THE MAORT OPERATION: A HISTORY OF THE STANDARD OIL COMPANY (NEW JERSEY) IN HUNGARY 1938-1948

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ABSTRACT

Title of Dissertation: The MAORT Operation: A History of the Standard Oil Company (New Jersey) in Hungary 1938-1948

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A multinational American company discovered oil in Hungary on November 20, 1937. The flowing wells produced crude for Hungary; later, they supplied some of the military needs of Germany and the demands of the Soviet Red Army after World War II. On September 20, 1948, a newly formed Communist Hungarian government nationalized the company, claiming that some American and Hungarian managers had sabotaged production. The decade-long operation of the Hungarian-American Oil Company, whose Hungarian acronym was MAORT, left behind intermittent, yet discernible trails in company, state, military and diplomatic records. In the aggregate, these documents preserved the history of MAORT, which exploited the Transdanubian oil fields in peace, in war, and under a socialist order.

Discovery of crude deposits, attainment of national self-sufficiency in refined oil products, and friendly cooperation between state and company hallmarked the first half of MAORT's history. During the war, the state sequestered the company and ruinously accelerated exploitation of the fields; still, Hungary relinquished less oil to Germany than was demanded. After the war, the Red Army came to occupy the fields and held the oil complex as a war trophy until 1947, when a

peace treaty was signed.

By the time the American managers had regained control over their company, the Hungarian government was in the midst of expropriating private enterprises. To allow, in the presence of massive Soviet arms, a vital segment in the nation's new socialist economy to remain in private foreign hands, was inadmissible. A criminal trial, in which the state's case rested on confessions of industrial sabotage, provided the means and justification for the expulsion of the American managers, the sentencing to prison terms or death of the Hungarian managers, and the nationalization of MAORT in 1948. The company began by serving Hungarian interests, but in its later years it became a pawn in German and Soviet hands.

PREFACE

In recent decades, the discipline of history has continued to broaden and the field of history has grown richer. Multinational oil companies' role in the development and support of the twentieth century state has received some attention. Control over oil resources, or lack of it, has had a massive influence upon national economies and international relations. Yet, Georges Clemenceau's World-War-I dictum, "A drop of oil is worth a drop of blood," has been slow to generate historical scholarship in oil-related matters, even during the post World War II era.

A major reason behind the paucity of oil-based research has been the fact that most primary source materials have been in the holdings of multinational companies. Traditionally, these large business firms have recognized few compelling reasons to open up their records for scrutiny. Occasionally, for ulterior motives, these firms have commissioned historians, selected from distinguished universities, to write their histories based on carefully chosen documents. With few exceptions, these accounts have turned out to serve the companies' interests and only incidentally to advance historical learning.

The majority of those who have written on the petroleum industry have used wide-angled lenses. They have examined the oil scene from the beginning and concentrated on the geological, technological and administrative aspects of the industry. But most of them have given little or no space to the industry's close and diverse relations with politi-

cians and governments.

The present account of Standard Oil Company's operation in Hungary is the history of the country's crude oil industry from the beginning to 1948. It has been a difficult undertaking. Both government and company officials have been evasive and uncooperative. The few and short secondary sources that make reference to the topic provide only fragmentary information. They all say that the pertinent records were lost, burned or destroyed during or after the war. However, I have discovered that certain events, felicitous for researching historians, have contributed to the preservation and availability of a large number of records both in Hungary and the United States.

During its entire operation, Standard Oil's Hungarian affiliate needed and used the good offices of the U.S. Department of State. Foreign officers of the U.S. Legation in Budapest acted as intermediaries in cases of serious disputes between the affiliate and the state, and served as a clearing-house or conduit of confidential information between the affiliate and its headquarters in New York. However, every time assistance was rendered, an official record was created which, as the property of the United States government, was eventually deposited in the National Archives and became available to interested parties in twenty years time. Because of the stormy history of the affiliate, a plethora of oil documents had been saved.

In 1965, the Hungarian government commissioned a member of the Hungarian History Institute to collect, arrange and retype those documents in the holdings of the Hungarian National Archives which had related to crude oil exploration and exploitation. With the documents retyped and some of them provided with explanatatory text, the historian arranged them into three volumes and photocopied each two hundred times.

In the end, each set of volumes was distributed to certain state officials and placed on the reserve shelves of selected libraries.

The larger portion of the three-volume set of documents relates to the operation of Standard Oil's Hungarian affiliate. These documents, letters, reports and memoranda, were exchanged between the affiliate and the Hungarian Ministry of Industry. On the whole, they show many gaps and inconsistencies; nonetheless, they complement the ones in the Washington National Archives, especially in the case of the war years, for which they represent the only source of information. Together, the two sets of documents, one in Budapest and the other in Washington D.C., contain enough information that a full history of Standard Oil's Hungarian affiliate could be written.

This history divides into two parts. One describes the technical accomplishments of the people who discovered the oil, exploited the oil fields, and made the oil available for distribution. The other deals with the subtle and open struggles among states and armies to establish control over this essential natural resource.

In memory of my parents,

Jolan and Jeno, this work

is dedicated to my children,

Steve, Katie, Rick and Jill

with thanks to my wife, Mary.

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CHAPTER ONE

BACKGROUND: THE AGREEMENT AND CONTRACT

Discovery of crude oil by the European Gas & Electric Company in 1937 and exploitation of the oil fields by the Hungarian-American Oil Company[1] during the following decade were inseparably tied to the activities of the multinational Standard Oil Company of New Jersey.[2] Crude oil and natural gas seepages had been observed in the Hungarian countryside for centuries; geological and geophysical examinations had indicated the presence of oil-bearing sands under the Danubian Basin; drill core samples had linked the subterrane with Polish and Romanian fields. Still, eighty years of exploration by private concerns and state agencies produced no result. Not until the 1930s, when Standard Oil decided to expand its interest in Europe, did Hungarian terra begin to yield oil.

Standard Oil, one of the largest multinational holding companies in the world, conducted some of its East-Central European business through the European Gas & Electric Company, called Eurogasco for short. A group of American and British investors founded Eurogasco to develop crude oil and natural gas resources in Yugoslavia, Austria, Czechoslovakia and Hungary;[3] and incorporated it under the laws of the state of Delaware on February 24, 1931.[4] Reasons for the establishment of this American-British company arose partly from the actions of a multinational oil cartel, and partly from the investors' contacts with native geologists and oil companies working in East-Central Europe.

Significantly, as soon as Eurogasco completed the first exploratory well in Austria and began negotiations for hydrocarbon concessions in Hungary, Standard Oil purchased a block of Eurogasco shares in 1933; and three years later, decided to gain outright control over it.[5]

A concessional contract, drawn up in 1932 and subsequently ratified by the Hungarian Parliament, defined the rights and responsibilities of the sovereign state and multinational operator. The most remarkable feature of the concessional document was the article which stipulated that the company could increase production of crude just until domestic needs of the country would be reached. Hungarian crude would not be allowed to glut world oil markets. In a world of interdependence and cooperation and only occasional and irregular competition among major oil companies, Standard Oil wanted to prevent Hungarian production from disrupting the world market.

Establishment of Eurogasco

Fear that depletion of the world's known crude oil fields would cause an oil shortage gripped the Western industrial nations in the early 1920s. Major oil companies from the United States, Great Britain, France, Netherlands and Italy started a worldwide scramble for new sources. Their discovery of several prodigious fields in different parts of the world, especially in the Middle-East, allayed this fear.

Not surprisingly, some of the large multinational companies, specifically Jersey Standard, Anglo-Persian and Royal Dutch-Shell, had come into conflict among themselves over possession of the most promising oil region lying under Arab land. At the insistence of their governments, the vying companies resolved their differences by signing the notorious Red Line Agreement of 1928. The companies, representing

five nations, united to divide and share the oil regions of the Middle East.[6] Later, when the problem of a crude oil surplus arose, the three largest oil companies considered this agreement as a precedent and formed the first multinational oil cartel.[7]

In the fall of 1928, Walter C. Teagle of Standard Oil, Sir John Cadman of Anglo-Persian and Sir Henry W. A. Deterding of Royal Dutch-Shell met in Scotland and drafted a seventeen-page directive which became known as the Achnacarry Agreement.[8] The document put forth principles, objectives and procedures to be followed by the petroleum industry in the future. The three companies pledged to ". . . accept their present volume of business and their proportion of any further increase in consumption."[9] In essence, they divided the world market in order to control production.

Throughout the 1930s, except for brief periods of price wars in scattered parts of the world, the major oil companies followed arrangements for controlled production, price uniformity and market sharing. Both the actual amount of oil produced from a particular source and the actual amount of oil sold in a particular market area depended on the stipulation of understandings existing among the majors. These practices were the world oil industry's answers to economic depressions.[10]

Local problems and peculiarities of the industry found solutions in regional compacts. In January of 1930, the Memorandum for European Markets announced that "local arrangements will be made between the parties (oil companies) for each country and shall be of such duration as may be thought advisable."[11] By September, the three majors concluded local marketing agreements for Germany, Austria, Switzerland and Poland. In the end, the memorandum declared that "it is the intention that all outside concerns . . . shall be admitted . . . ,"[12]

indicating that the three majors were interested in a united-front type of program.[13]

Quotations from cartel agreements, pronouncements of company officials and details of local arrangements were consistently reported in comtemporary trade journals such as The Petroleum News, The Petroleum Times, The Oil and Gas Journal and The International Petroleum Trade. By 1931, the tendency toward "cartelization" of the industry was evident; and with each passing month, less time remained for those who wanted to join in the general reorganization. A group of American and British investors sensed the opportunity and prepared themselves to export capital and technology into a part of the world where new discoveries might be made. They knew that if they registered their intention by the incorporation of a company, they would discourage other groups from pursuing the same goal. In case they struck oil, they would automatically gain possession of producing rights in the region. They were confronted with one question: what part of the world should they single out for their operation?

In the fall of 1919, Dr. Hugo Bockh, one of the most prominent geologists in Hungary, was appointed Under-Secretary of State, and was placed in charge of the Mining Division, a section of the Hungarian Treasury.[14] He belonged to those few who believed that frequent surface showings of natural gas and crude oil in Hungary indicated that the country was rich in hydrocarbons, and discovering them depended on long-term investments by a company which had access to advanced mining technology and machinery. One of Bockh's first acts was to approach the Anglo-Persian Oil Company and invite it to undertake explorations in Hungary.[15]

The following year, Anglo-Persian sent W. L. W. Bird, repre-

sentative of the affiliated D'Archy Exploration Company,[16] to Budapest to meet members of the Hungarian government (Ferenc Bohm, Hugo Bockh and Janos Teleszky) and negotiate concessions for the exploitation of oil and gas resources in the western part of the country. To complete geological surveys and drill test wells, the D'Archy official formed a subsidiary, the Hungarian Oil Syndicate (Brit-Magyar Asvanyolaj es Foldgaz Reszvenytarsasag), consisting of Hungarian nationals.[17] Ferenc Bohm, who was an advisor to the Finance Minister, became the part-time executive manager of the syndicate. Hugo Bockh served as the director of geological research; Dr. Aladar Vendel, Dr. Ferenc Vajna Pavai and Dezso Panto assisted Bockh. To supervise the gathering of geophysical data Dr. Gyula Pekar, a full-time ministerial advisor, was appointed. His aids were Jeno Fekete, Miklos Szacsali and Janos Renner.[18] These Hungarian scientists directed the geological examinations and the drilling of three test wells. As the work progressed, they sent geological reports, charts and maps to the London headquarters. There, based upon the information coming from Hungary, British officials made the important decisions concerning the future of the operation.[19]

Because of failure to discover oil, Anglo-Persian terminated the research effort and dissolved the Hungarian oil syndicate in 1923.[20] At the same time, the multinational company decided to retain the services of several Hungarian professionals and offered them employment in distant parts of the world. They were competent oil men who had come close to discovering Hungary's major oil deposits. In 1937, Eurogasco struck oil merely one-third of a mile from their very last abandoned dry hole test well.[21]

Hugo Bockh was the first Hungarian geologist to take up work for Anglo-Persian at exploration sites in Persia, Guatemala, Columbia,

Trinidad, Venezuela and Albania. He returned to Hungary in 1928 to assume directorship of the royal Hungarian Geological Institute.[22] Geophysicists Fekete and Renner were assigned to the Burman Oil Company, a subsidiary of Anglo-Persian. They worked in the Far East taking gravity measurements, using the Eotvos torsion balance instrument[23] to determine substrata density. Pavai accepted a position with a French company to carry out geological surveys in southern France; later, he joined a team searching for oil and gas in Austria.[24] Dr. Simon Papp, who in the next decade would become the central figure in Hungarian crude production, also found employment with Anglo-Persian conducting geological research in Turkey, Croatia and Albania. He also made explorations for another oil company in Canada and Germany. Finally, Miklos Szecsody took measurements with the Eotvos torsion balance in Persia; and Pal Mazalan, mining engineer, directed drilling operations in Albania.[25]

Other Hungarian geologists who had no affiliation with the syndicate or Anglo-Persian were also leaving the country. Among them the most distinguished was Dr. Lajos Loczy, Jr., who like Bockh, came from a family that for generations contributed significantly to the advancement of geology both as a science and as a profession.[26] Loczy became associated with the Dutch-Shell Company and completed surveys in South America and East Asia. Andras Rozlozsnik, a mining engineer employed by the Argentine government, organized the drilling operations of the state's oil fields.[27] The only Hungarian geologist who gained employment in the United States in an American company, the Torsion Balance Exploration Company of Houston, Texas, was Dr. Raul Vajk. He worked as a geophysical interpreter between 1928-31.[28]

While British companies were interested in searching for crude

oil deposits, Americans concentrated on the selling of petroleum products in Hungary. A wholly owned subsidiary of the Jersey Company, the Hungarian-American Petroleum Company (Magyar-Amerikai Petroleum Reszvenytarsasag), began distributing petroleum products in 1921. The company's original capitalization of 5,000,000 koronas (approximately $80,000) increased threefold to 1,600,000 pengos (approximately $250,000) by 1927.[29]

American and British investors who sensed the general reorganization of the multinational oil industry and wanted to move into a part of the world where new discoveries might be made, found their target in 1931. Learning in scientific and business circles about the hydrocarbon potential of East-Central Europe, they established Eurogasco to bring capital and technology into Austria, Hungary, Czechoslovakia and Yugoslavia. They hoped that with the start of local production of oil, in an energy-poor section of the continent, they would be able to see their company prosper without competition. In view of the trend toward cartelization of the oil industry, the American and British owners of Eurogasco set for themselves realistic business goals.[30]

Standard Oil's Interest in Eurogasco

As early as the turn of the century, American and British oil companies had been involved in both upstream (production) and downstream (distribution) activities in Eastern Europe. In 1904, Standard Oil and Anglo-Persian acquired interests in the production of the Galician fields of the Austro-Hungarian Empire and the Ploesti fields of Romania.[31] After World War I, they acquired refining, storage and distributing facilities to service the rapidly proliferating internal combustion engines in most countries of this area.[32] These investments

indicated that the two major internationals were on their way to establishing both horizontally and vertically integrated operations.

In the early 1930s, two developments impressed officials of the Jersey company to the extent that they deemed it advantageous for their holding company to gain control over Eurogasco. One was the abrupt but understandable change in the amount of oil the Soviet Union had been exporting to Western Europe. Traditionally, since the Swedish Nobels and the German Rothschilds had established their oil firms at the turn of the century, the Baku and Grozny fields in the Caucasus had produced crude for export. In 1933, one year after the Soviet oil companies shipped abroad a record amount of petroleum, the Soviet government began reducing the export quotas. This occurred because accelerated industrialization and concomitant mechanization of agriculture forced the Soviet planners to allocate more oil for internal consumption. While Soviet crude oil production continued to increase, production for foreign markets decreased until it came virtually to an end in 1940.[33]

The other development involved Romania, the only high-volume crude producer of continental Europe. Despite contracting global demand, Romanian producers increased their crude oil export between 1930 and 1933 from 30 million barrels a year to 60 million in accordance with the Romanian government's orders.[34]

Under pressure from the major internationals (Standard Oil, Anglo-Iranian and Royal Dutch-Shell) to reduce and regulate production, the Romanian companies refused. They also declined to join any "local arrangements." In this situation the majors concluded the Heads Agreement for Distribution in 1932 and the Draft Memorandum of Principles in 1934 as their last attempts to force the Romanian companies to adopt certain production quotas.[35] The Romanian producers first agreed to

limit their output, but eventually they renounced their promises. This happened in spite of the fact that most of the companies were owned by American, British and Dutch multinationals.[36]

At the root of the uncontrollable production of the Romanian oil industry was the Romanian state's almost exclusive reliance on ". . . income from the oil trade both internal and external . . ."[37] Since 1924, the government had been sanctioning new mining laws which raised taxes on the amount of oil produced, placed native citizens on the boards of directors of foreign-owned companies and toughened the already demanding new oil field lease requirements.[38] These measures hamstrung the managers of foreign-owned companies in the free operation of their enterprise, and perhaps more importantly, manifested the Romanian state's resolve to move with deliberate steps toward nationalization of the industry.

For Standard Oil, it slowly became impossible to compete successfully against the unrestricted flow of cheap Romanian crude in European market areas where it mostly took the place of the diminishing Soviet export oil. Standard Oil subsidiaries had been consistently registering losses in East Europe between 1931 and 1936 because of higher transportation costs of their petroleum products. Two specialty companies, one in Czechoslovakia and one distributing in both Austria and Hungary, had ended those years more often with deficits than not. In Poland, the Standard-Nobel w Polsce reported annual losses of more than $300,000.[39] It had become apparent that "agreements" and "memoranda" failed to help balance supply with demand at a reasonable profit in the eastern part of Europe.

To change the situation, Standard Oil had one of two courses of action to follow: form a company to explore the hydrocarbon potential

of East-Central Europe or buy participation in a company which had already been exploring the area for natural gas and crude oil. Standard Oil's officials chose the latter as early as 1933. In that year, Eurogasco discovered Austria's major oil field in the vicinity of Vienna[40] and concluded negotiations for rights to explore in Hungary.

During the next three years, Eurogasco began experiencing financial difficulties. The building of the Austrian operation required large sums; and at the same time, the Hungarian explorations grew much too expensive. To maintain solvency, Eurogasco had to rely upon Standard Oil's recurring purchases of new blocks of stocks. In 1936, the large multinational gained control over Eurogasco; and by 1939, it had acquired 81.68 percent of the preferred and 90.95 percent of the common stocks in Eurogasco.

Some years later, in 1939, looking back to the problems of the early years of the decade, Wallace E. Pratt, a director of Jersey Standard, wrote to Eugene Holmes, who in 1944 became the multinational holding company's president, that ". . . a producing effort in Europe on our part was justified as a defensive measure for the purpose of safeguarding our marketing in various countries there."[41] This was in line with Standard Oil's policy of making continuous use of resources, even at times of shrinking demands during the Great Depression. Explicitly, Standard Oil had intensified its efforts to find local production to reduce cost of transportation, and acquisition of Eurogasco served to fulfill this goal.

Beginning of Negotiations

Eurogasco maintained several offices to manage the activities of the firm. The first president, Henry I. Pierce, as well as his successor, Ralph P. Bolton,[42] operated the company's headquarters in London; Eugene Holmes, one of two vice-presidents, kept his office in New York. When the directors selected Austria as the first country in which they wanted to search for oil, they promoted Oscar Taussig to vice-president and stationed him in Vienna. It happened in the Austrian capital that the officials of Eurogasco and several geologists from Hungary met in the summer of 1931.

The most accomplished geologists of the country were among the delegates from Budapest. Moreover, perhaps not surprisingly, each had at one time been in the employment of Anglo-Persian. Hugo Bockh, Ferenc Bohm, Dezso Panto, Vajna Pavai, Gyula Pekar and Simon Papp reported to the officials of Eurogasco in Vienna that based on their measurements and evaluations, Hungary possessed economically valuable crude oil deposits.

Bockh and his colleagues explained that in East-Central Europe oil had been associated with the Sarmatian stratum which had most often been part of Tertiary formations. Because the Danubian Basin had been overlaid by sediments of Tertiary origin in which Sarmatian horizons had been included at most places, structural conditions were favorable for the presence of oil-saturated sands. In case the sand strata contained oil, they were buried at great depths in complicated cross-bedded formations. To locate the oil deposits and extract the oil, the Hungarian geologists cautioned, would require investment of large capital and utilization of advanced technology.[43]

In spite of the limited prospects, Eurogasco officials showed interest in moving their operations to Hungary. In the fall of 1931, Henry I. Pierce dispatched Paul Ruedemann to Hungary. Ruedemann, a naturalized American citizen of German birth, was a geologist who studied at the University of Michigan and at Cambridge University in England. He was a competent professional whose distinguishing qualification for the assignment was his exceptional command of the German and Hungarian languages.[44]

In Budapest, Ruedemann met Ferenc Bohm, one of the geologists who participated in the Vienna talks and Jacques Kaunitz, a businessman who had occasionally arranged for trade negotiations between high ranking state officials and representatives of foreign concerns. The two Hungarians were able to arrange an appointment with Dr. Bela Imredy, Minister of Finance. As a result of the exploratory type of conversation, Ruedemann and Imredy agreed that to expedite matters, they would include legal and financial advisors in the next round of their discussions.[45]

A Hungarian treasury, which had limited funds for geological explorations, and prominent state officials who had abiding doubts over the hydrocarbon potential of the country, were behind the Finance Minister's quick acquiescence to the opening of negotiations. The Hungarian government's response to a memorandum of the incoming director of the Royal Hungarian Geological Institute, Dr. Lajos Loczy, Jr., in the spring of 1932, further confirmed the government's lack of finances to support strong research efforts for oil. Dr. Loczy addressed his request to Gyula Gombos, Prime Minister, on the occasion of the National Work Week. Loczy stated that because his and other geologists' evaluations consistently pointed to the presence of oil-bearing sands in

several places, the unsuccessful efforts of the Hungarian Oil Syndicate in southwest Hungary should not discourage anyone, especially the state, from undertaking further explorations. To sustain interest, he recommended that the state support the Zala County exploration with four million pengos and the Bukkalja one with a half-million pengos. In turn, the Hungarian government decided to take over the Bukkalja operation altogether and remained silent over Zala County's oil potential. This signaled that the government would be willing to deal with foreign firms concerning Transdanubia; Eurogasce's plans for concessions in the region came at a propitious time.[46]

When Ruedemann met the Hungarian Minister of Finance in the spring of 1932, the American oil man presented to him a personal letter of recommendation from Henry Stimson, the United States Secretary of State.[47] The attentive gesture was characteristic of good relations which had developed between the two countries since the end of World War I. Then the United States refused to adhere to the Treaty of Trianon, a diktat which imposed punitive measures on Hungary after World War I, and in the summer of 1921, granted a generous treaty of peace to Hungary.[48] Later, the establishment of de facto diplomatic ties[49] and a reconstruction load from the League of Nations underwritten by the United States,[50] laid such a massive foundation of good will that exemplary relations between the two countries continued to exist until the outbreak of World War II.[51]

Economic connections assumed similar characteristics when representatives concluded the Treaty of Friendship Commerce and Consular Rights on June 24, 1925, to strengthen "the bond of peace" and to promote "friendly intercourse." Citizens of each nation received permission "to carry on every form of commercial activity which was not

forbidden by local law" and were granted "most favored" status provided they conformed "to local laws and regulations." Corporations and associations were allowed to be formed "in accordance with and under the laws, National, State or Provincial of either High Contracting Part . . . provided that they pursue no aims within its territories contrary to its laws." The nations also granted rights and privileges to each other ". . . with respect to the mining of oil . . . on the public domain . . . ." Finally the treaty provided in clear and unconfounding terms that properties of one nation on the territory of the other ". . . could not be taken without due process of law and payment of just compensation."[52]

In view of past relations between American multinationals and the United States government, Eurogasco entered Hungary anticipating support from the Department of State. It had become a tradition for American diplomatic posts to advise and aid venturesome American companies and to place the services of their "good offices" at the disposal of these companies.[53] In Hungary, members of the American Embassy extended personal favors and professional assistance to the officials of Eurogasco. Particularly helpful was the avuncular, John Fluornoy Montgomery, long time American Minister to Hungary, who enjoyed intimate connections with many of Hungary's aristocrat--politicians and industrialists.[54]

The Agreement

In the spring of 1932, Henry I. Pierce and Paul Ruedemann traveled to Budapest where, sitting with Hungarian legal, financial and industrial experts, they drafted an agenda that eventually formed the basis of relations between the multinational company and the sovereign

state.[55] During the rest of the year, the parties evaluated their positions; and in the spring of 1933, they again assembled and worked out the details of a final agreement and contract.[56]

The two legal instruments were based on Law Article VI of 1911, an inclusive addendum to the corpus of Hungarian Mining Laws. In clear and concise terms, this jurisprudence established the state's monopoly over hydrocarbons and activities related to their exploration, production and marketing. It also empowered the state to transfer this right to a private firm. The Minister of Finance was designated as the one who had sole right to grant concessions by way of written contract or agreement which, to become valid, had to be submitted to the parliament for a vote.[57] Law Article VI contributed to the creation of a secure legal climate for the development of a petroleum industry.

In general, the clauses of an agreement defined the rights and responsibilities of sovereign state and multinational operator. It enumerated areas which the parties would share as a result of cooperation. A mechanism to settle disputes was included, together with specific punitive measures against the operator in case the operator failed to satisfy certain requirements. The document contained no penalties in reference to the state for not fulfilling its part of the agreement.

A detailed analysis of the agreement would offer an insight into the legal foundation of negotiations for concessions and would allow amplification of those provisions which could form the basis of an eventual expropriation by the state. The latter has led to dramatic events in the history of conflict between the multinational company and the sovereign state.

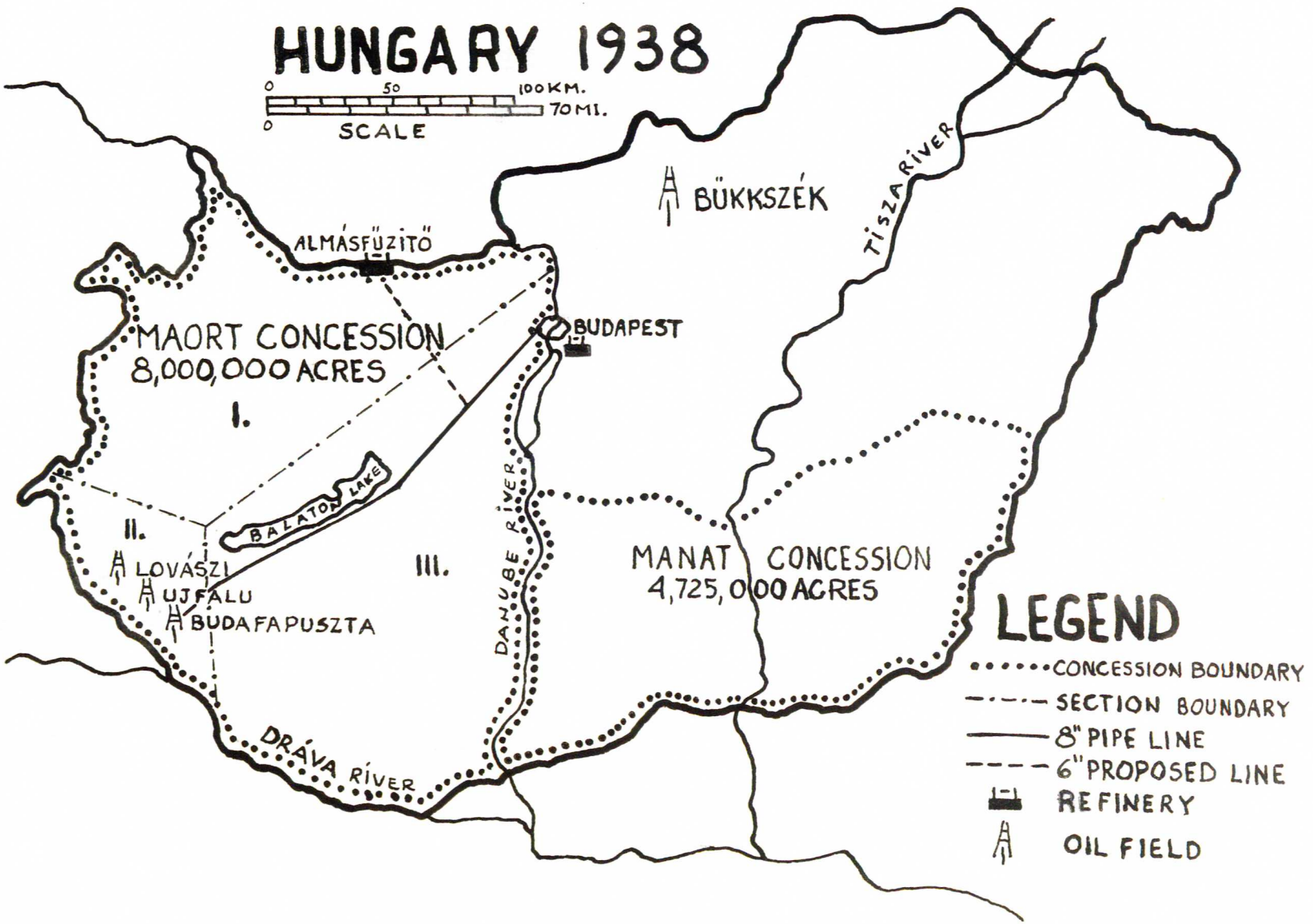
The Agreement, a twelve-page printed document, was based on the stipulations of Law Article VI of 1911. On the one hand, the Royal

Hungarian Minister of Finance on behalf of the Royal Hungarian Treasury transferred the state's monopoly over hydrocarbon (crude oil and natural gas) explorations in the entire area south and west of the Danube River, an area of 8,000,000 acres to Eurogasco for a period of five years. (See map on the following page.) On the other hand, Eurogasco obligated itself to undertake geological explorations and test borings amounting to an investment of no less than $300,000.[59]

According to the Agreement, Eurogasco obligated itself to undertake geological and geophysical research of the concessional area and agreed to submit to the Ministry of Finance and the Royal Hungarian Institute of Geology a copy of the resultant maps, diagrams and reports. In return, Eurogasco gained access to all geological data (of the same area) collected and accumulated by governmental and scientific organizations.[60]

The Agreement called for a rigid drilling schedule of test wells. The total exploration area was divided into three sections (see map). During the second and third years of exploration, the company had to complete the drilling of at least three test holes; by the end of the fifth year, Eurogasco had to have sunk five more test holes in a pattern that two of the three sections would have three test holes, and the remaining one section two test holes. The drilling rig used by the company had to be capable of reaching a maximum depth of 4,000 feet.[61]

To obtain a working staff, Eurogasco was allowed to employ Hungarian nationals. Professional, skilled and unskilled people could be hired in unlimited numbers. There was only one condition: in case the Hungarian government needed the services of a particular worker or group of workers, the government would have prior right to engage the services of the person or group of persons. This reservation would have


HUNGARY 1938
0 50 100 KM.
0 70 MI.
SCALE
BÜKKSZÉK
TISZA RIVER
ALMÁSFÜZITŐ
BUDAPEST
MAORT CONCESSION
8,000,000 ACRES
I.
BALATON LAKE
II.
LOVÁSZI
UJFALU
BUDAFAPUSZTA
III.
DANUBE RIVER
MANAT CONCESSION
4,725,000 ACRES
DRÁVA RIVER
LEGEND
CONCESSION BOUNDARY
SECTION BOUNDARY
8" PIPE LINE
6" PROPOSED LINE
REFINERY
OIL FIELD

serious implications only in a case of prolonged national emergency.[62]

Eurogasco had to submit to state supervision. The Minister of Finance had the right to appoint a technical expert to inspect any phase of the exploration. In case the government requested some information, the company had to furnish it expeditiously.[63]

In the event oil was discovered in commercial quantities, Eurogasco would have to fulfill certain additional obligations. On the quantity of oil Eurogasco produced, the company had to

> . . . pay a royalty of fifteen percent to the Royal Hungarian Minister of Finance either in kind or in cash at the choice of the Royal Hungarian Minister of Finance . . . . If paid in cash, the price shall be the current price obtained by Eurogasco.[64]

On the producing field, the company would have to employ such extraction methods which would prevent wastage of oil. The Agreement stated:

> In the event of striking oil or gas, Eurogasco shall take all measures technically and reasonably possible for avoiding waste and for collecting and storing the oil and for shutting off the gas wells. Eurogasco shall be answerable for loss of oil or gas arising from its failure to carry out these obligations and also for any damage which may arise as a result of negligence on its part.[65]

If natural gas were discovered in sufficient quantities, the company officials would have to begin negotiations with the Minister of Finance concerning compensation to the state and plans to transport the gas for use in Budapest. As an act of ackowledgement for discovering oil or gas, the Hungarian state would grant exclusive rights to Eurogasco to produce it.[66]

To impartially settle disputes arising between the state and the company, the Agreement provided for a board of arbitration called the Jury of Experts. The jury consisted of four members: two appointed by the Finance Minister and two by the President of Eurogasco. The four members would elect one of their number to be the chairman. If the four

experts could not reach agreement concerning the person for the chairmanship, the Chairman of the High Court of Justice of Hungary (Kuria) would appoint one. The expenses of the jury had to be born in equal amounts by the state and the company.[67]

In case Eurogasco failed to fulfill the terms of the Agreement, all rights and privileges granted to the company would automatically and irrevocably revert to the Hungarian state. In such eventuality, all material, equipment, plants, machinery etc., belonging to Eurogasco, would

> . . . become the property of the Hungarian State . . . provided that the Hungarian State shall refund to Eurogasco the cost of such material . . . at a price which shall be the estimated value at the time of the taking over . . . .[68]

If the estimated value of the confiscated property became the subject of disagreement between the state and the company, the Jury of Experts would establish the just price.[69]

The parties decided that the company's law suits, belonging to civil courts, would come under the jurisdiction of the Central Court of Budapest (budapesti kozponti jarasbirosag) and law suits of criminal allegations would be tried by the State Court of Budapest (budapesti kiralyi torvenyszek).[70]

The parties drafted the Agreement in two authentic copies: one in English and one in Hungarian. In case of a disagreement concerning the language of some definitions or a divergence of interpretation would develop, the experts would scrutinize the Hungarian text; it was declared to be the prevailing one. Dr. Bela Imredy[71] and Henry I. Pierce signed the document on June 8, 1933, in the presence of four witnesses: Dr. Zsigmond Thaly, Ferenc Bohm, Ingemar O. Taussig and Abel Bodog.[72]

The Contract

Concurrently with the drafting of the Agreement, the parties negotiated the terms of a contract that gave Eurogasco the option to form a producing subsidiary in case the explorations led to the discovery of crude oil or natural gas deposits in commercial quantities. The existence of contractual arrangements assured Eurogasco of continuous legal standing in Hungary and promised the expeditious development of discovered hydrocarbon resources.

The Contract set forth the scope of activities for the new company.[73] It stated:

> The purpose for which the company is formed are [sic] to explore for and develop (produce, transport, buy and sell) oil, gas and other bituminous minerals which are the subject of State Monopoly according to Act VI of the year 1911 on the territories transferred to it and shall have the right to build or acquire and operate oil refineries and conduct all necessary business in connection therewith.[74]

While fulfilling these purposes, the company had to ". . . consider in so far as it could, without damaging its own interest, the economic interest of Hungary."[75] The vagueness of this provision suggested that in the long run and in practical matters, the company and the state did not anticipate conflict.

The initial capitalization of the company was established at $500,000, of which $150,000 had to be available at the time the company declared itself ready to begin production and the rest at the end of one full year of operation. The duration of the contract was set at forty years; however, if the company had invested at least $10,000,000 during that time, the Hungarian government would grant a twenty-year extention. The company, as any other legal entity of its kind in Hungary, received permission to issue stocks and bonds that could be bought and sold on

the bourse.[76]

The company had to turn over to the state fifteen percent of its crude oil and natural gasoline production as royalty payments. This had to be done in kind, but the Minister of Finance had the option to change this requirement and ask for payments in cash. No later than the tenth day of each month, the company had to report to the Minister of Finance the exact amount of hydrocarbons produced during the previous month.

The manner of making payments to the state in kind was described in detail. Crude oil had to be delivered to storage tanks that were owned, built and maintained by the company. The oil had to be stored the first thirty-day period without charge. If the state requested transportation of its oil from the storage place to a certain destination, the company had to comply, charging the state only the actual cost. The government reserved for itself the right to sell crude oil below the "going" or "fixed" price, in case the economic conditions of the country demanded such a move.

If the royalty were requested in cash, the company had to reimburse the government at the market price. This price was fixed "from time to time" by the Minister of Finance and a company representative to the satisfaction of both. If the two parties could reach no agreement, "the selling price of the crude oil would be the market price corresponding to the natural level of prices at the time."[77]

The Hungarian government extended substantial tax privileges to the company for the first fifteen years of operation. The following special considerations regarding rates and taxes were granted:

> . . . full exemption from the corporation tax, and general income tax, as well as, with the exception of road tax, from the government, municipal and local additional taxes thereof, further from fees payable to the Chamber of Commerce and Industry.

> . . . full exemption from government and local duty payable on the transfer of immovable property should such properties be purchased for the purposes of the working plants or in case they may be leased from duty payable in respect of the lease contracts. This exemption applies also to purchase of machines and accessories which are under duty legislation deemed to be like immovable property.[78]

According to the text, office and storage buildings, workmen's quarters and halls for social and cultural events were considered housing projects which ". . . served the purpose of the working plants;"[79] therefore, they became exempt from taxation. Finally, the company did not have to pay fees for permits in case it entered into partnership contracts or issued shares of newly formed joint stock companies.[80]

Some of the Contract's tax clauses referred to possible contingencies in the existing tax structure of the country. In this respect, the Contract stipulated:

> Should the Hungarian system of taxation be changed during the period of the contract, in such a way that any differential taxation not existing at the time of the signature of this contract should be introduced that would impose rates higher than the general rates on such business as that in which the company or the branches are engaged, the supercharges resulting from such future differential taxation shall be refunded to the company or the branches by the Royal Hungarian Minister of Finance.
>
> In the event of an export duty on crude oil or its products being introduced during the period of this contract, the Royal Hungarian Minister of Finance shall also refund to the company the sums paid in respect thereof by it.[81]

Equal in importance to the clause which related to the prevention of oil wastage was the contractual understanding that permanently limited the volume of production. After the officials of the new company ascertained that they indeed discovered commercially profitable quantities of crude oil, they had to develop the fields

> . . . in a proper business-like manner, and provided it is proving reasonably remunerative to the N.C. [New Company], it shall be increased until the total home consumption which can be marketed in Hungary has been secured. The drilling operations

> for oil may be wholly or partially suspended, however, when it is shown upon the request of the N.C. to the Royal Hungarian Minister of Finance that in known oil pools the drilling has progressed so far that new commercially productive wells cannot be drilled therein.[82]

The Contract provided for punitive measures, if the new company produced more crude oil than the country could use. The very next paragraph stated:

> Should the above conditions not be complied with, the Royal Hungarian Minister of Finance shall have the right to request the N.C. to make good the default. Should the N.C. not comply with the request within six months, the exploration and development rights on the areal unit or units in question shall revert free of charge to the Hungarian State together with the wells and test holes.
>
> In case any dispute arises out of this clause, the Jury of Experts shall decide in accordance with the stipulations of clause 25.[83]

The negotiated production ceiling prepared the way for controlled growth of the petroleum industry in Hungary, and it protected the arrangements of the multinational oil cartel from unexpected Hungarian oil exports.

A simple procedure was selected to determine the price of crude oil. The Contract stated:

> The prices at which the N.C. is entitled to sell its crude oil, as well as the prices at which the Royal Hungarian Minister of Finance is entitled to sell the crude oil obtained by him as royalty from the N.C., shall be fixed from time to time by the Royal Hungarian Minister of Finance and the N.C. Failing to reach an agreement between the two parties, the selling price of the above mentioned crude oil shall be the market price corresponding to the natural level of prices at the time.[84]

However, the Minister of Finance had the right ". . . to sell the royalty oil at a lower rate . . . should the economic conditions of the country demand it . . . in which case the N.C. also may sell crude oil . . . at the same price."[85]

The new company had to purchase "all its plants and equipment required for production, upkeep and operation in Hungary."[86] In case some material or gear could not be found within the country, the

Minister of Finance in agreement with the Minister of Commerce would allow the new company to buy the particular item abroad.[87]

While the Agreement allowed the employment of Hungarian citizens, the Contract required the new company to "engage Hungarian citizens or employees, foremen and workers."[88] This time, the foreign workers received special consideration. The Minister of Finance allowed the employment of foreigners "in positions which could not suitably be filled by Hungarian citizens."[89]

Regarding the economic interests of the Hungarian state and the new company, the latter had to follow some rather vague guidelines. They read:

> In carrying on the work of development for oil and gas, as well as the disposing of the products, the N.C. shall consider, in so far as it can without damaging its own interests, the economic interest of Hungary, and shall comply with the reasonable requirements which the Royal Hungarian Minister of Finance may set forth in this respect.[90]

Legal consequences for not satisfying obligations were placed at the end of the Contract. Clause twenty-seven stated:

> In the event of default being established with regard to obligations stipulated in this contract . . . and should the intimation of the Royal Hungarian Minister of Finance, enjoining strict fulfillment of the conditions of the contract, remain disregarded within an adequate term to be fixed by him of not less than two months, . . . the Minister of Finance may bring legal action against the N.C. to enforce the fulfillment of the obligation . . . and if as the result of such legal action it shall have been established on three separate occasions that the N.C. has been in default . . . , the Minister of Finance may withdraw the rights transferred to the N.C. and sue for invalidation of this contract before the Court . . . .[91]

The Minister of Finance could terminate (cancel) the Contract if the new company ". . . became bankrupt . . ."[92] or "failed to comply with the obligation . . ."[93] described in Clause one and read ". . . Eurogasco undertakes to form within three months (after discovery of oil) . . . an independent Hungarian Limited Company to be called the Eurogasco

Hungarian Company or any other name stipulated before . . ."[94]

In the event the Minister of Finance would have to cancel the Contract or declare the new company in default of its obligations, the Hungarian state would assume ownership of all or part of the new company's belongings (material, equipment, plant, machinery, etc.), provided that

> . . . The Hungarian State would refund to the N.C. the cost of such material, equipment . . . at the appraised value existing at the time of such taking over, such appraised value to be established by the Jury of Experts . . . unless mutually agreed upon.[95]

Regarding courts of jurisdiction, the parties decided that law suits

> . . . Which may arise out of this contract belonging to the jurisdiction of a regular court; and if Hungarian law does not confer an exclusive jurisdiction, the Central Court of Budapest [budapesti kozponti jarasbirosag] shall have the jurisdiction: and in such law suits for which the Royal Court [kiralyi torvenyszek] has jurisdiction, the Royal Court of Budapest [budapesti kiralyi torvenyszek] shall have jurisdiction.[96]

Some provisions of the Agreement were repeated in the Contract. They had to be transferred because with the act of the new company's registration, the Contract would supersede the Agreement. The duplication provisions referred to preventive measures against oil and gas wastage, supply of Budapest with gas, construction of oil and gas pipe lines, state inspection and supervision of production, submission of technical reports to state authorities, selection and role of the Jury of Experts, validation of the Contract by the Houses of the Parliament, number of authentic copies of the Contract and prevalence of the Hungarian version of the Contract.

After the Contract was signed by the same persons on the same day as the Agreement,[97] the Finance Minister sent both documents to the Parliament for ratification.

Members of the House of Representatives listened to the readings

of the Agreement and Contract on June 19, 21 and 22. Without comment or debate they approved them on June 23.[78]

NOTES: CHAPTER ONE

1. MAORT is the commonly used abbreviation for Magyar-Amerikai Olajipari Reszvenytarsasag [Hungarian-American Oil Company].

2. For a history of Standard Oil Company (New Jersey), predecessor of Exxon Corporation, see the three-volume collaborative work by members of the Harvard Graduate School of Business History: Ralph W. Hidy and Muriel E. Hidy, Pioneering in Big Business 1882-1911 (New York: Harper and Brothers, 1955); George S. Gibb and Evelyn H. Knowlton, The Resurgent Years 1911-1927 (New York: Harper and Brothers, 1956); and Henrietta M. Larson, Evelyn H. Knowlton and Charles S. Popple, New Horizons 1927-1950 (New York: Harper and Row, Publishers, 1971).

3. Standard Oil Company (New Jersey) and Oil Production in Hungary by MAORT 1931-1948 (New Jersey: European Gas & Electric Company-Standard Oil Company, 1949), p. 1; hereafter cited as SOPHM.

4. Letter, John W. Brice, President of European Gas & Electric Company, to the Secretary of State, November 23, 1948, Decimal File 864.6363/11-2348, U.S. Department of State Records, National Archives Building, Washington, D.C. In this collection, each document bears the number 864, denoting the country of Hungary, and the decimal number 6363, specifying the topic of petroleum. Hereafter, documents belonging to this collection will be cited following the date of the document as NA Records. When the document is housed in Suitland, Maryland, it will be cited as NA Records, Suitland, Maryland.

5. Moody's Manual of Investments American and Foreign Industrial Securities (New York: Press of Publishers Printing Company, 1936), p. 2532; and ibid., 1939, p. 3086; and Letter, Brice to Sec. of State, Nov. 23, 1948, NA Records.

6. The name of the agreement derived from a red line drawn on a French map outlining the former Ottoman Empire. The compact required each participant to buy crude only through the Turkish Petroleum Company (after 1929, Iraq Petroleum Company) in the region of Turkey, Syria, Lebanon, Israel, Jordan, Saudi Arabia and Iraq (Gibb and Knowlton, The Resurgent Years, pp. 306-8).

In modern economic terms, the Red Line Agreement created a monopsony (buyer's monopoly), for the acquisition of Middle East crude.

For a complete list of the ten companies, their affiliates, nationalities and exact shares in the Turkish Petroleum Company, see U.S. Congress, Senate, Federal Trade Commission, The International Petroleum Cartel, Staff Report Submitted to the Subcommittee on Monopoly of the Select Committee on Small Business, 82nd Congress, 2nd Session (Washington, D.C.: Government Printing Office, 1952), pp. 49, 65;

hereafter cited as International Petroleum Cartel.

7. For comprehensive accounts on the American oil industry, see Harold F. Williamson et al., The American Petroleum Industry 2 vols. (Evanston: Northwestern University Press, 1959-63), vol. I, Harold F. Williamson and Arnold R. Daum, The Age of Illumination 1859-1899; and vol. II, Harold F. Williamson, Ralph L. Andreano, Arnold R. Daum and Gilbert C. Klose, The Age of Energy 1899-1959; and John G. McLean and Robert W. Haigh, The Growth of Integrated Oil Companies (Boston: Graduate School of Business Administration, Harvard University, 1954).

For multinational companies, see Mira Wilkins, The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Period to 1914 (Cambridge: Harvard University Press, 1970); and Edith T. Penrose, The Large International Firm in Developing Countries: The International Petroleum Industry (London: Allen and Unwin, 1968).

8. The official title of the agreement was Pool Association.

9. The International Petroleum Cartel, pp. 199-218.

10. The introduction of the Achnacarry Agreement read: "If these principles are followed, the results will be a stabilization of the world's market outside of the United States' domestic market which will be in the interest of all," (ibid., p. 201). Specific exclusion of the United States was intended to prevent conflict with existing American antitrust legislation. The Webb-Pomerane Export Trade Act of 1918 permitted combination of American multinational companies in foreign trade; therefore, at that time, Standard Oil's participation in the agreement was considered permissible and not in conflict with the Sherman Antitrust Act.

11. Ibid., p. 232. 12. Ibid., p. 234. 13. Ibid., p. 236.

14. For a biographical sketch of Hugo Bockh see Jozsef Fulop and Andras Tasnadi-Kubacsa, One Hundred Years of the Hungarian Geological Institute (Budapest: Muszaki Konyvkiado, 1969), pp. 71-75.

15. Letter, Hugo Bockh, Under-Secretary of State to George Greenway, Director, Anglo-Persian Oil Company Limited, October 8, 1919, Hungarian Treasury, Bohm Papers, package 1, no. 1, Hungarian National Archives, Budapest, reprinted in Andras Nemeth, A Magyar Koolajbanyszat Dokumentum Gyujtemenye 1919-tol--1949-ig [Collection of Hungarian Oil -Mining Documents from 1919 to 1949], 3 vols. (Budapest: Muzeumok Rotauzeme, 1965), vol. 1, pp. 100-103; hereafter cited as CHOMD, Collection of Hungarian Oil-Mining Documents. Bockh gave the letter to Pal Teleki (an internationally respected statesman and geographer) who as the head of the Hungarian peace delegation, was leaving for Paris with the instruction that he should transmit the letter to London (ibid., vol. 1, p. 103).

16. The founder of this company, William Knox D'Archy, a British subject, obtained the first oil concession in the Middle East in 1901. Within a few years after his company began geological research of the area, Anglo-Persian took it over. In 1934, Anglo-Persian changed its name to Anglo-Iranian Oil Company (U.S. Congress, Senate, Special

Committee Investigating Petroleum Resources, American Petroleum Interests in Foreign Countries, Hearings, S. R. 36. 79th Congress, 1st Session (Washington D.C.: Government Printing Office, 1952), pp. 375-76); hereafter cited as American Petroleum Interests in Foreign Countries.

17. W. L. W. Bird began organizing the syndicate and recruiting personnel in February of 1921 (CHOMD, vol. 1, p. 110).

18. Ibid., vol. 1, p. 110.

19. Craig Cunningham, English geologist, served as consultant in the selection of drilling points in Hungary (ibid., vol. 1, p. 123).

20. Ibid., vol. 1, pp. 104-43. Anglo-Persian invested a total of 120,000 pounds in the Hungarian project (ibid.).

21. Ibid., vol. 1, pp. 104-43. The first test well penetrated 5,700 feet at Budafa before it was declared a dry hole. This was only a third of a mile south of the southern end of the Lispe oil field, discovered in 1937 (The Hungarian Oil Industry (New York: Mid-European Studies Center, 1954), pp. 28-29).

22. Fulop and Kubacsa, One Hundred Years of the Hungarian Geological Institute, p. 72.

23. Baron Lorant Eotvos (1848-1919) was an outstanding Hungarian physicist who invented an instrument to measure the earth's gravitational force. Hungarian geologists began to use a slightly different model of the original instrument, called the Eotvos torsion balance, to measure the density of underlying rock strata. Within a short period of time, this instrument became one of the standard geophysical crude oil detecting devices around the world.

24. An American company explored the Vienna Basin in 1925-26, and Pavai might have worked for it (American Petroleum Interests in Foreign Countries, p. 375).

25. Banyaszati es Kohaszati Lapok [Hungarian Journal of Mining and Metallurgy] no. 9, 1939, p. 184, cited in CHOMD, vol. 1, pp. 142-43; hereafter cited as HJMM.

26. Members of these two families were innovative scientists in their fields who wrote lasting works on the geology of Hungary. They also served as directors of the Royal Hungarian Geological Institute. For details on these two tandems of father-son scientists, see Fulop and Kubacsa, One Hundred Years of the Hungarian Geological Institute, pp. 47-48.

27. CHOMD, vol. 1, pp. 142-43.

28. Geophysics, vol. 12, no. 2, April 1947, pp. 143-46.

29. Gibb and Knowlton, The Resurgent Years, Appendix 1, point 24, p. 644.

To check inflation, the Hungarian Government issued a new currency, the pengo, in 1924. One pengo equalled 0.19 dollars. Until the final months of World War II, the pengo maintained an unusually stable exchange value (L. D. Schweng, Economic Planning in Hungary Since 1938, p. 21; and Census of American Owned Assets in Foreign Countries, United States Treasury Department, Office of the Secretary (Washington D.C.: Government Printing Office, 1947), p. 60).

30. In 1948, there were still 226 American and British stockholders of Eurogasco (Letter, Brice to Sec. of State, Nov. 23, 1948, NA Records).

31. In the same year, Standard Oil formed the Romano-American, a producing company in Romania (William et al., The American Petroleum Industry, vol. 2, pp. 257-58; and Hidy and Hidy, Pioneering in Big Business, pp. 512-13).

The total British investment in the Romanian oil industry amounted to 21 percent in 1913 (Maurice Pearton, Oil and the Romanian State (Oxford: At the Clarendon Press, 1971), p. 68).

32. Standard Oil maintained marketing outlets in Austria, Hungary, Poland and Romania (Larson et al., New Horizons, p. 338).

In 1920, to supply the Mediterranean markets with less expensive crude, Standard Oil purchased a half interest in the Noble Brothers Producing Company, which through twenty-eight subsidiaries, controlled more than half of the Russian petroleum industry. The eight-million-dollar investment was lost when the Soviet Union nationalized private holdings in the petroleum industry in 1918 (Williamson et al., The American Petroleum Industry, vol. 2, p. 521).

33. Arthur Jay Klinghoffer, The Soviet Union and International Oil Politics (New York: Columbia University Press, 1977), p. 40. Soviet crude production gradually increased from 80 million barrels in 1927 to 220 million in 1940. Soviet crude export figures showed a somewhat different story. Exports increased from 6 million barrels in 1927 to 48 million in 1932. Then they began declining so rapidly that in 1939 they were at 4 million. For a detailed chart see pp. 41-42.

Regarding refined products only, the Soviet Union exported even greater portions. In 1928, the Soviet Union exported 53 percent of kerosene, 99 percent of gasoline and 69 percent of lubricants. By 1940, the ratio between exports and output decreased to 5 percent for kerosene and gasoline, and 22 percent for lubricants (Robert W. Campbell, The Economics of Soviet Oil and Gas (Baltimore: The Johns Hopkins Press, 1968), p. 157).

34. Pearton, Oil and the Romanian State, p. 193. World production of crude oil declined from 4,079,4429 barrels a day in 1929 to 3,578,646 in 1932 (American Petroleum Interest in Foreign Countries, p. 357).

35. For detailed reports on the "Heads Agreement and Draft Memorandum" see International Petrolum Cartel, pp. 241-69.

The 1932 "Paris Agreement" specifically involved the Romanian

producers. However, as the others, it was ineffectual. Pearton notes that the "State could never entirely support a limitation of output--except as a temporary measure, in an extreme situation, and alternatively, could not stand aside and let the industry work out its own solution," (Pearton, Oil and the Romanian State, p. 172).

36. Altogether, the foreign companies produced 70 percent of Romania's crude. For a breakdown of these companies, their owners and their share of the total production see, ibid., p. 162.

37. Ibid., p. 172. To compensate for the decreasing state revenue from oil because of its decreasing price in world markets, the Romanian state required the foreign producing companies to increase their output and their refinery runs (ibid., p. 166).

38. Ibid., pp. 112-35 and pp. 203-11. For an account on the Romanian oil industry after 1945, see Constantine N. Jordan, The Romanian Oil Industry (New York: New York University Press, 1955).

39. Larson et al., New Horizons, p. 338.

40. American Petroleum Interests in Foreign Countries, p. 71. An American company, presumably Standard Oil, began geological and geoelectrical surveys of the Vienna Basin in 1925. The company terminated its exploration ". . . before the final results of these surveys were evaluated . . . ." Eurogasco, with the assistance of Austrian geologists, discovered oil in commercial quantities in 1933; production reached 2,600 barrels a day in 1939. The highest daily output was 32,000 barrels a day in 1944 (ibid., pp. 375-76).

41. Letter, Pratt to Holman, July 15, 1939, cited in ibid., p. 59.

42. In 1937, Ralph Bolton also became the manager of Romana-American (Larson et al., New Horizons, p. 145). Employment of key individuals in interlocking managerial positions was one of several ways Standard Oil achieved control of subsidiaries.

43. CHOMD, vol. 1, pp. 239-41.

44. In the management of MAORT, Ruedemann had been by far the most important single individual; therefore, it was especially discouraging that numerous inquiries with different persons and offices at the Exxon Corporation concerning Ruedemann were totally unproductive. The only additional information the present writer could obtain was that Ruedemann enlisted in the United States Army and ". . . served overseas in a machine-gun battalion in World War I," (Larson et al., New Horizons, p. 571); and that after he left Hungary in February 1942, "He served in key positions in which he supplied the allied armies with petroleum products" (SOPHM, p. 28).

45. CHOMD, vol. 1, p. 239-41.

46. Letter, Loczy to Dr. Bertalan Geocze, counsellor to MAORT, MAORT Papers, package 49, HNA, cited in CHOMD, vol. 1, pp. 215-16.

47. Ibid., p. 239.

48. For the text of the treaty and surrounding diplomatic activity, see Foreign Relations of the United States (Washington D.C.: United Stated Government Printing Office, 1921), vol. 2, pp. 249-62. The document declared the end of the war that had existed between the two nations since December 7, 1917, granted "most favored nation treatment" to American nationals residing or working in Hungary and pronounced the establishment of friendly relations. The document contained no provisions for outright reparations or indemnities. However, parts of the Treaty of Trianon guaranteeing ". . . all rights and advantages for the benifit of the United States . . ." were included, ". . . notwithstanding the fact that such Treaty had not been ratified by the United States." These parts stated in general terms that Hungary would have to satisfy claims for losses, damages or injuries suffered by U.S. nationals in Hungary during World War I (ibid.).

49. Ulysses Grant-Smith, United States Commissioner at Budapest, was named U.S. Charge d'Affaires to Hungary, and official diplomatic relations commenced between the two countries on December 17, 1921 (Foreign Relations of the United States, vol. 2, p. 261).

50. For details on the negotiations leading to U.S. guarantee of the loan see ibid., 1924, vol. 2, pp. 325-32.

51. For a comprehensive history of Hungarian-American relations, see Imre M. Major, American-Hungarian Relations 1918-1944 (New Brunswick: Danubia Press, 1977). For personal accounts, see John Fluornoy Montgomery, The Unwilling Satellite (New York: Devin Adair Co. 1947); and Endre Sik, Egy Diplomata Feljegyzesei (Notes of a Diplomat) (Budapest: Kossuth Konyvkiado, 1966). And for a diplomatic history of a short period see Peter Varkonyi, Magyar-Amerikai Kaplcsolatok 1945-1948 (Hungarian-American Relations 1945-1948) (Budapest: Kossuth Konyvkiado, 1971).

52. For the text of this treaty and attendant diplomatic activity, see Foreign Relations of the United States, 1925, vol. 2, pp. 341-57. The duration of the treaty was set for ten years with the understanding that in case both signatories were still satisfied with it, the document would remain in force indefinitely, unless one of the parties expressed an intention of modifying or terminating the treaty (ibid.).

53. When foreign oil companies excluded American ones from some parts of the world, Washington insisted that the governments of those companies honor the Open Door policy. Wlen foreign governments discriminated against American firms by refusing to grant concessions, Washington requested that they apply the equal opportunity principle; and when foreign governments nationalized American enterprises, Washington demanded just compensation.

For sources on the United States Federal Government's oil policies and relations with oil companies, see John Ise, The United States Oil Policy (New Haven: Yale University Press, 1926); John W. Frey and H. Chandler Ide, A History of the Petroleum Administration for War

1941-1945 (Washington D.C.: United States Printing Office, 1946); Gerald D. Nash, United States Oil Policy 1890-1964: Business and Government in Twentieth Century America (Pittsburgh: University of Pittsburgh Press, 1968), Herbert Feis, Petroleum and American Foreign Policy (California: Standord University, 1944); and J. de Novo, "The Movement for an Aggressive American Oil Policy Abroad 1920-1922," American Historical Review, vol. 16, no. 4, (July 1956), pp. 854-76.

54. For details on these topics, see John F. Montgomery, The Unwilling Satellite.

55. CHOMD, vol. 1, p. 240. 56. Ibid., p. 241.

57. Ibid., pp. 40-43. The new law is reproduced almost in its entirety. For a question-answer synopsis regarding "the rights of American citizens to explore for minerals and to own and operate mines in Hungary," see Despatch 69 (plain), Nicholas Roosevelt, Secretary, Legation of the United States at Budapest to Sec. of State, March 14, 1931, NA Records.

58. CHOMD, vol. 1 includes the Agreement in the Appendix. The exact title of the Agreement was Egyezmeny--a m. kir. penzugyminiszter es az European Gas & Electric Company (London es New York) kozott. Agreement--between the Royal Hungarian Minister of Finance and the European Gas & Electric Company London and New York. Each page was divided vertically to accommodate the Hungarian and English language texts.

A copy of this document can also be found among the NA Records.

When parts of the Agreement are quoted, appropriate pages of the Agreement will be noted in the notes.

59. Ibid., p. 1. 60. Ibid., p. 3. 61. Ibid., pp. 4-5.

62. Ibid., p. 5. 63. Ibid., pp. 7-8. 64. Ibid., p. 6.

A comparison with other hydrocarbon agreements between states and operators showed that the royalty provisions of the agreement conformed to prevailing rates.

65. Ibid., pp. 5-6. 66. Ibid., p. 9. 67. Ibid., pp. 9-10.

68. Ibid., pp. 10-11. 69. Ibid., p. 11. 70. Ibid.

71. During the war, Bela Imredy became Prime Minister for a short while. After the war, he was sentenced to death and executed for his pro German and anti-Jewish policies. It was ironic; he had to resign his premiership because of the inclusion of a Jew in his ancestry.

72. Agreement, p. 12.

73. CHOMD, vol. 1, Appendix. The exact title of the Contract was Szerzodes--a m. kir. penzugyminiszter es az European Gas & Electric Company (London es New York) kozott. Contract--between the Royal Hungarian Minister of Finance and the European Gas & Electric Company of

London and New York. Divided vertically, each page accommodated the Hungarian and English language texts.

A copy of this document can also be found among the NA Records. Moreover, two copies of the Agreement and Contract had been attached to Despatch 480 (plain), James B. Stewart, Charge d'Affaires, American Legation, Budapest to Sec. of State, Sept. 30, 1936, NA Records.

When parts of the Contract are quoted, appropriate pages of the Contract will be noted in the notes.

74. Ibid., p. 2. In case company geologists discovered natural resources other than the specified hydrocarbons, the company had no right to them; nonetheless, company officials had to report the find to the proper government agency without delay (CHOMD, vol. 1, p. 42).

75. Ibid., p. 12. 76. Ibid., pp. 2-3.

77. Ibid., pp. 18-20.

78. Ibid., pp. 24-25. A private owner, one that was not incorporated, paid a flat five percent of the earnings of his business as tax; as a tax-paying individual, he paid general income tax, graduated from one percent to forty percent, on his net income. An incorporated firm paid a basic five percent of the earnings of the company as corporation tax and a general income tax, graduated from five percent to twenty-five percent on its net income (Despatch 69 [plain], Roosevelt to Sec. of State, March 14, 1931, NA Records).

79. Ibid., p. 25. 80. Ibid., pp. 25-26.

81. Ibid., p. 26. To legalize the privileged tax status of the company, the Minister of Finance, in concurrence with the Minister of Commerce, drafted a bill specifying the tax exemptions to be granted to the company and submitted it to the Parliament for approval, simultaneously with the Contract. This procedural responsibility of the two ministers was incorporated in the Contract and placed as a preamble of the articles which described the company's tax status. The law itself was recorded as Law Article XIX of 1933 and bore the signature of Hungary's Regent, Miklos Horthy and the Prime Minister, Gyula Gombos (CHOMD, vol. , pp. 241-43).

82. Ibid., pp. 9-10.

In 1936, the American Legation at Budapest decided to obtain copies of the Agreement and Contract of 1933 and send them to Washington. Commenting on the activities of Eurogasco in Hungary, James B. Stewart, Charge d'Affaires, reported: "In the event of finding oil, exports will also be sent to Germany, Yugoslavia, Italy, Czechoslovakia and Austria." At another place he wrote: "One of the objects in searching for oil in Hungary . . . is to find a field which can be used to compete with the Rumanian fields." It is impossible to find out why Stewart had communicated such information to Washington which contradicted Clause 8, paragraphs 2 and 3 of the Contract. It is possible that he learned these from Ruedemann, who had then misrepresented Eurogasco and negotiated in bad faith from the very beginning (Despatch 480 [plain], James B. Stewart, Charge d'Affaires, U.S.

Legation at Budapest, to Sec. of State, Sept. 30, 1936, NA Records.

83. Ibid., p. 10. 84. Ibid., p. 12. 85. Ibid.

86. Ibid., p. 23. 87. Ibid. 88. Ibid., p. 23.

89. Ibid. 90. Ibid., p. 12. 91. Ibid., pp. 27-28.

92. Ibid., p. 29. 93. Ibid. 94. Ibid., p. 1.

95. Ibid., p. 29. 96. Ibid., p. 30-31.

97. Ibid., p. 32. There was one exception: the four witnesses also affixed their signatures onto this document.

98. Orszaggyules, Kepviselohazanak Naploja [Parliament, Diary of the House of Representatives] (Budapest: Athenaeum Konyvnyomadja 1933), pp. 323-529.

99. CHOMD, vol. 1, Appendix. Potszerzodes (Supplementary Contract), p. 1. Members of the Upper House were not allowed to discuss matters of legislation. They assembled only to vote.

CHAPTER TWO

THE EXPLORATION OF TRANSDANUBIA AND ESTABLISHMENT OF MAORT

The Agreement provided for an orderly progression of prospecting and drilling operations. Geological and geophysical explorations had to commence in one, and possibly two, of the three sections of the concessional area by the end of July 1933, only a month after the Hungarian Parliament ratified the Agreement. During the next two years, the company had to expand its substratum examinations to obtain reliable scientific information regarding the crude oil potential of Transdanubia in all three sections.

At the end of the first year of explorations, after July 1934, drilling of test wells had to begin. During the second and third years of operation, Eurogasco had to finish three test wells without regard to sections. However, by 1938, the terminal year of the Agreement, Eurogasco had to have constructed five more test wells, so that Section 1 and 2 would each have three, and Section 3, two complete perforations. Each of the eight wells had to reach the stratum which, according to geological evaluations, would most likely contain oil; and each had to be constructed in compliance with sound engineering practices.[1]

Beginning the exploratory activities, with so short a period of preparation time, was possible because of the existence of several

favorable factors. Eurogasco was headed by Paul Ruedemann, a knowledgeable and experienced oil man who had clear and effective plans to start the operations. The American, who was an engineer and geologist, had also been assisted by the vast financial and technological resources of the Standard Oil Company. The Agreement permitted Eurogasco to employ Hungarian scientists, engineers and skilled workers, and to use the royal Hungarian Geological Institute's records and instruments. The Hungarians who had sought and gained employment with Eurogasco complemented Ruedemann, and together they proved to be an efficient and ardent labor force.

Between July 1933 and September 1937, Ruedemann's team of geologists conducted the most intensive and painstaking exploration of Transdanubia that had ever been undertaken in Hungary. The first test well, completed in February 1935, turned out to be a dry hole; and the next three, each placed in a different section, shared the same ignominious classification. By this time, Eurogasco had exhausted its financial resources and Standard Oil assumed ownership of the company. The new Rockefeller Plaza owners allocated capital only for the completion of two more test wells, both located near Budafa in Section 2. Finally, in November 1937, the Budafa No. 2 well struck oil and augured successful drilling throughout the geological formation.

While the preparatory work for the Budafa wells was under way in the spring of 1937, Ruedemann took steps to conclude a supplementary agreement and contract with the Hungarian authorities. He wanted to extend the time limit of exploratory drilling operations stipulated in the Agreement; and he planned to increase the company's capitalization which was included in the Contract. In July, before anyone knew with certainty that oil would be discovered in commercial quantities, the

Minister of Industry granted the requested changes.

After the Budafa wells struck oil, Ruedemann began to organize the company to exploit the oil fields. He registered the company as the Hungarian-American Oil Company, wrote the bylaws and selected members for the board of directors. By the end of 1938, the essentials were in place to commence a successful oil producing operation.

Organization for Exploration

By the middle of 1933, Eurogasco's Austrian operation around Vienna had begun showing results; and Ruedemann was able to spend more time in Budapest to organize for the exploration. Ruedemann invited Abel Bodog, manager of the Tendloft-Ditrich Machine Factory, to join him and take charge of administrative and business matters. To Dr. Simon Papp, a geologist with considerable experience at home and abroad, he offered the opportunity to lead the geological and geophysical research. Both men accepted; and without loss of time, they proceeded to fulfill their new responsibilities.

Papp approached Dr. Lajos Loczy, a university professor, internationally recognized geologist and current director of the Royal Hungarian Geological Institute, and persuaded him to direct the topographic survey and surface photography of Transdanubia. At the same time, he brought together a cluster of young and promising scientists: Dr. Aladar Vendel, Dr. Laszlo Strausz and Dr. Miklos Kretzoi who were geologists; and Laszlo Facsinay, Szilard Oszlaczky and Viktor Schaffer who were geophysicists.[2] Finally, Papp was able to persuade Dr. Raul Vajk, a doctor of geodesy who had just returned from the United States, to join the prospecting effort.[3]

At the outset, the exploring scientists reviewed the existing

records of Transdanubia in the possession of the Geological Institute, the D'Archy Exploration Company and the Hungarian Oil Syndicate, and reached the conclusion that the data was inconsistent, incomplete and unreliable in many instances. As a group, they agreed to take additional measurements and concentrate their exploratory efforts in Section 2 which possessed the most promising and largest amount of extant research information. They also decided to double check and compare the collected information and apply as many different geological and geophysical methods and apparatus as were available. Because of the complicated substrata configurations of Transdanubia, the Eurogasco team took the position that only a painstaking, multipronged approach could lead to success.[4]

Dr. Aladar Vendel and Dr. Laszlo Strausz, under Dr. Laszlo Loczy's supervision, carried on the exploration for hydrocarbons in several ways. With surveyor levels, they measured the elevation of land features and used the obtained data to prepare contour maps. During test-hole borings, they collected drill-core samples from different depth levels of the earth; and after analysis of the specimens,[5] they evaluated the composition of each substratum. The results of the topographic and stratigraphic studies were synthesized to determine the structure of the particular area under exploration. To highlight some features, the geologists took aerial photographs as part of their air photogrametry and photogeology work and included characteristic pictures in their final reports.[6]

Under Dr. Raul Vajk's leadership, Laszlo Facsinay, Szilard Oszlaczky and Viktor Schaffer conducted magnetic, seismic and gravity measurements.[7] The results of the geophysical examinations revealed not the presence or absence of hydrocarbons, but rather the type, dimensions

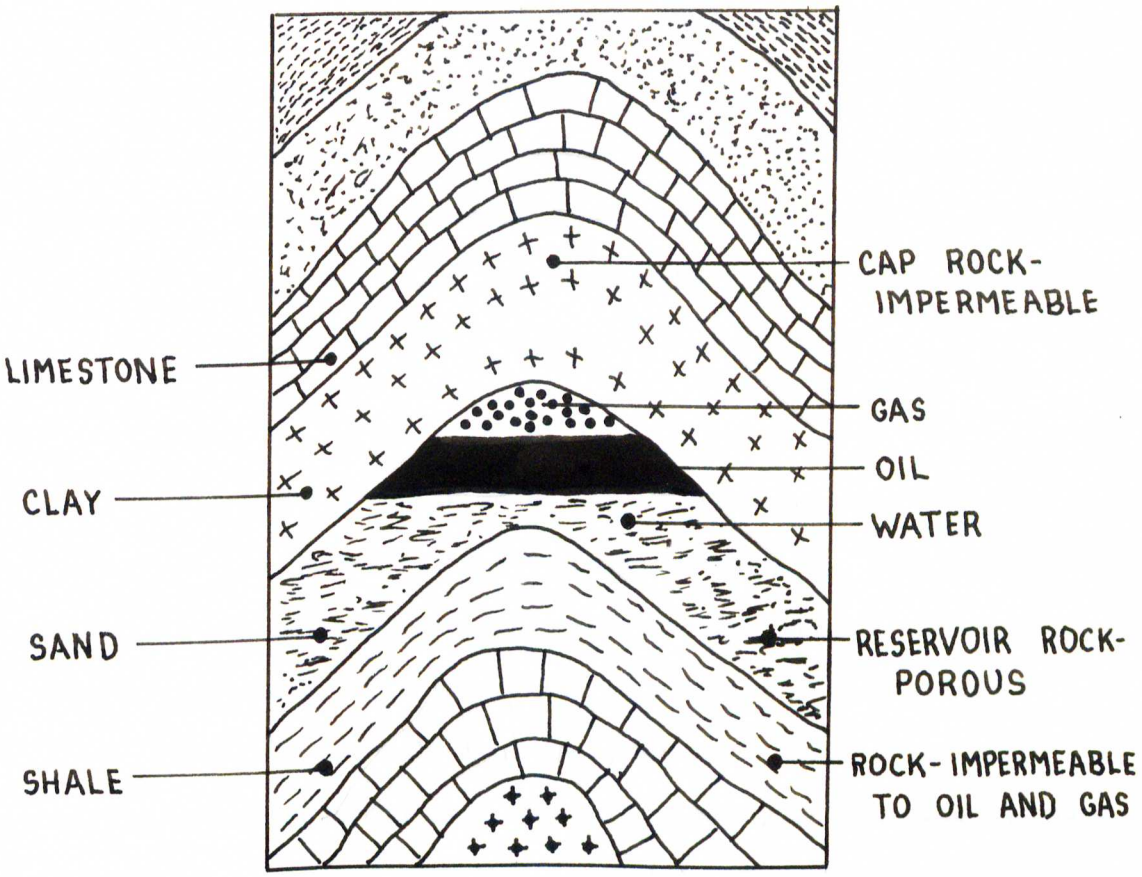
and arrangements of the substrata. Knowing the substrata which was associated with oil deposits, the geophysicists could surmise whether the underlying structure was or was not favorable for the formation and subsequent accumulation of oil. Drilling into the earth was the only sure way to tell of the existence of oil. In this connection, once a well showed the presence of oil, geophysicists conducted electric logging measurements to learn about the properties of the producing zones around the bore hole.[8]

In Hungary, Eurogasco geologists and geophysicists were searching for anticlines: elongated dome-type structures that represented the least complicated, but most commonly found, type of oil traps or reservoirs. (See the schematic drawing of an anticline with trap on the following page.) Anticlines could easily be detected by either geological or geophysical methods; anticlines were also relatively simple to tap. However, because of the particular geological evolution of Transdanubia, research efforts had been hindered by the faulted and cross-bedded conditions of most anticlines.[9]

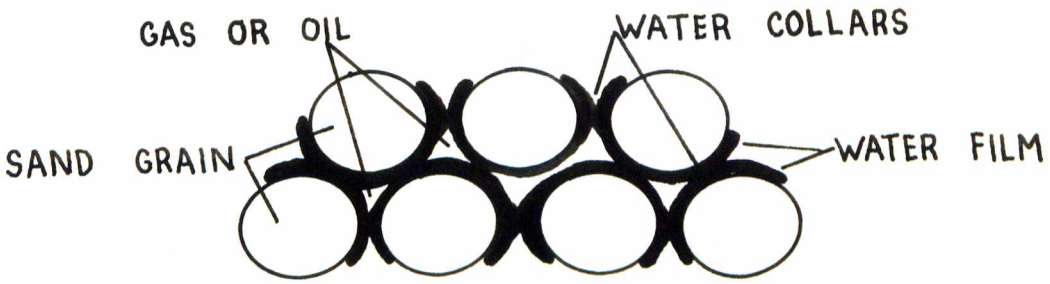
Between July 1933 and September 1937, the two groups of earth scientists worked steadfastly and prolifically. The geophysicists recorded 15,000 magnetometer readings, obtained seismograms from 2,500 points and established 20,000 torsion-balance stations, mostly in Section 2 which covered southwest Transdanubia. The geologists compared their topographic and stratigraphic studies and prepared their summaries.[10] In essence, the scientists found that

> Most of the southwest corner of the Transdanubian basin, near the Yugoslav border, is covered with Recent, Quaternary, and Levantine sediments with some Pliocene outcrops. The sediments are without definite stratification, and strong cross-bedding can be observed even in the Pliocene strata. Consequently, southwest Hungary is not a uniform area, but is divided into several parts of structurally different

ANTICLINE WITH TRAP FOR GAS AND OIL



FLUID DISTRIBUTION IN RESERVOIR ROCK



character.[11]

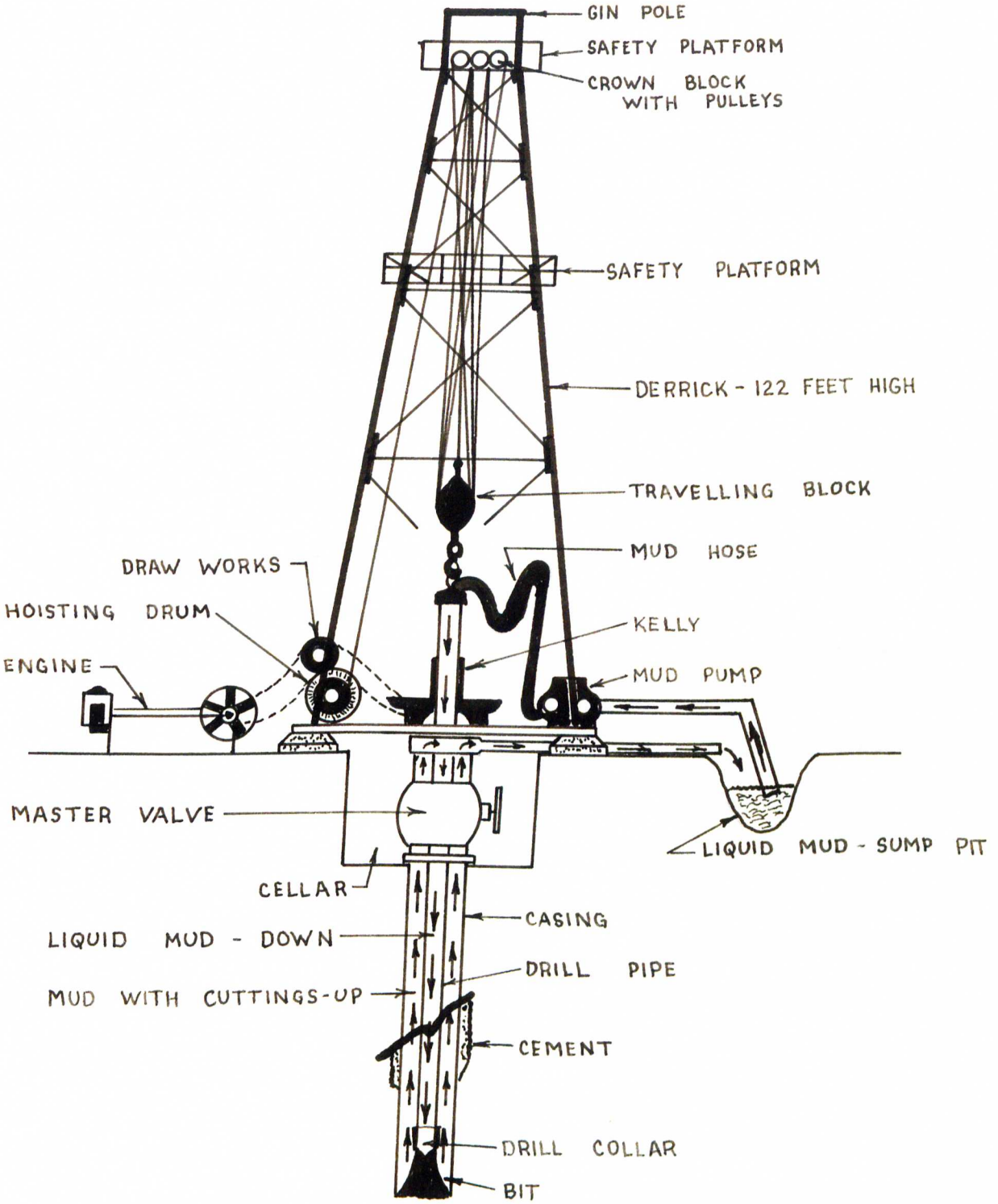
Because this land had been covered several times by oceans with adequate marine life, and the land had been subject to violent geological upheavals, conditions were favorable for hydrocarbon formation. In case there were hydrocarbon accumulations, the oil reservoirs would be buried in two different structures: in Pliocene sand traps of anticlinal folds and in the fractures of Triassic limestone with the oil originating in overlying Pliocene strata.[12] Drilling, the crucial test for the presence of oil, could now begin in southwest Transdanubia.

Drilling of Test Wells

At Eurogasco's Hungarian office in Budapest, Ruedemann and Papp received the final geological and geophysical reports. The American and Hungarian oil men collated and evaluated the scientific information; and within a few weeks, fixed the exact location of the first set of test wells.[13] Derricks, eye-catching, tall, hoisting structures, which suspended the drilling mechanism, started appearing in southwest Hungary, signaling the beginning of the last state of exploration for oil.[14] (See the schematic drawing of a derrick on the next page.)

The first location to be probed with the drill was in the environs of Mihalyi, a small town in Gyor-Sopron County in Section 1, 14 miles from Lake Ferto in northwest Hungary.[15] The geologists learned that 25-million-year-old (Tertiary Period)[16] sediments covered this region, and below the sediments was a 35-mile-long faulted quartzite hill that was formed 200 million years ago (Paleozoic Era). Construction of a derrick for the Mihalyi No. 1 (Section 1) well started on November 21, 1934. Drilling began on February 20, 1935, and lasted until November 2, 1935, when the rotary drill bit reached the crystal-

ROTARY DRILL RIG



line basement at 5,256 feet. This well produced gas at a depth of 3,770 feet, and carbon dioxide between 4,990 and 5,000 feet. Through an 8-inch valve at 154 pounds of pressure, the well yielded 15 million cubic feet of carbon dioxide daily.[17]

Next, Eurogasco engineers moved to southwest Hungary in Somogy County, Section 3, where natural gas seepages had been observed for a long time.[18] The structure they wanted to test was in the vicinity of Gorgeteg, a small village, 10 miles from the Yugoslav border. Drilling on the Gorgeteg No. 1 well (Section 3) commenced on October 14, 1935. The top 1,234 feet of the earth's crust consisted of 30-million-year-old (Quaternary Period) layers; from 1,234 to 4,600 feet, 15-million-year-old (Pliocene, Levantian or Upper Pannonian Epoch) layers; and at 6,755 feet, the drill rod got stuck. While several horizons showed oil and gas traces, the well ended in hard, compact and dense marl, which could not serve as a reservoir for oil; therefore, the operation was terminated on April 4, 1936.[19]

The third attempt to find oil took place near Inke, northwest of Gorgeteg, and 20 miles south of the western extremity of Lake Balaton. The site consisted of four buried hills, each lying in a structural trough. Geologists hoped that an anticline had developed in the 50-million-year-old (Tertiary Period) formation above the 150-million-year-old (Mesozoic Era) crystalline horst, making this location favorable for the accumulation of oil. Moveover, geophysical measurements (magnetic and gravimetric) indicated formations usually associated with oil.

Drilling of the Inke No. 1 well started on March 10, 1936. The drill penetrated an over 400-foot-thick, 15-million-year-old, 4,744-foot-deep layer. Fifteen-million-year-old sands between 4,429 and 4,521

feet deep, yielded 3 million cubic feet of gas daily, which contained 30 percent carbon dioxide and 70 percent paraffin base distillate. Drill-stem tests showed no significant oil traces. Boring was concluded at 7,023 feet on October 2, 1936.[20]

The time, effort and money devoted to the Inke No. 1 well was wasted. In the months ahead, the well produced muddy water and a series of gas eruptions. The gas, propelling the muddy conate (salty) water, turned out to be inflammable. The gas originated from 4,455-foot-deep, 15-million-year-old stratum. This horizon also produced scant, but definite, oil seepages.[21]

Dedicated efforts of knowledgeable people and substantial amounts of investors' money moved Eurogasco, much too deliberately, toward achieving the company's oil-finding goal. Since the exploration had begun, two years had passed and 10 million pengos ($2,000,000)[22] had been spent; still, not one of the three completed wells showed promise of oil. A feeling of failure and hopelessness followed the oil men wherever they moved their rigs.[23]

While the field personnel were experiencing problems, the directors at Eurogasco's London and New York offices were facing a different crisis in their high-risk, long-term investment business. They needed more money to maintain the company's operations. Because the recently discovered Austrian oil fields would not generate enough profit to finance the rising cost of the Hungarian explorations in the near future, many among the British stockholders refused to contribute additional sums to the working capital of Eurogasco. They were willing to sell, and Standard Oil of New Jersey was ready to buy. Before the winter of 1935 arrived, the large multinational company gained 64 percent of the voting power in Eurogasco. During the next year,

Rockefeller Plaza dismissed President Henry I. Pierce and appointed Ralph P. Bolton in his place, transferred the company's operations headquarters from Vienna to Budapest and started listing Eurogasco as a subsidiary in Moody's Manual of Investments.[24]

Standard Oil officials also reviewed the progress reports on the Hungarian exploration and decided not to establish a budget for its continuation in 1937. However, Ruedemann's persistent and convincing arguments that prospecting should continue on a limited basis in Section 3, modified Rockefeller Plaza's position to the extent that Standard Oil agreed to cover the cost of those test wells whose drilling had already started or whose location had already been fixed. Altogether, in Section 3, which was located in Zala County, there were three such wells.[25]

In the summer of 1937, work resumed, following Standard Oil's refinancing of the exploration efforts on a limited basis.[26] Ruedemann placed his hopes on the Budafa No. 1 and No. 2 wells for which the geologic and engineering works had recently been completed. Here, in the hilly region of Zala County, the British D'Archy Exploration Company, a subsidiary of the Anglo-Persian Oil Company, had already drill-tested the subterrain in the early 1920s.[27] But now, newly developed scientific evidence suggested that the proven oil pools of Szelnice and Peklenice of Yugoslavia[28] had continued into Hungary and formed part of the Budafa structure, which began a mere 15 miles from the border. Geological data also indicated that the Budafa structure encompassed three secondary highs, near Lovaszi, Lispe and Ujfalu villages. In agreement with Papp and Pavai, Ruedemann interpreted the three highs as three domes on the crest of the main Budafa anticline, which had the potential to become reservoirs for oil if sedimentation occurred without devel-

opment of inconformities 50 million years ago.[29]

Work on the Budafa No. 1 well, near the small city of Lispe (see map on p. 17) started on July 13, 1936. The drill perforated 15-million-year-old stratum between 3,531 and 5,128 feet, and 30-million-year-old stratum down to 5,788 feet where further deepening of the well was stopped. Technical difficulties almost completely frustrated the efforts of the crew. The well caved in at 3,745 feet, and both the drill stem and bit were lost. At this depth, the workers cemented off the well and prepared the remaining portion for tests. The well started producing 14 million cubic feet of gas and a few barrels [30] of high-gasoline-content crude daily, sometime in February 1937. Altogether, the well yielded a total of 6,780 barrels, further complications forced the engineers to close it off completely. In spite of the failure of this well, core samples obtained from it proved Ruedemann's assumption: sedimentation had begun 50 million years ago, and the whole anticlinal structure developed continuously without detectable inconformities.[31]

The near-total failure of the Budafa No. 1 well prompted Ruedemann to personally supervise the preparations for and the actual drilling of the No. 2 well.[32] Work on the second well started on April 14, 1937, and ended on Septemner 29, at 5,946 feet in the upper layer of the basement rock. The well logged 2,930 feet of 15-million-year-old statum; from there to 4,997 feet, the drill penetrated 30 to 50-million-year-old stratum to the end of drilling at 5,909 feet. Several horizons showed definite traces of oil, produced gas seepages, yielded conate water and contained foraminifera: each a definite sign for the previous existence of an ocean in the area.[33]

Mechanical problems again intervened when the well caved in below 4,217 feet. Ruedemann terminated further drilling and instructed

the workers to prepare the hole for testing. The stratum, between 3,973 and 3,986 feet, began producing crude oil on November 20. Ruedemann remembered the event as follows:

> During the entire operation, every sign suggested that we would strike oil. We stayed at the well day and night, when finally, on a cold, damp November morning, the oil started flowing.[34]

Later Papp reported that

> . . . by November 21, the oil flow was so substantial that we thought about beginning commercial production. The well produced 360,000 cubic feet of wet gas and 365 barrels of high-quality crude oil a day.[35]

Because Eurogasco's Budafa No. 1 and No. 2 wells started producing crude at different times, two possible dates avail themselves to signal the beginning of commercial oil production in Hungary. People connected with or interested in oil divided in their choice over the date for the origin of this vital branch of industry. Newspapers in Budapest, in particular, the Pester Lloyd and Magyarorszag reported on February 25 that according to authoritative sources, Eurogasco discovered oil near Lispe and the field could supply 15 percent of the country's need.[36] In 1957, Geza Szurovi, an authority on oil exploration wrote the following in his extensively used textbook, Koolajkutatas es Feltaras Modszerei Magyarorszagon (Rock Oil Exploration and Exploitation Methods in Hungary):

> Success followed Eurogasco's activity for the first time on February 9, 1937, when the company brought to an end the deepening of well B-1. In spite of the fact that the drill stem got stuck and the hole could not be developed completely, it started producing through an 8.5 millimeter bean [choke valve] 418,000 cubic meters of gas, and intermittently, 24 cubic meters of rock oil daily. Thus, February 9, 1937, became the birthday of the Hungarian rock oil industry.[37]

Because of insufficient production and hope for a substantial strike, Skeels and Vajk, who were scholarly geologists, appropriated no significance to the exact day on which well B-1 started producing when

they prepared the following report:

> Based on the torsion balance and seismograph data, a test well was located on the Budafa structure about 1.1 miles north of the Hungarian Oil Syndicate well. When choosing this location, road and transport conditions had to be considered also. Preparations started in July 1936, and drilling was completed in March 1937. The drill encountered Upper and Lower Pannonian, Sarmatian and Tortonian strata. The well yielded more than 10 million cu. ft. wet gas daily, and some light oil from a depth of 3,500 feet. At a later date, when the gas of the well was used as fuel, the well yielded about 150 barrels oil daily.[38]

On the other hand, the oil men who had been responsible for the whole operation, Ruedemann and Papp, waited until the B-2 well came in before they made their pronouncements. Talking with John F. Montgomery, U.S. Minister to Hungary, Ruedemann intimated that the first flowing well started producing on November 20. He also said that "as the well yielded 480 barrels a day, prospects for other wells were excellent."[39] And it happened only on the next day that Papp felt confident enough to write about the company's "beginning commercial production."

In contrast with some major oil stikes in the 1970s, Eurogasco's success stands out in clear relief. Eleven test wells were sunk into Alaska's North Slope before a commercial find was made. In the North Sea, the engineers and geologists had 50 false starts; and in oil-rich western Canada, the number reached 153.[40] While the cost of exploration for each of these presently producing fields is not available, Eurogasco's investment in the exploration of the Budafa field can be found out. Skeels and Vajk reported that the

> . . . area east and west of Budafa was also investigated by the torsion balance, and about 500 stations were completed in this territory. Total cost of the survey was about 2,000 dollars. It is believed that this is the cheapest and most efficient survey ever made as the 500 torsion balance station contoured three domes on a main anticline, each of which is now a proven oil field (Budafa, Lovaszi and Ujfalu). Cost of the survey per oil field was less than 700 dollars.[41]

Undoubtedly, the discovery of oil in an energy-poor country was

significant. However, the question arises: why did the Hungarian Oil Syndicate (a subsidiary of Anglo-Persian) fail to discover oil in the area in 1921 when its exploring geologists, some of them the same as those who later served Eurogasco in 1937, sank two test wells only a few hundred feet from the ones that eventually became producers? Only one authority on this intriguing question has offered an explanation. Dr. Vajk wrote:

> The Hungarian Oil Syndicate drilled two wells in southwest Hungary in search for the continuation of the eastwest striking anticline of the long-known small oil fields of Szelnice and Peklenice located in Yugoslavia near the border. Well No. 1 at Budafa penetrated 5,700 feet of Pannonian sediments with some oil and gas shows and well No. 2 near Kurd, reached the Miocene formation at 984 feet, showing some oil traces. Both wells were drilled on the basis of geological considerations without geophysical investigation.
>
> Geologists supposed that the eastwest striking anticline, which in Yugoslavia is easily discerned on the surface, extends across the border into Hungary. However the Lower Pannonian strata which outcrop at Szelnice in Yugoslavia, are not present on the surface in Hungary, and the Upper Pannonian is without reliable stratification. For this reason the continuation of this anticline in Hungary could not be definitely determined by surface geological methods. This explains why the exploratory well drilled by the Hungarian Oil Syndicate in 1921 at Budafa, without previous geophysical investigation, was a failure. It missed the water-oil contact of the Lispe oil field, discovered here later, by 1,600 feet.[42]

Supplementary Negotiations

During the preparatory work for the Budafa No. 1 well in the spring of 1937, Ruedemann informed the Minister of Industry, Geza Bornemissza (who had been representing the Royal Treasury in concessional negotiations), that he wished to renegotiate some provisions of the Agreement of 1933. He wanted to extend the initial five-year time limit placed on exploratory drilling operations because he believed that if there were oil deposits, the exploring geologists needed more time to find them. Government officials received Ruedemann's request favorably,

and the two parties concluded the Supplementary Agreement in July. The new document permitted Eurogasco to continue explorations two more years, until July 20, 1939, and increased the required number of test wells from the original eight to eleven, with the stipulation that the additional wells could be drilled in any one of the three concessional areas. In case the company officials decided to place the additional test wells in Section 2, where Budafa was located, they could do so legally.[43]

After the Budafa No. 1 well had shown traces of oil, but before the drilling of the No. 2 well, Ruedemann notified the Hungarian government that now he wanted to change some terms of the 1933 Contract. The Hungarian government once again accommodated Ruedemann's request.

Negotiations for the new guidelines entitled Supplementary Contract, between the Royal Hungarian Minister of Industry (on behalf of the Royal Hungarian Treasury) and representatives from Eurogasco, commenced in June 1937.[44] The main thrust of this document intended to strengthen the financial interest of the owners in the new company. Capitalization of the new company was increased from the original $500,000 (2,631,000 pengos)[45] to $2,727,000 (14,357,000 pengos) by virtue of a technical, financial maneuver; and the increase was divided into 14,357 shares, each having a nominal value of $19 (100 pengos).[46]

The significant feature of the technical, financial maneuver, which in effect raised the new company's capitalization by $1,910,000 (10,057,000 pengos), was that it required no additional cash outlay by Eurogasco. The reason for this was that

> To this mentioned capital, Eurogasco, as founder of the N.C., contributes an investment not consisting of cash, the value of which is P. 110,057,000 which, according to the Agreement, mentioned in the first clause of the present Supplementary Contract, consists of the investment having property value, and

> made by Eurogasco during the period of the right of option, such as machinery, drilling equipment, materials, wells, maps, and immovables, which were necessary to complete the geological, geophysical and drilling works carried out under the Agreement. The total number of the shares of the mentioned investments, not covered by cash, will be declared by the General Assembly forming the N.C. to be 10,057 shares of the nominal value of P. 10,057,000.[47]

The right to increase the value of the new company through such a contractual, financial conversion was reserved in hard-to-notice and even hard-to-connect stipulations of the original Agreement and Contract. The Agreement stated:

> Provided Eurogasco shall comply with the terms of this agreement, it shall have the right, if it so desires, at any time within the period of this option, to form the Company as provided in Clause 1 of the Main Contract[48] for the purpose of exercising the same.[49]

The "option" was defined by the Contract as ". . . it [Eurogasco] undertakes to form within three months, for the purpose of executing this contract, an independent Hungarian Limited Company . . ."[50] Actually, Clause 3 of the Contract explained Eurogasco's right for those additional 10,057 shares. It read:

> The N.C. shall not pay out of the cash capital mentioned above to Eurogasco any amount in cash in return for the expenditures of Eurogasco in connection with the formation of the new company, with geologising [sic], prospecting, developing and establishing the project, but may, in return for the work performed by Eurogasco, assign to it such portion of its common stock as it may issue in addition to the above mentioned cash capital (500,000 dollars) and may be determined between Eurogasco and the N.C. [51]

In essence, these clauses of the Ageement and Contract sanctioned a three-fold increase (from $500,000 initially set investment, to $1,910,000) in Eurogasco's financial interest in the new company. A similar financial, technical move regarding investment in and cost of exploration would recur.

The Supplementary Contract increased the new company's capital-

ization from $500,000 (2,631,000 pengos) to $2,727,000 (14,357,000 pengos). It also stated: "To this mentioned capital, Eurogasco, as founder of the N.C., contributes an investment not consisting of cash, the value of which is P. 10,057,000 . . ."[52] This meant that only $817,000 (4,300,000 pengos) of the total $2,727,000 capitalization had to be in cash. Furthermore, the Supplementary Contract specified that the cash amount had to be surrendered in two unequal portions. At the time of the establishment of the new company, Eurogasco had to deposit $245,100 (1,290,000 pengos) on an account of the new company opened for this purpose at the Hungarian Commercial Bank of Pest (Magyar Kereskedelmi Bank, Budapest). This amount represented 30 percent of the nominal value of the shares payable in cash. The remaining 70 percent ($572,000 or 3,010,000 pengos) had to be deposited within one year from the official registration of the new company in a manner to be determined by the new company's board of directors.[53]

Toward the end, the renegotiated document repeated the clause which limited the new company's production to the amount of home consumption of petroleum products. It read:

> The development shall be carried on continuously in a proper business-like manner and, providing it is proving reasonably remunerative to the N.C., it shall be increased until the total home consumption, which can be marketed in Hungary, has been secured, but the N.C. is not obligated to perform greater drilling activity than stipulated in the first paragraph on any of the areal units taken over for development. The drilling operations for oil may be wholly or partially suspended, however, when it is shown upon the request of the N.C. to the Royal Hungarian Minister of Industries that in known oil pools the drilling has progressed so far that new commercially productive wells can not be drilled therein.[54]

The Contract, the Supplementary Contract and the Articles of Association[55] gave legal standing to the new company as they regulated the relationship between the sovereign Hungarian state and multinational

American company. The Supplementary Contract became valid when the Minister of Industry, Geza Bornemissza (representing the Royal Hungarian Treasury), and Paul Ruedemann, Vice President of Eurogasco, signed it on June 24, 1938. Dr. Karoly telegdi Roth, Bela Faludi, Dr. Simon Papp, and F. C. Pannell were the witnesses.[56]

The text of the Supplementary Contract was presented to the House of Representatives on June 24 and 27. The representatives voted in favor of it on June 28. No questions, discussion or comments were advanced for or against the granting of the concessions with one exception. Representative Geza Malasits interjected during the proceedings: "It should not be read so loudly; the Germans may hear it and they may want our oil."[57] During the presentation, no one mentioned that two years earlier the Standard Oil Company had gradually acquired control over Eurogasco.[58] With the approval of the Upper House, on July 6, 1938, the document became binding.[59]

On July 28, Eurogasco officials registered their producing company under the name of Hungarian American Oil Company Limited (Magyar Amerikai Olajipari Reszvenytarsasag, abbreviated MAORT) in the Company Register at the Royal Court of Justice in Budapest, which also functioned as a Firm Registration Court (budapesti kir. Torvenyszek, mint a Cegbirosagok Tarsas Jegyzeke). It received the firm number Cg 40.315.[60] A year later, on September 4, 1939, MAORT officials placed the company's stocks in bearer' shares in the vaults of the National Bank of Hungary as had been agreed on by the state and the company.[61]

Organization of Maort

With the act of registration in the Company Register at the Royal Court of Justice on July 28, 1938, MAORT became a legal entity

within the confines of Hungarian law and a potential force in the country's economic life. Paul Ruedemann, who came to Hungary as a representative of Eurogasco in 1931, gained important posts and distinguished titles in the newly established company. He was appointed Vice President and Manager of MAORT--in function, an executive Vice President--and also placed on the first board of directors. MAORT's Board of Directors in 1938 had the following nine members:[62]

Clarence Herman Lieb, President
Paul Ruedemann, Vice President
Ralph P. Bolton
Emil Konek
Simon Papp
George A. Bannantine
Ray P. Walters
J. F. Conaway
Erno Hauer

While the members of the Board of Directors made and executed decisions necessary for the continuous operation of the company, the Board of Supervisors scrutinized the activities of the Directors, ascertaining that each acted in good faith within his competence for the benefit of the company. The Board of Supervisors had three members, two Hungarian and one American. Walter Graf and Abel Bodog were the Hungarians and George W. Martin of Standard Oil Company of New Jersey was the American.

With two exceptions, MAORT's high echelon officials were Hungarian citizens. Ruedemann was American and Emil Schudel, a naturalized American citizen (originally Swiss), supervised the company's financial matters as comptroller. Schudel lived in Canada but visted Hungary often. Usually he represented (in the role of a proxy) the majority interest of Standard Oil's stockholders during the General Assembly of Shareholders. Occasionally, he was selected to sit on the Board of Directors.

Second in charge of the company's affairs was Simon Papp. He not only was one the Board of Directors but was also the head of the Production Department. Abel Bodog, who was a member of the Board of Directors and occasionally one of the three members of the Board of Supervisors, was in charge of the Purchasing Department. Dr. Raul Vajk was the Chief Geologist who supervised the work of the Exploration Department. These high officials of MAORT maintained their offices in an exclusive business section of Budapest, in the fifth district, in Ferenc Jozsef ter 5. This was the central office of MOART which also operated a local office in Nagykanizsa and a field office in Lispe.[63]

After the formation of MAORT, Geza Bornemissza did not delay too long in appointing a State Comptroller to the company. He selected Dr. Karoly Roth, an experienced mining engineer and administrator and a trusted ministerial advisor. Since the Division of Mining had been transferred from the Treasury to the Ministry of Industry, as Department X, in June of 1936, Roth had been in charge of all mining affairs in Hungary. Now, he also had to oversee the business of MAORT. Ruedemann was able to work alone with Roth, in spite of the latters' insistence on rapid development of the oil fields and the exploitation of crude over and above the needs of the country.[64]

To complete the organization of the company, MOART officials had to fulfill a regulation that was included in the Supplementary Contract and described in the Commercial Code of Hungary. They had to draft a set of articles of association or, as they were commonly known, bylaws. This document intended to enumerate the rules for the major decision-making process of the company.[65]

The adopted Bylaws consisted of thirty-two articles. The first ones defined the name, purpose, duration and capitalization of MAORT--

these were transferred verbatim from the Contract and Supplementary Contract. The rest of the articles defined the scope and function of the General Assembly of Shareholders and specified the duties of the Board of Directors and Board of Supervisors.[66]

The General Assembly of Shareholders was designated as the final decision-making body of the company. In it every shareholder had the right to participate and cast votes according to the number of full shares owned. Sometime during the first six months of each calendar year, the Board of Directors had to convene this Assembly to decide such matters as the allocation of capital, issuance of new shares, determination of annual dividends, and the election of directors and supervisors to their respective boards.

The shareholders' rights included the privilege of preemption on new shares issued in proportion to the number of shares they had already owned. They could be represented by proxies at the General Assembly if the proxies were properly granted power of attorney.[67] The General Assembly achieved a quorum in case the shareholders in attendance represented not less than a two-thirds part of the share capital. In case no quorum were achieved, the General Assembly of Shareholders would have to be again convened within thirty days; this time, any number of share capital represented formed the quorum.

The proceedings of the General Assembly of Shareholders had to be conducted by the Chairman of the Board of Directors, the Vice Chairman or a member of the Board of Directors. Resolutions of the General Assembly required only a simple majority of votes of the shares represented. In case of a tie, the chairman would have the deciding vote. The voting could be oral and open, provided that none of the shareholders called for a written ballot. Exact minutes had to be kept

of each session and after the chairman signed the minutes, they had to be submitted to the Royal Court of Justice, Budapest as Firm Registration Court (budapesti kir. Torvenyszek mint Cegbirosag) without delay.

The Board of Directors consisted of no less than three and no more than twelve members who were elected by the shareholders in the General Assembly for the duration of one business year. The directors represented the company before third persons and made decisions concerning all important matters of the company which were not reserved to the sphere of action of the General Assembly and Board of Supervisors. In turn, the directors had authority to form an Executive Committee of their own to deal with the regular business matters of the company.

The directors perpared their own rules of procedure within the limits set by the Bylaws. They elected from their own body a chairman and vice chairman who could convene the meetings of the board at the request of at least two directors. In case all members of the board were invited, as few as three directors could constitute a quorum. The resolutions of the Board of Directors had to be passed by a simple majority of votes; and if there were a tie, the chairman had the deciding vote. Fees or remuneration for the members of the board were fixed by the members of the General Assembly.

The main task of the Board of Supervisors was to verify that the Board of Directors acted within the resolutions of the General Assembly and managed the company's business in accordance with the Bylaws. The supervisors consisted of no less than three and no more than five members who were elected by the shareholders in the General Assembly for one business year. Rules of procedure, election of chairman, quorum requirements and remuneration of supervisors were identical to the ones of the directors.

The Bylaws also defined some necessary administrative procedures. At the end of each business year, which began on January 1 and ended on December 31, the company had to prepare a balance sheet and submit it to the proper authorities.[68] In case the company lost half of its share capital, the Board of Directors had to call to order the General Assembly of Shareholders to decide the continuation or dissolution of the company. The Bylaws of the company had to be submitted to the Royal Minister of Commerce and Communications for his consent and later presented to the General Assembly of Shareholders for its approval.[69]

In general, the executives of the Board of Directors, with their interlocking positions in the management of the company and membership in the Board of Supervisors and General Assembly of Stockholders, were the eminent persons in the decision-making process of the company. Throughout the history of the company, with the exception of the war years, the directors fulfilled their responsibilities in accordance with existing rules of the company and the instructions of Rockefeller Plaza.

NOTES: CHAPTER TWO

1. For details concerning the Agreement, see pp. 14-19.

2. CHOMD, vol. 1, p. 245.

3. See page 6 for more details.

4. CHOMD, vol. 1, pp. 244-46.

5. The analysis also included careful examination of microfossils which could tell of a possible marine period in the geological history of the area. For the purpose of finding hydrocarbons, geologists regarded such information useful.

6. George D. Hobson, Some Fundamentals of Petroleum Geology (London: Oxford University Press, 1954), pp. 57-53; Richard E. Chapman, Petroleum Geology (New York: Elsevier Scientific Publishing Company, 1975), pp. 27-46; and Orville I. Levorsen, Geology of Petroleum (San Francisco: W. H. Freeman, 1967), pp. 3-43.

7. Magnetic measurements detected anomalies (irregularities) in the earth's magnetic field that have been caused by the inclusion of different rock strata. At this time, geophysicists were interested in finding anomalies caused by sedimentary rock, because this type of rock formed the most commonly found reservoirs for oil.

Seismic studies aided the geophysicists in the determination of density and thickness of the underlying layers. Sound waves, sent into the earth's crust, refracted differently from layers of rock with different properties. An array of data enabled the scientists to place together a seismic profile of an area.

Gravity studies recorded the earth's gravitational pull. Locating areas with lower gravitational pull than what had been typical for the region indicated the presence of an intrusion of less dense rock. Salt domes, remnants of seas, which had often been associated with crude oil and exerted less pull than the surrounding rock, were especially sought by geophysicists (Lewis Nettleton, Geophysical Prospecting for Oil (New York: McGraw-Hill Book Company, 1940), pp. 17-57; Adrion Scheidegger, Foundations of Geophysics (New York: Elsevier Scientific Publishing Company, 1976), pp. 31-38; and Carl Heiland, Geophysical Explorations (New York: Prentice-Hall, 1940), pp. 27-44).

To record magnetic values, the team of Eurogasco geophysicists used a Schmidt vertical manometer manufactured by the Ashania Company in Berlin. Seismic profiles were compiled by a group of scientists from the Carter Oil Company, U.S.A., a subsidiary of Standard Oil Company. The gravity pull of the area was established with Eotvos-Rybar automatic torsion balance instruments of Hungarian origin and make. Many of the gravimetric figures were rechecked with a Humble-Truman-Howell gravi-

meter, because the hilly topography of Transdanubia influenced the accuracy of the Eotvos-Rybar instrument (CHOMD, vol. 1, pp. 245, 248).

8. Electric logging aided the geophysicists in the determination of the porosity and permeability of the crude oil saturated stratum. For the logging tests a Schlumberger apparatus was used (CHOMD, vol. 1, p. 250).

9. In general, an anticline, a gentle fold in the substrata, was caused by tectonic forces. Within it, reservoir layers or pays consisted of coarser grained sedimentary rock (sandstone, limestone, dolomite and grit) which possessed fluid-holding (porosity) and fluid-transmitting (permeability) properties. These pays were usually bent downward on all sides, forming eliptical contour lines. Gas, oil and water could migrate from all sides into the structure, accumulating in the highest part of the fold, the anticline. At the roof, an impervious stratum sealed in the oil completely (John R. Foster, Geology (Columbus: C. E. Merrill Books, 2967), pp. 175-198; and James Gilluly, Principles of Geology (San Francisco: W. H. Freeman, 1975), pp. 216-227).

10. Raul Vajk, "Geophysical Exploration of Southwest Hungary," Geophysics, vol. 17, no. 2, (April 1952), pp. 291-92.

11. Ibid., p. 292.

12. D. C. Skeels and R. Vajk, "Geophysical Exploration and Discovery of the Budafapuszta (Lispe) Oil Field in Hungary," Geophysics, vol. 12, no. 2, (April 1947) pp. 212-13.

13. CHOMD, vol. 1, p. 247. Ruedemann and Papp disregarded the location of the many scattered, larger and smaller surface seepages of hydrocarbons in the area as they selected the drilling points. For a detailed map showing the free occurrences of hydrocarbons see The Hungarian Oil Industry, pp. 90-91.

14. The engineering corps used modern rotary-type rigs manufactured in the United States by the Hughes Tool Company (CHOMD, vol. 1, p. 251).

15. In subsequent years, four more wells were sunk in this area, but not one of them turned out to be a producer (The Hungarian Oil Industry, p. 32).

16. European and American geologists agree in designating "eras" (about one billion to one hundred million years ago) and "periods" (about one hundred million to ten million years ago) in their geological time tables, but they differ in the names for most "epochs," (about ten million to one million years ago). Europeans tend to call "epochs" (the last and shortest time interval) by names with local reference. When Hungarian geologists speak of Levantian, Pontian and Pannonian epochs, they talk about three parts--late, middle and early--of the Pliocene Era. In case there is a difference in designation, both names will be shown in parentheses with the familiar American first. For a comparative chart, see the Hungarian Oil Industry, p. 20.

17. CHOMD, vol. 1, pp. 256-47. Not to waste the carbon dioxide, Eurogasco set up a small plant to manufacture dry ice ("Petroleum Facilities of Hungary," prepared by Enemy Oil Committee, 1944, NA Records). This committee consisted of government employees who researched for information in order to prepare reports on the energy situation of countries which were at war with the United States.

18. For a detailed map showing natural hydrocarbon seepages in the whole country see The Hungarian Oil Industry, p. 91.

19. Banyaszati es Kohaszati Lapok [Hungarian Journal of Mining and Metallurgy], no. 9, 1939, p. 215; Hereafter cited as HJMM; The Hungarian Oil Industry, p. 19; CHOMD, vol. 1, p. 247; and "Petroleum Facilities of Hungary," 1944, NA Records.

20. CHOMD, vol. 1, p. 248. Later two more wells were drilled here; well No. 2 reached 7,078 feet and well No. 3 reached 7,441 feet. Both wells passed through the same kind of strata as No. 1 without detecting oil (The Hungarian Oil Industry, p. 35; and "Petroleum Facilities of Hungary," 1944, NA Records).

21. CHOMD, vol. 1, p. 248. Eventually five more wells were bored into the Inke structure without finding oil deposits. The deepest well reached 7,853 feet (The Hungarian Oil Industry, p. 36).

22. The official exchange rate was one pengo for o.19 dollars.

23. CHOMD, vol. 1, pp. 248-51.

24. CHOMD, vol. 1, pp. 251-52; and Moody's Manual of Investments, 1936, p. 2532. Ostensibly, the headquarters' transfer was a result of Germany's rising influence in Austria, and the intensification of Nazi agitation, following the remilitarization of the Rhineland.

25. Ibid.

26. CHOMD, vol. 1, p. 241. First, the Mihalyi No. 2 well's completion continued, but without any success. In later years, three more wells went down into the Mihalyi structure. The No. 3 well reached the basement at 6,227 feet and turned out to be a dry hole. The No. 4 well, another non-producer, passed through a 285-foot thick, 33-million-year-old (Miocene, Upper-Mediterranean or Sarmatian Epoch) horizon before it reached the basement at 4,791 feet, and produced lots of carbon dioxide. Mihalyi's five wells produced no oil; still, the geologists' final evaluation did not exclude the possibility of accumulations in this locality (The Hungarian Oil Industry, p. 33).

27. Papp and Pavai first surveyed this region for the Hungarian government during World War I; and later for the Hungarian Oil Syndicate, in 1921. After they completed their exploration of the same region for Eurogasco, they went back to the results of the previous two sets of measurements and noticed no significant differences among the three sets of data (ibid.).

28. These two places had been steadily producing crude for

years, however, in small quantities (ibid., p. 34).

29. CHOMD, vol. 1, p. 249.

30. One barrel consists of 42 gallons or 156 liters. Because the barrel is the customary volume unit in the oil industry, this paper will also use it as its basic unit and will make no reference to equivalent metric units.

31. "Petroleum Facilities of Hungary," 1944, NA Records; CHOMD, vol. 1, p. 250; HJMM, no. 9, 1939, p. 22; and The Hungarian Oil Industry, pp. 36-37.

32. HJMM, no. 9, 1939, p. 22.

33. Ibid.; and CHOMD, vol. 2, pp. 252-53.

34. Ministry of Industry, Mineral Oil Division, pkg. no. 1, Hungarian National Archives, cited in CHOMD, vol. 1, pp. 253-54.

35. Ibid., and HJMM, no. 9, 1939, p. 224.

36. Pester Lloyd, February 25, 1937; and Magyarorszag, February 25, 1937.

37. Geza Szurovi, ed., Koolajkutatas es Feltaras Modszerei Magyarorszagon [Crude Oil Exploration and Exploitation Methods in Hungary] (Budapest: Akademia Kiado, 1957), p. 24. The author continued to state: "In May of the same year, the explorations at Bukkszek also led to results, as rock oil surfaced in small quantity from great depth." This operation was financed and conducted by the Hungarian state (ibid).

38. D. C. Skeels and R. Vajk, "Geophysical Exploration and Discovery of the Budafapuszta (Lispe) Oil Field in Hungary," Geophysics, vol. 12, no. 2, (April 1947), p. 215.

39. Despatch 207 (plain), John F. Montgomery, American Minister U.S. Legation, Budapest, to Sec. of State, Nov. 23, 1937, NA Records.

40. Time, July 24, 1978, p. 51.

41. D. C. Skeels and R. Vajk, "Geophysical Exploration and Discovery of the Budafapuszta (Lispe) Oil Field in Hungary," Geophysics, vol. 12, no. 2, (April 1947), p. 215. Apart from quoting the same figures, the writers of The Hungarian Oil Industry added the following on page 36: "It was made by Hungarian experts using instruments manufactured in Hungary."

42. Raul Vajk, "Geophysical Exploration of Southwest Hungary," Geophysics, vol. 12, no. 2, (April 1952), pp. 293-94.

43. The Supplementary Agreement was signed by the parties on June 10, 1937, and "voted in favor" on by the Hungarian Parliament on July 9, 1937 (CHOMD, vol. 1, p. 254). Neither the Hungarian collection

of documents nor the Washington D.C. archival deposits contained a copy of the Supplementary Agreement.

44. On July 1, 1936, the Division of Mining, which up to this date had been a part of the Royal Hungarian Treasury, was transferred to the Ministry of Industry. However, Law Article VI of 1911, which stipulated that the Minister of Finance (Treasury) had exclusive authority to grant hydrocarbon contracts, had not been changed. Therefore, the Supplementary Contract was negotiated and signed by the Minister of Industry on behalf of the Royal Hungarian Treasury.

45. Census of American-Owned Assets in Foreign Countries - United States Treasury Department Office of the Secretary (Washington D.C.: Government Printing Office, 1947), p. 60. The official exchange rate was 1 pengo for 0.19 dollars. The pengo, replacing the inflationary, post war crown, was issued in 1923. In later years, the pengo proved to be a reasonably stable and convertable monetary unit.

46. CHOMD, vol. 1, Appendix. The exact title of the document was Potszerzodes - ma. kir. iparugyi miniszter es az European Gas & Electric Company kozott. Supplementary Contract - between the Royal Hungarian Minister of Industry and the European Gas & Electric Company. A copy of this document is also available in the NA Records, designated 864.6363/27 in box 6868.

47. CHOMD, vol. 1, Appendix, Supplementary Contract, p.1.

48. In such a case, Eurogasco had to act in the capacity of a negotiorum gestor (negotiator without a mandate). In other words, Eurogasco had to mediate and insure that the new company would come into all contractual rights and obligations at the time of its registration.

49. CHOMD, vol. 1, Appendix, Agreement, p. 2.

50. CHOMD, vol. 1, Appendix, Contract, p. 2.

51. Ibid., p. 3.

52. CHOMD, vol. 1, Appendix, Supplementary Contract, p. 3.

53. Ibid., pp. 4-5. 54. Ibid., p. 8.

55. Articles of Association or, Bylaws, had to be drafted by the officials of the new company and submitted to the Minister of Industry for his consent before it could be presented to the owners at the next General Meeting of Shareholders (ibid., p. 9).

56. Ibid., p. 11.

57. Orszaggyules Kepviselohazanak Naploja, 1938, p. 218.

58. Ibid., pp. 216-36.

59. CHOMD, vol. 1, Appendix, Supplementary Contract, p. 11.

60. Ibid., p. 11.

61. Letter, Brice to . . . Wiederaufbau und Vermogenssicherung, Wien, January 20, 1949, attached to letter by George Koegler counsel to Standard Oil to David E. Longanecker, November 7, 1949, Petroleum Division, Department of State, NA Records. There were exactly 14,357 of them.

62. To appreciate the multinational character of MAORT's first Board of Directors, it is useful to list the information available (names, board titles, work addresses and citizenship) on these officers:

Clarence Herman Lieb, President, Chairman of the Board of Directors, Standard Oil Company, 30 Rockefeller Plaza, New York - American

Paul Ruedemann, Vice President, Director, 5 Ferenc Jozsef ter, Budapest - American (naturalized, originally German)

Ralph P. Bolton, Director, Standard Oil Company, S. A. Buenos Aires, Argentina - British

Vice Admiral Emil Konek, Director, Budapest - Hungary; He was the representative of the Hungarian Ministry of Industry

Dr. Simon Papp, Director, 5 Ferenc Jozsef ter, Budapest - Hungarian

George A. Bannantine, Director, Creole Petroleum Corporation, Caracas, Venezuela - American

Ray P. Walters, Director, Standard Oil Company, 30 Rockefeller Plaza, New York - American

John F. Conaway, Director, Creole Petroleum Corporation, Caracas, Venezuela - American

Erno Hauer, Director, Budapest - Hungarian. He was the manager of the Hungarian-American Mineral Oil Trading Company Limited [Magyar-Amerikai Asvanyolajkereskedelmi Reszvenytarsasag]. Previously, this company was called Hungarian-American Petroleum Company Limited [Magyar Amerikai Petroleum Reszvenytarsasag].

The source, "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records, which included this list, was also interested in using the directors as possible sources of intelligence information. This can be surmised from the footnote which followed the list of directors. The footnote read:

> In listing the individuals who have been associated with the various oil companies, it should be understood that these individuals may be looked to for information of possible value in their respective fields, but insofar as concerns the non-Americans, no implications should be drawn as to their political sympathies or affiliations.

An appropiate example for a MAORT official who "may be looked to for

information of possible value" was discovered in the person of Ruedemann. After he left Hungary in January 15, 1942, he was invited to Washington, D.C. by Wallace Phillips, Director, Division of Special Information, Department of State, Washington, D.C., to be interviewed concerning various topics related to Hungarian economics and politics.

It is necessary to note that the CHOMD listed Ralph P. Bolton as still the President of both Eurogasco and MAORT and Clarence H. Lieb only a member of the Board of Directors. But what is most unusual is that the CHOMD stated that the Board had nine members but listed only eight. It left out Ray P. Walters, who after 1945 would assume a very special role. (CHOMD, vol. 1, p. 259).

63. CHOMD, vol. 1, p. 260. 64. Ibid., pp. 219, 260.

65. CHOMD, vol. 1, Appendix, Supplementary Contract, p. 8.

66. Bylaws, unattached, NA Records, box 6868. The Hungarian collection of documents did not contain this particular record.

67. In fact, MAORT never had a full General Assembly of Shareholders meeting in its history. Paul Ruedemann or Emil Schudel acted as a proxy of Eurogasco, representing almost all shares.

68. The first business year began with the registration of MAORT, July 6, 1938, and ended on the last day of the calendar year.

69. Bylaws, unattached, NA Records.

CHAPTER THREE

OPERATIONS: 1938-1941

The discovery of rich pay zones set MAORT officials on their way to prepare the oil fields for large-scale production. They put to work the available drilling outfits to sink wells at the most promising locations as fast as practicable. Construction of storage and transportation facilities to expedite the movement of increasing quantities of crude from the fields to the refineries was started. Because most operations were in the initial stage, officials had to procure various types of materials, purchase new machines, organize supporting services and store large amounts of equipment. In the course of months, the oil workers transformed an agricultural region of southwest Transdanubia into an industrial area.

Completion of the engineering projects constituted part of the company's operations. Equally important were the administrative decisions underlying every major work phase. The director-managers worked under conditions which were dominated by conflicting interests. They made decisions based on instructions from New York and orders from the Hungarian government in both the board of directors and stockholders meetings. To make matters more urgent and complicated, MOART operated as a military plant, supplied Germany with petroleum products, and earned profits for American stockholders.

MAORT's crude oil production continued to increase before

Hungary entered World War II. By 1941, the fields' crude output exceeded domestic needs and the refineries began exporting distilled products to Germany. This violated MAORT's contract with the state, but neither party found the breach objectionable.

The company's increased output brought about larger profits. During 1939, $252,683 was transferred to Rockefeller Plaza as dividends. This represented the only profit earning occasion for Standard Oil from its Hungarian affiliate. Because of emergency legislation and the state of war between Hungary and the United States, future earnings of MAORT were used to increase the company's capitalization.

The American Legation in Budapest also received a role in the day-to-day operation of MAORT. As the Hungarian government increased its control over the company, MAORT officials began exchanging sensitive information with Rockefeller Plaza by way of diplomatic wires and pouch. When state officials demanded larger crude output, company managers asked the American Minister to Hungary to intercede on their behalf and protect the company's rights. In return, American foreign officers experienced no difficulties in gathering classified geological, cartographic and oil-production data impinging upon Hungary's military capabilities. Each of these activities of the legation violated existing Hungarian-American commercial and friendship treaty agreements.

For the purpose of national security, the government sequestered MAORT on December 20, 1941, seven days after Hungary declared war on the United States. The government promised to compensate Standard Oil for the use of the company and to return it at the end of the war. After having been invited to stay in Hungary for the duration of the war, Paul Ruedemann decided to leave the country for the United States in the middle of January 1941.

Engineering Part: Characteristics of the Three Oil Fields

Scientific investigations of Zala County continued in earnest after the Budafa B-2 well became a regular producer in November 1937.[1] Geologists extended their efforts to determine exactly the characteristics of the region. Because of the presence of wide and deep Pleistocene deposits, traditional geological surveys had only limited value. The geologists, in evaluating the oil potential of Zala County, had to also rely upon data recorded by geophysical instruments.

At first, using Hungarian-made torsion balance instruments, the geologists located a 20-mile-long, east-west striking gravity maximum. Its width from syncline to syncline was approximately 8 miles at the eastern end and about 15 miles at the western end, near the Yugoslav border. Off to the northern and southern slopes, the geologists detected three secondary highs: Budafa, Ujfalu and Lovaszi. The geologists interpreted the detected large gravity maximum as an extension of the Yugoslav Szelnice-Peklenice anticline and the three secondary gravity maxima as three domes on the crest of the anticline. Later, each dome proved to be an oil field containing several pools of oil overlying one another.[2]

When advanced American gravity meters became available,[3] the geologists rechecked the results of their first sets of measurements and came to the conclusion that in most instances their initial data were correct. They decided to drill each dome and build each hole into a well; and in a short time, each completed well became a producer of crude and each dome a separate field.[4]

The Budafa field, first to yield crude and second in total production, was located on a spread of land used for grazing and owned

by Rudibo Zichy, one of Hungary's richest landowners. Here, Eurogasco geologists detected hydrocarbons with well B-1 in February 1937 and found oil and gas in commercial quantities with well B-2 in November 1937. The nearest town was Lispe, 2.6 miles north; and the nearest city was Nagykanizsa, 10 miles east. Because Lispe had a post office and a railroad station, and many people were familiar with this town, Hungarians, in general, often spoke of the Lispe oil field when they referred to the Budafa oil field. Often the phrase "Lispe oil" stood for all three oil fields of Transdanubia.[5]

The dimensions of the Budafa field outlined a reservoir that was compact and accessible. The producing area occupied 5 square miles and the gas cap 0.75 square miles. The five producing zones[6] had lenticular shapes. They did not extend in the same thickness throughout the field but thinned out so that in some parts of the field they were undetectable.[7]

Particular reservoir conditions at Budafa indicated that the estimated oil recovery rate would be 40 percent (29 million barrels) of the oil contained in the pore space. Ninety percent of this was believed to surface by natural flow, because the gas cap above the reservoir and the gas dissolved in the oil would force the flow of the oil. However, geologists warned that to maintain these desirable ratios, the engineers had to adopt rational production methods. In other words, the responsible heads of the operation had to establish balanced relationships among several variables: they had to determine the spacing of the wells, select the bean (orifice or choke regulating the flow of crude) size, stabilize the gas-oil ratio and return gas into the reservoir to sustain bottom pressure that made the wells free flowing.[8]

While the producing sands' porosity and saturation of the pore space were excellent, the sands possessed low permeability (flow of the oil within the pore space). This condition prompted Ruedemann to space the wells at a distance of 1,000 feet from each other. Larger distances would have left more oil in the sands but if the wells were placed closer, they would have mutually influenced each other and would have reduced the productivity of the fields in the long run.[9]

Geologists and engineers developed the Budafa field gradually. Altogether, by the end of 1941 there were 85 wells, of which 71 produced oil, gas or both, and 14 holes which came up dry. Five drilling outfits sank the wells to an average depth of 3,600 feet, and the wells produced through 0.12-0.25 inch beans.[10] (For a summary of well drillings and functions, see tables 3 and 4.)

The 71 productive wells yielded about 5.5 million barrels of crude and about 8 billion cubic feet of gas during the same period.[11] (For comprehensive crude and gas production figures see tables 1 and 2.) The Budafa crude was similar to the high quality oil of Texas. It was light, had a paraffin base, averaged 38 degrees on the API gravity scale, contained 28 percent of 65 octane natural gasoline and only 0.15 percent sulfur.[12]

Next, MAORT crews moved their operation near the village of Lovaszi in August of 1940, where they struck a profitable quantity of oil with their first wildcat. The field they discovered was located 5 miles northwest of Budafa, covered 3.5 miles and had a gas cap above the producing zone which occupied 0.5 square miles. The producing area extended for a short distance into Yugoslavia.[13]

Geological evaluations indicated that the Lovaszi field represented a separate structural unit, a secondary fold which developed on

the north side of the Budafa-Szelnice main anticline. As under the Budafa field, the producing zones consisted of Pliocene sands though they lay deeper and did not promise continuous development. Six oil and gas-bearing horizons which made up the pay were as thick as 83 feet.[14]

The first well drilled into the Lovaszi structure became a producer on December 1, 1940. Equally successful were the other wells, 22 in number by the end of 1941, as they produced crude from 5,280 feet deep and through 0.25-0.50 inch beans. While the permeability of the zones did not reach Budafa's, geologists still placed the wells 1,000 feet from each other.[15] (For drill summaries, see tables 3 and 4.)

Up to the end of 1941, the 22 wells brought to the surface about 1.1 million barrels of crude and 1.4 billion cubic feet of gas. The field's recoverable reserves were estimated to be 30 million barrels. The Lovaszi crude was similar to the oil of Budafa in that it was light with substantial paraffin content, but it yielded more kerosene and less gasoline. On the API scale, it registered a gravity of 40 degrees.[16] (For crude and gas production figures, see table 1 and 2.)

Ujfalu, the third field, was the smallest and the least important oil find. This field, near the village of Ujfalu, was discovered in the spring of 1941. The original belief that this field would be the richest of the three because its dome on the Budafa anticline was nearest to the proven fields of Szelnice and Peklenice, turned out to be false.[17] MAORT workers decided to abandon the field in October 1944, after the 5 wells drilled produced only 13,362 barrels of the estimated 25 thousand barrels of recoverable reserve. Carrying much sand and salt water to the surface, the Ujfalu oil was thick and black, useful only for heating. The field yielded only negligible amounts of gas.[18]

Machinery, Plants and Support Services

In the spring of 1938, MAORT started accelerated drilling operations with four Hughes steam-driven drilling outfits. Later, the company acquired four more units from Germany which were driven by Diesel engines. The well drilling rigs were accompanied by six steel suspension derricks, each 136 feet long. (See schematic drawing of a contemporary rig on page 73.)[19]

Drilling engineers used long-tooth, three-cone, self-cleaning rock bits to bore 9-inch holes for 7-inch casing. They preferred to use American drill bits and drilling mud to seal in the walls of individual well-shafts. The completed wells used adjustable 0.25-0.50 inch beans.[20]

The amount of time and money required to complete a well indicated an efficient operation. In general, a drilling rig took two months to finish the boring of a well. The average cost of a completed well in 1941 was $19,000 (100,000 pengos) in the Budafa field. However, this cost rose substantially to $29,300 (150,000 pengos) per well in the Lovaszi field.[21] At this time in the United States, the average cost of a well was $19,000.[22]

To begin high-volume crude production, MAORT officials had to build pipelines connecting the oil fields to the refinery plants. Direct trunk lines represented practical, secure and inexpensive links in comparison to truck and rail transportation of the crude. However, first MAORT engineers had to erect three kinds of tank stations.

The field crude-gathering tank stations consisted of 6 tanks. Each tank received crude from 12 wells through 2-inch pipelines and could hold 1,000 barrels. By the end of 1941, Budafa had 9 and Lovaszi, 5 such stations. From a distance or from an airplane, the only visible

objects on a completely drilled-up oil field were the individual tanks of the stations.[23]

Through 3-inch pipelines, the crude from the field crude-gathering tank stations flowed toward crude-storage tank stations. These centrally located stations consisted of several 10,000-barrel tanks. Budafa had 7 tanks and Lovaszi, 4. Through 6-inch pipe-lines, the crude was pumped from these stations to Ujudvar, a small town with rail connections to the country's main railroad network.[24]

Ujudvar became the company's crude-transportation tank station. Here, in addition to 20,000-barrel capacity tanks, the company constructed railroad sidings and a 60-car loading rack to fill tank cars to facilitate the transportation of the crude to refineries in different parts of the country.[25]

Transportation of the crude on rails in tank cars was neither technically sound nor financially advantageous for the company. Purchase or rent of the tank cars was expensive, and filling and emptying them was time consuming because the cars had to travel back from the refineries empty. The despatch and transit of the cars depended on a state-owned railroad system which was overloaded with work and had to follow definite priorities, especially in times of war.[26]

While Ruedemann was pondering over the merits of a newly constructed transportation pipeline, he received contradicting instructions from two powerful sources concerning his project. Officials of the Hungarian government were interested in the steady flow of the crude to distant refineries in concealed, underground pipes.[27] Officials at Rockefeller Plaza advised Ruedemann not to plan such a project, at least not for the time being, because of the "unpredictable and unsafe situation created by the war."[28]

In a short time, Ruedemann was able to change New York's position. He reminded them of the fact that the Hungarian government prohibited the transfer of money out of the country with the passing of the National Emergency Defense Law of September 2, 1939.[29] Present and future earnings of the company would increase the company's cash reserves; devaluation or inflation caused by the war could diminish those accumulated reserves overnight. Therefore, Ruedemann urged that profits be used immediately in order to take advantage of this investment opportunity: the construction of a pipeline. He estimated that the cost of the pipeline would not exceed $2,3000,000 (12,000,000 pengos). This was the same amount the company projected to pay for the transportation of crude to the Hungarian railroad agency for just one year. The cost of the trunk line, Ruedemann promised, would provide a safe investment of the company's profits and would be amortized in the first year of its operation.[30]

Construction of an 8-inch trunk line from Ujudvar to Budapest, a distance of 165 miles, commenced in May of 1940. (See map on p. 17.) For the year-long construction, MAORT trained its own workers and purchased the materials from the Hungarian Weissmanfred Work of Budapest. The main pipeline followed the towns of Ujudvar, Mososzentgyorgy, Lepseny, Kapolnasnyek, and Budapest.[31]

Two pipeline laterals branched off the main line; a 4-inch-diameter, 24-mile-long section at Lepseny connected to Pet and a 6-inch-diameter, 58-mile-long section at Kapolnasnyek, ran to Almasfuzito and Szony. Each major refinery plant was included in the network of pipelines, except two.[32]

On November 24, 1941, the pipeline construction reached Budapest where MAORT built a loading rack to fill railroad tank cars to service

the two remaining refineries. The construction of the 247-mile-long pipeline system took one and a half years and cost $2,280,000 (12,000,000 pengos)--almost the same as the original estimate. The oil was pumped into the pipeline at Ujudvar under 100 pounds of pressure and was delivered to Budapest at a rate of 12,000 barrels a day.[33]

In addition to crude oil and natural gas, the fields also yielded wet natural gas which contained more than average amounts of light hydrocarbons in the form of natural gasoline, liquid butane and propane. After the wet gas moved upward in the wells, it was piped into a compressor house or gasoline plant, where it was placed under pressure to condense its light hydrocarbons.[34]

Each field had its gasoline plant. On the average, 1 million cubic feet of wet gas yielded 100 barrels of natural gasoline. During 1941, the fields produced 32,000 barrels of natural gasoline and 26,000 barrels of liquid butane and propane.[35] (For comprehensive production figures, see table 5.)

Adjacent to the gasoline plants, MAORT officials built repressuring plants. Because the growing number of wells reduced the pressure of the gas cap, engineers had to replace the lost gas pressure in the formation. For this reason, after the gasoline content of the wet gas was removed in the gasoline plants, the gas, now dry, was led to the repressuring plants where it was compressed and injected through input wells into the producing formation for pressure maintenance. The daily repressuring capacity of the Budafa plant was 4 million cubic feet of gas and the Lovaszi plant, 6 million.[36]

Electricity, heat and water were necessary for the continuous exploitation of the oil fields. To obtain electric energy, MOART had to undertake the largest effort. Because no sizeable electric power plant

operated in the southwestern corner of the country and the electricity need of the crude producing fields was substantial, MOART officials had to build, equip and maintain their own power plants. By 1941, the company was self-sufficient in electrical energy.[37]

Heating represented the least problem, because natural gas was available aplenty as a co-product of the crude. The first producing field, Budafa, was selected to supply gas to different size burners which generated heat energy for the offices, machine and repair shops and dwellings of workers.[38]

On and around the oil fields, industrial and household needs for water were substantial. Fortunately, large enough rivers crossed both fields. The Valicka River supplied the field of Budafa with the help of a centrifugal pump and a 100,000-gallon, concrete, underground tank. In the Lovaszi field, the Kerka River provided the water. On both fields, the tanks also stored drinking water.[39]

To insure continuous work on the fields, MAORT employed different types of skilled workers to repair and service machines and to store materials. In two places, at Ujudvar and Nagykanizsa, both near the producing fields, the company established major repair and service centers. The latter was the larger and more important shop. It included car and truck repair sections together with a welding station. Here also stood the central warehouse where large quantities of steel pipes were stored.[40]

The main office building was located in Nagykanizsa. This continuously expanding facility housed both the administrative and the technical management for the field operation. Here offices were also reserved for the Budapest central office executives who often came to inspect the field operations.[41]

As an auxiliary but necessary task, MAORT also had to engage in road building. In order to build the wells and later service them, workers and their equipment had to reach the well-sites or the wells in the middle of open fields in all types of weather. Over the years, the company's road-building crews constructed many miles of roads which often ran through swamps and rivers. The roads these workers built were gravel and macadam.[42]

To begin and to maintain the operation of the oil fields, MAORT procured the necessary materials and machinery in Hungary and imported some from Germany, France and the United States. From the very beginning, the war going on outside of Hungary created critical shortages in the procurement of materials. To counteract this, MAORT officials decided to increase the company's inventories. During the period of March 1940 through May 1949, officials increased the amount of supplies in the Budafa warehouses from $195,000 to $492,000 and in the Lovaszi field, from $43,150 to $170,000.[43] (For details, see table 15.)

Employment and Compensation

The Contract which established the relations between the state and company and defined the important activities of the company, granted MAORT the right to employ Hungarian nationals with or without technical or administrative skills. There was only one restriction: in case the country were at war, the Hungarian state could unconditionally command the service of any employee. This stipulation had been a standard feature in the contracts of multinational companies everywhere and did not discourage MAORT officials from recruiting, training and employing Hungarians.[44]

To the contrary, from the beginning MAORT officials expressed

their intention to operate the company with an almost exclusively Hungarian work force. Later, when the number of employees reached into the thousands, the company still had not had more than nine American nationals on the payroll simultaneously. This course turned out to be practical and profitable, considering the labor situation of southwest Hungary in the late 1930s.[45]

The area where oil was first discovered around Budafa and Lovaszi (near the villages of Csehi and Kerettye) belonged to the estate of one of the richest landowners, Baron Istvan Rudibo Zichy.[46] Before the discovery, this region represented the poorest and most economically depressed corner of Hungary. It had no industry of its own. Since it was located far from urban centers, only agricultural job opportunities at extremely low wages were available. While in 1938, the rate of unemployment among agricultural workers was 38 percent in Hungary, this figure reached a staggering 49 percent in Zala County. MAORT officials came into this kind of labor situation to recruit workers and begin the operation of the oil fields.[47]

Scarcity of skilled workers among the area's farm laborers did not discourage MAORT officials. They had experience in the recruitment, training and assembly of a capable body of oil workers. The personnel specialists visited the surrounding villages and hired people who, with few exceptions, had been agricultural laborers all their lives. Workers originating from the same village were placed in the same crew, shift and field. Similar background, knowledge of each other's living conditions and family ties disposed the members of each group to be helpful toward each other. Their pride in their locality lent itself to be transferred into pride in the accomplishments of their group, especially in competitive work situations. The practice of not dispersing members

of one village enhanced cohesion and increased the performance of the whole work force. MAORT's management showed insight into the psyche of the landless Hungarian agricultural day laborers.

Fieldhands were hired at an hourly rate of 8 cents (40 fillers), which amounted to almost $20 (96 pengos) for a month (24, ten-hour work days). These workers were also placed on a six-month probationary period. While the entry level wage was low, it was still 30 percent higher than what large farm owners paid their workers. To be hired on condition was an unusual experience for the Hungarian workers. They had been accustomed to working so long as the job lasted, without dependence on their work performance. However, in this instance, the replacement of the traditionally paternalistic employer did not discourage the peasant workers. In fact, the opposite happened. The probationary procedure increased the workers' performance and increased the number of applicants who wanted to get jobs.

The machinists, technicians and engineers came from Budapest and other large cities. One of the first tasks of these educated, skilled workers was to provide the fieldhands with on-job training. As the workers learned to perform certain skills, they received raises. This again was a new employment practice for the Hungarians. They responded with eagerness and learned the different skills which transformed them into efficient oil field workers.

In spite of substantial progress in recruitment and training of local people, Ruedemann still had his doubts. In August of 1941, he noted:

> It still is too early to see how our National staff will function. We have been growing too fast in a country where no experienced people are available for our type of work . . . . We took on about ten young engineers during the year who are now in training in various branches. Our situation as regards suit-

> able men for the supervision of work is not bad. What they need is more experience . . . . It is to be hoped that we shall have a breathing spell in which to better perfect the organization. Undoubtedly, we shall need the advice of specialists in the various branches as soon as hostilities cease.[48]

The supervisory personnel, whether technical or administrative, also had to accept and satisfy new and demanding standards as conditions of permanent employment. They had to fulfill a probationary period of one year. They had to take an entry level salary that was barely above the field workers' wages; and what was most unusual in the experience of the Hungarian white-collar worker, was that they had to begin their assignments as physical workers and work themselves through several stages of skilled-labor assignments before they finally could earn the position for which they originally applied.[49]

Throughout their careers with the company, the members of the technical staff and management had to attend lectures and take in-service courses to learn new developments in their fields. The most capable engineers earned opportunities to come to the United States and expand their theoretical knowledge at American universities and receive practical experience at Standard Oil plants. "One of these was stated by Standard to be the best engineer who had ever been sent to them from any part of the world."[50] This type of employment practice contributed to the creation of a positive image in the mind of petroleum engineers throughout Europe. According to the words of an American diplomat: "The Hungarian operation was the most advanced in Europe."[51]

The difference in earnings between MAORT's executives and physical workers was very substantial. As physical workers learned the skills necessary to complete their particular job assignment, their hourly base wage of 8 cents (40 fillers) gradually rose to 11 cents (55 fillers) in 1938. The workers' earnings after one month on the job

amounted to $26.40 (132 pengos).[52] In contrast, the top executives' monthly salaries ranged from $133 (700 pengos) to $342 (1,800 pengos) in 1941; $209 (1,100 pengos) to $380 (2,000 pengos) in 1942; and $304 (1,600 pengos) to $665 (3,500 pengos) in 1943.[53] (For details of executives' salaries, see table 9.)

In comparison with the earnings of other physical workers who worked either at industrial or agricultural jobs, MAORT's physical workers earned more. This fact did not escape the scrutiny of some highly placed, interested persons. In 1938, the Regent of Hungary, Miklos Horthy, and his wife visited the oil fields. Mrs. Horthy mentioned to Ruedemann that "There had been some criticism of the company's wage scales on the basis that it was spoiling the labor market." Without hesitation, Ruedemann replied that "in his opinion it could do no harm to improve the standard of living of the Hungarian workmen." In the end, "Mrs. Horthy indicated her agreement with Ruedemann's point of view."[54]

Over the years, the size of MAORT's labor force grew without interruption. From 236 in 1938, the number of physical workers increased to 1,798 in 1941. During the same period, the salaried staff expanded from 52 to 208.[55] (For complete figures, see table 13.)

Under existing Hungarian labor laws, a registered company had to provide sick, accident and death insurance in addition to a pension program.[56] Up to August 1941, MAORT was slow to establish programs for these social security benefits. Ruedemann acknowledged this shortcoming in the following words:

> There have been hints that we are not doing enough by way of social welfare and we are now progressing a program for death and sick benefits along the Humble plans. Moreover, an expert on pension plans is to submit data on what is being done by others and what could be done now . . . .[57]

In reality, Ruedemann cared about most aspects of his employees' welfare. He often inserted in his reports to Rockefeller Plaza, short accounts describing some beneficial program the company started.[58] In the middle of 1941, he noted that

> Except for the landscaping, the Budafa club house was completed last week. An informal inauguration turned out to be a huge success as about 1,300 people were present. The workmen (also daughters) gave an operetta performance that was very good. Proceeds from the show will be turned over to widows of MAORT employees killed in action.[59]

He also cared about the food supply for the workers. He reported:

> We arranged for the purchase of 700 hogs--one year's supply of fat. To handle this and other rationed products, a butcher shop, distribution store and bakery will be built at Kerettye. We have to look out for ourselves or we will find our people without the essentials of life.[60]

While the company's security programs were lagging behind or were still in the planning stage at the end of 1941, fringe benefits were extensive and generous. Garrett G. Ackerson, Jr., Secretary of the U.S. Legation at Budapest, visited the oil fields in 1939 and related the following:

> I gained the impression that the Company has been doing a good deal to improve the life of the workers. Some ten or twelve houses have been built for the American and Hungarian engineers living at the field. For next summer, the Company contemplates the construction of more houses, a sports club, a swimming pool, and a sports field for the workmen, in order to keep them away from the wine shops where they spend a good deal of time at present for want of a better place to go.
>
> The Company has also undertaken medical service for the employees and their families, transportation to and from the nearest town, the construction of schools for the children of employees, and other such services which one finds so often on large American works of this nature.[61]

As MAORT's earnings began soaring in 1941, officials looked for expenditures which, at the present, would reduce the company's large accumulated cash reserves and would benefit the company in the future. For this dual purpose, they established a scholarship fund as an addi-

tional feature of the company's social and welfare program. Each year, form 1941 on, MAORT granted monthly stipends in 55, 70, 100 and 130 pengos (10, 12, 17 and 24 dollars) to seventeen students of meager financial ability but high intellectual achievement at the Mining and Forestry Academy in Sopron, and to fourteen students at the Mining Technical High School in Pecs. In return, the recipients obligated themselves to work as physical workers at drilling sites every summer during their school years, and upon graduation, work for the company at a place determined by the company's needs for five years. Maintenance of this program, in a country where children of poor families could not ordinarily have access to higher education, created a favorable reputation which benefited MAORT beyond its original, pragmatic, dual purpose.[62]

Over the years, MAORT worked out a comprehensive program of fringe benefits. When surveying the many different services the company provided for the employees, Papp summarized the accomplishments as follows:

> On each field, there are food stores, slaughter houses, canteens, club rooms for the workers, and moving picture theaters. In Lovaszi there is a hospital as well. Company physicians are in attendance in each and every field, and even an ambulance car has been purchased. For sporting, football grounds and swimming pools have been provided.
>
> For workmen and clerks, other than those living in nearby villages, a camp has been built. Engineers, depending on the size of their families, were housed in one and two-room dwellings. Every house has a bathroom with running water and gas heating. Additional dwellings are being built to meet the requirements. Vegetable gardens have been allotted to all employees living in the camps. An autobus runs between the plants and Nagykanizsa, and once a week, opportunity is afforded to every employee, or his or her members of family, to reach this city for shopping. The company post is being forwarded by the autobus, although, the postal authorities opened up a branch office at Kerettye. Public safety is watched over by the gendarmerie for whom the company provided barracks. A chapel and a cemetery are within the plant at Kerettye.[63]

At times of critical operations, or in case of industrial acci-

dents anywhere in the oil fields, company executives from the Nagykanizsa offices and occasionally from the Budapest headquarters, would rush to the place of need. Under Ruedemann's personal leadership, the managerial staff, in shirt sleeves and over long hours, would labor shoulder to shoulder with the fieldhands to bring the situation under control. This type of executive action, singular in the Hungarian work setting, raised the worker's respect for his supervisors and endeared the ordinary employee to the company. The exemplary behavior of top executives, in addition to the relatively high monetary and fringe benefits, molded the individual employees into a willing and industrious work force, whose loyalty to the company became its special hallmark.

In the perception of Department X officials in the Ministry of Industry, who were in charge of MAORT' s operation, company employees' work characteristics reflected the undesirable "American influence" of Ruedemann's "American style management." During the war when Department X leader, Karoly Roth, ordered the company to increase its crude output and company officials were only partially able to meet orders citing technical difficulties, Roth attributed the shortfalls to the persisting "American influence" of the repatriated Ruedemann.[64]

Safeguarding the Oil Fields

In peaceful times, the possession of oil fields was important; in times of war, the fields became indispensable. Acquisition of more than an adequate crude supply at the beginning of World War II turned out to be a source of unexpected benefits and a nest for unforeseen difficulties. The main problem centered around the meaning of the term "safeguarding" of the oil fields. To some, it meant the military protection of the fields so that much crude could be produced throughout

the war. To others it meant the premeditated damaging of the fields so that the crude could not be used until after the war. It came down to the military safeguarding of production for now, or industrial sabotage to safeguard production for later.

Within days after the National Defense Law was invoked on September 2, 1939 (concerning this law, see p. 142), the Hungarian government declared MAORT a military plant and stationed military troops on the oil fields. When Ackerson visited the fields in December 1939, he noticed that

> The fields are under military control at present, and they will doubtless so remain until the European conflict comes to an end. There are some four hundred officers and soldiers quarted on the fields, but there has been no military interference with administration and production; in fact, the military authorities appear to be well satisfied with the Company's work, and they have been helpful in procuring prompt production and delivery of materials and machines . . . . The Company has also undertaken the construction of barracks for the soldiers and the police who are quarted in the field.[65]

Regarding the presence of the military, Ruedemann noted only that "Hungarian troops made sporadic patrols of Standard's property," and "There were occasional German inspections."[66]

At the beginning of the war, both the government and the company wanted to protect the fields against air raids. For this reason, the engineers completed the wells in special ways. Ackerson, during his December visit, observed that

> . . . all wells thus far brought in are flowing wells, the derricks can be dismounted when the flow begins. The wellhead is then placed underground in a bomb-proof cellar and nothing is visible from the surface or from the air. Bombing from airplanes would be virtually impossible, as the pipelines and wells are invisible and are spread over a considerable area. The gathering tanks could be bombed, but they are not absolutely necessary and it would be a simple matter to run the petroleum direct from the wells to the tank cars. There is a pipeline, some twenty-seven kilometers in length, from the field to the loading rack. The most effective bombing would be directed against the railroad line and against the nine refining plants,

most of which are near Budapest; it would be a comparatively simple matter to put the latter out of action and thus to render the petroleum useless for military purposes.[67]

As soon as the fields showed promise of large production near the end of 1939, Ruedemann contacted the Legation and inquired "whether it would be advisable for his Company to safeguard the oil wells . . . in case Hungary became involved in hostilities."[68] Montgomery, who took upon himself the task of responding, regretfully but truthfully stated that "The Legation did not feel competent to express an opinion in the matter."[69] However, the American Minister promised to transmit to the Department of State Ruedemann's memorandum.[70]

In fine details, the American oil man described how he contemplated safeguarding the fields. He wrote:

> In view of the present international situation, we cannot exclude the possibility that an attempt may be made to invade Hungary. Should such an unfortunate circumstance occur, it is not inconceivable that in the course of hostilities, the surface installation, which keeps under control the energy in the underground reservoirs, would either be accidentally or intentionally damaged or destroyed by one of the belligerents. Such an accident would immediately unleash an uncontrolled flow of oil and gas under high pressure and, which even if it did not catch fire, might take weeks or months to again bring under control. In the meantime, however, the well and the oil reservoir in the ground would be suffering permanent irreparable damage, and might even be destroyed from the standpoint of future oil production. Therefore, in the event of imminent danger, resulting from possible hostilities, we would like to take such proper precautionary measures as may be within our legal rights to safeguard the wells, and the oil producing capacity of the ground reservoir for future operations without in any way contravening international law or subjecting ourselves to a legitimate accusation of sabotage.[71]

According to Ruedemann, the protective steps would proceed as follows:

> The precautionary measures would consist of such materials near the flowing oil wells and the installation of the necessary equipment that in case of imminent danger would enable us to pump the necessary mud fluid or water into the well, in order to prevent the escape of any oil or energy, should the surface installations be damaged or destroyed. The fluid, thus put into these flowing wells, would only be in such quantities as would be reasonably necessary to safeguard and protect the wells.

> With proper equipment, these wells could, within a reasonable time, again be placed on a flowing basis without any appreciable diminution from their former rate of production. It is naturally to our interest that this protective measure be carried out in such a way that no permanent injury would result either to the well or to the oil producing capacity of the reservoir, as of course, we would hope to resume the exploitation of these wells, and of these oil reservoirs after the cessation of hostilities, and we fully realize that the repairing of these wells would be at our expense with no hope of repatriation [sic] from either belligerent.[72]

In the end of his memorandum, Ruedemann asked for the "advice and counsel" of the Legation and summarized the most important considerations. He wrote:

> In order that we may fully exercise our legal rights in taking such legitimate precautions to safeguard our property as we may deem desirable, we are taking the liberty of seeking your advice of counsel on the following questions:
>
> 1. As long as Hungary is not a belligerent, may we legitimately store materials and install equipment which, in case Hungary did become a belligerent and danger to our property, would be used by us in killing the flowing wells in such a way that in case of accidental or intentional destruction or damage to the surface installations by either belligerent, the uncontrolled escape of energy would be prevented, provided the measures thus taken would not in any way prevent such wells, within a reasonable time and by the use of proper equipment, from again being made to produce oil as formerly; and by taking such measures at this time would we be in a defensible position should an invading enemy accuse us of sabotage?
>
> 2. In the event Hungary was a belligerent, would we, in order to protect our property, be within our legal rights in killing the flowing wells, as outlined in question one, and would we be in a defensible position should the invading enemy accuse us of sabotage?[73]

To show that he received and handled Ruedemann's request in a proper, official manner, Montgomery sent Ruedemann's memorandum to Washington and asked "please instruct me as to whether a reply should be given, and if so, the nature of such reply."[74] In case the Department of State did send instructions to Budapest, those instructions, unfortunately, could not be located. At any rate, Ruedemann's action plan was not acted upon, rather the attention of the Hungarian managers of MAORT shifted to a different way of safeguarding the fields.

Soon after MAORT was established in the summer of 1938, officials of the company signed a contract with a multinational French oil exploring firm, the Schlumberger Well Surveying Corporation, "to conduct extensive geophysical research and undertake the boring of experimental wells in certain sections of the consessional area."[75] Some members of this corporation were also willing to contemplate acts of sabotage. Simon Papp and Gabor Temesvary, two of the highest ranking Hungarian officials of MAORT, met C. Scheibli and P. Gipaud, two officials of the corporation, at Scheibli's residence in Budapest, sometime in December of 1942, "in order to put an obstacle to German pressure and to limit the output of crude oil on the fields of MOART."[76] The four men held a secret conference and arrived at the following agreement:

> 1. The output of crude of the MAORT oil fields must be brought down by all means of sabotage which may be at the service of the Schlumberger technics.
> 2. The sabotage will be carried out mainly in the following ways:
>
> a. Schlumberger will make use exclusively of 8.5 mm bullets instead of 12mm bullets.
>
> b. Schlumberger will make use of an insufficient load of gunpowder so that almost all shot bullets shall remain unproductive by sticking partly in the very casing, partly in the cement.
>
> c. Schlumberger will, in certain cases, prepare the blocks of the shooting guns so that only the central third of the thickness of oil-bearing sand will be shot.
>
> d. Schlumberger will, in certain cases, and when there is no risk for this kind of sabotage to be discovered, shoot a certain part of the bullets in the shales or clay covering the oil-strata.
>
> After discussing these matters, the members of this conference agreed that by the above mentioned methods MOART's output of crude oil can be reduced to zero.[77]

On December 13, 1941, Hungary declared war on the United States of America. Four days later, during a Board of Directors meeting, Ruedemann announced that "for an indefinite period of time he would take a vacation in the United States."[78] On December 20, 1941, the Hungarian government sequestered MOART. (For details, see pp. 118-130.) These

rapidly unfolding and threatening events failed to perturb Ruedemann and Schudel, the only American citizens in Hungary at the time. For weeks they continued to live in a country which was officially at war with their native land and work for a company which became the property of the Hungarian state. The two Americans must have felt that their presence in Hungary would be safe, and that they were welcome to continue their stay in Hungary even during the war. In a telegram sent to Hungary on December 12, through the communication facilities of the Department of State, Rockefeller Plaza states:

> We greatly appreciate your willingness and that of Schudel to remain at your posts but we reiterate such decision is your responsibility and we urge you in determining your future course to carefully consider all aspects to avoid possible later difficulties. Schudel should not fail to make the necessary visa arrangements.[79]

Finally, on January 15, 1942, Ruedemann left Hungary.

On March 3, with John Bohanon, a legal counselor of Standard Oil, Ruedemann appeared in Washington, D.C., in the office of Wallace Phillips, Director of the Division of Special Information. In the presence of Major Miles O.N.I., Captain Wonderly M.I.D. and Mr. Ferris A.F., Ruedemann answered a battery of questions.[80] While proportionately few of Ruedemann's answers touched upon the operation of MAORT, the aggregate of his answers shed light on the quality of relations between Standard Oil and the U.S. government. Regarding MAORT, Ruedemann said

> Standard produced the entire production of Hungary, and at eleven thousand barrels a day, it was enough to supply Hungary. This production is divided into twenty-five percent gasoline, fifteen to twenty percent kerosene, five to ten percent diesel oil, and most of the balance, fuel oil.
>
> Hungarian troops made sporadic patrols of Standard's property. There were occasional German inspections.
>
> Standard Oil of New Jersey production facilities were taken over by the Hungarians for operation with the expressed intention of returning everything after the war. Mr. Ruedemann expects that there will be efficient and conservative operation of the production plant, which will be in the Hungarian's own

> interest, because of their desire to save their oil reserve. This estimate is based on the expectation that the present party will remain in power.[81]

Concerning petroleum products, Ruedemann stated:

> Hungary makes no aviation gasoline. With lead, the products of its old refineries can be raised to 85 or 87 octane.
> There is practically no oil reserves in Hungary except about two hundred tons of kerosene.[82]

Production of airplanes was increasing and according to Ruedemann

> The Hungarians manufactured one hundred to two hundred fifty planes a month for their own use at a factory on Csepel Island in the Danube at Budapest. (There is a refinery on the same island.) There is a Messerschmidt plant just finished one hundred fifty miles up river from Budapest. It is understood that its production is to be allocated sixty percent to Hungary and forty percent to Germany.[83]

Raw material and food situations were adequate. In this connection Ruedemann noted:

> The raw material situation is not very bad, but the industry is overloaded, and it takes twelve to fifteen months to obtain delivery on equipment.
> Food was good last year although no great variety and three or four meatless days. There is plenty of meat. Hungary is better off than other countries in that part of Europe although he Ruedemann] has not been outside Hungary since June 1940 when he went to Hamburg and Berlin.[84]

The Second Hungarian Army's performance in the Soviet Union and the Hungarians' attitude toward the war did not escape Ruedemann's attention:

> All Hungarian mechanical equipment has been lost in the Russian war and there are no troops now in combat there, although some are on quard duty in the Ukraine. The Hungarians do not regard it as their war, and have little enthusiasm, in spite of their dislike for the Russians.[85]

Concerning questions about the Hungarian first family, Ruedemann answered that "Admiral Horthy was not well, and it was felt that his son would succeed him in case he died."[86] Horthy's son, according to Ruedemann, "knew the United States well and at one time worked in the Ford plant."[87]

The Jewish problem also received some comments. Ruedemann noted that

> There is a little Jewish persecution, and the Jews are not badly off except when specific actions are forced by the Germans. The Hungarians contemplate solving the Jewish problem in one or two generations. Their plan is to limit participation in the professions in accordance with the Jewish population.[87]

The most interesting observations of Ruedemann centered around the future of Hungary. In this connection, he offered the following remarks:

> There are not many Germans in evidence. Hungarians are not too happy about the Germans and would rather be left alone. They seem to be contemplating an American victory in the war, regarding American war potential as larger than the Germans. Their first hatred is for the Russians. They look forward to an opportunity to get a crack at Rumania after the war. They do not like England . . . .
>
> No line of Allied propaganda would be successful in detaching Hungary from the Axis. This is because of (a) fear of Russian victory and (b) fear of German reactions to any anti-Axis move.[88]

Few, if any, observers of contemporary Hungarian political life have made comments as astute as those of Ruedemann, when he spoke to the members of the Division of Special Information. After leaving Hungary, Ruedemann ". . . served in key positions in which he supplied Allied armies with petroleum products."[90]

Based on information received from the Legation in Budapest and elicited from key employees of Standard Oil (in addition to some scant data from intelligence sources), a special group within the State Department called the Enemy Oil Committee compiled a booklet entitled "Petroleum Facilities of Hungary, in 1944," which contained numerous maps and charts describing in detail the operation of MAORT. In conclusion, this committee offered the following "Strategic Considerations" for the worth of the Hungarian oil fields:

> Value to enemy: While the capacities of the Hungarian

refineries are small, compared with other larger refineries in other Axis held European countries, their value to the enemy is greatly out of proportion to their capacities because of their strategic locations and because Hungarian crude oil is being produced in excess of Hungarian refining capacity. It may be assumed that the enemy will operate these refineries to capacity until forced out of the area and that he will destroy them upon leaving.

Possible value to Allies if captured intact: Due to their proximity to ample crude supplies, large centers of consumption and cheap river transportation, these refineries would be invaluable to the Allies if captured intact--always bearing in mind the small capacity of the plants involved.

Effects of damage: Successful bombing of the pipe stills of any one of the refineries would knock it out for at least six months. Destruction of specialized equipment such as hot oil pumps and control panels would probably cause refinery shut-downs of appreciable duration.

Owing to the high temperatures employed in the operations, refineries are more susceptible to sabotage operations than are distributing and producing operations. However, the mere bombing of firing of storage tanks alone, without accompanying damage to refinery machinery and stills would not necessarily cause any stoppage of actual refining operations.[91]

Production, Consumption and Exportation

Continuous, large increases characterized MAORT's crude oil production before Hungary entered World War II. With the completion of each additional well, the company gained a steady 150-barrel-a-day producer. By the middle of 1940, Hungary became self-sufficient in petroleum products; and toward the end of the year, the country started exporting gasoline, diesel fuel and crude oil.

Crude production, exceeding domestic needs, violated MAORT's concessional agreement. Clause 8 of the Contract stated that ". . . production would be increased until the total home consumption which can be marketed in Hungary has been secured." Over the twelve-year history of the company, the Hungarian government promoting its own interests, allowed, and in most cases ordered, the company to operate in defiance of this clause.

In 1937, only 2 wells brought crude to the surface. The Budafa

B-1 well started producing crude first in February of 1937. After yielding 1,110 barrels, the well was shut down in the summer of 1938 because of technical problems. The B-2 well, the first gusher with a 226-barrel-a-day production, began flowing on November 20, 1937, and marked the beginning of a crude producing industry in Hungary. Together, the wells produced 10,120 barrels for the year.[92] (For a comprehensive chart concerning production and well distribution, see tables 1 and 3.)

In 1938, MOART drilled and completed 7 more wells in the Budafa field. Of the total 9 wells, 7 were still flowing at the end of the year and went on to become regular producers. For the year, the field yielded 288,423 barrels of crude.[93] This was the last year the company was devoted to extensive explorations required by the Agreement of 1933 and the Supplementary Agreement of 1937.

The first complete official business year of MAORT was 1939. The Contract of 1933 and Supplementary Contract of 1937 came into force to regulate the company's activities. This year the company added 12 new wells of which 11 became producers. The Budafa field yielded 1,102,623 barrels of crude.[94]

In 1940, a second field at Lovaszi opened for production. Here the company drilled 3 wells which became producers and yielded 21,160 barrels of crude. At Budafa the company added 29 wells, all of which became producers and brought forth a total of 1,914,559 barrels. Together, the 2 fields produced 1,935,719 barrels, for a daily average of 5,332 barrels.[95] This was the last year Hungary still had to import crude from Romania to satisfy domestic consumption.

The year 1941 turned out to be a significant one in the history of MAORT. Geologists discovered a third oil field near the village of

Lendvaujfalu (usually referred to by its shorter name, Ujfalu) and by the end of the year the company's production exceeded the country's needs for the first time. In the new field the working crews drilled 2 wells, which produced 4,865 barrels, foretelling successful drilling throughout the geological formation. At Lovaszi the company added 19 and at Budafa 15, new wells. In the summer, the 3 fields produced 3,258,977 barrels, for a hefty daily average of 8,928 barrels.[96]

Almost without exception, natural gas is a valuable co-product of upward surging crude oil. The gas may break to the surface in its own gaseous form; it may be dissolved in the liquid crude; or as in most cases, it may come both ways at the same time. Natural gas helps propel the crude to the surface and thereby makes the recovery of crude less expensive. The three Hungarian fields, Budafa, Lovaszi and Ujfalu, were all on gas lift and this made the production of crude very lucrative.

As the production of crude increased, so did the production of natural gas. During the first three years, Budafa proved to be a most prolific gas field. From a total of 82 million cubic feet in 1937, gas production surged to 4,822 million cubic feet in 1941.[97] (For a comprehensive gas-production chart, see table 2.)

MAORT utilized the natural gas it obtained for three purposes. First, the company used it to generate heat energy; second, it was used to repressure the fields to maintain formation pressure; and third, from wet gas (which contained higher-than-normal quantities of light hydrocarbons) the company produced natural gasoline, and liquid butane and propane.[98] This last use of natural gas became of special interest and value to the company. (For details on utilization of gas, see table 8.)

The gasoline plants in which the wet gas was compressed and stripped of its light hydrocarbons, started operating in 1939. The

products, natural gasoline and liquid butane and propane, were exported by MAORT directly from the fields to Germany. By 1941, the company exported natural gasoline to Germany at a daily rate of about 70 barrels, and liquid butane and propane at about 50 barrels. In exchange for these products, Germany exported to Hungary about 50 barrels of lubricating oils a day.[99] (For details, see table 5.)

To provide for the country's consumption, Hungary imported crude from Romania in the 1930s. Railroad tank cars transported the crude from Ploesti and delivered their cargo to Hungarian refineries. (For import quotas, see table 10.) As the crude output of the Zala field increased, the importation of Romanian crude proportionately decreased. In July of 1940, Hungary became only the third European nation self-sufficient in oil, next to the Soviet Union and Romania. This situation did not change in the course of World War II.[100]

Consumption of hydrocarbon products in Hungary showed several unusual characteristics. (See table 6.) Kerosene (petroleum) use was high because most houses in rural areas used kerosene lamps for illumination.[101] A gradual increase in consumption of all distillates had come to an end in 1940. In that year, the Hungarian government's rationing of crude oil derivatives began to show its full effect. A large portion of the lubricating oils were still imported from Germany, because Hungarian crudes had low yields of heavy oils.[102]

Before and during the war, hydrocarbon prices were among the lowest in Hungary. In 1939, the last year of peace in Hungary, one gallon of gasoline cost 1.75 pengos (35 cents) and one gallon of kerosene .95 pengos (19 cents). In the case of gasoline, 1.30 pengos (26 cents) of the cost represented taxes; and for kerosene, .60 pengos (12 cents) was the state's share of the price. During the war, in spite

of hardships and inflation, these figures did not change substantially.[103]

In 1941, Hungary started exporting crude and refined oil products. A total of 732,909 barrels left Hungary for Germany. (For details, see table 7.) During the next years, the export figures grew in proportion to the increasing output of the fields.[104]

Until the end of 1941, the Hungarian government did not request MAORT to increase the production of crude, a crucial natural resource of modern warfare. Ruedemann's lengthy reports to Rockefeller Plaza reflected this understanding relationship between the state and the operator. Writing to New York in August of 1941, the top executive of MAORT remarked:

> There is no desire on the part of Hungarian authorities for expansion beyond the needs of the country. Naturally, in these times, a certain amount of over-expansion is forced and cannot be avoided. It would be nice if one could ride along a year at our present size.[105]

At another place in the same report, he explained how he manipulated the government's expectation. He wrote:

> The estimates we submit must be conservative because so many of their plans are built around the expected oil production. Therefore, it is better for us to produce more rather than less than the figures submitted. So far, in August we are running slightly ahead of the estimate.[106]

Garrett G. Ackerson, Jr., Secretary of the U.S. Legation in Budapest, who had closely followed MAORT's activities over the years, observed similar behavior on the part of the government. In December 1939 he reported:

> The Government is not at all desirous of having any petroleum exported now that the war has begun; in fact, the Government would probably take measures to prevent exportation. The company also realizes that the present is not the time to begin exporting even if production increases to a figure beyond that required for internal consumption.[107]

On the other hand, Major R. C. Partridge, a military attache, noted some pressure on MAORT by the Hungarian government to increase production in a report that appeared to be both contradictory and misinformed. In March 1941, he wrote:

> Some time ago, the Prime Minister is reported to have told the oil companies not to produce too much as he wished to avoid having any appreciable surplus.[108]

Three sentences later, in a new paragraph, Partridge stated:

> The Hungarian government has requested the company to put in more wells, but they object that drilling equipment can no longer be obtained from the United States. Germany is trying to furnish the drilling equipment but Russia already has 80 units on order in Germany and it is questionable whether this new order can be filled.[109]

At the center of the issue concerning the presence or absence of governmental pressure on MAORT to increase crude output before Hungary became involved in World War II, was Ruedemann's contradictory behavior. He denied, as late as August 1941, that the company was under pressure. On the other hand, he repeatedly spoke of "unavoidable" and "expected" rise of crude production which the Hungarian government encouraged. The rise in production was not significant. The growth of production resulted in an export of almost 700,000 barrels of petroleum products to Germany. This growth could hardly be considered a". . . certain amount of over-expansion . . ." that could ". . . not be avoided." It could not be so, especially in the light of the Contract which stated:

> The development of the fields shall be carried on continuously in a proper business-like manner and provided it is proving reasonably remunerative to the company it shall be increased until the total home consumption has been served.

The reports, up to the end of 1941, indicated that the Hungarian government placed no explicit pressure on the company to increase production; in general, it accepted the amount of crude the company deemed sufficient and necessary to produce. Ruedemann allowed accelerated pro-

duction and exported the surplus to Germany in violation of contract stipulations. Why Ruedemann, a mindful and cautious oil man, had done so could not be determined from the available facts. However, some of the effects can be seen. MAORT, the Hungarian state, and several refinery plants (mostly owned by British, French, Dutch and American multinationals) earned large profits in German marks; German-Hungarian economic relations received reinforcement; and Germany acquired an unexpected but welcomed supplier of a much needed natural resource.

Administrative Part: Financial Accomplishments

Steady increases in large amounts characterized not only MAORT's production, but also the company's earnings. As the fields yielded more crude year after year, so did the profit of the company amount to larger and larger sums. Between the first complete business year in 1939 and the last full year of the Second World War, company earnings rose more than twenty-fold.

On April 1, 1938, MAORT's executive-directors decided that actual present and expected future crude production warranted the beginning of an official business year, even though the first one would consist of only nine months. At the end of the abbreviated year, the company's balance sheet showed a profit of 2,197,382 pengos ($417,502),[110] as the company sold its crude to refineries at a rate of 12.57 pengos ($2.38) per barrel.[111]

The following year, Ruedemann convinced the managers of major refineries and officials of the government that the Zala County crude was an unusually high-quality oil. He demonstrated that the crude's specific weight was less and its boiling point lower; therefore, it yielded more gasoline and less heavy oil per volume than ordinary

crudes.[112] As a result, the price of crude was raised to 15 pengos ($2.85) a barrel in August and to 15.43 pengos ($2.93) in December.[113] The higher prices, coupled with substantially increased production, placed MAORT's profit for 1939, the first complete business year, at 4,956,568 pengos ($941,728).[114]

The 1939 business year witnessed a significant, and at the same time, singular, event. At the annual General Assembly of Stockholders meeting on May 20, 1940, Emil Schudel, who represented by proxy 14,346 of the 14,357 shares, decided that 100 pengos ($17.60) in dividends should be paid out for each share.[116] Consequently, $206,000 (1,170,454 pengos)[117] was transferred to Eurogasco's New York account. These were the only dividends on MAORT's stock that had ever reached the multinational Standard Oil Company of New Jersey.[118]

During the May 20, 1940, General Assembly of Shareholders meeting, where the entries of the 1939 Balance Sheet[119] received final approval, Schudel, by proxy represented 14,346 shares; Ruedemann, 10, and Papp, 1. Beside the three shareholders, six members of the Board of Directors and Board of Supervisors were also present.[120] At Ruedemann's proposal, the stockholders approved that from the 1939 earnings, 100 pengos ($17.60) in dividends would be distributed for each share, amounting to 1,435,700 pengos ($252,683).[121] In case these dividends could not be transferred out of the country, they would be used to increase the company's capital stock. Of the year's profits, Ruedemann received permission to use 3,500,000 pengos ($665,000) to increase the capitalization of the company from 14,357,000 pengos ($2,727,830) to 17,857,000 pengos ($3,392,830), issue stocks at a 1000-pengo face value from the reinvested money, and distribute the new shares, without charge, among the shareholders in proportion to the number of shares

they had already owned.[122]

After the members of the Board of Directors and Board of Supervisors resigned in accordance with the stipulations of the bylaws, Schudel nominated and the two other shareholders approved the new ones.[123] The majority shareholder also reminded the elected officials that for their sevices they would receive no remuneration, as it was the rule of the company. Finally, Schudel recommended that in view of the ongoing war, if the shareholders could not hold their annual assem- bly and take care of the company's business, the members of the Board of Directors and Board of Supervisors would continuously serve until the next General Assembly of Shareholders could convene. This was accepted and entered as an amendment in the company's bylaws.[124]

The third (but only the second complete) year of MAORT, also came to an end with resounding financial success, as the company registered 9,259,919 pengos ($1,629,745) profit on December 31, 1940.[125] To make the final disposition on the year's balance sheet, the General Assembly of Shareholders met on May 1, 1941. Seven directors and supervisors[146] joined Schudel who represented by proxy 17,846 shares; Ruedemann represented 10; and Papp, 1. At Schudel's recommendation, the shareholders approved the distribution of 100 pengos ($17.60) in dividends for each of the 17,857 outstanding shares amounting to 1,785,700 pengos ($314,283)[127] and the return from the year's profit of 7,143,000 pengos ($1,257,168) to increase the capitalization of the company to 25 million pengos ($4,400,000). For this last amount, the company would issue 7,143 shares, each at 1,000 pengos face value, and distribute these shares among the shareholders in proportion to the shares they had already owned. At the end of the meeting, the shareholders decided to place the 1,750,000-pengo-retirement fund ($308,000 which was set aside

in December, 1940) on special reserve. They instructed Ruedemann to organize the company's retirement program including the drafting of its bylaws. The resignations of the members of the Board of Directors and Board of Supervisors were accepted and the appointment of new members was unanimously approved.[128]

With only five members present,[129] the last peace-time meeting of the Board of Directors convened on September 30, 1941. It was brief in duration and disappointing in accomplishments. Ruedemann reported that the dividends for 1940 could not be transferred to Eurogasco's New York account; however, he was able to arrange that the 1,785,000 pengos ($314,160) be placed on a new, special Unpayable Dividends account and left there until it could be removed from the country. He also noted that two American citizen board members, Bolton and Panil, had resigned their posts.[130]

On December 24, 1941, one day after government officials formally delivered the sequestration order to take the company for the use of the state because of the state of war existing between the United States and Hungary since December 17, 1941, the General Assembly of Shareholders convened for an emergency session. By proxy, Schudel represented 24,000 and Papp, 500 shares. Ruedemann, Geocze and Konek attended the meeting. After the shareholders approved the bylaws of the company's retirement system,[131] Ruedemann announced that he "planned to take an extended vacation and travel to North America for an indefinite period of time."[132] For the interim, he appointed Papp to serve as the company's executive vice president. Papp accepted his new post and asked that the minutes show "the assembly's expression of thanks and gratitude to Ruedemann for his role in the establishment of the company and in providing leadership during the formative years in the company's

life."[133]

Sometime after the shareholders meeting, Ruedemann, who believed that "Papp's personal relations with members of the Ministry of Industry and Finance would enable him to unwaiveringly defend the American shareholder's interests,"[134] advised the newly appointed vice president what to do under certain circumstances. He made statements to the following effect: "If such danger threatened the company's interest, which politicians who have favored Anglo-American causes and have enjoyed influence in governmental circles could not ward off, Papp should turn to the German Standard, DAPG's president, Klassen and ask for his support."[135]

On December 25, one day after Papp was elevated to his new post, he issued a memorandum to MAORT employees asking for their cooperation. He wrote: ". . . be helpful to me, too, as I begin my responsible assignment, so that we can maintain, and if possible, further develop our company, which was founded to discover and produce crude oil, that nowadays is so valuable."[136] He did not fail to remind every employee of his dual allegiance:

> Now that we have been left alone for an indefinite period of time, and we can rely only upon our own ability, we must show to the holding company of MAORT and to our Hungarian homeland, that we are capable of doing our work, and we can fulfill the expectations under the changed circumstances.[136]

Ending with the company's sequestration, 1941 witnessed the growth of profits at an ever-increasing rate. Earnings for the year added up to 12,014,829 pengos ($2,114,609).[138] The key to the large profits of the company was not only the substantial growth of production but equally, the gradually decreasing cost of production. In 1941, the average cost of production of a barrel of crude oil was $0.54 (3.06 pengos) while MAORT sold each barrel for $2.71 (12.37 pengos).[137]

A quick and rough, nonetheless instructive, check of certain figures reveals that the declared 3.2 million pengos in profits had really amounted to three times that amount. In 1941, MAORT produced 3.2 million barrels of crude oil of which the company turned over to the state (as royalty payment) 15 percent or 0.48 million barrels. The remaining 2.72 million barrels the company sold at 15 pengos per barrel to refineries for a gross income of 40.8 million pengos. Subtracting from this amount 3 pengos per barrel cost of production on 3.2 million barrels would leave the company with an unadjusted gross income of 31.2 million pengos.

MAORT's income from the sale of natural gas and carbon dioxide (used in the manufacturing of dry ice) had not been documented and was insignificant. However, the company's 1941 income from its natural gasoline production of 24,528 barrels and its liquid butane-propane production of 19,972 barrels (which had been exported to Germany right from the fields) had not been distinctly shown anywhere. The company's 1941 Balance Sheet indicated 4 million pengos on the asset side in the "Accounts Receivable from Abroad" line, which could have very well been income from the sale of these two products to Germany. Because MAORT transacted its export business with DAPG, another Standard Oil subsidiary, it was also possible that the 4 million pengos had never been transferred to MAORT.

The question arises: how could one discover the whereabouts of the company's unadjusted gross earnings of 41.2 million pengos on the 1941 balance sheet? A comparison of the 1940 balance sheet with the 1941's reveals that the company increased its investments in security papers from 0.5 million pengos to 1.5 million pengos, and its inventory from 2.5 million pengos to 7 million pengos. These increases absorbed

5.5 milllion pengos of the 1941 earnings. At the same time, the company created two "sinking fund" reserve accounts. In one it placed 5 million pengos and called it "Reserves for Taxes, Retirement and Welfare Fund and Other Expenses." In the other, it placed 11.3 million pengos and called it "Reserves for Accounts Outstanding." These two reserves absorbed 16.3 million pengos of the 1941 earnings. Including the 12 million pengos earmarked for distribution as dividends, MAORT appeared to have exceeded its 31.2-million pengo gross unadjusted earnings by 2.6 million pengos.

In general, the balance sheets did not present accurate and detailed reports on the company's financial operations.[140] For instance, the 1941 balance sheet did not directly show the company's gross earnings. It did not quote in detail the cost of production, although under the heading of Investments, company officials did list labor, real estate, buildings, materials, research and development, machines and drilling rigs at their cost-value in one lump sum of 45 million pengos. On the other hand, this balance sheet noted that the company's assets had reached 62.3 million pengos in 1941, which was 22.2 million pengos over the assets of the previous year.

Role of the American Legation

Established in accordance with the terms of the Treaty of Peace between the United States and Hungary in 1921, the Legation of the United States of America in Budapest provided an irreplaceable service to Standard Oil Company of New Jersey by aiding and facilitating MAORT's operation. In general, the Department of State through its diplomatic personnel at different posts around the world, traditionally supported and assisted the work of American multinational companies. The succor

was usually rendered without question or reservation and was often in violation of treaties to which the United States government was a signatory. Events involving the Department of State, the American diplomatic corps in Hungary and the management of MAORT unfolded so that they constituted a model case in point.

From 1933 until the beginning of 1941, John Fluornoy Montgomery headed the American Legation in Budapest. The tall American diplomat viewed Hungary as "a small country" and as his "watchtower on the Danube" from which his "eyes would roam over her neighbors and neighbor's neighbor."[141] During the years he had spent in Hungary, Montgomery believed that he "witnessed a tragic and insoluble conflict between fear and horror in which fear was bound to win."[142] He became convinced that "the essence of the fear was that the Magyars, neither Teutons nor Slavs, were aware of being between the two fires of German and Russian imperialism."[143] Hungary could not look forward to times of peace and prosperity because, according to Montgomery:

> It was apparent that it was only a matter of time before the two tyrants would be at each other's throats. Russian communism is practically the same system as German national socialism . . . ; if the Germans were locusts, the Russians were super-locusts.[144]

In spite of these threatening circumstances and the imminent conflict, Montgomery found a ray of hope for Hungary in the personnel of the U.S. Legation in Budapest. In his opinion, the legation "was certainly equal to, or better than that of any other country."[145] During the years he led the American diplomatic community in Hungary, Montgomery placed the legation's services at the disposal of Ruedemann and Standard Oil without suspecting that with some of those services, he also placed the United States in the class of "locusts."

The first time that Eurogasco's company matters entered the dip-

lomatic correspondence of the Legation was concerning the fear of some American diplomats that Hungarians, who had been instrumental in the negotiaton for the Contract and Agreement, had received bribes or some illegal compromising benefit from Ruedemann. James B. Stewart, Charge d'Affaires in Budapest, reported on September 30, 1936:

> According to information obtained from the American representative who is in charge of the Company's operations, nothing was paid to the Hungarian Government for the Agreement or the Contract.[145]

Garrett G. Ackerson, Jr., who inspected the fields, was still suspecting unfair practices in December of 1939. He could not find anything unusual either, as he indicated in the following account:

> . . . the Company has never been asked by, nor has it given, any Hungarian official favors or 'graft.' The concession seems to be based on a fair contract which was procured in a manner which insures fair treatment (insofar as that is possible) to both parties. Up to the present time, there have been no major difficulties with the Government and Mr. Ruedemann is, generally speaking, well pleased with the cooperation which he receives.[146]

The fact that Legation officials could not detect illegal monetary transactions had to be disappointing to Montgomery. While he apparently liked Hungarians, he was suspicious of them when it came to pecuniary matters. Based on a decade-long experience in Hungary, he believed that

> The attitude of Hungarians toward money was that its only function was to be spent. Hungarian hospitality was something proverbial in Europe. The Hungarian gentleman generally lived beyond his income but he always entertained some way or other.[147]

Ruedemann and the Legation reported no instance of impropriety involving Hungarian government officials, but the National Bank of Hungary (Magyar Nemzeti Bank) extended favored treatment and special services to MAORT on more than one occasion. Dr. Bela Imredy, who granted the crude oil exploration and production concessions to

Eurogasco in 1933, and who had been the president of the National Bank of Hungary since 1936, arranged "for the importation of additional sums at a better rate of exchange" for Eurogasco.[148] Ostensibly, Imredy allowed the conversion of dollars into pengos at a rate higher than the official rate. After the National Defense Law of September 2, 1939, froze all assets in Hungary, the National Bank of Hungary took the unusual course of cabling $100,000 to the United States for the purchase of machinery without the red tape of procuring import permits from the competent ministries of the Hungarian government.[149] Apart from these two instances, Hungarian state officials appeared to have acted honestly and properly.

Once crude production became substantial, legation officials established close contact with Ruedemann and periodically visited the fields. Their observations concerning the activities on the fields were transmitted in reports to Washington. Ackerson made an inspection in December 1939 and relayed the following to Washington:

> The general atmosphere at the field appeared to be good and the standard of living of the workers is certainly higher than that of workers on similar large projects in Hungary. Mr. Ruedemann keeps in close touch with the work and I had the impression that he runs the Company efficiently and with understanding for the Hungarian point of view, while never losing sight of the best interests of his employers . . . . The Government, which keeps close control of what is taking place, appears to be satisfied that the Company is working in a manner which incurs the best interests of the country. . . . The combination of circumstances in Hungary appears almost ideal and one can only hope that political conditions in Eastern Europe will permit a continuation of what has been a most fortunate beginning.[150]

Regarding the magnitude of the operation and the impact of the production, Ackerson reported:

> It is not expected, according to present geological knowledge of the territory, that a tremendously large production will ever be forthcoming in Hungary, but it seems fairly certain that the country's internal requirements (at least for gasoline) are assured for some time to come. With the construction of more

> modern refineries, which is now under consideration by both the Vacuum and the Shell Oil Companies, it would be possible to refine the petroleum more efficiently and thereby to procure an even larger percentage of Hungary's other petroleum requirements.[151]

Legation officials also explored the implications which the discovery of oil presented to Hungary. Montgomery, in his inimitable and superfluous style, expounded these implications in the following words:

> With the skepticism born of privation, even Hungarian official-dom has been disinclined to believe the existence of such wealth in the country or to estimate the implications arising from the possession of this essential of modern civilization. Nor do I find my colleagues, especially those representing countries which should be interested particularly, to have shown appreciable concern with the notable exception of the French Minister, who has evinced great interest and expressed the belief that Hungary's increased rearmament will ensue . . . .
>
> The acquisition of wealth will afford the economic prosperity essential to a successful Government and should tend to consolidate the domestic political situation. It is no sociological obscurity that good times endear a Government to its people, and the dawn of a better future to the Hungarian people which has striven with meagre means at hand, and suffered so acutely from what it terms "degraded economic culture," should have an electrical political and economic effect . . . .
>
> Will the new wealth be entrusted to Jewish financiers, the only element in the country now equipped to manage it, and the risk run of intensifying the existing feeling of anti-Semitism, or will the Government maintain it in its own hands? With something tangible now to lose, will Hungary become conservative, practice good husbandry, pay its national debts, and maintain its independence within an increasingly neutral policy, or will she accelerate rearmament, always a popular issue kept active by soldiery, and engage in political adventures with a view to retrieving its lost territory? The answers will be provided only by the facts.[152]

Montgomery did not leave out the oil fields' international implications. He wrote:

> From an international point of view, the vision of possibility broadens. Hungary will become a petroleum competitor of Poland and of Rumania . . .[153]

Montgomery envisioned that the major countries of Europe would now compete for the Hungarian crude. He thought that

> Italy well might use her position as leader of the Rome Protocol

> countries to derive this advantage. Germany conceivably would intensify its Nazi propaganda in Hungary to bring about the creation of a Nazi State and derive commercial advantages, including a lien on the petroleum, through 'Gleichschaltung.' France and Great Britain might be inclined to lose their apathy towards Hungary and to take interest in this country in order to counteract these activities.[154]

There were also military implications concerning the newly discovered oil. The American diplomat expected the following:

> Again, Hungary might concentrate military force in this border zone which Yugoslavia previously wished to assimilate, with the object of defending the oil field. An incident, apparent or real, or a diversion created by political action elsewhere in Europe, might tempt the Yugoslavs again to claim the territory or to attempt to occupy the oil field as they did the Pecs coal mines in 1919, or at least to concentrate troops on the Hungarian border as the Rumanians did at the time of the French occupation of the Ruhr.[155]

In the end of his evaluation Montgomery wrote:

> In general, the possession of petroleum would make Hungary a vastly more important country both to its friends and its foes, bringing to its statesmen greater influence in the world's councils; but with added treasure to defend, the country's situation would be rendered more dangerous.[156]

Montgomery sent his report to Washington believing that it would help Department of State experts understand the new situation which oil created for Hungary.

On September 2, 1939, one day after Germany attacked Poland, the Hungarian Parliament voted to place in effect the codex, National Defense Law (Honvedelmi Torveny).[157] This body of laws had been drafted and approved previously; it suspended or modified existing laws and in the second article, paragraph 232, conferred extraordinary powers upon the state for the duration of the war. This law placed Hungary under martial law or statarium as early as the second day of World War II.

Before the invocation of the National Defense Law, subsidiaries of multinationals operating in Hungary had been allowed to send out of the country useful and necessary information pertaining to the normal

functioning of their business enterprises to their home offices. This free exchange of information, flowing between a company doing business in Hungary and a controlling office outside of Hungary, was suspended indefinitely on September 2, 1939. MAORT officials in Budapest and diplomats at the American Legation learned about this restriction right away; and they knew that maps, charts, data and reports containing information that related to Hungarian national security were not allowed to leave the country.

Awareness of the Hungarian government's prohibition concerning the transmission of sensitive information quickly became noticeable in the Legation's reports to Washington. The first instance occurred in relation to the construction of the main pipeline. On December 17, 1939, Ackerson wrote:

> The difficulty in obtaining the permission of Standard is due, in some measure, to the fact that the local Company is not permitted, while war continues, to send full reports, production figures, pictures, maps and similar material to the parent company. The New York Office is, therefore, somewhat in the dark regarding the exact situation and is naturally hesitant to approve a venture of such magnitude on the limited information available to it.[158]

Other difficulties regarding the operation of MAORT were noted by a special committee in Washington as it attempted to prepare a general evaluation of the Hungarian oil industry. The report stated:

> From the end of the year 1939, the Hungarian government prohibited the export of maps. Since Hahot, a promising geological structure some 15 miles southwest of Lake Balaton, was discovered after that year, there are no geological maps of it available in the U.S.A. . . .
>
> There are no maps in the United States which show the location of gathering stations, flow lines, gas lines, water lines, etc.[159]

Standard Oil Company's headquarters at Rockefeller Plaza was not left without confidential information from Hungary too long. Ruedemann and members of the American Legation agreed that the Legation would

allow Ruedemann to use the Legation's diplomatic communication systems, specifically the telephone, telegraphs and courier (pouch) services. Herbert C. Pell, who in 1941 succeeded John F. Montgomery as the American Minister to Hungary, introduced Ruedemann's report to the Secretary of State with the following words:

> With reference to my telegram No. 479, August 5, 2 p.m., I have the honor of enclosing a letter with enclosures addressed to Mr. C. H. Lieb of the Standard Oil Company of New Jersey, 30 Rockefeller Plaza, New York City, by Mr. Paul Ruedemann.[160]

The letter, which Pell requested the Department of State to transmit to Rockefeller Plaza, was Ruedemann's comprehensive 32-page report entitled "Status of Operations," dated August 7, 1941. It was also accompanied by the following enclosures:

> Letter from Janos Dinda to George Bannantine explaining the selection of bean size in the Budafapuszta field
>
> Table showing bean size and resulting change in production
>
> Diagram showing the effect of bean size on the gas-oil ratio (GOR)
>
> Study by Arpad Karoly on the economy of well spacing on the Budafapuszta field.
>
> Diagram showing the relationship between profit and well spacing on the Budafapuszta field
>
> Contour map of the Lovaszi field[161]

The last item accompanying Ruedemann's report was a cleverly devised cable code. This enabled Ruedemann to receive instructions from New York without necessarily relying on the communication system of the Legation. The scheme of the code was self explanatory and appeared as follows:

Cable Reference		When cabling state only
1 A	Estimated profit for the year 1941--23,000,000	
2 B	How much should be reserved for Pension Fund?	amount

3 C	Should amount reserved for Pension Fund be handled as in 1940 or should it be distributed as part of profit?	as 1940 or part of profit
4 D	Do you think it advisable to increase Capital Stock in view of possible special levees based on Capital Stock?	yes and amount or no increase
5 E	Do you agree on 10% dividends to be credited to Eurogasco as in 1940?	agree as 1940 or do not agree giving recommendation
6 F	Do you agree to transfer 2,000,000 or more to appropriated surplus as such actions are customary here and favorably looked upon?	agree and amount or do not agree
7 G	Do you agree to elect Dinda as Director?	agree or do no agree
8 H	We feel that it might be well to have power of attorney now for the authorized representative of Eurogasco for the 1941 General Meeting and we propose the following: Emil Schudel, Dr. Erno Hauer and Dr. Simon Papp	will be forwarded or not necessary now
9 J	We suggested, and council agrees, that we should have a declaration from the directors living abroad to the extent that in case there is no possible communication at the time the General Meeting is held, the directors residing in Hungary are empowered to hold the General Meeting and solely sign the balance sheet, profit and loss statement and the report of the board of directors, or if necessary, that the chairman sign them in the name of the absent directors.[162]	

Within less than two months, Herbert Feis, Advisor on International Economic Affairs at the Department of State, was ready to send the reply from Clarence Lieb. Feis instructed Pell in the following

words:

> There is enclosed herewith a reply from Mr. C. H. Lieb, executive of the Standard Oil Company of New Jersey, to the report of August 7 from its Hungarian representative, Mr. Paul Ruedemann, which the Legation sent to the Department for transmittal.
>
> It is requested that the Legation, within its discretion, transmit this reply to Mr. Ruedemann.[163]

The Japanese surprise attack on Pearl Harbor forced Hungary to announce its intention toward the United States. While Hungarian state officials prepared to sever relations with the United States, they were careful to ease and lessen the impact of their actions on the Americans. The events leading up to and immediately following Hungary's declaration of war on the United States formed a telling example of Hungary's being on the horns of a dilemma.

On December 13, at 5:30 in the afternoon, Laszlo Bardossy, Prime Minister of Hungary, handed Pell a document that announced the existence of a state of war between Hungary and the United States. The short document read:

> The Royal Hungarian Government, under the terms of the so-called "Three-Power Pact" of September 27, 1940, and under the provisions of Hungary's adherence thereto on November 20, 1940, respectively, further, in accordance with the declaration of the principle of solidarity of December 11 of this year, considers the state of war, which exists between the United States of America, on the one hand, and the German Empire, Italy and Japan, on the other hand, to be existing also with respect to Hungary.[164]

Two days before the delivery of this ultimatum, Bardossy, following the German declaration of war against the United States on December 11, informed Pell that Hungary could no longer maintain relations with the United States. In his "triple priority" telegram to the Department of State, Pell stated that the Hungarian Prime Minister severed relations "but not with intention of declaring war."[165] A few days after the delivery of the ultimatum, Bardossy was explaining to his pro-Anglo-

American friends that "he had not really declared war but had simply noted that a state of war existed between the two countries as a consequence of the stipulation of the Tripartite Pact."[166]

On November 29, 1940, Hungary signed a document wich linked the country with the Tripartite Pact. Article 3 of the original Pact signed by Germany, Italy and Japan on September 27, 1940, stated:

> Germany, Italy and Japan agree to cooperate, in the course of their efforts, along the lines stated. Furthermore, they assume an obligation to support each other with all political, economic and military means, if one of the contracting parties is attacked by a power which is not, at the moment, participating in the European conflict or in the Sino-Japanese war.[167]

As a result of this stipulation and after the Japanese attack on Pearl Harbor on December 6, 1941, Hungary had no choice in avoiding war with the United States.

There were some instances of Hungarian tactfulness in the face of these undesirable and unavoidable circumstances. Over the years, menbers of the American diplomatic corps established friendly relations with the first family of Hungary to such a degree that occasionally German officials had to express their disapproval. One instance involved the wife of the American Minister to Hungary:

> Mrs. Pell was allowed to paint a portrait of the regent and his wife; one for which both actually sat. This episode is related by Antal Ullein-Reviczky in his wartime memoirs. What Ullein-Reviczky does not mention in his memoirs is that the artistic endeavor of the wife of the American minister did not remain a secret from the German authorities, and that during his trip to Germany as chief of the Press Section of the prime minister's office, in November 1941, he felt obliged to assert in the presence of German officials that no such portrait was ever painted.[168]

Many high-ranking American diplomats in Hungary showed strong positive sentiments toward Hungary and Hungarians; for instance:

> Relations between American diplomats and Hungarian officials had almost always been cordial in the between-the-wars period. American diplomats in Hungary, John F. Montgomery, Herbert Pell

> and Howard Travers were at pains to point out to the Department of State that, despite appearances, Hungarians in general and Horthy in particular, were not pro-German but rather pro-British and pro-American. 'The Regent is firmly determined,' . . . wrote Montgomery back in November, 1940, 'to refrain from taking any step in his relations with Germany, such as granting of military or air bases, which would involve a loss of sovereignty. I hope, however, that the matter will not be put to the test.'[169]
>
> Just after the suicide of Count Teleki, the American charge d'affaires, Howard Travers, reported that his feeling was that Hungary would do all in its power not to participate in the war against Yugoslavia. 'However,' he continued in his dispatch, 'it is doubtful whether any such efforts could prove successful against strong German pressure.'[170]

Montgomery, Pell and Travers were not alone in viewing the Hungarians in a favorable light. While Great Britain was contemplating sending an ultimatum to Hungary toward the end of November, 1941, Pell warned the Department of State that a " British declaration of war against Hungary would only result in strengthening the 'war party' in Hungary, hitherto in a minority."[171]

In their reports, the American diplomats realistically and sympathetically presented the situation in which Hungary found itself toward the end of 1941. On the one hand, Hungary had to join the Tripartite Pact if it wanted to effect its revisionist foreign policy objective of territorial expansion; and on the other hand, Hungary had to support Germany's war aims if it wanted to keep the recently "awarded" territories. In the end, the result was that even some of the highest American statesmen appreciated Hungary's predicament. After the Hungarian Foreign Minister presented the declaration of war, Secretary of State Cordel Hull said:

> . . . at least for the time being, we will not ask Congress for a declaration of war against these satellites. We realize that their governments were puppets of Hitler, and they had to jump when the strings were pulled.[172]

Addressing himself to the same subject, President Franklin D. Roosevelt noted: "It is my present thought that the U.S. should pay no attention

to any of the declarations of war against us by puppet governments."[173]

However, the United States government did not operate in a pressureless environment either and could not hold war declarations against Hungary and East European countries in abeyance too long. During his visit to Washington, at the end of May 1942, Vyacheslav Molotov, Foreign Minister of the Soviet Union, disagreed with Roosevelt when the American President said that "it seemed something of a waste of effort"[174] to declare war on those East European countries. However, to accommodate his Russian guest, Roosevelt indicated that war would be declared on Romania, Hungary and Bulgaria the following week. Thus, almost six months after Hungary placed itself on the field of open hostility against the United States, Roosevelt signed the American declaration of war against Hungary on June 5, 1942.[175]

Sequestration of MAORT

On December 20, 1941, seven days after Hungary declared war on the United States, Jozsef Varga, Minister of Industry, issued decree No. Ip.M. 7997/11/1941 (based on The National Defense Law of 1939, article 107, paragraph 5).[176] This temporary law placed MAORT in the use of the Royal Hungarian Treasury for the purpose of national security and designated Simon Papp as the head of the state-controlled company. At the same time, Varga informed the company's management that a delegation of state officials would arrive at the company's main office in Budapest on December 23, to formally execute the decree.[177] With this, a two-year, frustrating and non-productive argumentation between MAORT's Hungarian management and of the Hungarian government began in earnest. The compensation which the Hungarian government would have to pay to Standard Oil Company for assuming control over MAORT, formed the basis of the

bitter and protracted contention.[178]

To execute the government's order, Varga dispatched Chief Mining Advisor Bela Faludi (representing the Ministry of Industry), Ministerial Advisor Dr. Jozsef Czeh (representing the Ministry of Finance), and Assistant Chief Prosecutor Dr. Ferenc Magyarossy (from the Treasury) to the Ferenc Jozsef ter 5, central office of MAORT. There the state's delegates met Chief Ministerial Advisor Dr. Erno Hauer, Chief Legal Counselor Dr. Bertalan Geocze and Executive Vice President Dr. Simon Papp, all representing the company.

Faludi, spokesman for the state's delegation, explained that MAORT would be administered as a new company with a different firm number under the modified name of Magyar Amerikai Olajipari Reszvenytarsasag uzemei a m. kir. kincstar hasznalataba (Hungarian-American Oil Company in the use of the Royal Hungarian Treasury--abbreviated MAORT of the RHT). He noted that an accurate inventory of MAORT's properties would be taken as soon as it became practicable[179] and that in accordance with Law 11 of 1930, the Hungarian government would compensate the owners of MAORT for the use of the company. The exact amount of the compensation would be determined by a special committee selected at a later date.[180]

On behalf of MAORT, Geocze asked the members of the state's delegates that the time limit placed on MAORT's concession (and stipulated in the Contract and Supplementary Contract) be extended by the time period the company's sequestration would last. He recommended that the new company, MAORT of the RHT, assume and satisfy all MAORT's current contractual obligations. In return he offered to place the capital necessary to continue the company's operation at the disposal of MAORT of the RHT on the same terms as had previously been granted by Hungarian

financial institutions to MAORT. Goecze's last request was that after the Hungarian government returned the company to the American owners, the incoming MAORT managers would reserve the right to dismiss any employees hired during the period the Hungarian government had the company, without assuming severance payments to the discharged workers.[181]

The legal seizure of the American company in the interest of national security[182] created difficult, but by no means paralyzing, legal problems for both the company and the government. The company's executive managers had to act in dual roles for the remainder of the war. The officials of the company were now employed by the Hungarian government; however, during certain special meetings, the same officials acted on behalf of the American owners and represented MAORT against the Hungarian government.

The first opportunity to observe the officials in their dichotomous roles occurred the next day, December 24, 1941. In order to protect the interest of the American owners, officials of MAORT of the RHT addressed a number of requests to the Minister of Industry. Following an expression of shock over the government's decision to sequester the company, the officials affirmed that "primarily, MAORT had always been operated in the interest of Hungary."[183] Nonetheless, they asked that, in order to avoid administrative complications, the date of sequestration be set for January 1, 1942. If this couldn't be accomplished, then 1,750,000 pengos ($325,000) should be set aside from the company's reserves to cover a retirement fund in that amount as ordered by the Minister of Industry on September 11, 1941, (and recently established in an emergency meeting of stockholders). In the end, the managers unequivocally stated that they "reserved their rights to make future

appeals in case problems presented themselves in connection with the changed status of the company."[184]

During a joint conference on December 31, officials of the company and representatives of the government agreed on several points. They selected December 23 (the day the sequestration order was delivered at the company headquarters), as the official date to begin crediting all profits made by the company to the Hungarian Treasury.[185] To prevent complications with the newly established retirement fund, the participants set January 1, 1942, as the first day all employees of the company would be considered as working for the government-controlled MAORT.[186]

With the sequestration order in effect, Papp directed and supervised the daily business of MAORT of the RHT. He received instructions from Ministerial Advisor Karoly Roth, formerly chief executive of the Salgotarjani Coal Company, and a trusted and competent member of the state bureaucracy. Notwithstanding his government position, his colleagues respected him for his accomplishments in his profession as a mining engineer. Among government administrators, he belonged to that group of officials who did not find German-Hungarian military and economic cooperation objectionable. Roth supported a program of accelerated production of the oil fields. Because Papp knew how to follow and implement decisions, and Roth had enough managerial sensibility not to expect fulfillment of unreasonable orders, the two men worked along with each other without major breakdowns until the end of the war.[187]

Less than a month after the first requests to the Minister of Industry, company officials were prepared to discuss with state officials additional suggestions, observations and claims. To obtain the desired results, the executives (in the absence of legal or business

precedents) developed a set of arguments on which they based their new requests. They contended that the sequestration order made no reference to the concessional agreements and contracts signed by Eurogasco and the Hungarian state; therefore, the company MAORT still existed as a legal entity, even though it temporarily ceased to do business. The working function of the company was taken over and continued by another company with a different firm number and under the control of the state. For these reasons, merely a "business transfer (uzlet-atruhazas)"[188] had occurred; and consequently, the Hungarian government owed no compensation to the legally still extant MAORT.

To further elaborate on this interpretation, the executives wrote a letter to the Minister of Industry on January 19. They asked that their previously requested extention of the concessional time limit, the duration of the sequestration, be dropped from further consideration. Rather, MAORT of the RHT should be allowed to assume and continue to use the granted concessional time period. The new company should also maintain and fulfill all contractual obligations and responsibilities of the old company. All investments made after December 23, 1941, should (as had been requested before) become the property of the American owners without their having to be reimbursed by the Hungarian government at the end of sequestration. The government would owe no compensation to the owners of MAORT, if MAORT of the RHT were allowed to deposit a "respectable portion (meltanyos hanyadat)"[189] of the company's profit on a special account at the end of each business year and turn over the accumulated sum to the stockholders as dividends at the time the government terminates the company's dependent status.[190]

To further support the no-compensation proposal, members of the Executive Board sent another communication to the Minister of Industry

on January 28. This note analyzed the tax situation of the two companies and suggested a new way to enter the company's profits on the books. In 1933, when the government granted Eurogasco a concession to search for and produce crude oil, the Hungarian Parliament passed special laws exempting the company from taxation except for road and military levies. MAORT of the RHT had no tax exemption; it was liable for every type of tax that companies generally pay. This substantially reduced the company's net earnings. The executives suggested a simple bookkeeping procedure which could solve the new company's tax predicament. At the end of each business year, the new company would calculate its profit, show it in the profit column and then transfer it to the profit column of the old company. To keep everything legal, the new company would also enter the profit in the loss column and the old company would pay the taxes (which were almost nonexistent) as it had before. Finally, the executives warned that only these steps could make the operation of the new company as lucrative as the old one.[191]

For weeks the Ministry of Industry failed to respond to any of the requests. This silence encouraged the company's executives. The appointment of a new Minister of Industry, Geza Bornemissza, who had been known to question the legality and necessity of MAORT's sequestration, further emboldened the executives and they were now ready to submit their most revolutionary set of proposals.[192]

Article 2, paragraph 107, of the National Defense Law of 1939 stated that owners of companies vital to the defense of the country had to maintain the operation of their companies, or they had to allow the government to take their companies into state use. The law, however, did not stipulate that the government had the right to transform a sequestered company into a new company with a different registration

number. The sequestration of MAORT and the resulting two companies created such legal and administrative problems that the normal operation of the companies had become cumbersome. For instance, the properties or assets of MAORT and MAORT or the RHT could not be accurately separated; if an old building were destroyed or a new one constructed, which company would suffer a loss or enjoy a gain? Every one of the old company's lease agreements or contracts would have to be renegotiated, and as a matter of fact, the new company had no concession from the government to operate at all. For these reasons the executives of MAORT requested that the Minister of Industry abrogate the sequestration order and appoint a state trustee to head the company. This high government official, together with the state controllers and occupying military personnel, could adequately insure the company's operation in conformity with any order from the office of the Minister of Industry.[193]

Bornemissza did not respond to any of these requests. However, at the initiative of Department X, he appointed a committee of six high government officials and charged them with the task of preparing an inventory of the company's possessions.[194] On March 5, 1942, the selected officials visited Nagykanizsa, a town near the oil fields where the company maintained its field offices and the supply and maintenance buildings. Here they held one meeting, concluded that their task was too large to accomplish, and asked for and received copies of the company's latest (December 31, 1941) inventory lists. To the Ministry of Industry, they reported their findings and suggested that to obtain an up-to-date inventory (to be prepared by an outside group) the government would have to choose a larger group and allocate more time to perform the task.[195]

Only one of the company officials' requests, the one regarding

the company's tax status, received attention. On March 20, 1942, the Legal Section of the Royal Hungarian Treasury informed MAORT of the RHT that its tax specialists had come to a conclusion regarding the company's tax situation. They stated that tax exemptions and privileges enjoyed by MAORT could not be transferred because they had been lodged with the company as a "legal person." This ruling included situations in which the owners would have to lease out their company for profit.[196]

Inclusion of the leasing instance was important because the tax experts judged the state's sequestration of MAORT as an act of "forced-leasing for profit (kenyszerhaszonberlet)."[197] However, this was not the only reason why MAORT's tax status could not be transferred to or assumed by another company. The Treasury, as executor of the state's sequestration order, established a new company for the sole purpose of operating MAORT. MAORT of the RHT was an independent legal person; it was the executor of the will of the "forced leasee," the Treasury, and had no legal relationship to MAORT. On the other hand, MAORT, during the "forced-lease" period, still remained an independent legal person. It had the right to exercise certain executive functions such as to collect compensation and communicate its opinion to government offices and it still possessed every one of the granted tax exemptions. In short, MAORT still existed; only its activity had been limited by the sequestration order.

For the Treasury's legal experts, it was not difficult to establish that MAORT of the RHT had no tax obligation. In Hungarian law, a company and its owner formed an inseparable legal personal union. As an integral part of the Hungarian government, the Royal Hungarian Treasury had no tax obligations.[198] Because the Royal Hungarian Treasury owned

MAORT of the RHT, the company enjoyed exemption from all taxes or levies.[199] MAORT's executives were pleased to learn the decision of the Treasury's legal experts because this way no unexpected tax charge would reduce the company's profits.

On the other hand, company officials were openly dissatisfied with some other recent developments. In a letter dated October 22, 1942,[200] Gabor Temesvary, a member of the company's Board of Directors, informed Simon Papp that according to confidential information he had received, an interministerial committee would soon begin to hold a series of conferences to determine the size of compensation for the takeover of the company. Therefore, officials of the company should be extremely cautious in agreeing to any proposition. Moreover, there would be no guarantee whatsoever that after the war the American owners would approve the actions of the company's Hungarian officials. According to Temesvary, there was only one way to handle the situation: under certain circumstances, company officials could accept a government-proposed settlement but with the explicit reservation that the compensation would be taken only as an advance toward the final payment to be negotiated between the government and the rightful American owners after the war.[201]

In early December of 1942, company officials were again ready to express their preference for a certain modified control over the company. They asked the Minister of Industry to discontinue the company's sequestration and to appoint a state trustee to head the company. This time the company executives went one step further and suggested that the state choose Simon Papp for the responsible post.[202]

The executives supported the appointment of Papp as a state trustee with two arguments. The present "two-company system (ket

vallalati rendszar)"[203] made the administration of the company difficult and confusing. At the end of the war when the company's leadership must give an account of MAORT's assets and liabilities to the American owners, a single, trusted and respected person from within the company would be able to do the job more creditably.[204]

A few days later, the executives followed their request for a state trustee with a review of the company's administrative problems caused by the sequestration. Dr. Bertalan Geocze drafted the review; however, the signature at the end of the letter was not his. As had been the case with the other communications, the name MAORT stood in place of a personal signature.[205]

In the opening part, Geocze noted that not one of the company's four, problem-describing and solution-suggesting letters, over a span of the last twelve months, had been addressed by the government except that which dealt with the new company's tax status. The apparent inactivity on the part of the government to settle even a few of the new company's problems induced the executives' belief that the company was more than adequately serving the civilian and military needs of the country and that the government had no intention of settling any of the major problems before the end of the war. However, one year of operation by the sequestered company had created several questions which needed to be addressed for efficient operation of the company for the second year. Soon the two companies' yearly balance sheets would have to be prepared. Because the government had not revealed its intentions about many undecided matters, the executives suggested that the books of MAORT of the RHT be prepared the same way as the books of MAORT had been in previous years. After the obligations of MAORT of the RHT had been satisfied, including the fifteen percent royalty payment to the government, the

profit of the company would be transferred to MAORT as of January 1. MAORT would "place this amount at the disposal (rendelkezesere bocsajtja)"[206] of MAORT of the RHT without interest but with the stipulation that the company invest it. The ownership of the investments would then be transferred to MAORT as assets. Because the executives of both companies were the same, they would invest the profits in necessary and useful projects or properties.

In the closing part, Geocze mentioned the executive's hard work toward the building of a successful company and their patriotic devotion to the Hungarian state. He also stated the MAORT's executives had been serving the interests of the Treasury as well as those of the stockholders "with the care of a regular businessman."[207] At this juncture, Goecze came to his main point which was to state that because of the twofold nature of the company, MAORT should relinquish claims for compensation; and the government should be asked to postpone further changes in the company's status.[208]

Up to the end of November 1942, the Hungarian government avoided addressing all but one of the company's attempts aimed at finding solutions to problems created by the sequestration order. On December 1, 1942, Bornemissza invited company representatives to participate in a series of conferences regarding the compensation issue. The negotiating sessions continued until December 23; five officials represented the Ministry of Industry and three were present on behalf of MAORT.[209] On January 8, 1943, the Ministry of Industry abruptly handed down its decision. The government's ruling failed to incorporate any of the negotiators' recommendations which could have been beneficial for the company and the state.[210]

The description of the terms of the compensation drawn up by the

government was long in detail and short on explanation. The order stated that the government would have to pay MAORT 6,300,497 pengos ($1,197,094) for each year the company was in use.[211] The yearly amount of compensation was based on the average taxable earnings of MAORT over the past three years.

Because there was no extant jurisprudence which could have guided the "legal relationship (jogviszonyt)"[212] between the state and the company, the government had to search for laws which showed "similitude of rights (joghasonlosagot)"[213] to the act of the sequestration. A section in Hungarian civil law regulating "lease for profit (haszonberletet)"[214] relationships had shown the greatest affinity; therefore, the government chose to follow the stipulations of this set of laws in deciding the particular details of its compensatory obligation.

Two definitions, which under normal conditions would apply, turned out to be disadvantageous because MAort was such a rapidly growing company. Each year's compensation was based on the average earnings of the company for the previous ten years. MAORT had been operating for less than three full years. Each successive year's earnings showed prodigious growth (taxable earnings for 1938--2,197,382 pengos, 1939--2,929,843 pengos, 1940--12,332,958 pengos); therefore, the company could never recover all its earnings in any one year. The "lease for profit" laws did not allow the company to collect payment for the very large, purposefully accumulated supplies and materials. At the time of the sequestration, the company had just invested large quantities of money in supplies and materials for two reasons: the company prepared for large-scale expansion of crude production and it anticipated shortages due to the war. The "lease for profit" laws simply

stated that the amount of compensation covered both the "use and using up (felhasznalasat)"[215] of all materials which were necessary for the normal operation of the company. In a similar vain, another article of the law stipulated that "no allowance would be made for depreciation which occurred during the sequestration period."[216]

Perhaps in acknowledgement of the company's several appeals to the Ministry of Industry, the ministerial decision noted that the "company's sequestration took place in accordance with lawful orders;"[217] therefore, company officials' repeated "indignations lacked foundations in law."[218] Nonetheless, the officials of MAORT had the right to appeal the order and ask the Minister of Industry to "re-examine it (vizsgalja felul)"[219] if the officials "were not satisfied (megelegedve nincsenek)" with the adjudged compensation.[220]

As soon as MAORT's executive board members had an opportunity to examine and discuss the government's compensation offer, they turned it down in toto. On February 1, 1943, after reminding MAORT officials that "the company did not demand compensation for its being taken into use"[121] Bornemissza ruled that the Treasury and MAORT's "mutual demands (kolcsonos kovetelesek)"[222] on each other over the company's sequestration would be "put in order (rendeztetni)"[223] after the company's sequestration ended. Until that time, the Treasury would obligate itself "to place at the company's disposal sums necessary to finance the company's operational costs."[224] The sums would be "mutually agreed upon and they would become part of the final accounting of the termination of the sequestration."[226]

With this, for the duration of the war, further litigations were officially discontinued. In a sense, the Hungarian government maneuvered itself into an advantageous position; it made assurances but no

commitments for the future. Fortunately for MAORT, the Treasury did not touch the profits the company made during the war and allowed the company officials to invest those profits in the expansion of the operation. When the American managers returned to Hungary after the war, they found a company which grew larger in physical assets as well as economic importance.

NOTES: CHAPTER THREE

1. At the same time, Eurogasco geologists had been carrying on investigations in other East-Central European countries. In Austria, after discovering crude in commercial quantities, they were preparing the fields for production near Wien. Between 1937-1939, one American and one local geologist were engaged in mapping and exploring Czechoslovakia's natural gas fields. Two American geologists were doing field work in Yugoslavia during 1936 and 1937. They were looking for a possible extension of the Szelnicza and Peklenicza anticline to the west (American Petroleum Interests in Foreign Countries, p. 376, 378).

2. Raul Vajk, "Geophysical Exploration of Southwest Hungary," Geophysics, vol 17, no. 2 (April 1952), p. 295.

3. In the early 1940s, new and accurate gravity and magneto meters replaced the torsion balance instrument in gathering data for gravity surveys. The hilly and crossbedded topography of Transdanubia had much less effect on the readings of the new instruments. Also, later on, MAORT began using reflection seizmographs to check certain sites for oil deposits (D. C. Skeels and R. Vajk, "Geophysical Explorations and Discovery of the Budafapuszta Oil Field in Hungary," Geophysics, vol. 12, no. 2 (April 1947), pp. 217-20).

4. Ibid.; and "Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records.

5. "The Hungarian Oil Industry," report by Simon Papp, attached to Despatch 473 (secret), John Peabody Palmer, Secretary of American Mission, Budapest, to Sec. of State, July 21, 1945, NA Records.

6. The names of the five sands or pays were Budafa, Zala, Upper Lispe, Lower Lispe and Kerettye. The names had local significance and had no reference to standard geological nomenclature ("The Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records).

7. Ibid.; Report by Walters to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland; and The Hungarian Oil Industry, pp. 36-38.

8. "Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records.

9. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

Based on the geological data Ruedemann transmitted to New York, Rockefeller Plaza suggested well spacing of 1,500 feet ("Status of Operations," report by Ruedemann, attached to Despatch 321 (secret), Howard K. Travers, Charge d'Affaires, American Legation, Budapest, to

Sec. of State, August 7, 1941, NA Records).

10. CHOMD, vol. 1, p. 258; and "Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records. Several other sources which also quoted the number of wells drilled on this field, noted different figures; however, when the same sources reported production figures, the figures agreed without exception.

11. Report by Walters to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland.

12. Ibid., p. 37; and CHOMD, vol. 1, p. 268.

13. Report by Walters to Sec. of State, May 7, 1946, NA Records, Suitland, Maryland.

On the Yugoslav side, beginning with 1941, a German company started wildcatting and completed six wells. Four of them became gas and two became oil producers. The oil production reached 5,000 barrels for 1943, and the estimate showed a slight increase for the year of 1944 (ibid.).

14. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records. The names of the six horizons were: Paka, Upper Ratka, Lower Ratka, Sziget, Lenti, Lovaszi and Kutfej. The names had reference to local places and not to any geological nomenclature (ibid.).

15. Ibid.; CHOMD, vol. 1, p. 258; and "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

16. "Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records; and The Hungarian Oil Industry, p. 38.

17. Raul Vajk, "Geophysical Exploration of Southwest Hungary," Geophysics, vol. 17, no. 2 (April 1952), p. 295.

Lendvaujfalu was 2 miles southwest of Lovaszi and 3.5 miles northeast of Peklenicza (ibid.).

18. The Hungarian Oil Industry, p. 38-39.

19. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

20. "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records.

21. Ibid.; and "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

22. Williamson et al., The American Petroleum Industry, vol. 2, p. 562.

23. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records. Each station also had several separators; these were tanks of 300-barrel capacity. In them gas, dissolved in the crude, was separated and pumped to gas-gathering tank stations (ibid.).

24. Ibid. Budafa was 9 miles from Ujudvar and 15 miles from Lovaszi (ibid.).

25. Ibid.

26. "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records.

27. Memorandum by Garrett G. Ackerson, Jr. Secretary of Legation, Dec. 17, 1939, attached to Dispatch 383 (plain), Howard K. Travers, Charge d'Affaires, to Sec. of State, Dec. 20, 1939, NA Records; hereafter cited as Memorandum by Ackerson, Dec. 17, 1939, NA Records.

28. Ibid.

29. For details concerning this law see p. 142.

30. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

31. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records. The pipe sections came in 36-foot seamless sections. They were welded together and placed 4 feet below the surface beyond the frost line (ibid.).

32. Despatch 200 (plain), John Palmer, Secretary of Mission to Sec. of State, Aug. 20, 1945, enclosure entitled "Brief Summary of the Present Situation of the Hungarian Mineral Oil Industry," no author, no date, NA Records, Suitland, Maryland.

33. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records; and "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records. To transport the growing output of the fields, the engineers added five booster pump stations along the main pipeline. Each pump station raised the trunk line's capacity by 2,000 barrels a day (ibid.).

34. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records; and "Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records. After the Budafa plant was expanded, it became capable of producing 1,000 gallons of gasoline and liquid gas a day (ibid.).

35. Despatch 115 (plain), Palmer to Sec. of State, July 21, 1945, NA Records.

36. "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records; and "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records. The plants used American Cooper-Bessemer and German Thomasen compressors of 200-300 horsepower (ibid.).

37. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

38. Ibid. 39. Ibid.

40. Ibid. It is worthwhile to note that no source has mentioned the make, number and type of trucks and cars in use by the company. The only available document, dated 1946, simply stated that MAORT owned 149 motor vehicles in 1944 (Despatch 2361 [restricted], Arthur Schoenfeld, American Minister in Budapest, to Sec. of State, Dec. 18, 1946, NA Records).

41. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

42. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

43. Ibid. No pengo figures were given by Ruedemann.

44. For details of employment privileges and restrictions, see pp. 77-78.

45. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

46. CHOMD, vol. 1, p. 234.

47. CHOMD, vol. 2, p. 90.

48. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

49. CHOMD, vol. 2, p. 91.

50. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

51. Report by Palmer to Sec. of State, Jan. 5, 1946, NA Records.

52. CHOMD, vol. 2, p. 91.

53. Papers of the Ministry of Industry, bundle 1, HNA, cited in CHOMD, vol. 2, p. 112.

The positions held in August 1941 and the monthly incomes earned in 1943 by some of MAORT's top executives were as follows:

Executive's Name	Executive's Position	Earnings in pengos	Earnings in dollars
Simon Papp	chief geologist and second vice president	12,000	2,280
Janos Dinda	superintendent of production	5,400	1,030
Bela Majersky	supervisor of pipe construction	2,000	380
Ferenc Angyal	supervisor of drilling	2,333	443
Ferenc Pocker	superintendent of gasoline plants	2,000	380
Bela Halasz	transportation supervisor	2,300	440

Ferenc Benedek	area superintendent of Budafa	2,160	410
Janos Paal	area superintendent of Lovaszi	2,000	380

(ibid.).

54. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

55. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records. There were 716 probationary physical workers and 29 probationary employees among the salaried staff (CHOMD, vol. 2, p. 92). Altogether, MAORT had 2,751 employees in 1941. In 1940, Standard Oil's European employees numbered 35,400 (Larson, Knowlton and Popple, New Horizons, p. 336). The Hungarian operation made up about 10 percent of Standard Oil's European work force.

56. The pertinent laws which MAORT had to follow were Law XXI of 1927 and Law XI of 1928 (Despatch 69 [plain], Nicholas Roosevelt, Secretary of Legation at Budapest, to Sec. of State, March 14, 1931, NA Records).

57. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

58. For information concerning money reserved for these programs see p. 211.

59. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

60. Ibid.

61. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

62. CHOMD, vol.1, p. 325.

63. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

64. CHOMD, vol. 2. pp. 89-91.

65. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

66. "Interview with Ruedemann by Wallace Phillips," Director of Special Information, Department of State, Washington, D.C., March 3, 1942. Others present were: John Bohanon, Standard Oil Company; Major Miles, O.N.I.; Captain Wonderley, M.I.D.; and Mr. Ferris, A.P. Rough notes, later to be replaced by stenographic records. NA Records.

67. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

68. Despatch 1874 (strictly confidential), Montgomery to Sec. of State, Nov. 14, 1939, enclosed "Memorandum Regarding Production of Oil Producing Wells," by Paul Ruedemann, no date, NA Records.

69. Ibid. 70. Ibid. 71. Ibid. 72. Ibid. 73. Ibid.

74. Ibid.

75. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

76. Telegram A-522 (secret), Chapin to Sec. of State, Aug. 23, 1948, attached to it "Minutes of Secret Conference at Scheibli's," no author, no date, NA Records.

77. Ibid. Several circumstances surrounding this document need to be mentioned. Writing about the origin of the minutes, eleven days after Papp was arrested on August 12, 1948 (for details of the arrest see pp.) Chapin telegraphed:

> In connection with this case, the Department may be interested in the paper copied below which was taken from Mr. Papp's files by one of his friends. It is the proceedings of a secret conference held to develop and to agree on methods of sabotaging production of MAORT which was being used to maintain the German war machine.

At the end of the minutes were "four illegible signatures" and the date of December 1942 (ibid.).

At the present, the multinational Schlumberger Company has a near monopoly over advising companies on where to find and drill for oil. In spite of its tremendous success (In the 1970s, its shares reflected a net income of about 30 percent.) it has kept a low profile, engaged no lobbyists in Washington and showed no interest in advertising its services. The company owns 43 major subsidiaries and maintains operations in 92 countries (The Sun, July 22, 1984).

For a recent account on the activities of this company see Ken Auletta, The Art of Corporation Success: The Story of Schlumberger (New York: Putnam Publisher, 1984).

78. CHOMD, vol.1, p. 223.

79. Telegram 927 (restricted) Hull, no title or rank, Department of State to U.S. Legation, Budapest, Dec. 12, 1941, NA Records.

80. "Interview with Ruedemann by Phillips," March 3, 1942, NA Records. According to Standard Oil Company (New Jersey) and Oil Production in Hungary, p. 2, Ruedemann left Hungary in February, 1942.

81. Ibid. 82. Ibid. 83. Ibid. 84. Ibid. 85. Ibid.

86. Ibid. 87. Ibid. 88. Ibid.

89. Ibid.

Several places in the "rough copy" of interview notes Ruedemann's name was misspelled as Rudiman.

When Ruedemann left Hungary on January 15, the daily production was 8,928 barrels, not 11,000 as he stated. No oil man of experience would easily make such an error.

The Hungarian government kept in reserve 100,000 barrels of gasoline ("Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records); Ruedemann stated that it had no reserves at all.

Hungary's internal consumption of all petroleum products was close to 9,000 barrels a day and from 1940 on, Hungary exported large quantities of petroleum products. (See tables 6 and 7.) Hungary had more than it needed; why Ruedemann was silent about this fact cannot be determined.

Ruedemann estimated the importance of the Hungarian army's presence on the fields but failed to mention that the company built barracks for them.

The elderly Horthy lived several years after the war and wrote his memoires. His son died in an airplane accident over Budapest during the war.

Two striking facts emerge as conclusions about the interview: many of the facts appear to be inaccurate however most of the judgments and predictions turned out to be accurate.

90. Standard Oil Company (New Jersey) and Oil Production in Hungary by MAORT, p. 28.

91. "Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records.

92. "Hungarian Oil Industry," report by Ray P. Walters, Petroleum Attache, US Legation at Budapest to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland CHOMD, vol. 1, p. 235-36; and CHOMD, vol. 2, p. 73. There are several reliable, accurate and agreeing production figures and charts of different and useful details in both American and Hungarian primary sources. This is also true for the number, type and status of the wells in the different fields.

93. Ibid.

94. "Hungarian Oil Industry," report by Walters to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland.

95. Ibid.

96. Ibid.

In northcentral Hungary, at Bukkszek, the government operated the only other oil field of the country. Because of high-tar content crude yielded only fuel and heavy oil distillates, the government stopped exploitation in 1944. Between 1932 and 1944, only 25 wells of the 72 wells produced any oil at all. For production figures, see table 11 ("Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records; and CHOMD, vol. 1, p. 232).

97. "Hungarian Oil Industry," report by Papp, July 1945, NA Records.

98. Ibid.

99. Military Attache Report 1295, by R. C. Partridge, Major F.A., March 28,1941, NA Records.

100. CHOMD, vol. 1, p. 280.

101. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

102. Ibid.

103. American Petroleum Interests in Foreign Countries, p. 413.

104. Despatch 200 (restricted), Palmer to Sec. of State, Aug. 24, 1945, enclosure entitled, "Mineral Oil Products Exported from Hungary During 1941-1945," NA Records. The chart notes the figures in metric tons; to convert barrels into metric tons, use 7.5 as the divider. The chart itself was based on export figures reported by each Hungarian refining plant. Some of the refineries were owned by British, German, French, Italian and Dutch multinationals.

105. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

106. Ibid.

107. Memorandum by Ackerson, Dec. 17, 1939, NA Records.

108. Military Attache Report 1295, by R. C. Partridge, March 28, 1941, NA Records.

109. Ibid. 110. CHOMD, vol. 2, p. 80. 111. Ibid., p. 97.

112. For an accurate chemical analysis of the Hungarian crude, see letter, MAORT to Hungarian Refinery Plants National Organization, April 12, 1943, cited in CHOMD, vol. 2, pp. 97-99.

113. CHOMD, vol. 2, p. 97. MAORT was able to arrange for only one more price increase in the course of the war. On July 21, 1943, the price of one barrel of crude reached 17.03 pengos ($2.96) and it stayed there until April 1, 1945 (ibid.).

114. Minutes, Board of Supervisors meeting, April 15, 1940, cited in CHOMD, vol. 2. pp. 268-69.

115. In 1941, the official exchange rate was changed to 1 dollar for 0.176 pengos (CHOMD, vol. 1, p. 281).

116. Minutes, General Asembly of Shareholders meeting, May 20, 1940, MAORT Papers, bundle 5, HNA, cited in CHOMD, vol. 1, pp. 270-77.

117. Letter, Brice to Sec. of State, Nov. 23, 1948, cited in Standard Oil Company and Oil Production in Hungary by MAORT, p. XIII.

118. During each of the next two years, the shareholders (in reality their proxy representatives, Schudel, Ruedemann and Papp) voted to disbribute about 10 percent of the company's profits as dividends. However, no money could be removed from the country because the Hungarian government, with the invocation of the National Defense Law of 1939, froze all foreign assets in the country and, at the same time, prohibited transfer of currency abroad.

119. The 1939 Balance Sheet was examined and certified by the three members of the Board of Supervisors, Bodog Abel, George W. Martin and Walter Graf, on April 15, 1940 (Minutes, Board of Supervisors meeting, April 15, 1940, cited in CHOMD, vol. 1, pp. 268-69). Minutes of only this Board of Supervisors meeting were included in the volumes of CHOMD; although, the names of supervisors for other years, as they were appointed during General Assembly of Stockholders meetings, had been recorded in the minutes of the General Assembly of Stockholders meetings.

120. Besides the stockholders, Bertalan Geocze, Erno Hauer, Bodog Abel, Janos Dinda, Zoltan Gyulay and Walter Graf were present. (Minutes, General Assembly of Shareholders meeting, May 20, 1940, MAORT Papers, bundle 5, HNA, cited in CHOMD, vol. 1, pp. 270-77).

121. Why there was a discrepancy between this figure of $256,683 and the figure published by Standard Oil Company could not be deter- mined. One might speculate that the exchange rate used was different.

122. To reinvest the company's earnings by increasing the capitalization of the company, issuing capital stocks and distributing the new stocks among the shareholders, Ruedemann had to ask permission from the Ministry of Industry. On October 26, 1940, Roth approved Ruedemann's plan to increase the company's capitalization (Letter, Roth to MAORT, Oct. 26).

123. The following company officials were elected to the Board of Directors: George A. Bannantine, Ralph P. Bolton, John F. Conway, Erno Hauer, Emil Konek, Herman C. Lieb, Simon Papp, Paul Ruedemann and Ray P. Walters; and to the Board of Supervisors: Bodog Abel, Janos Dinda and Zoltan Gyulay (Minutes, General Assembly of Shareholders meeting, May 20, 1940, MAORT Papers, bundle 5, HNA, cited in CHOMD, vol. 1, pp. 270-77).

124. Ibid.

125. Balance Sheet for 1940, MAORT Papers, HNA, cited in CHOMD, vol. 1, pp. 337-38. This document contains some useful numerical details reflecting the company's financial status.

126. The following directors and supervisors were present: Bertalan Geocze, Emil Konek, George Bannantine, Erno Hauer, Bodog Abel, Janos Dinda and Zoltan Gyulay (Minutes, General Assembly of Shareholders meeting, May 1, 1941, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 286-89).

127. In the morning, the Board of Directors met and Ruedemann was requested to find out whether the company could again transfer the dividends out of the country; and if it were not possible, what the company could do with the money. Bannantine, Geocze, Hauer, Ruedemann, Schudel, Papp and Konek were present at this conference (Minutes, Board of Diectors meeting, May 1, 1941, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 284-85).

128. The new directors were George Bannantine, Ralph P. Bolton, Edward L. Eastabrook, Erno Hauer, Emil Konek, Paul Ruedemann, Simon Papp, Emil Schudel, Bertalan Goecze, Herman C. Lieb and C. F. Panil; and the new supervisors were Bodog Abel, Janos Dinda and Zoltan Gyulay (Minutes, General Assembly of Shareholders meeting, May 1, 1941, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 286-89).

129. Besides Ruedemann, others present were Hauer, Konek, Papp and Schudel (Minutes, Board of Directors meeting, Sept. 30, 1941, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 293-94).

130. Ibid.

131. In pamphlets, sets of the system's bylaws are available at the National Szechenyi Library in Budapest. The program had existed only on paper and had served one purpose: to provide an account on which the company could lay away some of its huge profits.

132. Minutes, General Assembly of Shareholders meeting, Dec. 24, 1941, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 295-297.

133. At the end of the meeting Raul Vajk and Ede Blaho were added to the Board of Supervisors (ibid.).

134. CHOMD, vol. 1, pp. 289-90. 135. Ibid.

136. Memorandum by Papp, Dec. 25, 1941, Ministry of Industry, bundle 1, HNA, cited in CHOMD, vol. 1, p. 290.

137. Ibid.

138. Balance Sheet for 1941, Dec. 31, 1941, MAORT Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 339-40.

139. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records. The exact delivered cost of the Budafa crude was $0.56 (3.18 pengos) and the Lovaszi $0.52 (2.95 pengos). It should be noted that Ruedemann's calculations were in dollar figures (ibid.). For Ruedemann's complete breakdown of the cost of productio, see table 16.

140. For a demonstration on this case in point, read the account dealing with the 19 Balance Sheet by the members of the Board of Directors on pp. It appears that the directors enjoyed almost complete liberty as to what, where and how much to enter on the balance sheets.

141. John F. Montgomery, Hungary the Unwilling Satellite (New York: The Devin Adair Company, 1947), p. 11.

142. Ibid. 143. Ibid. 144. Ibid., p. 20.

145. Ibid., p. 228.

146. Despatch 480 (plain), James B. Stewart, Charge d'Affaires,

U.S. Legation at Budapest to Sec. of State, Sept. 30, 1936, NA Records.

147. Montgomery, Hungary the Unwilling Satellite, p. 20.

148. Despatch 480 (plain), Stewart to Sec. of State, Sept. 30, 1936, NA Records.

149. Memorandum by Ackerson to Sec. of State, Dec. 17, 1939, NA Records.

150. Ibid. 151. Ibid.

152. Report by Montgomery to Sec. of State, Jan. 13, 1938, NA Records.

153. Ibid. 154. Ibid. 155. Ibid. 156. Ibid.

157. For a text of this long and complex law, see Orszagos Torvenytar [National Law Depository] (Budapest: Stadium Sajtovallalat Reszvenytarsasag, 1939), pp. 67-103; or Magyar Torvenytar [Hungarian Law Depository] (Budapest: Franklin Tarsulat, 1940), pp. 90-133.

158. Memorandum by Ackerson to Sec. of State, Dec. 17, 1939, NA Records.

159. "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records.

160. Despatch 114 (confidential), Herbert C. Pell, American Minister to Hungary, U. S. Legation, Budapest, to Sec. of State, Aug. 12, 1941, attached "Status of Operations," report by Paul Ruedemann, Aug. 7, 1941, NA Records.

161. Ibid. 162. Ibid.

163. Letter, Herbert Feis, Advisor on International Economic Affairs, Dept. of State, Washington, D.C., to Pell, Sept. 27, 1941, attached letter, C. H. Lieb, President of Eurogasco, New York to Ruedemann, NA Records. Unfortunately, Lieb's letter could not be found.

164. Letter with enclosure from Pell to Dept. of State, Dec. 13, 1941, cited in Fenyo, Hitler, Horthy and Hungary, p. 52.

165. Letter from Pell to Dept. of State, Dec. 11, 1941, cited in Fenyo, Hitler, Horthy and Hungary, p. 51.

166. Aylmer C. Macartney, October Fifteenth (Edinburg: University Press, 1961), p. 64, cited in Fenyo, Hitler, Horthy and Hungary, p. 52.

167. Fenyo, Hitler, Horthy and Hungary, p. 51. For complete texts of the two documents, see Magda Adam, Gyula Juhasz and Lajos Kerekes, ed., Magyarorszag es a Masodik Vilaghabory [Hungary and the Second World War] (Budapest: Kossuth Konyvkiado, 1961), pp. 308-10.

168. Fenyo, Hitler, Horthy and Hungary, p. 50. The author noted that Mrs. Pell informed him that she still had the portrait in her apartment.

169. Letter, Montgomery to Dept. of State, Nov. 23, 1940, cited in Fenyo, Hitler, Horthy and Hungary, p. 48.

170. Telegram, Travers to Sec. of State, April 7, 1941, cited in Fenyo, Hitler, Horthy and Hungary, p. 48.

171. Telegram from Pell to Dept. of State, Nov. 7, 1941, cited in Fenyo, Hitler, Horthy and Hungary, p. 46.

172. Cordell Hull, The Memoires of Cordell Hull (New York: The Macmillan Co., 1948), vol. 2, p. 1114.

173. Note from Roosevelt to Hull, Dec. 12, 1941, cited in Hull, The Memoires of Cordell Hull, vol. 2, p. 1175.

174. Memorandum of a conversation involving Roosevelt, Molotov, Litvinov, Hull, etc., May 29, 1942, cited in Fenyo, Hitler, Horthy and Hungary, p. 55.

175. Fenyo, Hitler, Horthy and Hungary, p. 55.

176. The Budapesti Kozlony, The Hungarian government's official law review, reprinted the sequestration decree in its December 1941, issue. The decree reads:

> The Royal Hungarian Minister of Industry, in agreement with the Minister of National Defense, by virtue of the authority vested by Article 107, paragraph 5, of the Law 1939, and on the basis of Government order, has taken over all MAORT enterprises located on the territory of Hungary, together with their personnel, for the use of the Hungarian Treasury, and entrusted Mr. Simon Papp, Hungarian Royal Chief Counselor for Mining, with the management thereof.

Article 107, paragraph 5 of the National Defense Law of 1939, on which the sequestration decree was based reads:

> Owners of business enterprises of industrial plants and other organizations engaged in the production, processing or distribution of goods for purposes outlined in Article 2, paragraph 1, as well as in the production and supply of electric power, road transportation and shipping companies, can be obligated in the interests of national defense to continue operation of their organizations and to use them for supplying the requirements of specified consumers or to surrender them together with their personnel for operation

(Orszagos Torvenytar, p. 78).

Article 2 or paragraph 1 reads:

> In order to satisfy the requirements of the Hungarian Royal Army, and to secure measures necessary in the interests of warfare, the services for National Defense determined in this law can be applied, provided that the above requirements cannot be satisfied in time in a normal manner; i.e., with methods normally applied in the economic life, or that the requirements

> could be satisfied only at cost out of all proportion to those justified by economic conditions

(ibid., p. 69). Paragraph 2 of the same article determines other, not directly military, purposes for which the National Defense Law could be applied. It reads:

> Services can be applied to guarantee the supply and the personal and material security of the population in wartime or to complete agricultural projects with public labor resources

(ibid., p. 70).

In September 1947, in connection with the return of MAORT to the American owners, the U.S. Legation in Budapest prepared translations of each Hungarian law invoked in the sequestration of MAORT (Despatch 3450 [secret], Steussy to Sec. of State, Sept. 25, 1947, enclosure entitled "Legal Basis of Hungarian Government Operation of MAORT During the War," NA Records).

177. Letter, Jozsef Varga, Minister of Industry, to MAORT, Dec. 20, 1941, Ministry of Industry, bundle 1, Hungarian National Archives, reprinted in CHOMD, vol. 1, pp. 291-92; and MAORT Papers, bundle 49, HNA, reprinted in CHOMD, vol. 2, p. 43.

178. In English there are only three brief accounts of the sequestration procedure. Papp's account, written for both the Red Army and Rockefeller Plaza, reads:

> Due to the hostilities between the United States of America and Hungary, the works and personnel of MAORT were taken over for use by the Royal Hungarian Ministry of Industries on December 23, 1941. The new firm, MAORT uzemek a m. kir. Kincstar hasznalataban [MAORT works in the use of the Royal Hungarian Treasury] was founded and registered with the Royal Court of Justice, acting as Court of Registry. To the best of my belief and knowledge, this step by the Hungarian Government was taken to save MAORT, this purely American enterprise, from becoming by the end of 1941 German property. The Royal Hungarian Government caused no change in the personnel or the management who were instructed that the business activities, exploration work and production of crude must be conducted in accordance with the business principles laid down by the Magyar Amerikai Olajipari R.T. A further instruction issued by the Royal Hungarian Government was that all profits must be invested in the development of the oil fields, their equipment and exploration of additional oil fields. The Royal Hungarian Government did not extend any financial means to MAORT; the firm continued to prevail, act, exist and carry on the business

("Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records).

A special committee in Washington D.C., whose members searched for information concerning petroleum production of nations which were at war with the United States, prepared the following report:

> On December 21, 1941, acting under the Defense Act of 1939, the Hungarian Government took over the operations of MAORT. By this act, the titles of the properties remain with the company but the Government conducts the operations. Dr. S. Papp, formerly Chief Geologist, was appointed Manager of the company for the Government. Under the Defense Act, the Government will have to account to MAORT for all income and expenditures. The Act

> provides for the eventual return of the properties and operations to the owners

("Petroleum Facilities of Hungary," report by the Enemy Oil Committee, May 1944, NA Records).

Standard Oil's own publication on the operation of MAORT denotes only the following three sentences:

> When the United States entered World War II in December 1941, MAORT was taken over by the Hungarian government. Every trace of American management participation was eliminated and by February 1942, the last American personnel had been repatriated from Hungary. No contact between MAORT and Eurogasco or Standard Oil Company existed during the war period

(Standard Oil Company (New Jersey) and Oil Production in Hungary by MAORT, pp. 2-3).

179. On this day, the records showed 295 office workers and 2,366 physical workers (Minutes of conference, Dec. 23, 1941, MAORT Papers, bundle 49, HNA, cited in CHOMD, vol. 2, p. 46).

180. Ibid., pp. 45-46. 181. Ibid., pp. 44-49.

182. MAORT of the RHT, as MOART before, was duly registered under the firm number Cg. 4497 in the Company Register of the Royal Court of Justice, Budapest, as Firm Registration Court, on January 12, 1942 (CHOMD, vol. 2, p. 51).

183. Letter, MAORT to Minister of Industry, Dec. 24, 1941, MAORT Papers, bundle 49, HNA, reprinted in CHOMD, vol. 2, p. 50.

184. Ibid., pp. 49-51. 185. Ibid., p. 51

186. Minutes of conference, Dec. 31, 1941, Ministry of Industry, bundle 1, HNA, cited in CHOMD, vol. 1, pp. 293-93.

187. CHOMD, vol. 2, pp. 52-53. 188. Ibid., p. 54

189. Letter, MAORT to Minister of Industry, Jan. 19, 1942, MAORT Papers, bundle 4, HNA, reprinted in CHOMD, vol. 2, pp. 56-57.

190. Ibid., pp. 54-57.

191. Letter, MAORT to Minister of Industry, Jan. 28, 1942, MAORT Papers, bundle 49, HNA, cited in CHOMD, vol. 2, pp. 58-60.

192. Excerpt of letter, MAORT to Minister of Industry, no date, MAORT Papers, bundle 4, HNA, cited in CHOMD, vol. 2, pp. 61-62.

193. Ibid.

194. The members of the committee were Dr. Ede Korponay, Dr. Karoly Geylhoffer, Dr. Karoly Karoji, Dr. Erno Tassonyi and Dr. Ferenc Magyarossy (CHOMD, vol. 2, p. 63).

195. Ibid., pp. 62-63.

196. Letter, Legal Section of Royal Hungarian Treasury to MAORT, March 20, 1942, MAORT Papers, bundle 49, HNA, cited in CHOMD, vol. 2, pp. 65-66.

197. Ibid., p. 64.

198. Legal precedent was produced by ministerial order 27441/1935 (A Magyar Illetekjog [Hungarian Tax Rights] Budapest: Athenaeum Nyomdaja, 1935), vol. 2, p. 578).

199. Ibid., pp. 64-66.

200. Letter, Temesvary to Papp, Oct. 22, 1942, MAORT Papers, bundle 49, HNA, reprinted in CHOMD, vol. 2, pp. 67-70.

201. Ibid.

202. Letter, MAORT to Minister of Industry, no date, MAORT Papers, bundle 49, HNA, reprinted in CHOMD, vol. 2, pp. 70-71.

203. Ibid., p. 70. 204. Ibid., pp. 70-71.

205. Letter, MAORT to Minister of Industry, no date, MAORT Papers, bundle 49, cited in CHOMD, vol. 2, pp. 71-75.

206. Ibid., p. 75. 207. Ibid. 208. Ibid., pp. 71-75.

209. The government representatives were the same persons as the ones who formed the committee in charge of the company's inventory, with one exception. In place of Dr. Tassonyi, Dr. Odon Alliquander served. MAORT was represented by Janos Dinda, Dr. Bertalan Geocze and Dr. Erno Hauer ("Decision of the Ministry of Industry" to MAORT, Jan. 8, 1943, MAORT Papers, bundle 49, HNA, cited in CHOMD, vol. 2, pp. 85-86).

210. Ibid., pp. 76-86.

211. This figure was followed by schedules of payments and definitions of penalties in case the government had fallen in arrears with its payments. For missing an installment, 5 percent penalty was established (ibid., pp. 76-78).

212. Ibid., p. 83. 213. Ibid. 214. Ibid. 215. Ibid.

216. Ibid., p. 84. 217. Ibid. 218. Ibid.

219. Ibid., p. 85. 220. Ibid., pp. 76-85.

221. Letter, Bornemissza to MAORT, Feb. 1, 1943, Ministry of Industry Papers, bundle 1, HNA, cited in CHOMD, vol. 2, pp. 86-87.

222. Ibid., p. 87. 223. Ibid. 224. Ibid. 225. Ibid.

226. Ibid.

CHAPTER FOUR

TRANSFER NEGOTIATIONS WITH I. G. FARBEN

Industrial relations between Standard Oil and I. G. Farben,[1] which began in the 1920s and expanded in the 1930s, greatly influenced the operations of both large multinational companies. German-Hungarian economic relations, which also grew during the same period, strengthened the two nations as they pursued their particular goals in the late 1930s. The outbreak of World War II and the course of the war until December 1941, did not significantly change the intensity of relations between the two companies and the two states.

The opposite held true in German-American relations. Because of political changes in Germany before 1939 and military actions by Germany after 1939, the United States government's initial suspicions turned into outright distrust of Germany. By 1940, relations were definitely strained, with neither nation showing signs of change.

One consequence of these variegated developments in business and diplomatic relations was that the immediate future of MAORT became uncertain. In the words of a senior American diplomat: "MAORT was as good as lost to Germany without compensation."[2]

Long-standing, mutually beneficial transactions between the Jersey Company and I. G. Farben pointed to a possible solution for the uncertainty surrounding MAORT. The two multinational companies could make a deal for MAORT and work their way out of the undesirable situation created by the unfavorable attitude the United States toward

Germany. A quick, quiet consummation of a deal could circumvent the scrutiny or objection of any of the three interested governments.

Certainly the Hungarian government, which had been looking to Berlin more and more for support of its revisionist goals of regaining lost territories would not object to such a deal, provided that I. G. Farben assumed every one of Standard Oil's concessional obligations. Without a doubt, the German government would not block the acquisition of the oil fields by a German company at the beginning of major war efforts. Only the United States government appeared almost certain to want to frustrate the deal. An executive order of President Roosevelt had already brought Germany under foreign funds control in the fall of 1939.[3]

Anticipating these governmental postures, Standard Oil officials decided to go ahead and begin negotiations with I. G. Farben for the sale of MAORT if for no other reason than to find out how far the United States government would allow such business dealings to progress while a major war was going on.

Background of Standard Oil and I. G. Farben's Cooperation

The first contact between Standard Oil and I. G. Farben occurred in the spring of 1925, when a group of scientists and executives of the German company came to visit the American company's refineries in the New York area. Toward the end of the visit, Wilhelm Gaus, spokesman of the German delegation mentioned to Standard Oil officials that his company had been making headway in the improvement of Dr. Friedrick Bergius's method for converting coal into liquid hydrocarbon by treating coal with hydrogen under high pressure and temperature. Because the American hosts expressed interest in this type of research, Gaus invited

Frank A. Howard, President of Standard Oil Development Company (a subsidiary of the Jersey Company) to inspect some of I. G. Farben's laboratories. Howard, who had coordinated research and development efforts and supervised the exchange of licenses and patents among the many subsidiaries of Standard Oil, accepted the German industrialist's offer.[4]

In March of 1926, Howard came to Ludwigshafen, where I. G. Farben operated its largest and most important research laboratory.[5] Recollecting his impressions of the German company's facilities, the American executive wrote: "I was plunged into a world of research and development on a gigantic scale such as I had never seen."[6] He was especially interested in I. G. Farben's experiments with synthetic oil. After he looked over the hydrogenation pilot plant, he wrote to Walter C. Teagle (Chairman of the Board of Standard Oil Company) who was staying in Paris with a number of senior officers of the company and asked him to come to Germany. To give urgency to his request, Howard let Teagle know that

> Based upon my observations and discussions today, I think that this matter is the most important which has ever faced the company since the dissolution of the Standard Oil Trust by a Supreme Court decision in 1911. I. G. Farben can make high-grade motor fuel from lignite and other low quality coals in amounts up to half the weight of the coal. This means the absolute independence of Europe in the matter of gasoline supply. Straight price competition is all that is left.[7]

Accompanied by a member of the Board of Directors, James Moffett, Teagle promptly arrived in Ludwigshafen. They, too, were impressed. Reporting to Rockefeller Plaza, Teagle wrote: "I had not known what research meant until I saw it here. We were babies compared to what they were doing."[8] After a thorough inspection of several laboratories, the three Standard Oil officials met in the lovely, medieval, university town of Heidelberg and sat down to ponder the probable

effects the startling developments at Ludwigshafen could have on the world's oil industry.

Although I. G. Farben's coal hydrogenation process was too expensive for commercial use at this time, Standard Oil officials concluded that an inexpensive method could eventually be developed. They had to safeguard the business of the company; therefore, after much consultation, the Jersey executives decided to enter into negotiations with I. G. Farben. Standard Oil wanted to learn techniques which would lead to the conversion of different types of coal into gasoline, at a time when worldwide demand for gasoline was increasing.[9]

In the fall of 1927, representatives of Standard Oil and I. G. Farben signed an agreement which would guide the two companies' relationship for the next twenty-five years. The document stated:

> . . . Jersey undertook to carry on research and development designed to adapt the hydrogenation process to oil operations. It agreed to erect and operate an oil hydrogenation plant having an output of 40,000 tons of products per year, using the Badische patents without paying royalty. It also arranged that, if it so desired, it could build and operate additional plants in this country by the payment of fair royalties. I. G. Farben was to retain all its United States patents and to control the licensing of them to others; but in compensation for Jersey's expenditures, Farben was to pay to Jersey one-half of any American royalties. The latter, in turn, would own the patents on any of its improvements on Farben's hydrogenation process and retain full control of their licensing; but it would pay the German concern half of whatever royalties it collected in the United States.[10]

During subsequent years, Standard Oil and I. G. Farben officials refined and expanded the cooperation between the two companies. In March of 1929, the two multinationals agreed that the German company would

> . . . sell its hydrogenation and other oil-refining patents, including those based on inventions that might be made during the next seventeen years, for the whole world except in Germany . . . for the sum of $35,000,000 which, at the request of I. G. Farben, would be paid in Standard Oil's stock . . .[11]

Eight months later, Jersey officials delivered 546,011 shares to I. G.

Farben.[12]

Some patents which related to both the oil and chemical fields presented a conflict of interest or infringement on the rights of the other company. To clarify and adjudicate borderline patents, the officials of the two companies agreed to

> . . . organize a company to be owned jointly, to which each would assign borderline processes. Every such process would be handled as a separate project, and the company turning over an invention would retain control of it as well as a five-eighths financial interest.[13]

In October 1930, the Joint American Study Company was formed which tested and evaluated new processes. This firm complemented the existing Standard-I. G. Company which controlled and exchanged patent rights of discovered processes.[14] Together, the two companies protected and enhanced the interests of the two multinationals in the 1930s.

Apart from these intricate arrangements with I. G. Farben, Jersey Standard had one other major concern in Germany which received a role in the history of MAORT. The American multinational holding company wholly owned the Deutsche-Amerikanische Petroleum-Gesellschaft, in short DAPG, a marketing company of petroleum products.[15] DAPG concentrated on the distribution of petroleum derivatives. With a sales volume of 16 million barrels in 1938, the American-owned company controlled 29 percent of Germany's oil market.[16] Toward the end of the decade, as Germany's need for petroleum products increased, I. G. Farben began supplying DAPG with synthetic fuel. The fuel come from the Deutsche Gasolin A.G. in which DAPG owned one-quarter interest.[17]

Toward the end of the first year of the war, facing imminent loss of MAORT, Jersey directors assessed the situation and decided that negotiations with I. G. Farben for the transfer of MAORT properties would be a useful move. As it turned out, a somewhat different con-

clusion emerged from behind the sales conversations.

Propositions for Transfer

The first documentable German offer to buy MAORT came from the Deutsche Bank; the second, soon after the first, originated with I. G. Farben. These initial propositions for the transfer of MAORT properties came to the attention of a third party, the United States government, as the result of a telephone call on October 23, 1940, from Jay Crane (Treasurer of Standard Oil Company) to Hans Morgenthau, Jr. (Secretary of U.S. Treasury). Reporting the event to Robert A. Jackson, U.S. Attorney General, Morgenthau wrote:

> On October 24, 1940, Jay Crane, the Treasurer of the Standard Oil Company of New Jersey, called on me, under instruction of his Board of Directors, to confirm and expand a brief statement which he had given me the preceding day by telephone concerning a business matter of his company.[18]

In Morgenthau's office, Crane intimated to the Secretary of the U.S. Treasury that

> Standard Oil had been approached through a representative of the I. G. Farben in Switzerland as to whether the company would be willing to sell against dollars its oil wells in Hungary. . . . Earlier the Deutsche Bank had sounded the company out on such a proposition but so far nothing had come of these.[19]

Crane believed that "the Farben people would probably be making the purchase on behalf of the German Government."[20] Toward the end of the conversation, the Standard Oil official, summarizing his company's position, said that "this might be a welcomed opportunity for Standard Oil to withdraw from one of its European investments . . . and sell its Hungarian wells for cash rather than see the Germans come in and take them over."[21]

The first concrete offer from I. G. Farben to purchase MAORT came on April 1, 1941. Dr. Fritz Fenthol, a Berlin lawyer who had usu-

ally represented the Ammoniawerk Mersenburg Leuna Werke (a subsidiary of I. G. Farben) in international business transactions, submitted the initial offer to the Hamburg office of Standard Oil. Surmising that Standard Oil estimated the value of MAORT at around $30,000,000 and that the American multinational wanted to receive the price not in marks but in dollars, Dr. Fenthol offered $20,000,000 in currency explaining that at this time, on such short notice, I. G. Farben could not arrange for a larger amount of cash. For the remainder, he suggested that the Deutsche-Amerikanische Petroleum Gesellschaft (DAPG) should take over 20 percent of MAORT, to be paid to Standard Oil at the equivalent of $5,000,000 dollars in new shares which DAPG would issue explicitly for this purpose. The remaining $5,000,000 of the $30,000,000 price would be eliminated by excluding the lubricating oil distributing business of MAORT from the final transaction.[22] At the same time, the Berlin lawyer requested Standard Oil's Rio de Janeiro office to facilitate his entree into the United States in order to move the deal closer to a mutually satisfactory conclusion.[23]

Standard Oil rejected Dr. Fenthol's offer; nonetheless, the American company did not discourage the Germany company from advancing further propositions. Regarding Dr. Fenthol's request to enter the United States, Orville Harden, Director and Vice president of Standard Oil, disapproved of it.[24] Crane, who maintained the line of communications between Rockefeller Plaza and Washington, D.C., also found it unwise for this representative to come to the United States. As an alternate place to meet and confer, Standard Oil officials suggested Havana, Cuba. To conduct negotiations on a personal basis in this small island country turned out to be unacceptable to Dr. Fenthol.[25] In the end, Rio de Janeiro was selected and approved by both parties as the

city where the future ownership of MAORT would be decided.[26]

In early July 1941, Harden flew to Rio to meet Dr. Fenthol. In the picturesque Brazilian city, Dr. Fenthol presented an itemized bill of exchange for MAORT on July 9. The bill included:

Gold, mostly in German coins---------- Delivery to be taken in Lisbon, Portugal; the gold to be purchased by I. G. Farben from the Reichsbank, Berlin, and to come from within Germany.	$13,000,000
Swedish kronor, Swiss franc, and/or Central or South American currencies---------- The Swedish and Swiss funds are held by large Swedish and Swiss Banks. The Central and South American currencies will be on deposit in banks in several countries.	5,500,000
Promissory note of I. G. Farbenindustrie------ This promissory note will be payable in U.S. dollars with interest three months after the end of the war and will recite that due payment of the instrument will be guaranteed by collateral represented by the American holdings and assets of the I. G. Farbenindustrie.[27]	5,000,000
	$24,000,000

Harden approved the gold but rejected the assorted foreign currencies and promissory note. A few days later, Dr. Fenton made a different and last offer. What he offered and how Standard Oil regarded that offer could be discerned from Harden's letter to Henry A. Wallace, Chairman of the Economic Defense Board. On August 28, 1941, Harden worte:

> . . . the representative of the I. G. Farbenindustrie who is now in Rio de Janeiro has informed me that his Company would be able to obtain approval of the German authorities to a payment of $24,000,000 in gold to be delivered to us in Lisbon.
>
> We sincerely hope that the Economic Defense Board will be able to consider this matter promptly, since we all realize that if a sale is to be made, time is working against us.

The admonishing words of Vice President Harding, ". . . time is working against us," alluded to Standard Oil Company's reasons for the

sale of MAORT; especially to those which had developed since the outbreak of World War II. In differing degrees, the reasons owed their existence to the prevailing political-military situation. Because of the abiding national aspirations to revise the territorial arrangements of the Treaty of Trianon after World War I, the Hungarian government had to conduct its foreign and domestic affairs in ways to earn not only the approval of Germany, but also the military support of the powerful central European country. Expected consequences of Germanophile policies, according to the vice President of Standard Oil, were the following:

> 1. With German domination over Hungary, the property would be taken by Germany if and when needed regardless of ownership.
> 2. If Germany needs the Hungarian oil, the fields will be exploited on the basis of producing the maximum quantity of oil over the shortest possible time, so that after a few years the fields would have relatively little value.
> 3. In the event of the war ending fairly soon, the European countries would not be in a position financially to permit profits to be taken out, so that from the standpoint of the American stockholder it is difficult to visualize that any dollars would be realized from our Hungarian venture for a long time to come.[29]

Standard Oil's earnings by MAORT, with the exception of one lump sum of $206,000 in 1939,[30] could not be collected by the major American multinational holding company. After the beginning of hostilities, the Hungarian government forbade the transfer of Hungarian or foreign currency from the country.[31] This indicated that so long as the war continued, Rockefeller Plaza would not receive any profits from Hungary. Thinking about inflation as one of several calamitous economic developments which usually occurred during and right after wars, Standard Oil officials, in a move to protect the company's accumulated profits, could only instruct their MAORT representatives to invest the profits made by MAORT and hope that some day they would be able to recover all the profits from Hungary.[32] These prospects failed to dissipate Rockefeller

Plaza's growing disquietude surrounding the Hungarian properties.

Being unable to determine the life-time production of an oil field with some reliability also affected Standard Oil officials' decision-making process. Now that there was a concrete opportunity to convert the Hungarian investment into gains, this consideration came into focus. Much was at stake, as the mere $2,500,000 initial invest in the mid 1930s had grown to command the lucrative offer of $24,000,000 in gold in 1941. Standard Oil officials started comparing the present production of MAORT with the estimated future yield of the company's oil fields. On May 7, 1941, Harden said that a 15,000-barrel-a-day production was possible; but after 18 months, production would drop to 5,000 barrels a day.[33] On June 12, 1941, Crane reported that "the output of the field was around 6,100 barrels a day."[34] Clarence H. Lieb wrote that "it is possible to increase MAORT's production from 8,000 barrels a day to 15,000 barrels a day for some months; but afterwards, production would fall back to 8,000 barrels a day."[35] Standard Oil officials' pronouncements conveyed the impression that selling the Hungarian subsidiary for $24,000,000 in gold was both desirable and advantageous for the American multinational company, even though the field's actual production for the May through September interval reach 9,050 barrels a day.[36]

Finally, a somewhat frivolous consideration for the sale of MAORT was put forth by Harden on August 9, 1941. When writing to Henry A. Wallace, the Vice President of Standard Oil stated that the gold used as payment in Lisbon ". . . would be part of the original gold reserves of the Reichbank and would be drawn wholly from within Germany."[37] Ostensibly, this would reduce Germany's stockpile of gold at home and consequently, Germany could spend less gold for other, most

probably military, purposes.

Positions of the United States, German and Hungarian Governments

When the negotiations for the transfer of the MAORT properties from Standard Oil to I. G. Farben ownership began, most high-ranking U.S. government officials who had knowledge of the proceedings did not perceive any significant reason to object to the proposed transaction. In the fall of 1940, when Harden informed Morgenthau that for some time conversations about the sale of MAORT to I. G. Farben had been under way, the Secretary of Treasury responded ". . . it was all right for the company to go ahead . . ." with its plans and the Secretary only wanted to know ". . . where the dollars would come from . . . ."[38] Later, on May 9, 1941, Dr. Herbert Feis believed that ". . . nothing would be gained by objecting to the consummation of a deal, if the company found it possible."[39] With this view, H. L. Welles, Undersecretary of State, concurred.[40]

However, as the negotiations progressed, several European nations were drawn into the war. This changed the grounds of consideration for the sale of MAORT, and government officials began finding objections to a German company's acquisition of American property during critical times. Recalling the fact that soon after the outbreak of the war the United States brought Germany under foreign funds control, Morgenthau, in a letter to Robert A. Jackson on June 12, 1941, noted that

> . . . contemplated German dollar payment for Standard Oil's Hungarian properties is several times as large as Germany's known short-term assets in this country and constitutes a considerable fraction of Germany's known total assets in the United States. The release of blocked German assets to pay Standard Oil would therefore impair the position of other American interests who also have claims against Germany, but who have not been so quick to advance their claims.[41]

Morgenthau clearly saw a disadvantage for some Americans; for this reason he disapproved the use of the frozen German assets. Still, he did not object to the sale as a whole.

Having found I. G. Farben's last offer satisfactory, Standard Oil officials applied to the U.S. Treasury Department for permission to conclude the deal on July 30, 1941. Five days later, Edward H. Foley, Acting Secretary of the U.S. Treasury, wrote that approval of the transaction ". . . would not be in accordance with the policy of the Treasury Department in administering President Roosevelt's Executive Order No. 8383."[42] He explained that this order prohibited American companies from doing business with Germany or countries occupied by Germany and forbade the sale of American-owned property for payment out of accounts blocked in the United States belonging to German nationals.[43]

In general, U.S. government officials observed the whole matter from a national point of view, within the context of American business activity and not from the partisan Standard Oil position. Herbert Pell became the first U.S. government official who unequivocally urged Washington not to permit the sale of MAORT to the German firm under any conditions. On August 12, Pell explained to Cordell Hull that

> This transfer would have a manifestly bad effect in the international political field. It would increase German prestige and would lessen ours. As long as these plants remain in the hands of a Hungarian concern owned by an American company, they can be administered with an eye to the long run. Under German administration, they would be, economically or not, squeezed for the ultimate possible immediate yield.[44]

For emphasis toward the end of his communication, Pell reiterated his position: "I am convinced that it would be against the interest of the United States to permit the sale of the company to Germany."[45]

In his dispatch, Pell also asked the Department of State to deliver a letter and report written by Ruedemann for Clarence H. Lieb.

The task of sending the papers to New York fell on Herbert Feis, who also decided to express his concern over the matter in the following words:

> . . . I assume that the Standard Oil Company of New Jersey will not proceed with any decisive move in the matter concerning the sale of MAORT without full and further discussion with the Department and possibly other interested branches of this government.[46]

On August 19, 1941, the U.S. Treasury Department transferred Standard Oil's request for permission to sell MAORT to the Economic Defense Board.[47] Viewing the matter as important, the board requested clarification of policy or expert recommendation from the Interdepartmental Committee on Foreign Funds Control on September 22. This committee counted among its members Assistant Secretary of State Dean G. Acheson, Assistant Attorney General Francis M. Shea and General Counsel of the Treasury Edward H. Foley, Jr.

The transfer of MAORT from American interest to German interest fell into the category of highly sensitive matters, and the Economic Defense Board referred the case to the Interdepartmental Committee on Foreign Funds Control. After extensive consultation with each committee member, Edward H. Foley summarized the committee's recommendation (which also became the officials' explanation for the board's decision) to deny a permit for the completion of the sale. The summary stated:

> An approval of this transaction would have permitted the Standard Oil Co. to have been preferred by Germany over other American owners of capital investment in Germany and the occupied countries. . . .
>
> Germany wanted to purchase the Standard Oil properties in Hungary as a part of its program to acquire through so-called legal methods complete economic domination and control over Europe. For this Government to have approved the proposed sale of Standard's Hungarian oil properties to Germany would not merely have facilitated Germany's program of economic domination of Europe, but would have been tantamount to an approval of Germany's economic new order in Europe.
>
> It is a fundamental policy of our freezing control program

to prevent Germany from acquiring the assets of overrun countries or from being able to make use of any such assets that it may have looted. To have permitted Germany to use $24,000,000 of looted gold or other foreign exchange assets to pay for the oil property in Hungary would have been a direct contradiction of the purpose of our freezing control. It would have exposed us to the charge of being willing to accept the spoils of looting to help preferred American companies. Mr. Farish [President of Standard Oil] admitted in his testimony that his company had no way of knowing where and from whom Germany acquired the gold that was being offered in payment.

This country had much more to gain, in terms of retaining the confidence and good will of overrun European peoples and subjugated governments, by maintaining the high moral principle of preventing Germany from acquiring or making use of looted assets than this country lost in not permitting the Standard Oil Co. to sell its Hungarian properties for funds looted by Germany.

An approval of the transaction which contemplated shipment of gold from Lisbon to the United States would have involved us in a breach of the British blockade of Europe, which was being maintained to weaken Germany's economic and military position.[48]

American government officials found out more about Germany's gold in connection with an unrelated court case. As a witness in a Senate hearing and investigation of Standard Oil Company's relations with I. G. Farben, William S. Farish had to appear before a special committee of the Senate and answer questions. This happened simultaneously with Standard Oil's application to the Treasury Department for a permit to sell MAORT. When Hugh A. Fulton, Chief Counsel for the Treasury Department, asked Farish what he knew about the origin of the gold, he simply stated: "I do not know whose gold it was."[49] Somewhat later he repeated: "It was offered to us at Lisbon and we had no way of knowing whose gold it was."[50] Farish was either lying or had no knowledge of his vice president's letter to the Economic Defense Board which was used as Exhibit No. 433 during this hearing and read as follows:

> The question has been raised as to the origin of the gold. On this point we have been assured that the gold to be delivered to us in payment at Lisbon would be a part of the original gold

> reserves of the Reichsbank, would be drawn wholly from within Germany, and probably would be largely made up of old German coins. By such payment, Germany would of course be reducing her total stocks of gold.[51]

After Farish repeatedly denied knowledge about the origin of the gold, the following conversation took place:

> Senator Connally: Gold is gold, no matter who it belongs to.
> Mr. Farish: So our Treasury seems to think, sir. We buy it from anybody and everybody.
> Mr. Fulton: There might be some question as to the title of that gold though, I assume.
> Senator Herring: We will have to subpoena Hitler and find out about that.
> Mr. Farish: Probably.[52]

The German government's position favoring I. G. Farben's efforts to purchase MAORT, could be discerned from indirect evidence. That some members of the German government had been aware of I. G. Farben and Standard Oil's conversations could first be seen in Morgenthau's letter to Jackson. According to the Secretary of the Treasury, on October 24, 1940, Crane thought that "The Farben people would probably be making the purchase in behalf of the German government."[53] Later, on August 12, 1941, in Budapest, Ruedemann when talking to Pell stated that "German interests under Government direction are desirous of buying the MAORT for thirty million dollars."[54]

Both the Deutsche Bank and the Reichsbank were at some time drawn into the transfer negotiations; the former as an interested buyer and the latter as a potential supplier of gold. Crane, in a conversation with Morgenthau on October 24, 1940, said: ". . . the Deutsche Bank had sounded the company out on such a propositon earlier."[55] Harden, in a letter to Wallace on August 19, 1941, explained that: ". . . the gold . . . would be part of the original gold reserves of the Reichsbank . . ."[56] Even before this, Dr. Fenthol's itemized bill of exchange for MAORT included the following statement: ". . . the gold

will be purchased by I. G. Farben from the Reichbank in Berlin . . ."[57] These activities of the two most important German banks could hardly be pursued without the knowledge of some members of the German government, especially at a time when the achievement of national autarky had been accorded priority in German economic life. Finally, when Carl Clodius, Chief of the Economic Section of the German Foreign Office, visited Hungary in August 1941, he requested cooperation from the Hungarian government in case MAORT became a subsidiary of I. G. Farben.[58]

Expeditiousness, if not duplicity, characterized the Hungarian government's position toward the possible German acquisition of MAORT. The Hungarian government publicly avoided giving signs of disapproval or opposition to the sales conversations between Standard Oil and I. G. Farben. Carl Clodius returned to Germany with the impression that the Hungarian government was prepared to accept the possible change in the ownership of MAORT.[59] Privately, members of the Hungarian government admitted that they were adverse to German management of the oil fields. Reporting to the Secretary of State on August 12, 1941, Herbert Pell wrote:

> Obviously, the Hungarian government, which is under such terrific pressure from Germany, is not in a position to refuse the transfer to Germany of this American-owned company should the Standard Oil Company of New Jersey decide to make the sale . . . .
>
> The Hungarians themselves do not like the idea of this transfer and would welcome--though they dare not publicly express any enthusiasm on the the subject--its rejection by the Standard Oil Company of New Jersey.[60]

The examination of how the three governments related themselves to the sales negotiations would be incomplete without a look at the position taken by MAORT's manager, Paul Ruedemann. It has been mentioned that Ruedemann was a naturalized American citizen of German birth who had had contacts with each one of the three interested governments.

Because of a scarcity of sources, information was sometimes not available. Among the few things that could be learned was the fact that Ruedemann spent the month of June 1940, in Germany where he stayed in the cities of Hamburg and Berlin.[61] What he did in these two cities (Both are locations of important I. G. Farben offices) could not be ascertained.

Sometime around August 10, 1941, Ruedemann arranged for an appointment with Pell in Budapest. In the course of the conversation with the American Minister to Hungary, Ruedemann revealed his knowledge of the current negotiations for the sale of MAORT.[62] Pell, who prepared a report of his discussion with Ruedemann for Washington, wrote:

> "Mr. Ruedemann . . . reported that German interests under government direction are desirous of buying the MAORT . . . . The substance of the statements made by Mr. Ruedemann were discussed with Mr. Travers of the mission, who also discussed the matter with the members of the Hungarian Government referred to in Mr. Ruedemann's letter to Mr. Lieb. After hearing the verbal reports and after reading Mr. Ruedemann's letter and report on the status of operations, I am convinced that it would be against the interests of the United States to permit the sale of the company to Germany.[63]

Ending his report, Pell asked:

> If the Department is in position to convince the Standard Oil Company of New Jersey that it is inadvisable to dispose of its Hungarian company at this time, I should appreciate telegraphic advice to that effect. This would materially ease the mind of the high Government official mentioned in the report.[64]

Through diplomatic channels, Pell sent his letter to the Secretary of State and requested that the Department of State transmit at its own discretion, Ruedemann's letter and report on the status of operations to Clarence H. Lieb.[65] From this scanty and indirect evidence, Ruedemann's position toward the possible sale of MAORT could not be determined with certainty.

The relations between Standard Oil and I. G. Farben demonstrated

that not even the small Hungarian oil fields could operate in isolation from the encompassing business interests of the large multinational firms. In the end, the unsuccessful attempt to sell MAORT to I. G. Farben served a much appreciated and well-timed purpose for the involved companies. It created an opportunity to test on several levels the U.S. government's willingness to allow cooperation between the two companies in times of war. This experience behind the transfer negotiations had been uppermost in the minds of several directors of Standard Oil Company as they continued relations with I. G. Farben.

The End of Standard Oil--I. G. Farben Relations

Standard Oil--I. G. Farben relations, which began with executive visitations of industrial facilities in 1925 and culminated in the Hague Memorandum of 1939, ended with the American company's repurchase of a jointly owned affiliate in 1953.

During August and September of 1939, the last month of peace and the first month of war, leaders of the two companies realized that they had entered upon a critical period in their relationship. To forestall some likely difficulties, they decided to accomplish three things: divide their joint business enterprises, settle their joint research and patent exchange programs, and work out some accommodations which would allow them to maintain contact with each other during the war. Two different hearings, two separate investigations, charges by the U.S. Department of Justice and vesting orders from the Alien Property Custodian formed the waves of attacks against Standard Oil for attempting to reach these goals.

The directors of the two large multinational companies began the breaking up of their "full marriage"[66] by terminating their joint owner-

ship of two companies. The first of the two companies, the Standard-I. G. Company, was incorporated in the state of Delaware in 1929. To this company, I. G. Farben assigned patent right of the Bergius-Bosch hydrogenation process of coal and oil for the production of gasoline ". . . including those based on inventions that might be made for the next seventeen years, for the whole world except the territory of Germany . . . ."[67] I. G. Farben owned 20 percent and Standard Oil 80 percent of the Standard-I. G. Company. Some time ago Standard Oil had purchased 60 percent of the shares from I. G. Farben for which it paid $35,000,000. At that time, this represented 2 percent or 546,000 shares of Standard Oil's entire common stock.[68]

The other company, the Joint American Study Company (JASCO), was also incorporated in Delaware but one year later in 1930. The purpose of this company was ". . . to test and license new processes developed by either party in the 'oil chemical' field . . ."[69] especially as those processes related to the manufacture of Buna synthetic rubber from oil and coal. While I. G. Farben and Standard Oil owned JASCO equally "every process was handled as a separate project and the company turning over an invention retained control of it as well as a five-eighths financial interest."[70] I. G. Farben transferred many patents to JASCO; Standard Oil had none to contribute, but it still received world rights to all patents with the exception of those in the territory of Germany.[71]

Walter C. Teagle and Walter Duisberg opened the preliminary sales negotiations for the two companies in August of 1939. Teagle, who had been a long-standing and trusted employee, was at this time Chairman of the Board of Standard Oil Company. Walter Duisberg, who in Teagle's words "was now the German I. G.'s sole representative in the coun-

try,"[72] was the son of the founder of I. G. Farben (Carl Duisberg) and had just recently become a naturalized American citizen.[73]

The two negotiators had to achieve rapid progress to keep ahead of developments taking place in Europe. By the last day of August, they finished their work. In essence, they agreed that Standard Oil would buy I. G. Farben's 20 percent interest in Standard-I.G. Company for $20,000, and Duisberg himself would acquire I. G. Farben's 50 percent share in JASCO for $4,000. For final approval Teagle and Duisberg submitted the results of their negotiations to their respective executive boards.[74]

While Germany was attacking Poland on September 1, the headquarters of the two multinational companies approved the transfer of Standard-I. G. Company. In Teagle's words, "we wanted to protect this minority interest in the event of war between ourselves and Germany . . . for it would certainly be very undesirable to have this 20 percent in Standard-I. G. pass to the U.S. Alien Property Custodian, who might sell it to an unfriendly interest."[75]

The executives at Rockefeller Plaza found the proposed purchase of I. G. Farben's 50 percent interest in JASCO by Duisberg unacceptable. To work out a different arrangement and take care of other business matters, Rockefeller Plaza requested that Frank A. Howard, who was at this time commuting between Paris and London on official business, attend a series of conferences with I. G. Farben officials somewhere outside of Germany. Uppermost in the minds of the executives was the problem of how to maintain contact between themselves and I. G. Farben executives in case the United States became involved in war with Germany.[76] To provide for this contingency, Walter C. Teagle had already worked out a solution with the representatives of I. G. Farben more than a decade

ago. Now Rockefeller Plaza executives wanted to find out to what extent they could apply the earlier agreement in reaching a *modus vivendi*. In part the earlier agreement said:

> In the event the performance of these agreements or of any material provisions thereof by either party should be hereafter restrained or prevented by operation of any existing or future law or governmental authority, the parties should enter into new negotiations in the spirit of the present agreements and endeavor to adapt their relations to the changed conditions which have so arisen.[77]

On September 22, 1939, Frank A. Howard met Dr. Friedrick Ringer, a representative of I. G. Farben, at The Hague in Holland.[78] Over a span of four days the two executives took care of all necessary business with the exeception of one last transaction. First, the executives concentrated on I. G. Farben patents to which the Jersey Company had rights because of the 1929 and 1930 agreements. Ringer turned over a large number of I. G. Farben patents pertaining to oil refining and petrochemicals under which Standard-I. G. Company or JASCO would hold world-rights outside of Germany.[79] Next, the negotiators confirmed the sale of I. G. Farben's share in Standard-I. G. Company to the Jersey Company and noted that because I. G. Farben contributed patents to the company, this ". . . participation gave Farben the right to elect two directors to the company's board of directors and thereby keep in touch with everything Jersey intended to do with the patents concerned."[80] Regarding Duisberg's purchase of I. G. Farben's half interest in JASCO, the executives expressed their unanimous dissatisfaction. To rectify the situation, they decided to request that Duisberg divest himself of his newly acquired half interest and sell his share to Jersey.[81] To ascertain that Standard Oil's outright ownership of JASCO did not prove inequitable to I. G. Farben in the future, Howard and Ringer settled on the following terms:

> Farben, for a nominal payment, would sell its stock in Jasco to Standard Oil Development Company. Jasco would retain all its rights in the patents for the United States and the British and French empires; it would transfer to Farben its rights in the patents for the rest of the world.[82]

In case the territorial division would prove unfair, the negotiators further agreed to undertake

> . . . periodic reviews of earnings. If such reviews indicated that royalty receipts did not work out in proportion to the original Jasco formula--that is, five-eighths and three-eighths --the two companies would settle the difference in a manner satisfactory to both parties. [83]

Thus, while Standard Oil gained sole ownership of Standard-I. G. Company and JASCO, I. G. Farben did not have to relinquish its contact with and participation in Standard Oil's future business activities or vice versa. The transferred companies were patent-holding affiliates with concern for territorial and royalty rights, and their functioning required some mechanism for periodic territorial and royalty adjustments.

On September 25, Howard and Ringer prepared a summary of their accomplishments which would have to be approved by the executive boards of their respective companies. In a short itme, the summary became known as the Hague Memorandum and in part read:

> Pursuant to these arrangements I was able to keep my appointments in Holland, where I had three days of discussion with the representative of I. G. Farben. He delivered to me assignments of some 2,000 foreign patents and we did our best to work out complete plans for a <u>modus vivendi</u> which would operate through the term of the war, whether or not the U.S. came in. All of the arrangements could not be completed, but it is hoped that enough had been done to permit closing the most important uncompleted points by cable. It is difficult to visualize as yet just how successful we shall be in maintaining our relations through this period without personal contacts.[84]

During the next two months, in piecemeal fashion, the leadership of the two large multinational companies approved the details of the

Hague Memorandum. Howard himself was satisfied with it and in an evaluation presented to the executive committee he wrote:

> I believe this arrangement, when coupled with the provision for the future readjustments, is entirely equitable, and that without regard to the possibility of legally enforcing the readjustment provision, it should be satisfactory in substance to us, as it is to the I. G. An attempt to put this provision in form which would be fully legally enforceable might result in many difficulties and (speaking for myself and the I. G. negotiator) it was not our intention to provide any legally enforceable clause of this character in our arrangements.[85]

There was only one correction that Howard wanted to make. In December, he proposed to Ringer that their agreements be dated retroactively to September 1, 1939, two days before England and France officially sent declarations of war to Germany. Ringer accepted the suggestion; and the different date technically made the Hague Memorandum a prewar document.[86]

The one last transaction which the two executives could not consummate at The Hague was concerned with I. G. Farben's patent for Buna rubber. The German company refused to include the right to manufacture or sell Buna synthetic rubber with the other 2,000 patents which the German company turned over to the American company. Within a short period of time, this omission placed Standard Oil in a difficult situation with the United States government and the major American rubber companies.

Since the mid 1930s, using I. G. Farben know-how, German rubber companies were able to produce different types of synthetic Buna rubber. The German Bunas were comparable to natural rubber in quality; they were not appreciably more expensive to produce; and the necessary raw materials were available in Germany. When World War II started, Germany was self-sufficient in rubber products.[87]

On the other hand, American rubber companies relied entirely on

exported raw materials in manufacturing rubber articles. There were two important reasons for this. The companies enjoyed an almost unlimited supply of inexpensive natural rubber from South-East Asia; and they believed that because Standard Oil had close relations with I. G. Farben, sooner or later the American company would obtain for them the German know-how on Buna.[88]

This did not mean that the major American rubber companies, including Standard Oil, completely neglected experimentation with synthetic rubber; but the existing limited research and development effort failed to produce an American synthetic rubber which could have compared favorably with the properties of the German Buna general purpose rubber. There was one exception. Standard Oil scientists developed Butyl, a specialty rubber used for pneumatic products such as tubes and balloons. In 1937, Standard Oil decided to follow the Standard-I. G. Company agreement (which assigned all rights in the chemical field to I. G. Farben) to the letter and turned over the rights and know-how on Butyl to the German company. Since Buna was not a petroleum derivative, I. G. Farben was not obligated to transfer the patents of this synthetic product to Standard Oil.[89]

Toward the late 1930s, with Germany taking bolder and larger steps toward the realization of the promised Lebensraum, Standard Oil directors began sensing that their company's cartel arrangements with I. G. Farben could lead to serious difficulties with the United States government. This would especially be true in case a general war broke out and natural rubber imports of American rubber manufacturers from South-East Asia and South America came to an abrupt halt. As early as March 1938, soon after German troops invaded Austria, Frank Howard visited Berlin. Reminding I. G. Farben directors how promptly Standard

Oil made the Butyl patents available, Howard pleaded for the Buna know-how. Ter Meer, one of the I. G. Farben directors, explained that until the German government and military authorities (which sponsored the research on synthetic rubber) granted permission, he could not fulfill Howard's request. However, the German executive promised that he would do everything in his power to gain the consent of those authorities.[90]

Howard understood that I. G. Farben needed state and military clearance to conduct many of its business operations and knew I. G. Farben was acting within its rights when it refused to transfer the Buna patents.[91] Explaining this situation to Rockefeller Plaza, he wrote:

> Certain difficulties still exist which prevent our I. G. friends from giving full technical information and proceeding in the normal manner with the commercial development of Buna in the United States. It is to be hoped that these difficulties will be surmounted in the near future and we here desire to do everything possible to bring about the results.
>
> In view of the very genuine spirit of cooperation which Dr. Ter Meer displayed, I am convinced that it was not only the right thing to do but the best thing from everystand point that we passed on to them full information on Butyl. I do not believe we have lost anything by this . . . .[92]

Meanwhile, the major American rubber companies, Goodyear, Goodrich and Dow Chemical, learned about Standard Oil's predicament. In the spring of 1938, they informed Standard Oil that they were ready to begin development of their own synthetic rubber technology. Standard Oil persuaded them to postpone their efforts until the German company could deliver. Unable to secure the patents, Standard Oil began employing similar delaying maneuvers with the rubber companies to those I. G. Farben used with Standard Oil. Howard explained the situation to another Standard Oil executive:

> Our primary objective in our talk with the Goodyear and Dow people was to convince them of our good faith and willingness to cooperate with them in order to avoid having them proceed pre-

> maturely with an independent development . . . . The thing that is really holding us up is . . . the inability of our partners to obtain permission of their government to proceed with the development in the United States. Until they obtain this permission it is not possible for us to make any commitment at all.[73]

At The Hague in Holland, Standard Oil's last attempt to obtain Buna patents and know-how fell short of even moderate expectations. However, in Germany, Ter Meer achieved partial success. At the end of a series of conferences with German state and military authorities, he was instructed to send the following telegram to New York on October 16, 1940:

> As agreed, we will assign Buna patents for Jasco field . . . With respect to technical information about Buna, we have to inform you that under present conditions we will not be able to give such information.[74]

In the summer of 1941, Standard Oil had received the right to produce and market Buna rubber but not the knowledge of how to make it. At this time, American chemists had not yet discovered the formula or the process. Because the country was faced with a monumental rubber shortage soon after December 7, 1941, when South-East Asia stopped importing natural rubber, the New Jersey company had to go to court and face charges. Attorneys for the Antitrust Division of the Department of Justice who had started investigating Standard Oil Company's business practices were preparing in January 1942 to indict Standard Oil's chief officials for a conspiracy to restrain trade and commerce in the oil and chemical industries.[75] When Standard Oil learned of the impending legal action, they appealed to the War Department complaining that defending against such a lawsuit would divert the energies of many executives from the war effort. The War Department accepted Standard Oil's reasoning and supported the large company's effort to block prosecution under the antitrust laws. In spite of this powerful department's efforts, the

Department of Justice could not be persuaded to drop all charges.

On March 20, 1942, Attorney General Francis Biddle, Assistant Attorney General Thurman Arnold, Secretary of War Henry L. Stimson and Secretary of Navy Frank Knox prepared a memorandum to President Franklin D. Roosevelt. While the prominent government officials admitted that an investigation and lawsuit would interfere with Standard Oil Company's war effort, they insisted that the elimination of cartel restrictions on the development and manufacture of synthetic gasoline and rubber could only be possible through the enforcement of antitrust laws. Consequently, the authors of the memorandum and President Roosevelt agreed to suspend current investigations and preparation of lawsuits, but at the same time, in deference to the Department of Justice, President Roosevelt would request congressional action to extend the statute of limitations on the antitrust case so that after the war prosecution would be possible.[76]

Because Standard Oil declined to accept the postponement of the government's case against the company until after the war, company and government lawyers worked out a compromise. On March 25, 1942, Standard Oil and ten of its chief officials pleaded nolo contendere to the Antitrust Division's criminal charges and were fined $5,000 each. The antitrust charges were based on Standard Oil and I. G. Farben's cartel-type arrangements and implied that the current rubber shortage was due to this restraining of trade. To the Department of Justice's civil complaint, Standard Oil entered a consent decree. Standard Oil agreed to discontinue relations with I. G. Farben; promised to abandon contracts and practices to which the government objected; and offered to all United States applicants all patents by which Standard Oil and I. G. Farben had monopolized trade in the chemical and petroleum industries.

In both legal actions, I. G. Farben was named an unindicted co-conspirator.[97]

To explain why Standard Oil chose not to contest the case in the courts, company officials issued the following press release:

> The company realized that to obtain vindication by trying the issues in the courts would involve months of time and energy of most of its officers and many of its employees. Its war work is more important than court vindication. Nor has the company any desire to remain in a position which the Department of Justice considers in any way questionable.[98]

William S. Farish, President of Standard Oil, placed the company's situation in a different perspective as he commented:

> In that consent decree, we did not admit--nor were we asked to admit--that we had violated the antitrust law. We simply agreed that in the future we would, in respect to these I. G. Farben contracts, follow the interpretations now being given by the Antitrust Division of this country's antitrust law.[99]

On March 25, the same day the antitrust charges and civil complaints were filed, the U.S. Alien Property Custodian, Leo T. Crowley, issued a vesting order for some recently acquired Standard Oil properties. Declaring I. G. Farben an "enemy corporation," Crowley seized Standard Oil stocks formerly owned by I. G. Farben in JASCO and Standard-I. G. Company.[100] As a result, during the next few months, Standard Oil released over 2,000 Jersey-Farben patents at royalty cost and markedly reduced the company's control over the oil and chemical industries.[101]

As the Department of Justice was concluding its lawsuits against Standard Oil, Assistant Attorney General Thurman W. Arnold prepared to set forth in full detail the history of Standard Oil's relations with I. G. Farben before a Senate Special Committee to investigate the National Defense Program headed by Harry S Truman. On March 27, 1942, supported by tens of thousands of documents from Standard Oil's own files, Arnold

summarized his findings in a twenty-seven-page report. Characterizing the purpose behind Standard Oil and I. G. Farben's cooperation, the Assistant Attorney General stated: "The sole motive was an attempt on the part of Standard Oil to get a protected market, to eliminate competition and finally, to restrict world production in order to maintain that control."[102] The Hague Memorandum, especially its arrangements for periodic review of earnings to make adjustments in accordance with the original formulas, also received attention in the report. Arnold classified the memorandum as a ". . . device for the continuation of the conspiracy at least through the war. . . ."[103] Regarding the plans of the persons who drafted the memorandum he said:

> . . . what these people were trying to do was to look at the war as a transitory phenomenon and at business as a kind of permanent thing: The war is bound to be over in a couple of years, and let us not have it interfere any more than necessary with the commercial relationships which in the long run are bound to exist.[104]

On the topic of Buna rubber, Arnold stated that the United States had to delay the use of it ". . . because the Hitler government did not wish to have this rubber exploited here for military reasons,"[105] and he concluded that "Jersey's cartel arrangements with I. G. Farben were the principal causes of the shortage of synthetic rubber."[106] At the end of Arnold's presentation, a reporter asked Senator Harry S Truman whether he regarded the Hague Memorandum as treasonable. In his terse manner the Senator replied: "Why yes, what else is it?"[107]

During the next session William S. Farish gave his testimony. He defended the company by saying that "any charge that Standard Oil Company or any of its officers had been in the slightest respect disloyal to the United States was unwarranted and untrue."[108] Regarding

relations with I. G. Farben, he stated:

> I wish to assert with conviction that whether the several contracts made with the I. G. did not fall within the borders set by the patent statutes or the Sherman Act they did inure greatly to the advance of American industry and more than any other one thing, have made possible our present war activities in aviation gasoline, toluol, and explosives and in synthetic rubber.[109]

Farish rejected Arnold's charge that Standard had delayed or retarded development of synthetic rubber. In short he said: "This statement has not a shadow of foundation."[110] Turning his attention to the Hague Memorandum, Farish disclosed some hitherto unknown facts. He said:

> . . . the American and British governments had been informed of the negotiations in advance, that the company had offered to conduct the negotiations in the presence of a member of the American Legation at the Hague, and that certain papers involved had actually been carried by a courier of the Department of State.[111]

The next set of legal proceedings which involved Standard Oil started on April 13, 1942, when the Senate Committee on Patents (under Homer T. Bone) opened its hearings. The purpose of this inquiry was to consider "a bill to provide for the use of patents in the interest of national defense or the prosecution of the war . . ."[112] Two testimonies, given before this panel of senators turned out to be injurious to Standard Oil Company. The first one was delivered by Senator Robert M. Follete, Jr., from Wisconsin, who said:

> Recently Standard Oil of New Jersey was found by the Antitrust Division of the Department of Justice to be conspiring with I. G. Farben . . . of Germany. I. G. Farben, through its maze of international patent agreements, is the spearhead of Nazi economic warfare. By its cartel agreements with Standard Oil of New Jersey, the United States was effectively prevented from developing or producing any substantial amount of synthetic rubber.
>
> The penalty administered on Standard Oil for its part in this obstructionist arrangement was a court 'consent decree' which provided a $50,000 fine and temporary--strictly temporary --and only partial suspension of the monopoly patent privilege which stopped full United States use of granted patents . . .
>
> All the consent decree does . . . is to guarantee that

> Standard Oil will hold these patents for I. G. Farben . . . until the day when Standard Oil can render an accounting to I. G. Farben, and return the patents.[113]

The other testimony came from Thurman Arnold, who presented the entangling and confusing patent situation as the work of international patent cartels. To buttress his charges, he used materials collected from the files of Standard Oil in connection with the investigation made by the Antitrust Division of the Department of Justice. He asserted that shortages of many basic, strategic materials were caused by a " . . . cartel system that used the patent law not to reward the inventor but as an instrument to establish an unproductive business policy of high cost and low turnover.[114] Regarding the future, he said that "his interest . . . was not only in a stop-gap law for the duration of the war but in a reform of the patent system to prevent the postwar use of patent cartels to establish monopolies.[115]

The congressional inquiries and court rulings created a public concensus which was unfriendly, if not openly hostile, to Standard Oil. Newspaper editorials and readers' letters to editors demanded changes in the company's leadership. One letter to the editor of a liberal New York paper demanded that

> Whatever the intentions which lay behind these policies, the effect was to make Standard Oil an ally to Hitler, an economic enemy agent within the U.S.A. . . . We think it your duty to remove Walter C. Teagle as Chairman of the Board and William S. Farish as President and Frank A. Howard as Vice President of the Standard Oil Company and radically change the policies which put them in the position of acting as international economic collaborators of the Third Reich.[116]

To improve the company's image, Jersey directors decided that those leading figures who had most exposed themselves in connection with I. G. Farben should be moved into the background. Before he could tender his resignation as president of the company, William S. Farish

died of a heart attack on November 29, 1942; one day later, Walter C. Teagle voluntarily relinquished his post. This left Frank A. Howard who was allowed to remain president of Standard Oil Development Company for two more years; however, special board action markedly reduced his former influence and authority.[117]

Standard Oil's I. G. Farben related problems did not come to an end until several years later. To regain control over patents and stocks of Standard-I.G. Company and JASCO, which originally belonged to the German company, the American company filed a complaint against the U.S. Alien Property Custodian. The trial began on May 21, 1945.[118] Company lawyers contended that at the time the patents and stocks were seized on March 25, 1942, Standard Oil was their rightful and legal owner because all vestiges of I. G. Farben's interest in the properties ended in September 1939 with the Hague Memorandum. On the defense side, government attorneys maintained that the transfer of the stocks and patents to Standard Oil, as provided by the Hague Memorandum, was a camouflage to conceal the enemy ownership by I. G. Farben.

August von Knieriem, former chief legal counsel of I. G. Farben, delivered the decisive testimony which settled the case. The German lawyer who was captured by the American army during the last days of the war agreed to come to the United States and appear in court. In April he arrived in New York and he brought with him correspondence between the chemical company and the German High Command.[119] Especially damaging to Standard Oil's cause was Knieriem's own copy of the Hague Memorandum with handwritten notes in the margin. Beside the preamble, recapitulating the initial 1930 agreement, was written: "Nachkrieg Camouflage." One letter from I. G. Farben to the High Command was also revealing. It stated:

> By this transfer . . . the patents in German possession will be removed from enemy seizure . . . we consider it right to transfer the patents to an American holder who is on friendly terms with us and who will cooperate with us on a friendly basis in the future.[120]

In the view of the lawyers representing the United States government, Knieriem's documents were sufficient to reach a decision. They believed that the presented evidence

> . . . exposed the falsity of the Hague Memorandum . . . and showed conclusively that the whole scheme was a transparent device to conceal the property from the Alien Property Custodian in the event of United States' participation in World War II.[121]

Five months later on November 7, 1945, Judge Charles E. Wyzanski, Jr., rendered his verdict. He considered the transfer of assets from I. G. Farben to Standard Oil as they were stipulated in the Hague Agreement a deliberate act of deception which intended to create a false impression regarding the true ownership of property interests. In his court brief, he explained:

> The court is satisfied that the overriding real agreement of the Jersey group and I. G. was that . . . these transfers both of legal title and equitable interests were to be null and void at the pleasure of I. G., and the parties intended that after the close of World War II, the Jersey group and I. G. would make whatever deal then deemed to be appropriate.[122]

Wyzanski's judgment of the seizure case was overpowering:

> In short, the Hague Agreement and the subsequent transactions in reality, though not always in form, left I. G. with unaltered legal and equitable rights. . . And so the United States government and the Alien Property Custodian were entitled to seize these rights on March 25, 1942, as properties of an enemy.[123]

On September 22, 1947, the respective circuit court upheld Judge Wyzanski's decision as Judge Charles Clark observed, in no unmistakable words, that Standard Oil could have been judged an enemy national because of its relationship with I. G. Farben afer the United States and Germany had become active enemies. Clark wrote:

> Though the defendant does not make the argument, it would seem possible to contend that, under this extensive definition, plaintiffs became enemy nationals after the outbreak of the war, since their concealment of I. G. assets continued thereafter.[124]

Judge Clark's decision became final when the U.S. Supreme Court denied all writs of certiorari on April 19, 1948.[128]

In April of 1953, the Alien Property Custodian offered at public auction those JASCO stocks which Standard Oil had to surrender in 1942 and attempted to regain in 1945. As it turned out, the highest bidder, Standard Oil Development Company, was a wholly owned subsidiary of the Jersey Company.[129] Back in 1939 when Standard Oil purchased the same stocks from I. G. Farben, the reason Standard Oil gave was that otherwise they might fall into the hands of "unfriendly interest."[130] This fear had finally been put to an end.

NOTES: CHAPTER FOUR

1. Interessen Gemeinschaft-Farbenindustrie Aktiengesellschaft was, as its name indicates, not one company but an amalgamation of companies which represented the most important and largest enterprises in the German chemical industry. The fusion of the companies started around 1900 when six German companies gained a worldwide monopoly over production and distribution of synthetic dyestuff. The companies were the following:

BASF (Badische Anilin und Soda-Fabrik of Ludwigshafen)
Bayer (Farbenfabriken form. Friedrich Bayer & Co. of Leverkusen)
Hoechst (Farbwerke vorm. Meister Lucius and Bruening of Hoechst am Main)
Agfa (Aktiengesellschaft fuer Anilinfabrikaten of Berlin)
Cassella (Leopold Cassella & Co. of Frankfurt)
Kalle (Kalle & Co. of Biebrick)

Competition marked by kickbacks to customers, price cutting and industrial spying reduced each company's profits. To change the situation, the chief officials of the six companies decided to form a community of interests (interessen Gemeinschaft) in 1903. Consequently, the company heads adopted a formula for sharing profits without surrendering control over their respective companies. Only dyestuff was under cartel regulations as each company remained free to pursue the development, manufacture and sale of other products (Joseph Borkin, The Crime and Punishment of I. G. Farben (New York: Macmillan Publishing Co., Inc., 1978), pp. 4-6).

The informal and limited community of interest came under heavy criticism during World War I. Some members contended that after the war, competition from abroad would be inimical to the whole German chemical industry. To prevent such a development, the original six companies, joined by the Ter Meer and Greisham companies, formed the Community of Interest of the German Dyestuff Industry (Interessen Gemeinschaft der Deutschen Teerfarben-Industrie). The eight members agreed upon closer cooperation. In addition to sharing profits, they also decided to share patents with each other (ibid., pp. 20-21).

This was not the last move to strengthen the partnership. To cope with increasing competition abroad, the I. G. companies merged into a monolithic industrial entity in 1925. The eight companies agreed to bring all their industrial activities and financial resources into one single corporation called I. G. Farbenindustrie Aktiengelellschaft. After this, no member company had independent activity or individual identity; they all had to follow one chairman of one managing board (ibid., pp. 42-43).

2. Despatch 114 (strictly confidential), Herbert Pell, American Minister to Hungary in Budapest, to Sec. of State, Aug. 12, 1941, NA Records.

3. The Public Papers and Addresses of Franklin D. Roosevelt (New York: The Macmillan Co., 1941), vol. 9, p. 133.

4. Borkin, The Crime and Punishment of I. G. Farben, p. 47.

5. This laboratory originally was part of BASF, the largest and most important member of I. G. Farben. At the time of the merger in 1925, the seven companies accepted BASF's leadership and consequent incorporation into BASF (ibid., p. 43).

6. Ibid., p. 47; and Larson, Knowlton and Popple, New Horizons, p. 153.

7. Borkin, The Crime and Punishment of I. G. Farben p. 154.

8. Ibid., pp. 47-48.

9. Larson, Knowlton and Popple, New Horizons, p. 154.

10. Ibid. Learning about the arrangements, a New York Times reporter made the following predictions:

> What experts in chemical fields admit is that the world is on the threshold of a new fuel era and that the often predicted failure of the gasoline supply is now shoved centuries in the future . . . . The discoveries in these fields are more marvelous than inventions which enable rapid strides in the development of radio, other uses of electricity and in airplanes, according to a prominent industrialist . . . .

He also forecast that by 1928, 20 percent of all gasoline used in the world would be manufactured synthetically. The price of this fuel would be less than the price of natural gasoline, and Germany would not need to import any petroleum products in the near future (Borkin, The Crime and Punishment of I. G. Farben, p. 49).

However, it did not happen quite that early. Only in 1948 could a Chicago Sun Times reporter write:

> Up to 70 percent of the world's coal can be turned into liquids and gases that can be used to make gasoline, heating oil, diesel fuel and jet fuel, using a new, award-winning process.
>
> The process, developed by Exxon Research and Engineering Co., has been recognized in award ceremonies at the Museum of Science and Industry here as one of the year's 100 most significant technological achievements . . . . Depending on the type of coal and the operating conditions, 50 percent to 70 percent of the coal can be converted into usable liquids and gases

(Chicago Sun Times, August 4, 1984).

11. Larson, Knowlton and Popple, New Horizons, pp. 155-56.

12. Ibid., p. 157.

13. Larson, Knowlton and Popple, New Horizons, pp. 159-60.

14. Ibid., p. 161.

15. It appears to be impossible to detect the exact holdings of Jersey Standard in Germany. Some of the reasons for this came to light in the words of those who were allowed "to use Standard Oil's records and to interview its personnel," as follows:

> Although profits were good in the later 1930s, Jersey was unable to convert its dividends from DAPG into dollars because of Germany's unfavorable foreign-exchange balance. The same was true of interest and payments on funds advanced to the company. Much of what was owed to Jersey therefore had to remain in Germany, where it was invested in various properties. The parent company managed to invest the equivalent of a million dollars of dividends in pipe, which was stored in Romania for future use, but was lost when that country was invaded during World War II

(Larson, Knowlton and Popple, New Horizons, pp. 334-35). In 1932, Standard Oil purchased the Eband Asphalt Werke A. G. in Hamburg, which produced synthetic fuels (ibid., pp. 182, 188). The same authors wrote that after the war:

> Jersey was only partially successful in regaining control of properties seized during the war by the United States Alien Property Custodian under the Trading with the Enemy Act. These were patent rights and shares in certain companies--obtained through arrangements with I. G. Farbenindustrie beginning in 1929--of which Jersey claimed to be the owner

(ibid., p. 560).

16. Ibid,. pp. 333-34. 17. Ibid., p. 335.

18. Letter, Hans Morgenthau, Jr., Secretary of U.S. Treasury to Robert A. Jackson, U.S. Attorney General, June 12, 1941, NA Records. Morgenthau also sent a copy of this letter to Cordell Hull, U.S. Secretary of State.

19. Ibid. 20. Ibid. 21. Ibid.

22. Telegram from Standard Oil office in Hamburg, Germany to Orville Harden, Director and Vice President of Standard Oil, New York, April 1, 1941, NA Records. On May 6, 1941, Harden, referring to this telegram, said that while I. G. Farben offered $20,000,000 for 80 percent of MAORT, he could allow the German company to have only 66 2/3 percent for that amount (Interview with Harden, May 6, 1941, NA Records).

The lubricating oil distributing business was not a part of MAORT properties.

23. Telegram from Standard Oil office in Rio de Janeiro, Brazil, to Gordon H. Michler, Advisor and General Counsel to European and Latin American marketing subsidiaries, New York, May 2, 1941, NA Records.

24. Interview with Harden, May 6, 1941, NA Records.

25. Letter, Morgenthau to Jackson, June 12, 1941, NA Records.

26. Telegram from Standard Oil office in Rio to Michler in New York, June 16, 1941, NA Records.

27. U.S., Congress, Senate, Special Committee Investigating the National Defense Program, Rubber, Hearing before a Special Committee Investigating the National Defense Program on S. Res. 71. Seventy-seventh Congress, First Session, (Washington: Government Printing Office, 1942), Part 11, p. 4670; hereafter cited as Hearing . . . Rubber. The original, rough and slightly different version of this offer can be found in letter, Crane to Dean G. Acheson, U.S. Assistant Secretary of State, July 9, 1941, NA Records.

28. Letter, Harden to Henry A. Wallace, Chairman of Economic Defense Board, August 28, 1941, NA Records; and Hearings . . . Rubber, p. 4669.

29. Memorandum by Harden, Aug. 19, 1941, NA Records; and Hearings . . . Rubber, p. 4670.

30. Letter, Brice to Sec. of State, Nov. 23, 1948, NA Records.

31. Interview with Harden, May 6, 1941, NA Records. For details concerning the prohibition of monetary transfers in Hungary after Sept. 2, 1939, see p. 142.

32. CHOMD, vol. 1, p. 328.

33. Letter, Harden to Atherton, May 7, 1941, NA Records.

34. Letter, Morgenthau to Jackson, June 12, 1941, NA Records.

35. Letter, Feis to Welles, May 9, 1941, NA Records.

36. See table 1. To find out the production for the May through September period, divide the total production for 1941 by 12 and multiply the quotient by 5 (the number of months in the interval).

37. Letter, Harden to Wallace, Aug. 19, 1941, NA Records; and Hearings . . . Rubber, p. 4669. Harden planned to "arrange for the shipment of the gold to New York by steamer and obtain a navicert from the British government covering the consignment," (Memorandum by Harden, Aug. 19, 1941, NA Records; and Hearings . . . Rubber, p. 4670).

38. Interview with Harden, May 6, 1941, NA Records.

39. Report, Dr. Herbert Feis, Advisor to Division of European Affairs, to Henry L. Welles, Undersecretary of State, May 9, 1941, NA Records.

40. Ibid. A note, "Welles agrees with Atherton and Dr. Feis," was attached to Feis's report (ibid.).

41. Letter, Morgenthau to Jackson, June 12, 1941, NA Records.

42. Hearing . . . Rubber, pp. 4518-4519, 4670.

43. Ibid.

44. Despatch 114 (strictly confidential), Pell to Sec. of State, Aug. 12, 1941, NA Records.

45. Ibid.

46. Letter, Herbert Feis, Advisor on International Economic Affairs, to Clarence H. Lieb, Sept. 8, 1941, NA Records. Feis's previous job title was Advisor to Division of European Affairs.

47. Memorandum by Harden, Aug. 19, 1941, NA Records; and Hearings . . . Rubber, p. 4670.

48. Hearings . . . Rubber, p. 4517. 49. Ibid., p. 4373.

50. Ibid. 51. Ibid., p. 4669. 52. Ibid., p. 4373.

53. Letter, Morgenthau to Jackson, June 12, 1941, NA Records.

54. Despatch 114 (strictly confidential), Pell to Sec. of State, Aug. 12, 1941, NA Records.

55. Letter, Morgenthau to Jackson, June 12, 1941, NA Records.

56. Letter, Harden to Wallace, Aug. 19, 1941, NA Records.

57. Hearings . . . Rubber, p. 4670.

58. Telegram 617 (confidential), Pell to Sec. of State, Aug. 3, 1941, NA Records.

59. Ibid.

60. Despatch 114 (strictly confidential), Pell to Sec. of State, Aug. 12, 1941, NA Records.

61. "Interview with Ruedemann by Wallace Phillips," March 3, 1942, NA Records.

62. Despatch 114 (strictly confidential), Pell to Sec. of State, Aug. 12, 1941, NA Records.

63. Ibid. 64. Ibid. 65. Ibid.

66. This expression was first used in the Memorandum of the Meeting at the Ambassador Hotel, November 15, 1926; present: Bosch, Schmidt, Gauss, Von Knieriem, Pickhard, Ruedemann, Howard and Clark (Hearings . . . Rubber p. 4582).

67. Larson, Knowlton and Popple, New Horizons, pp. 155-56.

68. Ibid.; and Borkin, The Crime and Punishment of I. G. Farben, pp. 50-51. To demonstrate satisfaction and approval of the

venture, Walter C. Teagle accepted an invitation from I. G. Farben to serve on the board of the American I. G. Chemical Company, a recently established holding company of I. G. Farben in the United States (ibid., p. 51).

69. Ibid.

70. Larson, Knowlton and Popple, New Horizons, p. 156.

71. Ibid., pp. 156-57; and Borkin, The Crime and Punishment of I. G. Farben, pp. 51-52.

72. Borkin, The Crime and Punishment of I. G. Farben, p. 83.

73. Ibid., pp. 83-84.

74. Ibid.

At the time the joint ownership of the companies was established, an American legal expert noted the following:

> Each company gave the other a world monopoly insofar as they were able to convey it, with the exception of the German market. This was done by setting up two patent pools, one for synthetic gasoline controlled by Standard Oil, and the other for synthetic rubber, controlled by I. G. Farben

(Hearings . . . Rubber, p. 4309).

75. Borkin, The Crime and Punishment of I. G. Farben, p. 84.

76. Larson, Knowlton and Popple, New Horizons, pp. 405-6; and Borkin, The Crime and Punishment of I. G. Farben, pp. 83-85.

77. Hearings . . . Rubber, p. 4584.

78. There is a noticeable discrepancy between Borkin and Larson's accounts concerning the duration of the Hague conference. Borkin says that ". . . the two men met at The Hague on September 22 . . . On September 25, Ringer and Howard finished their business and departed for home, each carrying a copy of the "Hague Memorandum" . . ." (Borkin, The Crime and Punishment of I. G. Farben, pp. 85, 87). On the other hand, Larson et al. write that "On September 22, Howard met Dr. Friedrick Ringer at The Hague . . . The two executives, on September 30, wrote a memorandum--known as The Hague Memorandum-- . . . ." (Larson, Knowlton and Popple, New Horizons, pp. 406, 407). Borkin's account is accurate. Howard, reporting to Rockefeller Plaza on October 12, 1939, wrote: ". . . I was able to keep my appointment in Holland where I had 3 days of discussion with the representatives of the I. G." (Hearings . . . Rubber, p. 4311).

79. Borkin, The Crime and Punishment of I. G. Farben, pp. 76-78; and Larson, Knowlton and Popple, New Horizons, p. 406.

80. Ibid., p. 407.

81. Borkin, The Crime and Punishment of I. G. Farben, p. 86.

82. Larson, Knowlton and Popple, New Horizons, p. 407.

83. Ibid. 84. Hearing . . . Rubber, p. 4311.

85. Borkin, The Crime and Punishment of I. G. Farben, p. 88.

86. Ibid.

87. Ibid., pp. 78-79; and Larson, Knowlton and Popple, New Horizons, p. 174.

88. Ibid., pp. 412-15; and Borkin, The Crime and Punishment of I. G. Farben, pp. 78-79.

89. Ibid., p. 79; and Larson, Knowlton and Popple, New Horizons, pp. 169-75, 412-15, 418.

90. Borkin, The Crime and Punishment of I. G. Farben, pp. 79-80.

91. Ibid., pp. 77-78.

92. Letter, F. A. Howard to R. P. Russell, Standard Oil Development Company, March 15, 1938, reprinted in U.S., Congress, Senate, Committee on Patents, Hearing before the Committee on Patents on S. 2303 and S. 2491. Seventy-seventh Congress, Second Session (Washington, D.C.: Government Printing Office, 1942), Part 6, p. 2906; hereafter cited as Hearing . . . Patents.

93. Letter, F. A. Howard to F. H. Bedford, Standard Oil Company, April 14, 1938, reprinted in Hearings . . . Rubber, Part 6, p. 2910.

94. Defendant's Exhibit 333, telegram from I. G. Farben to Standard Oil Development Company, October 16, 1939, reprinted in Borkin, The Crime and Punishment of I. G. Farben, p. 87.

95. Ibid., p. 89.

This investigation was an outgrowth of Senate Resolution 71 which authorized an immediate inquiry into the National Defense Program to find cause of weaknesses and ways for improvements in the nation's industrial performance. In the course of the hearings, I. G. Farben's unsuccessful attempt to purchase MAORT surfaced when Edward H. Foley said: "Standard Oil had been preferred by Germany over other American owners of capital investment in Germany and the occupied countries." To support his contention Foley added:

> The proposed transaction may have been even more generous than a mere preference. Mr. Farish in his testimony indicated that $24,000,000 represented a good bit more than the cost of the properties to the Standard Oil Co., and that the Standard Oil Co. was "getting something for nothing."

(Hearings . . . Rubber, p. 4517), Further investigation found that Pell reported to Washington the following: "I believe that Standard Oil Company of New Jersey has only put about two and one-half million dollars into this concern," (Despatch 114 [strictly confidential], Pell to Sec. of State, Aug. 12, 1941, NA Records).

96. Ibid.

97. Ibid., p. 89-91; and Larson, Knowlton and Popple, New Horizons, p. 431.

98. Borkin, The Crime and Punishment of I. G. Farben, p. 91.

99. Larson, Knowlton and Popple, New Horizons, p. 432.

100. Borkin, The Crime and Punishment of I. G. Farben, p. 90.

101. Larson, Knowlton and Popple, New Horizons, p. 432.

102. Hearings . . . Rubber, Part 6, p. 4308.

103. Ibid., p. 4311. 104. Ibid.

105. Borkin, The Crime and Punishment of I. G. Farben, p. 92.

106. Larson, Knowlton and Popple, New Horizons, p. 433.

107. Christian Science Monitor, March 28, 1942.

108. Hearings . . . Rubber, Part II, p. 4360.

109. Ibid. 110. Ibid., p. 4361.

111. Ibid., p. 4497. Farish said the truth. The Hague meeting was arranged with the cooperation of Jersey's New York headquarters; the assistance of W. R. Carlisle, a Jersey attorney living in London and familiar with I. G. Farben contracts; and the consent of Joseph P. Kennedy, American Ambassador to England; but against the warnings of Hershel V. Johnson, counselor at the American Embassy in London (Borkin, The Crime and Punishment of I. G. Farben, p. 85; and Larson, Knowlton and Popple, New Horizons, pp. 405-6.

112. Hearings . . . Patents, Part 9, p. 1.

113. Ibid., Part 6, p. 11. 114. Ibid.

115. Larson, Knowlton and Popple, New Horizons, p. 443.

116. PM, April 5, 1942.

117. Borkin, The Crime and Punishment of I. G. Farben, pp. 93-94.

118. Excellence and accomplishment characterized the members of the defending and prosecuting teams. John W. Davis, Democratic nominee for president of the United States in 1924, represented Standard Oil. Attorney General Francis Biddle selected Philip Amram, a successful trial lawyer from Philadelphia to advocate the government's case. The judge matched, in all respects, the qualifications of the contending legal representatives. Chief Justice Harlan Stone designated Judge Charles E. Wyzanski, Jr. of the U.S. district court in Boston to preside

over the trial (Borkin, The Crime and Punishment of I. G. Farben, pp. 200-1).

119. Knieriem's material remained intact because I. G. Farben moved his files from war-torn Frankfurt to protected Heidelberg (ibid., p. 201).

120. Ibid., p. 202 121. Ibid. 122. Ibid.

123. Ibid., pp. 202-3. While the Alien Property Custodian retained control over most JASCO and Standard-I. G. Company stocks and patents, including some Buna licenses, Standard Oil regained possession of some securities and patents. Judge Wyzanski declared that certain transactions between the American and German companies, those which occurred before the Hague Agreement, had been made in good faith and had not projected substantial future readjustment; therefore, they could not be adjudged as enemy property (ibid., p. 203).

124. Ibid. p. 203. 125. Ibid. 126. Ibid. 127. Ibid.

CHAPTER FIVE

WARTIME ACTIVITIES

Between 1938 and 1941, capable and devoted employees of MAORT built a strong foundation that started with the drafting and signing of a comprehensive and effective concessional contract. Under the leadership of Paul Ruedemann, native geologists discovered oil, local workers built the facilities and manned the oil fields, MAORT earned unexpected profits and the country as a whole achieved autarky in essential petroleum products. The Hungarian government's sequestration of MAORT brought the initial phase of the company's operation to an end.

The second phase began with the company being given a new name (MAORT of the Royal Hungarian Treasury) and the Hungarians joining other World War II belligerents on the battlefield. State authorities declared the company a military installation, and soldiers joined the oil men on the fields. From the winter of 1941 to the spring of 1945, the company increased its oil production and shipped greater quantities of oil to Germany. Hungarian managers, left without the experience and leadership of the repatriated American oil men, commendably directed the company's ship through stormy waters.

The Allied Powers' multifarious destructive forces impaired, but never stopped, the crude production on the oil fields. During the war the producing capacity of the fields was irreparably damaged because of the eagerness of Hungarian state officials to meet the escalating demands of German military authorities. The company's operation came to

a temporary halt only in March of 1945 when Hungarian and German military groups, retreating from the vanguard divisions of the westward advancing Red Army, dismantled the equipment and evacuated some essential machinery to Austria.

Production, Rationed Consumption and Exportation

The war years of 1942, 1943 and 1944 witnessed a forced, ruinous growth in the production of crude. While the country's area and population had increased during these years, the volume of domestic consumption of petroleum products remained relatively stable at the per capita level. This occurred because the government introduced a strict rationing system of petroleum products at the beginning of the war. This controlled consumption and the increase in production left a larger portion of the Hungarian oil for exportation.

During each of the first two war years, production rose sharply. In 1942, the average daily production of all fields was 14,019 barrels, which amounted to a total of 5,117,155 barrels for the year; 1,858,178 barrels more than the previous year.[1] In 1943, the second full year of war for the country, crude output reached an all-time high of 6,425,718 barrels with a daily average of 16,997. After this the Zala County oil region's production decreased, with each year showing a yield less than the one preceding.[2]

In 1944, the total yield reached 6,204,065 barrels, which was 221,653 barrels less than the year before. Each field, with the exception of Hahot, produced less. The average daily yield of all fields was 16,997 barrels.[3]

The year 1945 was truncated with regard to wartime production. By April 4, the Soviet Red Army defeated German and Hungarian army units

and completed occupation of the country. During the months of January, February and March, total production of the four fields was 2,362,290 barrels.[4] (For comprehensive production figures, see table 1.)

Natural gas production was also increasing during the war years. On March 21, 1945, two weeks before World War II ended for Hungary, Simon Papp reported that the company had so far produced 40 billion cubic feet of natural gas; and he estimated that the company could altogether recover 95 billion cubic feet more gas before the fields would ultimately be exhausted of both crude and gas.[5]

The Budafa field remained the most prolific gas producer. In 1941, the field's output reached 4.8 billion cubic feet, which broke down to 13.2 million cubic feet of gas as the average daily production. In 1942, the recently discovered oil and gas field, Hahot, contributed 34 million cubic feet of natural gas to the yearly total production of 7.5 billion cubic feet.[7]

Lovaszi produced 5.3 billion cubic feet of gas and thus became the most fecund of all the fields in 1943. The average daily production reached 25.7 million, and the total for the year was 9.4 billion cubic feet. Toward the end of this year the Ujfalu wells, which produced crude of high tar and sulphur content, were shut down permanently.[8]

While crude production declined for the first time in 1944, natural gas production maintained its steady rise. This development indicated that the fields had passed their most productive stage and that future differences between crude and gas production would grow. The yearly total reached 10.97 billion and the average daily production 30.1 million cubic feet of gas.[9]

As crude production decreased in 1945, gas production continued to increase. The total for the year reached 12.8 billion and the daily

average production stood at 35.2 million cubic feet.[10] This year, Lovaszi's production was twice as large as Budafa's.

Throughout the years, the least successful and at the same time the most controversial development in MAORT's operation had been the company officials' indifference to the wastage of large amounts of natural gas.[11] More than half of all the gas which surfaced was allowed to escape into the air. One half of the gas which found some application was repressured and returned into the earth to maintain formation pressure to assist the upward surge of the crude. One quarter of the gas was burned by the engineers for heat energy in the operation of various auxiliary plants. The other quarter, classified as wet gas, was piped to gasoline plants where it was compressed to precipitate its natural gasoline, liquid butane and propane contents. Only a small fraction of the obtained gas found its way to local customers and generated some revenue for the company. Significantly, not until after the war did responsible government officials begin to question the company's neglectful handling of the natural gas. (For gas production and utilization figures, see tables 2 and 8.)

In varying amounts, each of the four fields yielded wet gas that was rich in coproducts. The Budafa wet gas contained 70 to 80 grams of light liquid hydrocarbon in one cubic meter of gas.[12] The wet gas from Lovaszi gave 42.9, the Hahot 53.8 and the Ujfalu 40 grams of liquid hydrocarbon to a cubic meter of gas.[13] The rewarding outcome of the operation was that by subjecting the available and plentiful wet gas to routine treatment in a simple apparatus, the company was able to gain highly prized products. Moreover, MAORT of the RHT could sell the natural gasoline and liquid propane and butane directly from the fields without needing to run the products through refineries.

Natural gasoline production increased during each year of the war, reaching the record in 1944. Liquid butane and propane production greatly fluctuated from year to year. From the company's central loading station in Ujudvar, the products were shipped--liquid butane and propane in steel bottles and the natural gasoline in railroad tank cars.[14] (For production figures, see table 5.)

Few nations had been able to become self-sufficient in petroleum products during World War II; even fewer had been able to share their surplus oil resources with their allies. In a short time, Hungary had achieved both.

To save as much oil as possible for the country's war effort, including exportation of petroleum products to Germany, the Hungarian government resolved from the very beginning of the war to restrict domestic consumption of distilled crude oil products. On September 2, 1939, when members of the Parliament voted into effect the already written emergency corpus iuris, the National Defense Law of 1939, they simultaneously instituted a system of rationing of all hydrocarbon derivatives for the country.[15]

To implement the nation's hydrocarbon austerity program, government agencies took several actions. They placed a moratorium on the sale of gasoline and ordered owners of gasoline engine vehicles to convert the carburetors of their vehicles for "motalko" (a mixture of gasoline and alcohol) use.[16] Vehicle operators received tickets each month to purchase a definite amount of fuel and oil. As the years of the war passed, the amount of fuel available for civilian use decreased in accordance with successive orders from the Minister of the Interior.

The periodically escalating restrictions on the purchase of petroleum products had affected the quality of life in Budapest. Paul

Ruedemann, who returned to the United States in the spring of 1942, made the following observations:

> There is a limited use of taxis during the daytime and no use at night without special permit. Private cars have almost completely disappeared from the streets. Buses have stopped running except during rush hours, morning and evening. There are enough trains for ordinary civilian traffic but travel has been discouraged.[17]

The meager amount of permissible petroleum products for consumers supported Ruedemann's bleak observations. In February 1942, private passenger car owners were allowed to purchase 4 to 16 gallons a month, and private truck and tractor owners 10.6 to 31.7 gallons a month of the particular fuel their vehicle required. One year later, in May of 1943, the government further restricted the allocations. Car owners were now allowed 2.6 to 5.2 gallons, and the truck and tractor owners could purchase only 5.3 to 15.8 gallons of fuel. City transit buses could use 10.5 to 31.7 gallons, and the taxis 15.8 to 31.7 gallons of fuel a month. Kerosene used in lamps for the purpose of illumination also became scarcer, as the amount available for sale in 1942 was substantially reduced in 1943.[18]

Consumption figures for those war years in which records were available showed that demand climbed to the highest level for gasoline in 1941 and 1943 and for kerosene in 1942. The fact that diesel oil consumption in the country stood at only two-thirds that of gasoline, indicated that there were relatively few trucks on the roads and tractors in the fields. The amount of heating oil consumed implied that few households were equipped with oil furnaces. (For comprehensive consumption charts, see table 6.)

In 1939, when the country was in the first stage of controlled consumption, larger amounts of petroleum products were used than in the

next year. By 1941, consumption figures reflected the country's expansion from 58,170 square miles to 106,793, and a population growth from 9 million to 14.6 million people.[20] In the following years consumption levels maintained a moderately rising tendency.

After World War I, in order to provide the country with finished crude products, Hungarian refineries ran Romanian "artificial" or "sweet" crude, which was a mixture of crude and refined products. This was done to avoid paying high Romanian tariffs on exported crude and equally high Hungarian duty on imported refined products. Between World War I and World War II, the refineries put through 1.5 million barrels of crude a year. In 1941 there was a rise to 4 million, and in 1944, with the participation of about 40 percent foreign capital, Hungary's refineries reached their peak of 10 million barrels of crude. Shell, Vacuum and the Hungarian Oil Works refined more than half of all petroleum products. Because of frequent and massive air raids, almost each major refinery plant suffered extensive damage. After the war, the refining industry did not recover its wartime capacity for several years.[21] (For comprehensive charts of the major refineries, see tables 15 and 20.)

Between 1942 and 1944, the Hungarian government exported more than half of all the country's refined crude products. An aggregate of 732,909 barrels of assorted refined crude products was shipped out of the country in 1941. In the next year the country increased its exports to more than twice that of the previous year. In 1943, gasoline surpassed the 1 million barrel plateau and so did refined oil with the total hydrocarbon export topping 3,090.055 barrels. Then 1944 turned out to be a record year with the total exportation at 3,673,460 barrels. This year crude became the largest export item because of the U.S. Air

Force's frequent and successful bombings of each important Hungarian refinery plant.[27] (For further details on petroleum exports, see table 7.)

Other hydrocarbon fractions were also exported from Hungary. Directly from the gasoline plants located near the oil fields, officials of NOART of the RHT expedited large quantities of natural gasoline and liquid butane and propane. These products and the bulk of all the other petroleum products were destined to Hungary's wartime ally: Germany.

The exportation of natural gasoline began in 1939 with 2,344 barrels being shipped out. The grand total of this product amounted to 562,323 barrels exported over the six-year period.[24]

Liquid propane and butane, coproduct derivatives of wet gas, also left the country. The first shipment occurred in 1940, and the total export amounted to 292,734 barrels.[25] (For details on natural gasoline and liquid butane and propane exports, see table 5.)

Wells, Reservoir Conditions and Explorations

The portentous growth of crude production during the war years could not have taken place without concurring growth in the number of oil wells. On April 3, 1945, the last day for Hungary in World War II, 292 holes perforated the southwest region of the country. Since the sequestration of the company on December 20, 1941, MAORT of the RHT sank 163 holes, including 63 exploratory ones. Of the 292 total holes, 192 were flowing wells and 100 either dry wells or unpromising, unfinished exploration holes. During its sequestered period, the company added 100 flowing wells. To bore the 292 holes, oil workers drilled 1,312,000 feet with an average depth of 4490 feet.[26] (For a comprehensive chart concerning wells, see table 3.)

The majority of the wells were bored and finished (A permanent steel casing was cemented into place) by the company's aging, large Hughes Tool Company drilling rigs. The remaining ones were done with smaller, later model German rigs. Drilling crews originally took about two months to complete one well; however, over the years more rigs were used and fewer wells were drilled. there were three reasons for this: the rigs were becoming older and less efficient, and replacement parts for them were difficult to obtain. Procurement of necessary well-building materials was becoming more difficult; and the depth of the average well was increasing because it was becoming laborious to find new producing horizons close to the surface.[27]

A breakdown of the 292 wells according to productivity of individual wells and the type of energy which propelled the crude upward indicated that the Zala County fields had passed their young, profuse stage by 1944. Few 300-barrel-a-day wells remained in operation and "mature" wells fluctuated in productivity between 80 to 120 barrels a day.[28]

At the beginning of the war, most wells were on gas lift; therefore the cost of production was at a minimum. Toward the end of the war, far fewer wells were using gas to move the crude to the surface, proving that the fields had gradually become mature producers. As the total production of the fields increased because of the proliferation of new wells, an increasing number of wells fell under the influence of secondary production methods. These wells used repressured gas or mechanical pumps (compressors) as an energy source.[26]

The first and only accident to mar the safety record of the company took place on October 9, 1944. While completing a well, a crew member dropped a drill bit in the Lovaszi 94th well. As the workers

attempted to retrieve the bit, gas, present in the well-shaft, caught fire and exploded. Papp's report described the incident in the following words:

> The fact must be recorded here that during the week from October 9th to 16th, 1944, in the course of a fishing job in well L-94, a gas blow-out occurred. This was the first such event in the history of MAORT. The escaping gas caught fire on October 26th; the fire was extinguished but the gas flared up again. It was planned to prevent the escape of gas by way of side-tracking.[30]

Fortunately, no personal injury occurred to anyone.[31]

To exploit the fields without damaging them and still be able to obtain the largest possible quantities of oil from the estimated recoverable reserve, Ruedemann had employed three rational production methods. He directed the company's geologists and engineers to arrange the drill holes to allow 2,000 feet between any two of them. He did not allow any wells to tap oil from more than one pay zone at one time. He also prescribed the use of small bean sizes to preserve pressure within the formation. He was convinced that the particular reservoir conditions under the Zala fields required the rigid practice of each of these methods for efficient, long-term exploitation of the entrapped oil.[32]

The large number of wells and the record quantity of extracted crude rapidly reduced the gas pressure within the formation. When Ruedemann noticed the normal, unwanted decrease in reservoir pressure, he prepared to implement secondary production methods. He called for and supervised the construction of repressuring plants which, through designated wells, pumped gas back into the pay. Where this technique was not practicable, he ordered large compressors which mechanically pumped those wells which were rapidly losing pressure. Ruedemann had commenced these field-saving techniques as early as the fall of 1939.

When Ruedemann left Hungary in 1942, each of the 129 flowing

wells was completely or partially on gas lift. This was an important achievement, but equally important was the thorough training of the Hungarian technical leaders of the company in knowing why and how rational and secondary production methods should continue.[33]

Because of Hungary's decision to join World War II on the side of the Axis Powers, Hungarian statesmen had to put available natural resources at the disposal of their ally, Germany. As a matter of fact, Germany demanded this type of cooperation from Hungary. Through the Ministry of Industry, the leading Hungarian politicians exercised control over the basic decisions of MAORT of the RHT. As a result, Papp and other executives of the company had to compromise Ruedemann's field-saving production methods.

Soon after the sequestration of the company, Karoly Roth ordered Papp to begin a program of drilling more wells on each field and spacing the new wells only 1,000 feet from each other. As a result, 133 of the 163 wells completed during the war years in the Budafa and Lovaszi fields had only half the distance between them that Ruedemann deemed technically correct and justifiable. The remaining new wells, 25 in the Hahot field, 2 in the Ujfalu field, and 3 test wells near Gorgeteg still had 2,000-feet intervals between any two of them.[34]

The relatively new Lovaszi field had to be developed quickly. Papp reported:

> . . . in this field, the wells were originally spaced 300 meters distance from one another. As, however, the Royal Hungarian Ministry of Industry conveyed the wish expressed by the Germans that production be increased and that the wells should be drilled at a distance of 150 meters from each other . . .[35]

Roth requested that Papp begin to extract oil with one well from two or more pay zones at the same time. To keep the crude production of the company on the rise, Roth also ordered the exchange of beans of many

wells for larger sizes for greater yield in a shorter time.[36]

In order to give weight to his requests and contain the dissenting voices within the company, Roth did not fail to remind all employees that they were working during wartime at a military installation. He would even recommend to the Ministry of Defense that certain employees be conscripted into the army in spite of the military status of the company and the consequent technical exemption of the employees.[37]

When Papp complained that accelerated production damaged the fields and would reduce the company's profitability in the future, Roth proposed his "interest theory" as a way to show that he had prepared to avoid such an eventuality. This peculiar idea suggested that more wells would produce the available crude from a particular reservoir faster over a shorter period of time than would fewer wells. The money the company would earn for the larger quantity of earlier obtained oil would earn interest and offset the loss caused by the larger amount of oil left in the reservoir. Papp rejected this theory as "unsound as well as unscientific" and "essentially harmful to the fields."[39] Geologists supported Papp by noting that the excessive number of wells would quickly use up the gas energy of the field, would disrupt the continuous flow of gas from adjacent areas and ultimately leave too much crude in the reservoirs.

Because of their knowledge and experience in oil excavation, com- pany workers were able to moderate some of Roth's technical requests which were invariably aimed at increasing output. In spite of their efforts to save the fields, production increased and the damage became evident. The year 1944 marked irreversible decline of the Zala Country oil fields.[40]

The frequent requests from Papp to reduce production quotas and

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save the fields finally received some consideration in the spring of 1944. Roth authorized Papp to permanently close off some wells which showed unfavorable gas-oil-water ratios, and to use some others intermittently.[41]

Apart from the failure to practice rational production methods, the slow and belated institution of secondary production methods also contributed to the field damage. After the war was over, Papp wrote:

> The principal cause of the decline in formation pressure was that we did not receive the Thomassen compressors ordered from Germany and that gas repressuring on a substantial scale could only be commenced in 1944.[42]

Even the late and superficial attempts at saving the fields did not last long. In the fall of 1944, Ferenc Szalasi and his Arrow-Cross Party assumed control over the Hungarian government. The new regime pledged its continuous support to Germany and the prolongation of the nation's war effort. Szalasi appointed Emil Szakvari as the new Minister of Industry, who immediately requested that Roth increase production again and continue oil exports to Germany.[43]

Depending on their individual characteristics, fields produced gas (G), oil (O) and water (W) in definite ratios. In the hands of experts, the GOW ratios forecast the size of a field's reserves, the amount of crude which could ultimately be recovered and the length of time the extraction would take. Because the GOW ratios reflected the slightest changes in reservoir conditions, geologists could select and change the optimal extraction methods regarding bean sizes, density of wells, etc. Finding and using the right extraction methods assured company officials the greatest amount of crude production within the shortest period of time.

At the beginning of the extraction, GO ratios in the Budafa and

Lovaszi fields (Water had no direct bearing on the production of oil in these fields) were relatively high. The reason behind Budafa's 7,854 cubic feet of gas for each barrel of oil (cu. ft./bbl.) and Lovaszi's 3,439 cu. ft./bbl. was that the first wells lifted mostly gas at the start. Later, the GO ratios showed more typical values. In 1942, Budafa registered 1,077 cu. ft./bbl.; and in 1943, Lovaszi achieved a ratio of 1,391 cu. ft./bbl.[44] (For details, see table 14.)

A sharp rise in GO ratios occurred for both fields in 1944 and 1945. In Budafa the ratio jumped from 2,233 to 2,603 cu. ft./bbl. and in Lovaszi from 1,857 to 2,807 cu. ft./bbl. This change in the fields reflected that there was a greater number of wells, that the wells were located closer to each other, that the wells were producing from more than one pay, and that larger beans were being used. Recognizing the danger these high figures predicted, Papp and company geologists repeatedly warned the government officials that the optimal GO ratio for the Budafa field would be 1,670 cu. ft./bbl. (about 40 percent below the actual rate) and 2,690 cu. ft./bbl. for Lovaszi (about 25 percent lower than the actual rate). No problem existed in the Hahot field because it used water for energy to drive the crude to the surface.[45]

Another reservoir-condition indicator was the static bottom-hole pressure or simply the formation pressure. This was calculated on a 3,000 feet, sub-sea depth and expressed in pounds per square inch (lbs./sq. in.) In 1939, the value of this pressure under the Budafa field was 1,400 lbs./sq. in. By July 1942, it fell to 1,113 lbs./sq. in. Because of some gas repressuring introduced in the spring of 1944, the reading rose to 1,140; but then it again declined to 1,058 lbs./sq. in.[46]

In the Lovaszi field the formation pressure originally regis-

tered 1,764 lbs./sq. in. By November 1941, it decreased to 1,730; November 1942, to 1,502; and in November 1943, to 1,391 lbs./sq. in. The normal yearly expected decline of 2 percent rose to 13.2 percent, and the next year the decline amounted to 21.1 percent. As a conclusion Papp reported:

> A decline on such a scale, beyond doubt, was the result of increased production. Another contributory cause was that repressuring could not have commenced in time. Repressuring on this field dated from March 1944 only, and at present, daily some 7 million cubic feet of gas was passing back through 8 input wells, but in all probability this figure would have to be increased.[47]

Explorations for new fields continued during the war years. After Ruedemann's repatriation in early 1942, Papp determined the direction of MAORT of the RHT's explorations based on his evaluation of Transdanubia's geological properties. Geologists concentrated their efforts around the proven fields; and when they decided to expand their activities, the instruments and drilling rigs were moved northward in Transdanubia.[48]

The intensity and speed with which the exploration efforts proceeded did not depend on Papp's professional judgment but rather on that of the Ministry of Industry, on Karoly Roth in Department X. The perforations and geological works represented all the research accomplishments of the company and demonstrated the Hungarian government's wartime interest in the discovery of new oil sources. Company officials accepted the government's moderate emphasis on the development of the concessioned area and expressed no desire to change it.[49]

None of the exploratory holes yielded enough evidence to warrant developing any of them into wells, yet most of them produced some natural gas and many of them showed traces of crude. Only a few turned out to be completely dry. An unusual feature of these exploratory holes was

that they were drilled more than 6,600 feet, while most of the 200 producing wells had depths near 5,280 feet. The most promising exploratory hole was located near Salamonvar.[50]

The only noteworthy discovery of the war years turned out to be the Hahot field in 1942. It accounted for one barrel of each ten that had been produced by MAORT of RHT during the war.[51] Hahot was different from the other three fields because of the unique geological formation of its reservoir zone. Pliocene sands formed the reservoir rock under the other fields but the Hahot wells produced oil from a layer of porous Miocene limestone and fractured Triassic limestone. This situation became more intriguing when geologists discovered that the two limestones did not form the primary "mother rock" for the entrapped oil. Evidence showed that the oil in the Hahot field also originated in Pliocene sands and migrated into the pore space of the limestone core over geological epochs.[52]

The favorable ratio between productive and nonproductive wells also held true in the Hahot fields. Of the 9 wells, MAORT of the RHT drilled in this region, only two were dry holes. The wells produced through one-eighth to one-quarter inch beans at a GO ratio of 1,163 cu. ft./bbl. The gas production of this field was low in comparison to the quantity of crude, the reason being that the crude was pressured upward by water and the recovered gas was obtained from the crude in which it was dissolved.[54] (For crude and gas production figures, see tables 1 and 2.)

In comparison with the Budafa crude, the Hahot crude was heavy and contained paraffin. In 1943, a field engineer complained that the ". . . crude was very paraffinous; and during the winter, special go-devil crews had to keep running go-devils through the flow lines."[55]

The crude contained little gasoline, more kerosene and much heating oil. Because of the presence of unusually large amounts of sulphur, the Hahot crude was not mixed with the crude from the other fields, to accommodate the refinery plants.[56]

The peculiar reservoir conditions rendered the generally reliable estimation of recoverable reserves impractical. Geologists could not determine with any accuracy either the porosity or the permeability of the pays. These two figures would have been necessary to calculate the field's total pore volume.[57]

Administrative and Financial Developments

During the war years company officials occupying interlocking positions on the Board of Directors, Executive Board, Board of Supervisors and in the General Assembly of Shareholders searched for solutions to a recurring, twofold problem: what to do with the company's profits which were increasing and accumulating year after year and how to conceal them from outsiders.

In long sessions of different board meetings, the officials discussed the choices at their disposal. They knew that if they succeeded in persuading state officials to approve a series of postponements (or grant an indefinite suspension) of regular General Assembly of Shareholders meetings, they would not have to submit copies of the annual Balance Sheet for required publication to government and commercial agencies; and the company's financial records would not have to come under annual public perusal. During the same meetings the directors evaluated investment opportunities for the company's profits. Some of these were directly related to the company's operation, as the building of a refinery complex and the construction of pipelines. Others were

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unrelated, like the buying of multi-level buildings in Budapest.

The first Board of Directors meeting during the war years, on March 3, 1942, reflected the twofold concern of the directors. Hauer asked whether it would be prudent to postpone or even perhaps indefinitely suspend the up-coming General Assembly of Shareholders meeting because the disclosure of the previous year's business activity "would evoke undesirable reactions as the public had no understanding of many important factors"[58] in the operation of the company. The directors decided only to postpone the regular May General Assembly of Shareholders meeting to October 1942. Before the conference closed, Geocze asked Graf, chief expert of the company's books, to suggest to the board members within fifteen days, ways to reduce the size of the company's profits through "bookkeeping techniques (konyvelestechnikai csokenesere)."[59]

Participants of the May 7, 1942, Board of Directors meeting listened to an involved presentation by Papp. The chief executive explained an accounting procedure which would aid the directors in their attempt to conceal some of the company profits on the 1941 Balance Sheet. He said that oil producing companies customarily employed "bookkeeping techniques" which permitted them to capitalize the cost of searching for oil.[60] (Indeed, the Supplementary Contract pp. 2-4 made provisions for this type of maneuver.) After the excavation of oil started, the companies subtracted from their earnings a certain portion of the capitalized cost of exploration each year until the entire cost was met. The size of each year's subtracted portion was determined by a ratio formed by the actual amount of oil under the field. The advantage this graduated retirement of the cost of exploration offered was that it did not entail a corresponding reduction in the company's capitalization. In other words, the company's accounting of the initial expendi-

tures as assets remained the same even though those expenditures were fully recovered within the span of a few years.

Following this technique, the company capitalized 7,975,077 pengos. From this capitalized cost of exploration, the company amortized 948,122 pengos up to December 31,1941. This left the cost of exploration account with an outstanding balance of 7,026,954 pengos. To retire this, the company planned to enter 6,433,668 pengos on the liability side of the balance sheet and balance it with profits made in 1942. The capitalized cost of the Mihalyi exploratory well of 593,286 pengos (This amount could have exactly retired the total capitalized cost of exploration) had to remain for the time being, on the company's account of investments because the well produced saleable carbon dioxide used in the manufacturing of dry ice.

Papp continued to describe other ways and means to either hide or lay away some of the company's profits on the 1941 Balance Sheet. He said that from the General District Expense account, the company capitalized 379,652 pengos claiming that this amount was necessary to cover drilling expenses. He proposed that in the future the company should, "through retroactive bookkeeping procedures (utolagos konyvelesi muvelet vegrehajtasaval),"[61] enter every item of the General District Expense account also on the Cost of Production account.

In 1938 and 1939, MAORT contributed 243,833 pengos toward the state's road building program, as one of the company's few tax obligations. Consequently, the company capitalized this amount and retired 10 percent of it each year. The remaining 170,683 pengos had been handled as an operation expense. In order that this amount would reduce the company's earnings, Papp suggested that it be entered on the liability side of the 1941 Balance Sheet.

The Roads account, constituting the company's own road and bridge building maintenance expenses, totalled 748,316 pengos up to December 31, 1941. As a matter of course, the company capitalized this amount. Papp noted that this practice would have to be changed because the roads and bridges could never be sold as entities. Their costs could be recovered only partially in the increased value of the land surrounding those improvements. However, when the company's operation moved to other areas, the value of the land would decrease. Therefore, the expenses under the Roads account should not be capitalized, it should be transferred and placed on the Operational Costs account.

Papp informed the other directors that he planned to set up two sinking funds before the exact size of the company's profits were determined. One would amount to 1,000,000 pengos and would be labeled as Retirement Fund. The other, called Reserve Fund, would consist of 2,000,000 pengos. This money would be used to satisfy all or some of the company's debts and other financial obligations which incurred before the sequestration took place and which the government-controlled MAORT of the RHT refused to honor. Also, from this reserve, the company would pay for expenses which could not have been foreseen or estimated, such as the state's recently established military supply and equipment tax.

Closing the meeting, Papp stated that if the dividends could not be paid out as planned, and at this time it appeared that they could not, they would be deposited on the Undistributed Dividends account. He also noted that as in the past, no more than 10 percent of the company's profits could be set aside for this purpose.[62]

The next Board of Directors meeting took place on September 17, 1942; and each board member, except Dinda, attended the session. With a

measure of disappointment, Papp reported that the establishment of the two sinking funds (Reserve Fund of 2,000,000 pengos and Retirement Fund of 500,000 pengos) could not be accomplished as planned.[63] In connection with these funds, two directors, Geocze and Temesvary, conferred with Dr. Janos Erdo, a judge at the Royal Hungarian Court of Firms. Erdo advised that the funds could not be set aside before the determination of the company's profits for the year, because the shareholders would be denied fair share of the profits. Moreover, such financial maneuvers violated the articles of the Commercial Code. The judge noted that after the company's financial officials proposed the size of the profit and the shareholders approved it, the reserve funds could be established provided the shareholders did not object.

The directors discussed the problem presented by the reserve fund and agreed not to pursue a course of action which would reduce the company's profits. Rather, they searched for alternative ways to approach the difficult matter. After an exchange of ideas, they decided to leave the 2,000,000 pengos with the profits and formulate plans which would apply to all profits at a later date.

Papp informed the directors that the company's bylaws required that the annual General Assembly of Shareholders meeting convene during the first six months of the year. The 1942 meeting could not be held during the specified time because several directors were engaged in negotiations with state officials over the compensasation issue related to the company's sequestration. The company notified the Minister of Commerce of this and was granted a justifiable delay until the middle of autumn.

Toward the end of the board meeting, the directors discussed a sensitive matter in the operation of the company. They reached the con-

clusion that Department X in the Ministry of Industry, under the leadership of Karoly Roth had paid little or no attention to the company's financial situation in general or to the company's accumulating large profits in particular. The present company leaders were eager to care for and improve on both these financial aspects; therefore, the directors decided that to safeguard and enhance the company's financial interests, they would invest the company's large, accumulated, liquid assets in a variety of enterprises. Determining the details of this would be postponed to the General Assembly of Shareholders meeting.[64]

The annual General Assembly of Shareholders opened on October 8, 1942, several months past its regularly scheduled time. Papp represented by proxy 24,997 shares, while Dinda, Goecze and Hauer each represented 1 share. Papp informed the shareholders that no invitations could be extended to the foreign owners Lieb, Ruedemann, Bannantine, Eastabrook and Schudel because of the war in progress. The company's profit was set at 15,514,824,829 pengos ($2,730,609) for the 1941 year. Because no dividends could be paid out, Papp noted that 7,000,000 pengos of the profit would be used to increase the capitalization of the company and distributed among the shareholders in proportion to the number of shares they had already owned. This way the company's value reached 40,892,996 pengos.[65]

Papp reported that the company had set up an Employees' Accident and Welfare Fund in the amount of 500,000 pengos. Workers, who through their services had demonstrated their value to the company, could receive financial assistance from this fund in case they experienced some hardship that was not directly their own making. This fund could also be used for education that would eventually benefit the company. The Board of Directors would approve deserving employees for aid after

their names were submitted by the board's president. Institutions which aided the operation of the company or enhanced the company's reputation could also receive financial assistance. Motivated by similar considerations, Papp noted that the company also set aside 10,000 pengos for workers' housing and the building of a Cultural and Self-Improvement Center.

The pengo amounts to increase the company's capitalization, Retirement Fund and Employees' Accident and Welfare Fund, monies set aside for the Cultural and Self-Improvement Center and a special Reserve for Unexpected Taxes added up to 11,760,000 pengos. Subtracting the grand total of these sums from the 15,514,829 pengo profit, left the company 3,754,829 pengos. This final amount the directors decided to bring forward and add to the 1942 operating budget.

The last activity centered around the election or reelection of members to the Board of Supervisors. Dinda, Goecze, Hauer, Konek, Papp, Abel, Blaho, Gyulay and Vajk received votes to become, or remain members of the board.[66]

Because of the generally unsettled and confusing situation in the country, neither the Board of Directors nor the General Assembly of Shareholders met during 1943. However, toward the end of that year a committee consisting of Walter Graf, Dr. Gabor Temesvary, Zoltan Weniss and Bela Pataky[67] met and prepared a proposed balance sheet for the 1942 business year. Members of the committee were ready to present their work on February 28, 1944.

To discuss and approve the committee's work, the Board of Directors held an official meeting on June 14, 1944.[68] They established that the value of MAORT of the RHT was 40,892,996 pengos at the time of the sequestration (December 20, 1941). This amount consisted of the capi-

talization of the company, the profit the company had earned during the year, and the amount others still owed the company at the end of the year. To have a "price tag" indicating the value of the company was important for the final settlement between the Hungarian government and Standard Oil Company at the end of the war. During this meeting the Board of Directors acted as if they were the members of the General Assembly of Shareholders--indeed, most of them held positions in that body.

Regarding the Balance Sheet for 1942, Papp and the other directors agreed that the profit of the company should be set at 33,498,613 pengos. Because distribution of dividends would not be accomplished, the directors decided to use the profit to increase the capitalization of the company and issue new shares in the amount of the profit. Because of this the company's capitalization reached 69,974,161 pengos.[69]

Only a balance sheet could offer information regarding the company's financial state in 1943. There were no meetings, conferences or assemblies of any kind with minutes to check back on. This year MAORT of the RHT earned 36,611,012 pengos profit. The company's capital (buildings, machines, equipment, etc.) reached 69,570,984 pengos; the managers kept 20,566,191 pengos worth of inventory on hand; and the cost of production was 46,322,216 pengos which included 3,000,000 pengo for taxes. This year the value of the company reached 141,986,778 pengos.[70]

Because of military defeats abroad and economic disorders at home, Papp wrote on June 1, 1944, to the Minister of Commerce and Transportation requesting an indefinite postponement of the obligatory General Assembly Shareholders meeting.[71] In his reply on July 28, Dr. Paul

Jablonszky, who was a ministerial advisor, granted permission to delay the meeting until December 31, 1944. The meeting was never called to order and no balance sheet was ever prepared for the year of 1944.[72]

In 1938, the year MAORT was founded, the company's value was 10,712,000 pengos ($1,821,040). At the time of the company's sequestration, its assets were 40,892,000 pengos ($6,951,640), and three years later it reached 141,986,000 pengos ($24,137,751). Most likely, by the end of 1944 the value had passed the 200,000,000 pengos ($34,000,000) mark. A 10,000,000 pengo investment in a few exploratory wells had grown over seven years to 200,000,000 pengos' worth of industry, demonstrating a twentyfold growth in monetary value and much more in economic importance. MAORT of the RHT became Hungary's third largest industrial enterprise at a time when industrial employment had increased from 289,000 in 1938 to 392,000 in 1943 (not including the recovered areas). For the first time the value of industrial products exceeded the value of agricultural products.[73]

The profit level and value of the company had increased so rapidly, not because the company received more for a barrel of crude over the years, but rather because the company's volume of production had grown so prodigiously. The price the company received from the refineries for its crude from the beginning to the end of World War II had not changed substantially. The initial quote of 12 pengos ($2.11) for a barrel in 1938, rose to 14.38 pengos ($2.53) in August 1939 and again rose to 14.80 pengos ($2.61) six months later. The final adjustment in January 1941 was a small amount (15 pengos or $2.65 a barrel); and on April 1, 1945, the price was still the same.[74]

The company had tried on several occasions for price hikes. When Papp had requested more money for the high-quality crude from the

Lovaszi field,[75] he was turned down on the grounds that the improved quality of crude would not increase the volume of the distilled products; the better quality could not be passed on to the consumer in higher prices; and the government had been taking special measures to maintain price stability across the country.[76]

Because Papp was determined to receive a higher price for this vital commodity, he asked the National Oil-Refineries' Association to support the company's position again on December 14, 1943. This was also to no avail.[77] On January 15, 1944, the Minister of Industry was asked to examine the merits of the case. This time company officials presented the same reasons why they wanted a price increase with one addition that amounted to a not-so-veiled threat.[78] The letter stated:

> Under normal conditions, in time of peace, we could find ways and means to defend our just interest and bring around the refineries to see the situation from our point of view. But, that we could not do without endangering the continuous supply of crude oil which has such a large military importance.[79]

In spite of this last request, the price did not change for the duration of the war.

While particular government organizations denied any substantial rise in the price of crude, Karoly Roth ordered and enforced general pay raises for all employees. These measures reduced the company's profits. During the war years the price of crude remained the same, yet the hourly wages of physical workers increased from 0.40 pengo ($0.07) in 1938 to 3.00 pengos ($0.51) in October 1944. This was a 650 percent increase.[80]

The Hungarian government and Karoly Roth had several salient reasons for increasing and maintaining higher wages for MAORT of the RHT employees. The company was both singular and vital in the nation's war effort. Roth intended to keep the workers satisfied and to enhance

their awareness of their importance and that of the service they rendered. He was also convinced that government generosity would move the workers closer in their devotion to the state.[81]

On the day the Hungarian government sequestered the company, Papp issued a memorandum to all employees. He informed them that he was appointed to manage the company and requested "with respect and emphasis" that "in my responsible assignment . . . each employee help me in every instance."[82] He stated: "We must demonstrate to the owners of the company and above all, our Hungarian country that we can continue the work of the company."[83]

At Roth's request, Papp ordered a 23 percent across-the-board salary increase effective on January 1, 1942. Roth knew that workers had asked Ruedemann for a general wage hike in October 1941. The American manager refused explaining that the Hungarian government had ordered a wage freeze to control inflation. Now that the Hungarian Treasury had become the temporary owner, Roth intended to prove Ruedemann wrong.[84]

With the 23 percent general pay raise, the difference between the lowest and highest paid employee again increased. American managers would have found this counterproductive. (For exact salary schedules, see table 9.) Roth did recommend continuing the social and cultural benefit programs as the Americans would have done.[85]

Directing the company to cover the increased payroll was not the only financial policy of the government injurious to MAORT of the RHT. To control the rather mild 10 percent yearly inflation during the war, the government suppressed the price of raw materials but allowed the manufactured goods to command a price rise of 200 to 250 percent. Companies, such as MAORT of the RHT, which used large amounts of these man-

ufactured goods faced considerable reductions in their profit levels.[84]

Compulsory acceptance of unwanted work projects from the Hungarian government added to the hardship and frustration of MAORT of the RHT managers. Throughout the war years, the Ministry of Industry assigned certain tasks to the company which turned out to be burdensome on the company's material and financial resources. The unsolicited work projects invariably involved the Hungarian government's determination to find oil under the recently recovered lands. Soon after Hungary regained North Transylvania from Romania as part of the Second Vienna Award on August 30, 1940, a team of Hungarian state geologists began searching the area for hydrocarbon resources. By late 1941, the explorers located a promising natural gas field in the vicinity of Erdoszentgyorgy.[87] Following six months of preliminary negotiations, representatives of MAORT of the RHT and the Ministry of Industry agreed on the details of the construction of a gas pipeline connecting the source at Erdoszentgyorgy with two nearby cities, Nyarszereda and Marosvasarhely.[88]

In accordance with the Minister of Industry's 104 293/X 1942 order, Karoly Roth officially appointed MAORT of the RHT as the builder of the trunk line and allocated to the company 2,800,000 pengos for expenses on June 20, 1942.[89] The final details were settled and the contract was signed by Roth and Papp on July 11, 1942. The company was to construct the natural gas pipeline using 10-inch diameter pipe, and it would be approximately 25 miles long. MAORT of the RHT had to employ its own personnel and use its own equipment and machinery to complete the work. Moreover, it had to ". . . regard the whole project as if it were its very own."[90] The Minister of Industry would come to the aid of the company in case difficulties developed with the procurement of cer-

tain scarce materials on account of war time shortages. The company had to finish the construction within four months of the signing of the contract. The last stipulation gave the right to the company for a 25 percent profit after all expenses had been met.[91]

MAORT of the RHT completed the trunk line within the specified time period; however, the total cost of the project rose to 6,500,000 pengos before the 25 percent profit surcharge. The result was that the company not only did not earn a profit, but it also had to absorb the difference between the original estimated cost and the final actual cost of the project.[92]

In 1943, a new Hungarian state-owned company, The Royal Hungarian Mineral Oil Production Works, decided to explore the northern part of the Alfold. State geologists located the first test well in the nook formed by the Tisza and Koros Rivers, in the vicinity of Kisasszonyszolo (west of Kunszentmarton town) on a gravitational maximum. In this connection, Papp reported that "MAORT was ordered to perform the drilling at its own cost to a depth of 7,626 feet."[93] The workers found hot salt water, later used for bathing and medical treatment, but no trace of oil or gas.[94]

Between 1941 and 1945, the managers of the company had to fulfill several additional government orders. Whenever the government decided to increase the number of soldiers guarding the fields and plants, the company had to undertake the construction of barracks for the additional men.[95] When MANAT (German-Hungarian Oil Company) was formed in 1941, MAORT of the RHT had to lend money, equipment and personnel to them in addition to performing certain exploratory and drilling tasks.

In October 1944, the Minister of Industry assessed the country's

refinery situation in view of the destruction of several plants by heavy air raids. He ordered the immediate construction of ten minor distilling plants to be located in different parts of the country. MAORT of the RHT received orders to build two of them (one near the Budafa field and another at Ortahaza) with the possibility of a third to be constructed at the company's railraod station at Ujudvar.[96]

As requested, the company started constructing the refineries and by December 22, 1944, had completed the concrete foundation of each plant. However, at this point the building activity had to stop because the distilling equipment hadn't been delivered. Workers were then ordered to begin laying a 4-inch diameter pipeline leading from the company's crude storage tanks to the future refineries.[97]

This pipeline construction was not the only one required of the company by the government. In late 1944 there was another.

> In addition, the Hungarian Ministry of Industries, in compliance with the wish of German experts, prescribed the construction of a major pipeline for the transportation of crude. It was to run from Bazakerettye by way of Ortahaza to the northern part of Kormend, from there a deviation to Gyor on the Danube by way of Celldomolk; the other branch was to continue west, for the time being, as far as Vasszentmihaly.[98]

This was a major order. The pipeline network had to cover a distance of over one hundred miles, and to finish the job would take over a year. However, by December 15, 1944, workers had completed the first stretch of about 9 miles between Bazakerettye and Ortahaza. Here they stopped because they had no more pipe sections. Even the completed interval did not use the proper type and size pipe. The company had to use 6 5/8-inch drill-pipe casings because nothing else was available. Papp protested to the government against the use of this kind of pipe from the company's own supply and added "that in due course we would claim damages for using our pipelines and casings for such purposes."[99]

While some work crews built pipelines and others refinery plants, still a third group had to begin construction of loading racks to facilitate the pipeline transportation of crude. The company had to build one additional set of loading racks at Ortahaza with a daily capacity of 3,000 barrels. This project was completed by the end of 1944, and the government began negotiations for another one at Gelse.[100]

A recurring question throughout the war years which the Board of Directors of MAORT of the RHT had to try to answer concerned the distillation of aviation or 100-octane gasoline. Papp provided the definitive report on this topic after the war when he wrote:

> In the course of the war, the question has several times been touched upon whether or not aviation gasoline could be produced in Hungary. Military circles requested MAORT to try to produce isopentane from the gasoline of the Budafa and Lovaszi fields, as it would be one of the ingredients of aviation gasoline. In view of the fact that the gasoline obtained at Budafa contains 15% isopentane and the isopentane content of the Lovaszi gasoline is 8%, the erection of a plant for producing yearly 25,000 barrels of isopentane would be required. Plans had been drawn up, but up to and including December 22, 1944, they could not be carried out, as the quantity of steel required was not available, and on the other hand, war events rendered execution impossible.[101]

The only project during the entire war period which MAORT of the RHT officials considered as needed was the building of its own refinery complex. Such an acquistion would accomplish three goals. To the existing upstream (extraction) operation, a refinery would add a downstream capability. For the company's increasing profits, financing the construction of the refinery would present a lucrative, long-term investment opportunity. The acquisition of a refining operation would place the Hungarian managers in a favorable light with the American managers after the war. With the future in mind, only a distributing or marketing component would be left to build after the war in order to

turn MAORT into a fully integrated affiliate of the Standard Oil Company.

In this connection, Papp approached Jozsef Varga, Minister of Industry, on October 7, 1941. He informed the government official that MAORT would like to take advantage of the option in the Contract of 1933 which guaranteed the company the right to build facilities related to the oil business. The plan called for the construction of a refinery with a capacity to distill three million barrels of crude a year, at Szony, on the left bank of the Danube, 40 miles west of Budapest. With permission, it would begin ground-breaking operations at the beginning of 1942.[102]

On the same day that Papp contacted the Minister of Industry, Ruedemann sent a telegram to Rockefeller Plaza. What Ruedemann wrote was indicated in a letter sent to the U.S. Secretary of State on November 3, 1941, from T. R. Armstrong, a Standard Oil executive. Armstrong's letter read:

> On October 7, we received a cable . . . and we were advised that MAORT had announced that it would build a new and modern refinery. The representatives of th stockholders in New York answered the MAORT cable on October 10 advising that "we would prefer not to build a refinery at this time." On October 13, the MAORT management cabled back to us stating that it was 'impossible to follow your preference because the Hungarian Government had accepted MAORT's announcement of intention to build a refinery.' No answer has been made to this cable.[103]

On the surface, Rockefeller Plaza's rejection of the refinery project was a surprise; however, one had to bear in mind that Hungary's political and military alignments with the Axis Powers were well known. At this time, everyone concerned was aware of the fact that Rockefeller Plaza had only nominal control over MAORT; a tacit acceptance of this could be found in the continuation of Armstrong's letter to the Secretary of State:

> Although details are lacking as to the type and capacity of the proposed refinery, we estimate from experience elsewhere that under present conditions two or three years will be required for its completion, and our guess concerning its cost would be roughly 25,000,000 Pengos. The management of MAORT has proposed to finance the refinery construction through current income plus bank loans, and we agree that the Company's financial condition is sufficiently strong to permit them doing so, during this period when foreign exchange movements have ceased and dividends cannot be remitted to New York. All of the expenditures for the refinery would be made in pengos and no dollar exchange would be involved.[104]

The initial reaction of the Minister of Industry to Papp's first proposal was so encouraging that by January 2, 1942, Papp had ready a detailed outline of the planned refinery complex. Prefacing the draft were several considerations of national importance. If the company's crude production were increasing at the projected rates, the amount of uplifted crude by the end of the year would exceed the capacity of all Hungarian refineries. Exportation of crude oil (because of insufficient distilling volume) would not be as profitable for the nation's economy as fully processed petroleum distillates. The new refinery would improve upon this situation. Moreover, in spite of an adequate crude supply available in Hungary, the country still had to import heavy distillates (high viscosity oils). The new refinery would have facilities to produce different weights of lubricants and stop reliance on foreign products.[105]

Regarding the availability of transportation and the supply of materials, the location of the plant at Szony on the Danube offered several distinct advantages. The place was almost equidistant from Budapest and Wien, and was less than one hundred miles southeast of the prosperous Czechoslovak city of Bratislava. Each city enjoyed fine road, rail and water connections to Szony. Through a 6-inch pipeline, crude oil of the Zala field had already reached Almasfuzito (Vacuum Oil

Refining Company), a town only six miles from Szony. A location so near a river also provided the refinery with plenty of water. The plant needed 650,000 gallons an hour for its regular operation.[106]

MAORT officials calculated that they needed two years to build the refinery on a 60-acre site to be purchased from Dr. Bela Lowinger. In order to remain within the projected time frame, they would have to receive extraordinary cooperation from the government which had already been on the brink of being overwhelmed by the demands of war. The company needed different materials which were especially scarce because of the war and special licenses to import machinery not available in Hungary. At the end of the detailed refinery plan, Papp warned that without the complete support of state agencies, the refinery could not be built.[107]

On March 2, Varga approved MAORT's intention to acquire a downstream capability as presented in Papp's January 2 letter. The Minister of Industry singled out only one instance needing further attention. He noted that from the point of defensibility, the proposed location of the refinery exposed it to easy attacks from the air and asked the designers to take this military consideration into account in the preparation of the final plans.[108] On April 13, Papp submitted an expanded version of the plans and included only one major change: construction of the refinery would take three instead of two years.[109]

After April 13, 1942, only scant information regarding the history of the refinery-building project was available. Some time in the spring, the Minister of Industry issued a license that construction of the facility could start. The final plans for it were prepared by an affiliate of Standard Oil Company, the Societe Petrolifora Francaise.[110] In 1943, an intelligence report noted that

> Aerial reconnaisance shows that a new refinery has been under construction on the Danube, approximately two miles east of the Almasfuzito refinery. There is not yet sufficient material available to permit the estimating of the capacity of this refinery.[111]

At the end of the war the refinery still had not been completed. Papp remembered that Emil Szakvari, Minister of Industry under the Szalasi government

> . . . forbade proceeding with the construction work. This was very costly for MAORT as very many preparations had been made incidental to the construction, namely, the ground had been purchased and materials and supplies necessary for foundation work for offices, dwellings, etc. were acquired.[112]

This was the last piece of information concerning the refinery.

Germany's Role and Share in the Oil Production

Ever since the first Budafa wells started flowing, Germany had displayed keen interest in Hungary's oil resources with the intention of gaining access to as much oil as possible. At the outset, German businessmen came to negotiate for oil concessions and to purchase various petroleum products. Later, German military personnel arrived and demanded that Hungarian state authorities sell larger and larger quantities of crude and refined products to Germany. At the same time, German military-technical experts started periodic visits to MAORT of the RHT's offices and fields in order to ascertain that the company was extracting oil as fast as it could and as much as it could. During the war years, there seemed to be no end to Germany's need for Hungarian oil. Months after a representative of the Provisional Hungarian Government signed an armistice agreement on January 20, 1945, in Moscow, the company and refineries were still exporting large quantities of crude and refined oils to Germany.

Soon after the first Zala County wells started producing oil in

January of 1939, a representative of the German oil firm Wintershall Aktien-Gesellschaft of Kassel, approached Geza Bornemissza and expressed his interest in obtaining hydrocarbon exploration rights for the southeast region of Hungary.[114] Because the German company indicated that it had only a small amount of money to invest, Hungarian government officials allowed the negotiations to lapse.[115]

The following year, under changed conditions, the talks resumed. This time, Jozsef Varga advised his negotiators to respond encouragingly to the German company's offers. Wintershall, now a member of a five-company consortium, planned to have more capital to invest in the exploration.[117]

ON August 26, 1940, Jozsef Varga, on behalf of the royal Hungarian Treasury (which was the repository of the right to grant concessions) and Wilhelm Zentgraf and Johan Zimmermann, representing Wintershall, signed two documents. One was an exploration and option agreement and the other a concession agreement.[110] The first granted the right of the German firm to explore an area of 7,150 square miles in southeast Hungary, bounded on the west by the Danube River, on the south by the Yugoslav border, on the east by the Romanian border (as of August 30, 1940) and on the north by an imaginary line formed by the towns of Solt, Kecskemet, Szarvas, Mezotur, Kisujszallas, Puspokladany and Berettyoujfalu. (See map on page 17.) Wintershall undertook to invest a minimum of 4 million pengos ($649,000) in geological research and test-drilling for the next seven years.

The text of the exploration and option agreement was similar to the one Eurogasco obtained from the Hungarian government with one major exception. The first paragraph, describing the boundaries of the exploration area, contained a provision which specified that "if Hungary

recovered areas east and south of the present exploration area, the Minister of Industry would offer those areas to be added to the present concessional area, under the same conditions to Wintershall."

According to the concession agreement, which was concluded and signed by the same representatives on the same day as the exploration and option agreement, Wintershall had to provide 7,500,000 pengos ($1,275,000) for the capitalization of the new Hungarian-German Oil Company. The new company had the right to export oil and gas but only after the internal needs of Hungary had been satisfied. (MAORT had no right to produce for export.) The new company had the right to operate for 40 years in Hungary with options to extend this time limit up to 70 years. Other provisions of the concessional agreement were similar to, or the same as, the agreement regulating the operation of MAORT.[120]

After Varga, Zentgraf and Zimmerman drafted and signed the documents on August 26, 1940, the Royal Hungarian Council of Ministers approved them on September 18, 1940. Miklos Horthy, Regent of Hungary, consented to their presentation to the Hungarian Parliament on November 23, 1940. Recommending the contracts for acceptance, Jozsef Varga said the following to the members of the House of Representatives:

> Past experience indicates that discovery of hydrocarbons in southeast Hungary would require investment of very large capital . . . for instance, drills would have to be able to penetrate into the earth 6,600 to 9,800 feet deep. The German firm took upon itself this task, which the Treasury could include among its projects to be accomplished only many years from now.[121]

Members of the House of Representatives voted to grant the concessions to Wintershall on February 20, 1941, and members of the upper House on March 21, 1941.[122]

While the various Hungarian governmental bodies were approving Wintershall's concessional agreements, Hungary recovered North-

Transylvania as the result of a conference held in Vienna and attended by the representatives of Hungary, Germany and Italy. To show that the country was a deserving and grateful recipient of this "Vienna Award"[123] Hungarian politicians pledged that rights to search for and develop mineral resources in the recovered area would belong to Germany. Because Italy was also a participant in the conference, Hungarian politicians promised that they would accord favorable treatment to Italian interests in other areas regained by Hungary in the course of the Second World War. Within a short time, both Germany and Italy found occasions to hold Hungarian politicians to their word.[124]

First, representatives of Wintershall asked for the hydrocarbon concession rights of North-Transylvania in accordance with the pledge given to Germany in Vienna and to Wintershall in the first paragraph of the Exploration and Option Agreements. Without delay, the interested parties drafted an additional document granting the German company's request and signed the document on March 1, 1941. This Supplemental Agreement I was completed so quickly that members of the two houses of the Hungarian Parliament received it on time to vote on it simultaneously with the two basic agreements on March 21, 1941.[125]

Soon, a second supplemental agreement followed the first one. On April 11, 1941, Hungarian armies crossed the Yugoslav border and began a three-year occupation of the northern part of the Balkan country. A few months later, the Hungarian-German Oil Company, a subsidiary of Wintershall, asked for the hydrocarbon exploitation rights of the occupied area. Geza Bornemissza honored the Germany company's request and the parties signed the Supplemental Agreement II on September 1, 1941.[126]

Before the Hungarian Parliament could ratify Supplemental Agree-

ment II, several parties registered their objections against the latest concession. Paul Ruedemann appealed to the Ministry of Industry and reminded Geza Bornemissza that at the time of the signing of the concession in 1933, government officials promised the small but important region of Murakoz (formed by the confluence of the Drava and Mura rivers in Yugoslavia and located across the border from the Zala County oil field) to Eurogasco on the premise that the region and oil fields were located on the same geological structure.[128] Two Yugoslav oil companies, the Medjunursko Petroleumsko D. Zagreb and the Panonia A. D. Belgrad Hungarian, notified the Hungarian government that they possessed valid contracts awarded by the Yugoslav government (recently overturned by the German army) and that they intended to continue their work. Finally, the large and important Italian state oil company, the Azienda Generale Italian Petroli Roma (in short AGIP) called Hungarian government officials' attention to the promise they had made to Italy during the Vienna conferences and requested that they reconfirm the company's concessions in the area granted by the Yugoslav government just before it was overthrown by the German forces on April 6, 1941.[129]

Hungarian state officials examined the merit of each request and decided to uphold and promote the interest of Germany in almost every case. The Minister of Industry confirmed the territorial provisions of Supplemental Agreement II, expanding the German company's holdings to 11,700 square miles. He rejected MAORT's claim for Murakoz. He voided the two Yugoslav oil companies' contracts, and he truncated the Italian oil company's previously granted concessional rights.

To insure the continuation of explorations and excavations started by the Yugoslav companies, Bornemissza fostered the establishment of two new multinational oil companies. In 1942, a German-Italian

company (owned in the ratio of 60 to 40 by the respective states) received the hydrocarbon rights for northwest Yugoslavia. A Hungarian-Italian company (controlled in the ratio of 55 to 45 by the respective countries) gained the same rights in northeast Yugoslavia and southwest Transylvania. The complicated concessional arrangements and the quick formation of multinational companies appeared to have satisfied Germany and Italy at the expense of Yugoslavia and Romania.[130]

As soon as the legal matters were completed, Wilhelm Zentgraf, formed the Magyar-Nemet Asvanyolajmuvek Reszvenytarsasag (Hungarian-German Mineral Oil Works Company or MANAT). The new company employed geologists and rented instruments of the Royal Hungarian Geological Institute and also brought in German engineers and equipment. The scientists with their instruments carried out intensive geophysical investigations of the concessional areas. Torsion balance and gravity meter surveys covered the general area and the important gravity anomalies were checked by seismographic surveys.[131]

Between the fall of 1941 and the summer of 1944, MANAT, operating 8 drilling rigs, drilled 115,000 feet and bored 26 test wells at a cost of 30,000,000 reichsmarks (49,000,000 pengos or $9,310,000).[132] Under both of its concessional areas (in south Hungary near Totkomlos and the Romanian border and in the Murakoz region), MANAT discovered large deposits of natural gas but no crude oil in commercial quantities. In August 1944, officials of MANAT decided to stop operating in the areas and ordered all personnel and equipment to be evacuated from Hungary to Germany.[133]

The departure of the German-Hungarian company did not pass without serious consequences for MAORT of the RHT. From the beginning, Zentgraf was aware of Ruedemann's objections to the German company's

acquisition of the concessional area in the Murakoz. He remembered the American oil man's arguments that the area should really belong to MAORT because the area had been promised to Eurogasco and because the Lovaszi reservoir structure extended under the Yugoslav border. Now that MANAT was ready to terminate its operation in Hungary, Zentgraf, hoping to reduce the losses of his company, wanted to sell the concessional rights to Murakoz and the improvements upon it (geological research work and gas wells) to MAORT of the RHT. The Board of Directors of the Hungarian-American company rejected the offer.[134] MAORT of the RHT had no need for six additional gas wells when they were allowing gas to escape from their own wells. The Hungarian company officials explained that if they needed the gas of the Murakoz fields, they needed it in the reservoir formation under the field to propel the crude to the surface at Lovaszi. Now that the German company was leaving anyway, they saw no reason to purchase the gas wells, especially not at the inflated price the German executives were quoting. Zentgraf turned to members of the Hungarian government and requested their presence at the transfer negotiations. Within a short time, on August 17, 1944, Simon Papp signed the purchase contract in spite of his and his fellow board of directors' vehement objections.[135]

MAORT of the RHT became the owner of MANAT's six gas wells in the vicinity of Alsolendva (on the other side of the Yugoslav border opposite MAORT of the RHT's Lovaszi oil field) which had been occupied by a Hungarian army since Hungary attacked Yugoslavia on April 11, 1941. The Hungarian-American company also gained the right to search for gas deposits (but not for crude oil) in the region. For this acquisition, MAORT of the RHT had to pay 6,000,000 pengos ($1,020,000) to MANAT on the day the contract was signed, and 4,000,000 pengos ($680,000) six

months later. On behalf of MANAT, Wilhelm Zentgraf and Karl Ventz signed the agreement.[136]

Four years before Papp had to sign the transfer contract with MANAT, Paul Ruedemann had foreseen that the proximity of the border would be a source of future problems. He knew that the Alsolendva gas field and the Lovaszi oil field had shared the same geological structure; however, he was concerned with the relationship that would eventually develop between MAORT and MANAT during the time the two companies operated near each other. Reporting to Rockefeller Plaza he wrote:

> It appears as though Lovaszi will extend for a few locations over the former Yugoslav frontier to the concession now held by the German company, MANAT. (The Murakoz area was returned to Hungary and the Government wished to give us the concession, but the Germans claimed prior right.) They expect to drill across the line shortly. I have suggested indirectly to one of their people that part of the structure extending over the line be given us for exploitation. We want to drill and produce it as though ours and to sell them the equivalent value-quantity of oil produced therefrom at our pipe line terminus at a little above our land f.o.b. This would be good for them because they already have the right to export said oil and their own inland price is double or more of ours. For us it would solve many problems because to get into their part they would want to use our roads. Their well spacings and production rates might conflict with ours, although they state they would like to do as we are doing on the rest of the field. Pressure maintenance would be difficult and, lastly, if they would want us to transport the oil in our lines, it would be very troublesome because our oil is mixed from the three fields. They are sure to ask these priviledges and will make it nasty, if refused. They already asked that we supervise their drilling if they send in a rig with a Croatian crew. This I refused, explaining it would be hazardous for us to undertake such responsibility, and they agreed it would not be fair to expect it.[137]

Dr. Simon Papp, who had to sign the purchase contract with the representatives of MANAT, perceived the situation differently. Writing a comprehensive report about the company's operation during the war, Papp stated:

The MANAT, when its financial resources began to dwindle,

> decided to cash in on the gases encountered in the Paka sands . . . . This idea was most harmful to the interests of the MAORT, because by producing gas from the Paka sands, MAORT would have lost the major portion of the gas [under the Lovaszi field]. . . .
>
> . . . Should MAORT have the right to dispose of this quantity of gas, the life of the Lovaszi field could be prolonged by 10 years. Accordingly, an agreement has been entered into by the two companies, whereby--subject to approval by the Royal Hungarian Ministries of Industries and Finance--MAORT buys for the sum of Pengos 10,000,000 from the MANAT the gas contained in the Paka sand formations. The approvals have been granted on October 28, 1944, and towards the purchase price the sum of Pengos 6,000,000 was duly paid on November 4, 1944.[138]
>
> While MAORT is in fact in need of this quantity of gas, it is very costly at that price, because a cubic meter of gas, the quantity of which was but estimated, involves an outlay of 3.6 fillers net, that is, without cost of production and without the 12% participation by the Treasury. The two Ministries mentioned above paid no heed to the suggestions as to stipulations proposed by the undersigned, but upon pressure by the German Economic Delegate approved the contract. The sum of Pengos 6,000,000 paid was charged to the MAORT. The Board of Directors of the MAORT objected to entering into such an agreement.[139]

The 10 million pengos ($1,700,000) MAORT of the RHT had to transfer to MANAT, for the nominal return value was one of three large sums of money the company lost to wholly or partially German-owned companies. In 1943, Roth skimmed off 11,339,876 pengos ($1,995,818) from MAORT of the RHT's income which the company had earned for its exports of natural gasoline and liquid butane and propane to Germany. He explained his act by declaring that "this amount accrued to the company because of unadjustable differences in the exchange rates between "stable marks and unstable pengos.""[140] A year later, the Minister of Interior took into "safe keeping" 20,581,912 pengos ($3,622,416) of MAORT of the RHT's income stating that the company had exceeded its export quota to Germany for the year. This time, however, company officials were able to reverse the minister's decision and get the money back in early 1945. The large sum lost almost all of its value due to inflation that had been rapidly increasing toward the end of the

war.[141]

In a strong sense, the Hungarian government's inducing MAORT of the RHT to suffer losses of large sums of money was similar to what the government itself had been doing in its relationship with the German government and German business interests. Year after year, the Hungarian government extended credit to Germany and to German companies. When they failed to make proper payments on their loans, the Hungarian government either overlooked those violations or made weak protests to German authorities.

During the war years, the value of Hungarian export items to Germany exceeded the value of Hungary's import items from Germany. The inequality in the value of trade items resulted in a continuously growing deficit of payment for Germany. To redress the situation, the Hungarian government readily and repeatedly raised the ceiling of deficit Germany would be allowed to accumulate. In practice, the Royal Hungarian Treasury extended loans, often without interest, to Germany to cover the deficits.[142] In July 1941, the government allowed Germany to fall in arrears as much as 200 million reichsmarks; in January 1942, 300 million;[143] and in June 1942, 430 million.[144]

The steadily increasing trade deficit often elicited unpleasant verbal exchanges between Hungarian and German officials. In the summer of 1942, Dr. Erik Lanfried, an official of the Reich Ministry of Economy, requested that the Hungarian government extend credit up to one billion reichsmarks. When Hungarian officials suggested that German citizens holding stocks in Hungarian companies should surrender their certificates to Hungarian authorities, Dr. Lanfried replied that such a condition would be considered "unworthy of an ally."[145] Nonetheless some stocks were transferred and larger deficits were allowed. By the

end of 1943, Germany was in arrears up to 1.035 billion reichsmarks. Although no complete record survived, Germany's debt to Hungary most probably doubled in the course of 1944. National Socialist officials of the German Ministry of Finance regarded the Hungarian loans covering German trade deficits as "voluntary contributions" to the common cause whose repayment would be taken up "only after the victorious war."[146]

MAORT of the RHT shared a similar role with the Hungarian government regarding "Accounts Receivable" in Germany. The company's German exports and imports were handled by DAPG. During the war years

> MAORT advanced large sums for materials ordered, which were never delivered, and the DAPG was in arrears on payments for delivered oil. Incomplete records showed a balance owed by German companies to MAORT of 158,866 RM.[147]

Exactly how much was owed MAORT of the RHT could not be found out because ". . . there were no complete records of German liabilities. Records were destroyed in a fire following the bombing of the office by the Russians . . . and the only person, the Chief Accountant, who would have known, lost his life in an automobile accident late in 1944."[148]

Hungarian political leaders viewed the unfavorable balance of trade with Germany as compensation for Germany's assistance in the recovery of certain territories; German leaders regarded the favorable balance of trade as Hungary's contribution to the common cause. Hungary was the much weaker party in its alliance with Germany. This was the price to be paid by one and the ransom to be gained by the other.[149]

The German oil concession's failure to yield oil focused German state and military authorities' attention on Hungary's rising oil production. The interest was always there but MANAT's inability to strike oil and Hungary's becoming an active participant in the war, turned the German interest into demand for oil and military occupation of the oil

fields. Hungary's placing as much oil as possible at Germany's disposal was the result of intense pressure from various sources throughout the war years.

The first traceable German request for Hungarian oil came on November 30, 1939. Montgomery reported:

> The German government on December 18 demanded of the Hungarian government a reply within 24 hours to a peremptory request for an annual supply of 50,000 tons of heavy petroleum . . . this amount could not be supplied locally because it exceeded domestic production which was still supplemented by Rumanian oil.[150]

Less than a month later, German authorities complained that MAORT was not developing its concessional area with deliberate speed and demanded that Hungary grant oil concessions to Germany as soon as possible. Travers observed the following:

> Germans, annoyed about oil production in Hungary, are feeling that the American company is not prosecuting search for new fields with sufficient vigor and is supported by the Hungarian Government in this dilatoriness. Under strong pressure from Berlin, Hungary has agreed that if further oil concessions are given, Germany will be given first consideration.[151]

Within one year, a German company received rights to search for oil in the country's eastern portion.

After Ruedemann returned to the United States in March of 1942, he stated the following during an interview with a State Department official:

> By agreement of May 1940, Hungary agreed to supply Germany 35 thousand barrels of crude oil a month and receive in return some 1.5 thousand barrels of refined petroleum products. In September-October 1941, the Germans showed evidence of being a little worse off, and sent a party of officers to survey the oil situation in Hungary. Mr. Rudiman [sic] understands that 300 thousand barrels of crude are to go to Germany between January and May 1942. The Germans also then began to demand refined oil products.[152]

By May 1941, MAORT was shipping 100 barrels a day of natural gasoline in tank cars from the company's loading station at Ujfalu and

75 barrels a day of liquid butane and propane in bottles to Germany.[153] In June 1941, the Hungarian Vacuum Oil Company started delivering 35 thousand barrels of crude and 8 thousand barrels of gasoline per month to Germany. These consignments were not large enough, therefore

> . . . Germany has demanded Hungarian exportation of 60,000 tons of crude oil this year. But Hungary has refused by saying that it was impossible without an increase in production. Germany then demanded that the wells be opened to full production at once but the company, backed by the Hungarian government, objected that to do so would so lower the gas pressure as to prevent obtaining all the oil available.[154]

Requests from Germany came not only for more oil but also for changes in production methods. In response to one of these, on September 1, 1941, Hungarian authorities signed a contract to sell 40 thousand barrels of crude and 60 thousand barrels of gasoline.[155] The following year came orders to change well distances to bring about higher production rates. Papp reported that on the fields

> . . . the wells were originally spaced 300 m. distance from one another. However, the Royal Hungarian Ministry of Industries conveyed the wish expressed by the Germans that production be increased, and the wells be drilled at a distance of 150 m. from each other. An increase in production was meant also by adding two new units to the drilling rigs.[156]

By the end of October, German authorities demanded that MAORT increase its normal production by 150 to 200 thousand barrels a month.[157]

The significance of Hungarian oil to Germany also found reflection in many German documents. An expert researcher on German-Hungarian relations during World War II observed that

> . . . Hungarian oil wells soon became the second most important source of oil within the German sphere of influence. The significance of this source of oil is attested to by the amount of German paperwork I have found on the subject among the records of the German Foreign Office, the Wehrmacht, and other organs of the Reich government; perhaps every second German document on the Hungarian economy pertains to the exploitation of Hungarian oil resources.[158]

To obtain as much oil as possible as fast as possible, German

authorities often held conferences between German and Hungarian economic experts and frequently initiated personal visits of long duration to Hungary. That Hungarian authorities would attach proper import and gravity to these visits, German authorities usually concluded their trip with a final on-sight inspection of the oil fields and refinery plants.

The German official who most often visited MAORT's oil fields and negotiated with Hungarian officials was Carl Clodius, Chief of the Economic Section of the German Foreign Office. While in some high Hungarian circles Clodius had earned a favorable reputation, apparently he was basically interested in working toward the war aims of his country. According to Miklos Kallay, Prime Minister of Hungary, some Hungarian government and trade officials considered Clodius a "gentleman," so far as a National Socialist official went."[159]

Kallay himself believed that the German representative was ". . . a very decent man, in whom I did not detect excessive enthusiasm for the cause he served."[160] The Hungarian Prime Minister adhered to this belief in spite of the fact that more than once Clodius threatened Hungary's sovereignty. For instance, after some Hungarian trade officials objected to German demands for increased economic contributions and insisted upon freedom of action in domestic matters, Clodius wrote the following reminder to Kallay:

> Take care Mr. Premier! The conviction is beginning to gain ground in Berlin that it is not a good policy for us to tolerate Hungary's independence; for we are getting incomparably much more from occupied countries, especially Czechoslovakia, and also from Rumania, which grows and works for us as we want.[161]

On the other hand, Clodius was capable of making some concessions, but only minor ones. After concluding one of his trips, he reported to Berlin that he yielded to the Hungarians in some matters which

> . . . had to be done if only for psychological reasons, in order not to give the Hungarians the undesirable impression that they had to bow completely to the German demands. As for the rest, all the major German requests have been put through.[162]

A few days later, evaluating his negotiations, Clodius noted that they represented a ". . . significant step in the assimilation of Hungary into the German plans for the economic reconstruction of Europe under German leadership."[163]

Clodius displayed his negotiating skills when he came to Hungary to try to purchase MAORT in the early part of July 1941. He wanted to persuade Hungarian state officials to transfer control over MAORT to German authorities. Soon he learned that Hungarian officials were extremely defensive about the American company and became aloof whenever he brought up this objective of his mission. To give force to his arguments, Clodius sent the following request to Berlin on July 14, 1941: "I would like to bring up the request for the takeover of the property by Germany . . . only if I am authorized to support our request with political pressure without regard to expected consequences inside the country."[164] At the end of correspondence between Clodius and the Reich Foreign Office during the next four weeks, Clodius did not receive Berlin's approval to bring upon the Hungarian officials "political pressure." Finally the German negotiator sent the following memorandum to Berlin on August 16, 1941:

> . . . the German request that Hungary should agree to the purchase of the shares now in American possession of the only large Hungarian oil company, MAORT, by a German group, at first encountered considerable resistance. The significance of MAORT, which provides all of Hungary with oil, is for Hungary about the same as that of the Ruhr coal mining for Germany. The Hungarian government argued that the American participation represented purely a capital interest, whereas Germany as owner of the majority would certainly intervene very actively at once.[165]

Toward the end of his communication, Clodius repeated that ". . . the

Hungarian oil deposits . . . were of great importance for Germany's oil supply," therefore his request for the transfer of ownership of MAORT of the RHT should be ". . . urgently put through with the Hungarian government."[166] At first Laszlo Bardossy, Prime Minister of Hungary, refused any compliance with Clodius's request. Later, however, the Hungarian Premier agreed to transfer some MAORT shares to a German consortium en attendant, and ". . . a later definitive settlement of the question of ownership between German and Hungary."[167]

But in reality, members of the Hungarian Parliament had never taken up the matter of transferring ownership, in whole or in part to any German interest. From the vaults of the Hungarian National Bank, no MAORT shares were removed anywhere and no German authority received explicit right to exercise controlling influence over the management of MAORT or the production of Hungarian oil.[168]

After the unsuccessful attempt to transfer MAORT from the Hungarian to the German state, Foreign Minister Joachim von Ribbentrop came to Budapest in November of 1941. He had several conferences with Bardossy concerning the substantial increase of shipments of Hungarian goods, especially oil. To emphasize the urgency of his requests Ribbentrop repeated them during a follow-up visit in January of 1942.[169]

In the spring of 1944, Clodius wanted to have a first-hand report on the operation of MAORT of the RHT and so he sent Dr. Alfred Bentz of the Reichstelle fur Bodenforschung to Hungary to check out the situation. The trusted and knowledgeable German mining engineer was told in Germany that Hungary could produce much more crude, but the government would not permit a large increase in the fields' output. In Hungary he discovered otherwise. Papp, with whom Dr. Bentz conferred

several times, reported:

> On March 23, 1944, Professor Alfred Bentz called at the head office of MAORT and stated that German technical troops intended to occupy the oil fields of MAORT and place them under German control. These compulsory steps would be taken for the reason that MAORT, it was said, was in the position of producing 8 to 10 million barrels of oil annually, but it did not do so, because it was an American foundation and for this reason it was not in its interest to produce oil for Germany.[170]

In the end, Bentz concluded that he saw no reason for the German military occupation of the fields. Papp's report stated:

> Professor Bentz sojourned in Hungary till April 5, 1944, and in the company of a German military suite visited the MAORT oil fields. He made an objective survey of the activities of the MAORT and it was to thank to him that the entire organization and the oil fields of the MAORT were not already taken over in March 1944.[171]

Papp also agreed with Bentz's findings and wrote that

> . . . the study made by professor Bentz was objective and judging from results, it was apparent that his conclusions were that the MAORT producing rate was satisfactory. MAORT engineers were still of the opinion that the rates were too high for efficient operations.[172]

Apparently, Dr. Bentz and Papp understood each other well, and the professor's report to German military authorities brought distinction to Papp. Some years later, the Hungarian manager said:

> I received the German Order of the Eagle, first class. Partly it was due to Professor Bentz that I received this decoration. He, as Hitler's advisor in oil matters, visited me several times, and we were on good terms with each other.[173]

Dr. Bentz's reports to Berlin did not save the oil fields from German military occupation. German forces took control of the country on May 19, 1944. A few weeks before, Clodius revealed a devastating plan against Hungary's independence. On April 15, 1944, the German economic expert wrote:

> We agree on the fact that no Hungarian contribution of any significance must be neglected simply because of a lack of means of payment. . . . The Hungarian agriculture must be set to work to supply German requirements to the utmost. . . . The repre-

> sentative of the Ministry of Supplies will examine in what areas the shipments of Hungarian raw materials can be increased even further. Here, too, the objective is to extract everything possible for the German war economy.
>
> The needs of the army of occupation will be provided, according to the agreement still in effect, both in money and in kind, by Hungary. Furthermore, the Hungarian government will provide 100 to 200 million pengos for the construction of airfields. . . . We will also do our best to comb through Hungary ruthlessly for any available labor force and make it work for the German war economy.[174]

Manifold pressures from Germany for Hungarian oil accomplished the desirable goal. The Hungarian state increased the production of the oil fields, limited the consumption of the civilian population and sent the rest, which in some years was the bulk of the produced crude and refined oils, to Germany. In supporting a common war effort and sharing vital resources, Hungary proved to be a worthy ally.

While a Provisional Hungarian Government, seated in Debrecen in the northeastern part of the country, declared war on Germany on December 20, 1944 and sent a delegaton to Moscow to sign an armistice agreement on January 20, 1945, MAORT of the RHT and the refineries continued the exportation of crude and refined oils to Germany until the end of March. Altogether Hungary had exported almost 10 million barrels of hydrocarbons to Germany.[175] (For details, see table 7.)

The Hungarian oil exports, throughout the years, were received by the DAPG, a subsidiary of Standard Oil Company of New Jersey, which had been sequestered like MAORT by the German government at the beginning of the war.[176] This German-American company was more than just an importer of Hungarian goods. At the time Ruedemann left Hungary in early 1942, Papp received the following instructions from the American oil men:

> . . . Ruedemann handed over the concern to me as managing director and told me that if I had any problems in its direction, I should turn to Klassen, who was the head of the subsidiary com-

pany of Standard Oil in Germany, the Deutsche-Amerikanische Petroleum Gesellschaft in Hamburg.[177]

Papp's statement reflected Standard Oil Company's standing policy for affiliates operating in countries dominated by Germany during the war. The policy attempted to minimize the company's losses. It was supposed to ". . . preclude outright seizure of the holdings in countries under German domination."[178] To achieve this from 1940 on, Jersey directors ". . . assigned to the executives of its German affiliates the right to vote shares in companies in those countries."[179]

NOTES: CHAPTER FIVE

1. "Hungarian Oil Industry," report by Walters to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland; CHOMD, vol. 1, p. 136; and CHOMD, vol. 2, p. 237.

2. Ibid. On October 8, the company reached the highest daily production ever: 18,800 barrels (ibid.).

3. Ibid.

4. Ibid. MAORT's operation in southwest Hungary was not the only crude excavating effort in the country during the war years. State officials maintained their wells at Bukkszek, northeast Hungary (For production from this field, see table 11) and initiated exploratory drillings in the recently regained areas. New wells went down in the Murakoz region, formerly north Yugoslavia, and in Izaszacsal and the Derna-Tataros regions in Transylvania, which used to belong to Romania. Total yield of these fields was meager and did not exceed 10,000 barrels during any of the war years ("Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records).

5. Ibid.

6. Ibid.; "Hungary's Gas and Oil Production," report by Robert S. Folsom, Second Secretary of U.S. Legation at Budapest, to Sec. of State, Oct. 29, 1946, NA Records, Suitland, Maryland; Despatch 64 (plain), Donald F. Bigelow, Counselor of Legation at Budapest to Sec. of State, April 29, 1946, NA Records; and The Hungarian Oil Industry, pp. 8, 37-40.

7. Ibid. 8. Ibid. 9. Ibid. 10. Ibid.

11. This problem will be analyzed and discussed in detail in subsequent chapters.

12. Because in the petro-chemical industry the metric system is used in the United States, these figures are not converted into the units of the inch-pound-gallon system.

13. Despatch 115 (plain), Palmer to Sec. of State, July 21, 1945, attached to it, "Report on the Production of Hungarian Crude Oil," prepared by Papp, NA Records.

14. Ibid.; and Despatch 1424 (plain), Bigelow to Sec. of State, April 29, 1946, NA Records.

15. Despatch 1764 (plain), Travers to Sec. of State, Sept. 6,

1939, NA Records.

16. Ibid. The source did not quote the percentage gasoline and alcohol were present in the mixture.

17. "Interview with Ruedemann," by W. Phillips, March 3, 1942, NA Records.

18. Despatch 592 (restricted), Burton Y. Berry, American Consul, Istanbul, Turkey, to Sec. of State, May 18, 1943, NA Records; and "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records.

For the year of 1941, an intelligence report projected that crude oil consumption in Hungary, as a result of rationing, would be reduced by 480,000 barrels to a total of 2,500,000 barrels. This figure was similar to the number indicated in table 6 (Military Attache Report, no. 1295, by R. C. Partridge, Major, War Dept. General Staff, March 28, 1941, NA Records).

19. Hungarian Refinery Plants' National Organization, bundle 1, HNA, Budapest, cited in CHOMD, vol. 1, p. 280; and The Hungarian Oil Industry, p. 88.

In connection with the consumption figures, another researcher found similar ones while using completely different source materials. He noted that General Jeno de Bor of the Hungarian Ministry of Defense estimated that the country needed 3 million barrels of crude oil for the purpose of consumption in 1942 (NA Microcopy T-84, roll 135, 1437963-64, cited in Fenyo, Hitler, Horthy and Hungary, pp. 94-95). Taking into consideration the 15 percent reduction during the process of distillation, one can see that the 3 million barrels of crude would change into 2,550,000 barrels of refined products, a number not substantially different from the 2,242,500 barrel figure of two sources above.

For the year 1942, a German source, Captain Anton Krautzdorfer, who was the Officer of Military Economy in Budapest, estimated that Hungary needed between 2,475,000 and 2,625,000 barrels of refined products (NA Microcopy T-120, roll 93, 105703-4, cited in Fenyo, Hitler, Horthy and Hungary, p. 95).

Travers, the American diplomat stationed in Budapest before the war, projected that for 1941, the country needed 2,500,000 barrels of refined oil products, which could be reduced through rationing to 2,000,000 barrels (Despatch 473 [plain], Travers to Sec. of State, March 29, 1941, NA Records).

Curiously, none of the last three sources stated whether the figures reflected the consumption of Hungary proper or also included the consumption of the regained areas.

20. The Hungarian Oil Industry, p. 4. In 1938 and 1939, Hungary recovered two regions from Czechoslovakia. In 1940 Hungary regained a sizeable area from Romania and in 1941, a large area from Yugoslavia (ibid.).

21. Despatch 200 (restricted), Palmer to Sec. of State, Aug. 20, 1945, attached to it, "Brief Summary of the Present Situation of the Hungarian Mineral Oil Industry," prepared by Zsigmond Boros and Imre Hunft, Vacuum Oil Co, R. T., Budapest, Hungary, Aug. 14, 1945, NA

Records; and The Hungarian Oil Industry, pp. 75-87.

22. Ibid.

23. This figure is only for the first ten months of the year (ibid.).

24. Despatch 115 (plain) Palmer to Sec. of State, July 21, 1945, attached to it, "Report on the Production of Hungarian Crude Oil," prepared by Papp, NA Records; and Despatch 1424 (plain), Bigelow to Sec. of State, April 29, 1946, NA Records.

25. Ibid.

As in the case of the company's earnings and expenses, a cross check of the company's production figures against the country's consumption and export figures is possible. See table 12, and note that 15 percent of the production is discounted for wastage. This way the differences between the two sets of combined total figures are small for each year.

It would also be helpful to note that the composition of the Zala County crude and the type of construction and equipment of the refinery plants dictated that from each barrel of crude the distillation of major fractions would proceed according to certain proportions. Out of a barrel of crude oil about 15 percent would be irretrievably lost because of evaporation and spillage. Of the rest, 25 percent would be distilled as gasoline; 17 percent as diesel oil; 15 percent as refined oil; 15 percent as kerosene; 8 percent as heating oil; and 5 percent would remain for asphalt wax and other residual substances. The proportions could be changed at the diminution or enlargement of other fractions. In general, the Hungarian crude lent itself into the distillation of high proportions of light distillates, like gasoline, and not of heavy oils like lubriciants. Hungarian refinery plants lacked the latest technology to distill disproportionately large percentages of gasoline or to fractionate and blend aviation, 100 octane gasoline ("Interview with Ruedemann," by Wallace, March 3, 1942, NA Records).

26. CHOMD, vol. 2, p. 123.

27. Report by Folsom to Sec. of State, Sept. 25, 1945, NA Records.

28. "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records.

29. CHOMD, vol. 2, pp. 122-125.

30. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

31. Ibid. 32. CHOMD, vol. 2, p. 112. 33. Ibid.

34. Ibid., vol. 2, pp. 88, 109.

35. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

36. CHOMD, vol. 2, p. 109. 37. Ibid., vol. 2, p. 110.

38. Ibid., vol. 2, pp. 115-116. 39. Ibid.

40. Ibid., vol. 2, p. 109. 41. Ibid., vol. 2, p. 114.

42. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

43. CHOMD, vol. 2, p. 119.

44. "Hungary's Gas and Oil Production," report by Folsom, Oct. 29, 1946, NA Records, Suitland, Maryland.

45. Ibid.

46. "Hungary's Oil Industry," report prepared by Papp, July 21, 1945, NA Records.

47. Ibid. 48. CHOMD, vol. 2, p. 124. 49. Ibid.

50. "Hungary's Gas and Oil Production," report by Folsom, Oct. 29, 1946, NA Records, Suitland, Maryland.

51. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

52. Ibid., The Hungarian Oil Industry, pp. 39-40; and Raul Vajk, "Geophysical Exploration of Southwest Hungary," Geophysics, vol. 17, no. 2, (April 1952), pp. 297-298.

53. The Hungarian Oil Industry, p. 40; and "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

54. "Hungarian Oil Industry," report by Walters to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland; Raul Vajk, "Geophysical Exploration of Southwest Hungary," Goephysics, vol. XVII, no. 2 (April 1952), pp. 297-298; and The Hungarian Oil Industry, p. 40.

55. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

56. The Hungarian Oil Industry, p. 40.

57. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

58. To achieve a quorum, each Hungarian board member, Papp, Hauer, Geocze, Pozel and Temesvary attended the meeting (Minutes, Board of Directors meeting, March 3, 1942, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 298-299).

59. Ibid.

60. Minutes, Board of Directors meeting, May 7, 1942, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, p. 299.

61. Ibid., p. 301. 62. Ibid., pp. 299-303.

63. The proposed size of the Retirement fund during the May 7 board meeting was twice as large. It appears to be an obvious error (Minutes, Board of Directors meeting, Sept. 17, 1942, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, p. 334).

64. Ibid., pp. 303-307.

65. The annual Balance Sheet was duly submitted and published in the September 27, 1942, issue of the Budapesti Kozlony.

66. Minutes, General Assembly of Shareholders meeting, Oct. 8, 1942, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 307-315.

67. Each member of the committee was an employee of the company except Pataky; he was the official representative of the government (Minutes, Board of Directors meeting, June 14, 1944, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, pp. 317-318).

68. Each member of the board was present except Emil Konek (ibid.).

69. Ibid. 70. CHOMD, vol. 2, pp. 122-123.

71. Ibid., p. 120.

72. Letter, Dr. Jablonszky, ministerial advisor to Minister of Commerce and Transportation, to MAORT of the RHT, July 28, 1944, Board of Directors Papers, bundle 2, HNA, cited in CHOMD, vol. 1, p. 316.

73. The Hungarian Oil Industry, p. 4.

74. CHOMD, vol. 2, p. 97.

75. Letter, MAORT to Hungarian National Oil-Refineries' Association, April 12, 1943, MAORT Papers, bundle 2, HNA, cited in CHOMD, vol. 2, pp. 97-99.

76. Letter, Hungarian National Oil-Refineries' Association to MAORT, April 29, 1943, MAORT Papers, bundle 2, HNA, cited in CHOMD, vol. 2, pp. 106-108.

77. Letter, Papp to Minister of Industry, Jan. 15, 1944, MAORT Papers, bundle 2, HNA, cited in CHOMD, vol. 2, p. 103.

78. Ibid., pp. 100-106. 79. Ibid., pp. 105-106.

80. Ibid., p. 97.

81. Ibid., p. 93. In spite of careful government measures,

Hungary experienced a 10 percent inflation per year during the war years (ibid., p. 113).

82. Memorandum by Papp, Dec. 15, 1941, Ministry of Industry Papers, bundle 1, cited in CHOMD, vol. 2, p. 290.

83. Ibid. 84. CHOMD, vol. 2, p. 111.

85. Ibid., pp. 112-113. 86. Ibid.

87. Here, MAORT of the RHT drilled 10 wells of which 7 turned out to be producers of natural gas. The wells extracted the gas from 1,300-4,300 feet depths. The reservoir rock consisted of Upper-Miocene sandy marls. Production amounted to 100 million cubic feet per day ("Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records).

88. CHOMD, vol. 2, p. 94.

89. Letter, Roth to MAORT of the RHT, June 20, 1942, Ministry of Industry Papers, bundle 1, HNA, cited in CHOMD, vol. 2, p. 97.

90. Contract, signed by Roth and Papp, July 11, 1942, Ministry of Industry Papers, bundle 1, HNA, cited in CHOMD, vol. 2, p. 94.

91. Ibid.

92. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

93. Ibid. 94. Ibid. 95. Ibid. 96. Ibid. 97. Ibid.

98. Ibid. 99. Ibid. 100. Ibid. 101. Ibid.

102. Letter, Papp to Ministry of Industry, Jan. 2, 1942, MAORT Papers, bundle 2, NHA, cited in CHOMD, vol. 1, pp. 325-328.

103. Letter, Armstrong, counselor of Standard Oil Company, to Sec. of State, Nov. 3, 1941, NA Records.

104. Ibid.

105. Writing about imports, Papp's letter also mentioned engineers. He hoped to invite to Hungary French engineers who, at one time were employed by Standard Oil and designed a refinery for Standard Francaise des Petroles, S. A. Paris (Letter, Papp to Ministry to Industry, Jan. 2, 1942, MAORT Papers, bundle 2, NHA, cited in CHOMD, vol. 1, pp. 325-328).

106. Ibid. 107. Ibid.

108. Letter, Varga to MAORT of the RHT, March 2, 1942, MAORT Papers, bundle 2, NHA, cited in CHOMD, vol. 1, p. 329.

109. Letter, Papp to Ministry of Industry, April 13, 1942, MAORT Papers, bundle 2, NHA, cited in CHOMD, vol. 1, p. 330.

110. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

111. "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May 1944, NA Records.

112. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

113. Wintershall, as the firm was usually called, operated oil wells and refineries and also distributed petroleum products around Hannover until 1939, when it formed a consortium with five other German companies (Report by William L. Smyser, Vice Consul, U.S. Embassy in Berlin, to Sec. of State, Oct. 2, 1940, NA Records).

114. The first contact between Wintershall and a Hungarian party occurred on January 8, 1939, when an official of the German firm asked Dr. Lajos Loczy, Director, Royal Hungarian Geological Institute, to give his expert opinion regarding the hydrocarbon potential of the southeast portion of the Hungarian Alforld (Letter, Loczy to Bornemissza, Jan. 9, 1939, Ministry of Industry Papers, package 1, HNA, cited in CHOMD, vol. 2, p. 20). Whether Loczy complied with the request is not known; however, Bornemissza granted permission to Loczy to cooperate with Wintershall; at the same time, Bornemissza transferred the matter over to the Minister of Agriculture (The Geological Institute was under this ministry) with the comment that "on the area in question, no geological explorations have taken place so far," (Letter, Bornemissza to Minister of Agriculture, Jan. 1939, Ministry of Industry Papers, package 1, HNA, cited in CHOMD, vol. 2, pp. 21-22).

115. Ibid., p. 22.

116. The members of the consortium were the following companies: Deutsche Petroleum A. S., Berlin; Gewerkschaft Elwerath, Hannover; Mineralolverke Wietze, Hannover; Preussische Bergwerks and Hutten A. G. Abteilung Erdol, Hannover; and Wintershall A. G., Kassel and Berlin Representatives, no date, Orszaggyules Kepviselohazanak Iromanyai 1939-1944 [Parliament House of Representatives' Writings] (Budapest: Athenaeum Nyomdaja, 1946), p. 367, cited in CHOMD, vol. 2, pp. 23-25).

117. Ibid., p. 22.

118. The four witnesses who also signed the documents were: Dr. Gunther Weiss, Dr. Bela Angyan, Dr. Istvan Fluck and Karoly Roth (CHOMD, vol.2, pp. 363, 383).

119. Complete Hungarian text of the Exploration and Option Agee-ments is included in CHOMD, vol. 2, pp. 365-383. A seven-page, type-written summary of both agreements can be found in English under the title "German Oil Concession Rights in Southeastern Hungary," report by Milton C. Rewinkel, Vice Consul, American Legation in Budapest, March 29, 1941, NA Records.

120. CHOMD, vol. 2, pp. 323-363. Also, see previous footnote

for English summary of the Concession Agreement.

121. Report by Jozsef Varga to House of Representatives, cited in CHOMD, vol. 2, p. 24.

122. Ibid.

123. Hungarian history textbooks call this "Vienna Award" the Second Vienna Award. Hungary received the First Vienna Award at the conclusion of a conference in Vienna, attended by Germany, Italy and Hungary on October 2, 1938. The first award consisted of Ruthenia or Lower Carpathian Region that belonged to Czechoslovakia.

124. CHOMD, vol. 2, pp. 26-27. 125. Ibid., p. 26.

126. Ibid., p. 27.

127. In this area were the two Yugoslav oil fields, Selnice and Peklenice, which produced oil before the Hungarian oil fields were discovered. The combined, yearly average production of the two fields during the war years was around 25,000 barrels (Report by Robert S. Folsom, Secretary of U.S. Mission in Budapest to Sec. of State, Sept. 25, 1945, NA Records).

128. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

129. CHOMD, vol. 2, p. 27.

130. Report of Geza Bornemissza to the House of Representatives, cited in CHOMD, vol. 2, pp. 32-37.

131. Ibid., pp. 24-25.

132. In 1944, 100 pengos was equivalent to 60.9 reichsmarks (NA Microcopy T-84 roll 136, 1438704, cited in Fenyo, Hitler, Horthy and Hungary, p. 68).

In 1940, and throughout the war years, 100 pengos was worth 0.17 of a dollar at the official rate of exchange (Letter, Hungarian National Bank to MAORT, March 6, 1940, MAORT Papers, bundle 49, HNA, cited in CHOMD, vol. 1, pp. 258-259).

Estimating some of MAORT's investments, Dr. Simon Papp reported: ". . . The expenditures incurred alone by the exploratory work done by the company . . . were more than 40,000,000 pengos . . . ." ("Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records).

133. Papers of Gyula Gombos, Secretary of the Hungarian State, bundle 1, no date, Ministry of Industry Papers, HNA, cited in CHOMD, vol. 2, pp. 30-31.

134. Ibid., p. 32.

135. Contract between MANAT and MAORT of the RHT, cited in CHOMD, vol. 2, pp. 384-390. The witnesses were: Dr. Erno Hauer, Janos Dinda and Endre Maurer (ibid.).

136. Ibid.

137. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

138. The purchasing contract stipulated that MAORT of the RHT would have to pay MANAT 6,000,000 pengos ". . . the following day the Minister of Industry and Minister of Finance approved the contract" (Contract between MANAT and MAORT of the RHT, cited in CHOMD, vol. 2, p. 385). Company representatives signed the document on August 17, 1944, and the ministers on October 28, 1944 (ibid.). Without explaining the one week delay, Papp reported that his company paid MANAT on November 4, 1944 ("Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records).

139. Ibid. 140. CHOMD, vol. 2, p. 93.

141. Ibid., pp. 93-94.

142. Telegram, Clodius to Berlin, July 9, 1941, NA Microcopy T-120, roll 2563, 312303, cited in Fenyo, Hitler, Horthy and Hungary, p. 87.

143. Telegram, Clodius to Berlin, Feb. 14, 1942, NA Microcopy T-120, roll 2563, 3126611-12, cited in Fenyo, Hitler, Horthy and Hungary, p. 87.

144. Memorandum by Schnurre, June 2, 1942, NA Microcopy T-120, roll 93, 105636m cited in Fenyo, Hitler, Horthy and Hungary, p. 87.

145. Letter Dr. Lanfried to Weizsacker, July 30, 1942, NA Microcopy T-120, roll 2564, 312908-9, cited in Fenyo, Hitler, Horthy and Hungary, pp. 87-88.

146. Ivan Berend and Gyorgy Ranki, "Die deutsche wirtschaftliche Expansion und das ungarische Wirtschaftsleben zur Zeit des zweiten Weltkrieges" [German Economic Expansion and Hungarian Economic Life During the Second World War], Acta Historia, vol. 5, 1958, p. 352.
According to a German report on the Hungarian economy, dated July 19, 1944, the German debt to Hungary reached 1.1 billion reichsmarks at the end of 1943 (NA Microcopy T-84, roll 136, 143713, cited in Fenyo, Hitler, Horthy and Hungary, p. 88).

147. Despatch 1211 (restricted), Schoenfeld, American Minister to Hungary, Budapest, to Sec. of State, April 15, 1946, NA Records.

148. Ibid.
As the only source revealing some method of payments from Germany, one may quote from Ruedemann's report of 1941: ". . . all sales are strictly on the basis of cash . . . from Germany we receive payments regularly . . ." ("Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records).

149. CHOMD, vol. 2, p. 42.

150. Telegram 322 (confidential), Montgomery to Sec. of State, Nov. 30, 1939, NA Records.

151. Telegram 350 (strictly confidential), Travers to Sec. of State, Dec. 23, 1939, NA Records. The American diplomat's information came from "interested but unofficial individuals whose continued residence in Hungary would not be permitted if information became known here," (ibid.).

152. "Interview with Ruedemann," by Walters, March 3, 1942, NA Records.

153. "Status of Operations," report by Ruedemann, Aug. 7, 1941, NA Records.

154. Military Attache Report 1328 to War Department, June 10, 1941, NA Records.

155. Despatch 876 (restricted), Pell to Sec. of State, Nov. 22, 1941, NA Records.

156. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

157. Ibid. 158. Fenyo, Hitler, Horthy and Hungary, p. 94.

159. Kallay, Hungarian Premier, p. 290.

160. Ibid. 161. Ibid., p. 285.

162. Telegram, Clodius to Berlin, July 20, 1941, NA Microcopy T-120, roll 2563, 312268, cited in Fenyo, Hitler, Horthy and Hungary, p. 88.

163. Telegram, Clodius to Berlin, July 25, 1941, NA Microcopy T-120, roll 2563, 312304, cited in Fenyo, Hitler, Horthy and Hungary, p. 88.

164. NA Microcopy T-120, roll 1168, 469000, cited in Fenyo, Hitler, Horthy and Hungary, p. 96.

165. Documents of the German Foreign Ministry, series D. pp. 320-321, cited in Fenyo, Hitler, Horthy and Hungary, p. 97.

Personnel of the American Legation in Budapest also knew about the purpose of Clodius's visit. Pell sent a telegram to Washington on Aug. 5, 1941, which said in part the following: ". . . Clodius requested necessary Hungarian permission to transfer title of MAORT to German ownership. For political reasons this must be approved" (Telegram 1175 [plain], Pell to Sec. of State, Aug. 5, 1941, NA Records).

Here, somewhat prematurely but necessarily, Standard Oil Company's policy regarding wartime operation of affiliates located in countries controlled by Germany must be mentioned. While there is no direct available documentation to this effect, each person, Clodius, Bardossy and Pell knew exactly what they were doing and saying. They

were all aware of the following Standard Oil policy: "In order to preclude outright seizure of the holdings in countries under German domination, Jersey's directors in 1940 assigned to the executives of its German affiliates the right to vote shares in companies in those countries (Larson, Knowlton and Popple, New Horizons, p. 384). In other words, when Pell telegraphed the phrase, "political reasons," he and everyone else involved in the negotiations for the transfer of MAORT of the RHT shares to German authorities, had some knowledge that Rockefeller Plaza subordinated to German leadership all Standard Oil affiliates within Germany's sphere of influence. For specific examples, see the end of this chapter and

166. Documents of the German Foreign Ministry, series D, pp. 320-321, cited in Fenyo, Hitler, Horthy and Hungary, p. 97.

167. NA Microcopy T-120, roll 1168, 469003ff., and roll 103885-940; and telegram from Clodius to Berlin, July 31, 1941, NA Microcopy T-120, roll 91, 103901, cited in Fenyo, Hitler, Horthy and Hungary, p. 96.

168. Ibid., p. 97

169. NA Microcopy T-120, roll 92, 104479, cited in Fenyo, Hitler, Horthy and Hungary, p. 113.

170. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

171. Ibid. 172. Ibid.

173. "Confessions of Papp," cited in RHMMS, p. 9.

174. Memorandum by Clodius, April 15, 1944, NA Microcopy T-120, roll 2564, 313462-65, cited in Fenyo, Hitler, Horthy and Hungary, pp. 98-99.

175. Despatch 200 (restricted), Palmer to Sec. of State, Aug. 24, 1945, enclosure, "Mineral Oil Products Exported from Hungary during 1941-1944," chart prepared by Zsigmond Boros and Imre Hunft of Vacuum Oil Company R. T. Budapest, Aug. 14, 1945, NA Records. Numbers for each distillate and crude are complete only for the first ten months in 1944 (ibid.).

A few necessary remarks are in order concerning the export items. The chart which shows the quantities of exported hydrocarbons does not declare the destination of the items. However, Palmer, in his despatch writes:

> Attached to the Vacuum report are figures on exports of crude oil and products, most of which went to Germany or the German army for the years 1941 to 1944.

There is no evidence to trace the exports to any place other than Germany.

In case any oil shipment left Hungary to any other country except Germany, German authorities would have vehemently objected. They did not, in this respect. They supervised Hungary's production, production methods and consumption very closely; and they would not have allowed

Hungary to export to any other nation during the war. They needed all the oil.

The authors of The Oil Industry of Hungary, on page 18 stated:

> There are no precise export-import data available for the chaotic years 1944 and 1945, when Hungary was a battlefield and the oil fields were under first German, then Red Army supervision. It is known, however, that crude production amounted to 6,115,500 barrels of which some 3,750,000 barrels were exported to Germany or were used up by the German army in Hungary. Similarly, of the 1945 production of 4,920,000 barrels the Germans took 750,000 barrels while the Red Army seized over 3,000,000 barrels.

Standard Oil Company's own publication states: "The oil produced in MAORT's fields went to help the German war machine and nothing could be done to prevent it" (SOPHM, p. 3).

Fenyo, who also looked into Hungary's oil export to Germany, found that Hungary exported 385,357 barrels in 1941, 940,635 barrels in 1942, and 1,527,217 barrels in 1943 ("Der Aussenhandel Ungarns, 1941-1943," Statistisches Reichsamt, Nov. 1944, NA Microcopy T-84, roll 135, 1438122, cited in Fenyo, Hitler, Horthy and Hungary, p. 95). Fenyo's numbers from this German source are about 60 percent under the numbers quoted by the executives of Vacuum Oil Company. It is possible that the German source did not include Hungarian distillates used by the German army in Hungary; to exclude this amount would have been logical for this source because that oil neither left Hungary nor entered Germany. To confuse the situation, Fenyo uses the word oil without qualification. He writes about "oil" production of Hungary and also "oil" export of the country when he means crude production and refined products export. His crude oil production figures, which he found in German sources, were almost the same as those of most other sources.

At the end of his oil export report, Fenyo writes: "Total Hungarian oil exports, including those to certain neutral countries, exceeded the exports to Germany by about one-third" (ibid.). If someone increases Fenyo's figures by 30 percent for 1942, he is still off by a half million barrels, and for 1943, by one million barrels from the most likely accurate quotations of the two Vacuum executives. It is also important to note that neither Fenyo, nor any other source, men- tions by name the neutral or friendly nations which imported Hungarian crude or refined products in the course of the war.

176. Telegram 5790 (plain), Harrison U.S. Embassy, in Bern, Switzerland, to Sec. of State, Sept. 17, 1943, NA Records. The telegram also noted that Hungary has achieved self-sufficiency in petroleum products and has made 38 million pengos profit. According to Harrison, Dr. Ernst Hauer was the source of this "Budapest private despatch" (ibid.).

177. "Confessions of Papp," cited in RHMMS, p. 9.

178. Larson, Knowlton and Popple, New Horizons, p. 384.

179. Ibid.

CHAPTER SIX

SOVIET CONTROL OVER THE OIL FIELDS

Without a struggle, the vanguard troops of the Soviet Red Army replaced the retreating German and Hungarian army groups in the Trans-danubian oil fields sometime toward the end of March of 1945.[1] The oil-producing complex which escaped major damages witnessed the quick exchange of one occupying force by another. This time, a two-year period of Soviet control over American property on Hungarian land was set to begin.[2]

The oil wells and auxiliary facilities suffered only minor damages from air raids and ground fighting. U.S. Air Force planes bombed the oil fields on July 13, 1944. This single attack damaged some oil pipelines, one repressuring plant and one gasoline plant at Budafa, and one absorption plant and an instrument house near Lovaszi. The fields' output declined from 16,000 barrels per day to 10,000 barrels, but within two weeks the wells' production returned to normal.[3]

Fleeing from the rapidly advancing Red Army, German and Hungarian soldiers, together with some MAORT of the RHT employees, caused more damage to the oil fields than the bombing raid. The retreating personnel committed acts of sabotage and evacuated hundreds of railraod cars filled with valuable equipment, machinery and supplies to the West.[4] Papp, who came to visit the place in the early part of March,[5] found that one gas well was set on fire at Lovaszi; and at Budafa, an office building and two 5,000-barrel storage tanks were

burned down. Most of the repressuring compressors did not work because some employees removed the electro magnetos. Most of the company's 149 motor vehicles (trucks, passenger cars, tractors and motor cycles) loaded with administrative and geological records and other essential equipment were removed from the company's premises. Because of damaged machinery, lack of materials and the absence of vehicles, oil production stopped on March 29.[6]

However, within days oil again surged upward through the pipes because the Red Army came prepared to restore field operations. A special unit, the Soviet Army's Oil Committee, placed some equipment, machinery and vehicles at the service of returning company employees who started the first wells flowing on April 9. During the next two weeks, repair crews put the pipelines connecting the pump stations to the refineries in working order, and the first barrel of peace-time crude reached Budapest on April 22, 1945.[7]

For two years, until the signing of a peace treaty in 1947, Red Army officers regarded the oil fields as their war booty. They removed anything from the fields they wanted; they brought to the fields whatever they needed; and they took as much oil as they pleased.

For the most part, exploitation of the crude proceeded deliberately without incident. Away from the fields in Budapest, in New York and Washington, feverish and calculated activities were taking place to find a way to expel the Russian soldiers from the fields. In April of 1945, only two things were certain: the wells were yielding crude, and the Red Army was in charge of the operation.

Return of the American Managers

From the time Hungary was liberated[8] from its native Fascist

regime and its occupying German forces (on April 4, 1945) until the American managers arrived on November 14, 1945, Hungarian managers directed the company's operations according to orders from the Red Army and a new Hungarian government. The directions from the two sources of authority were at times in accord and at other times in contradiction; nonetheless, the managers and workers had to carry on their duties. During this time, the Hungarian managers grew keenly aware of the fact that the decisive force in the company and in the country was the Red Army.

With the anticipated return of the American manager, Paul Ruedemann, most employees hoped that soon the company's entangled situation would be resolved. Ruedemann would represent the other major victorious power and he could legitimately expect his relationship with the Soviet military authorities to be on an equal footing. Both the Hungarian and American managers expected cooperation based on written agreements reached between the two major wartime allies.

The first of these was the Armistice Agreement of January 20, 1945, and the second, the Protocol of the Berlin (Potsdam) Conference which took place between July 17 and August 2, 1945. Before Ruedemann returned to Hungary, these two documents provided the initial guidelines for the postwar conduct of the Allied Powers in occupied territories.

When Ruedemann returned to Hungary toward the end of 1945, he was aware of the stipulations of the two documents and expected no insurmountable problems. He knew that the thirteenth point of the Armistice Agreement signed in Moscow by representatives of the United States, Soviet Union, Great Britain and Hungary stated:

> The Government of Hungary undertakes to restore all legal rights and interests of the United Nations and their nationals on Hungarian territory as they existed before the war and also

to return their property in complete, good order."

This document took care of Hungary's responsibility to all victorious nations. Annex II of the Berlin Conference, signed by Joseph V. Stalin, Harry S Truman and Clement A. Attlee, stipulated:

> The burden of reparation and "war trophies" should not fall on Allied nationals. We object to the removal of Allied property . . . under any guise. The United States looks to the other occupying powers for the return of any equipment already removed and the cessation of removals.[10]

This agreement, although not binding upon the signatories, attempted to discourage the wartime allies of the United States from encroaching upon American properties and rights.

In addition to the two documents, Ruedemann believed that with aid from the U.S. Military Mission and the U.S. Legation (both stationed in Budapest) he would be able to solve the company's two most pressing problems: removing the Red Army from the oil fields and re-establishing the control of the American owners. In light of the circumstances, Ruedemann's expectations did not appear to be unrealistic. However, he failed to take into account the fact that the United States was represented by a dozen or so military-diplomatic staffers and that the Soviet Union had an occupational force of two million soldiers.

Ruedemann's difficulties in obtaining permission to re-enter Hungary could have served as an harbinger of adversity. Activities in preparation for Ruedemann's return began months before World War II had even come to an end in Hungary. On February 9, 1945, Orville Harden (Vice President of Standard Oil) wrote to Charles B. Rayner and William B. Leroy (officials of the Petroleum Administration for War in the Department of State) requesting application forms for Edward L. Estabrook, Ralph P. Bolton, Paul Ruedemann and John Fink to enter Hungary. On February 27, James C. Sappington, Assistant Chief of the

Petroleum Division, replied:

> It is not yet possible to arrange the entrance of company representatives into Hungary. However, we will keep the importance of this matter in mind, and as soon as it is possible to do so, we will. . . .[11]

Reasons for Rockefeller Plaza's eagerness to have Ruedemann back in Hungary were threefold, according to Edward F. Johnson, General Counsel of Standard Oil. He explained:

> These men are badly needed to assist in rebuilding the disrupted organization, in improving the efficiency of the operations, and in planning rehabilitation--needs which the local management recognizes.[12]

On August 30, 1945, Harold L. Febes, an official of the Petroleum Administration for War, who had been monitoring Rockefeller Plaza's efforts to get its representatives into Hungary, prepared a progress report of the steps that had been taken so far. He wrote:

> On February 12, this Administration brought to the attention of the State Department the desire of the management of this Hungarian company that certain members of its organization who are familiar with Hungarian affairs should return to that country as soon as possible in order to undertake supervision of the affairs of this subsidiary. We were informed on February 26, that it was not yet possible to arrange such entry, but that the question would be taken up as soon as the United States representative was established in Hungary. Mr. H. F. Arthur Schoenfeld, United States representative in Hungary, arrived in Budapest on May 11.
>
> On May 17, I was further informed by the Acting Secretary of State that no passports had been issued to civilians returning to Hungary because Hungary was still primarily a military area and the military authorities in control had withheld permission for civilians to enter. I accordingly placed the matter before Admiral William D. Leahy by letter of June 10, requesting the assistance of the Joint Chiefs of Staff in obtaining permission for the entry of representatives of the Standard Oil Company (New Jersey) and the Socony-Vacuum Oil Company, from the Allied Control Commission. In their reply of June 23, the Joint Chiefs of Staff informed me that the Joint Chiefs of Staff perceived no military objection to the proposed program and would cooperate in securing military clearances to permit the entry into Hungary of such representatives of American oil interests as might be required, upon advice from the Department of State that it was prepared to furnish passports to the individuals concerned.
>
> At a conference in the office of Hon. William L. Clayton, Assistant Secretary of State, on June 26, at which this Admin-

> istration was represented by Mr. William B. Leroy, Director of Foreign Production, the urgent necessity for the admission of representatives of the Standard Oil Company (New Jersey) was reviewed and the serious situation of the Company's Hungarian subsidiary was fully presented. The request that arrangements for the admission of the representatives of the Company into Hungary be expedited was renewed.
>
> In my letter of July 3, I informed Mr. Clayton of the names of the representatives of the oil companies for whom it was desired that the passports be issued, and I again stressed the great importance of this matter.[13]

These efforts met with no success. On July 10, 1945, John Grew, an official in the Department of State, informed Schoenfeld in Budapest that soon personal data sheets and completed questionnaires which Soviet authorities usually requested from those who wanted to enter their occupational zone, would be sent to the four Standard Oil employees who wanted to enter Hungary. Then Grew added:

> For your confidential information, the American Embassy in Moscow is pressing to expedite the matter, and this entire question of entry of American citizens into Southeast European countries is on the President's agenda for the Tripartite meeting in Berlin.[14]

No one among the Americans could understand why the Soviet military authorities would want to make American civilians' entry into Hungary so difficult. Febes expressed this lack of understanding when he wrote:

> More than seven months have lapsed since the signing of the Hungarian armistice and more than three months since the surrender of Germany. It is difficult, if not impossible, to understand why, in view of the terms of the armistice agreement, the representative of the Soviet Government on the Allied Commission has the power to exclude American citizens from Hungary, and why Americans are still deprived of access to their properties in that country. I think that the American representative on the Allied Control Commission should have equal standing with those of Soviet Russia and Great Britain and that he should be able to authorize the issuance of entry permits. I am deeply concerned as to the treatment of American oil interests in Hungary, and I request that the most forceful possible action be taken to expedite the entry of their representatives without delay.[15]

In the fall, the situation started showing encouraging signs.

William Clayton was able to report to John Ickes, a Standard Oil executive at Rockefeller Plaza, that

> We are now pleased to inform you that the following officials of the Standard Oil Company of New Jersey have received clearance through the Allied Control Commission to enter Hungary: Ralph Bolton, George A. Bannantine, Paul Ruedemann, Edward L. Estabrook, Emil Schudel, John H. Fink and George E. Mattingly.[16]

Finally, on November 20, 1945, Edward L. Estabrook telephoned Rex Townsend at the Petroleum Administration for War and said that

> . . . two of our men, namely Mr. Rudemann [sic] and Mr. Schudel left Vienna by automobile for Budapest last Wednesday, November 14. Mr. Bolton and Mr. Fink are expected to reach Budapest before the end of this month.[17]

It would be safe to assume, that Ruedemann and Schudel arrived in Budapest on the same day. Completion of an auto trip between the two cities would normally take five hours.[18]

Ruedemann's Challenge of the Soviet Position

Back in Hungary for the first time since January of 1942, Ruedemann learned first-hand that besides the everyday management of operations, the company had two problems of great importance and urgency. He entrusted the solution of one problem to the Hungarian directors, and he went to resolve the other. The Hungarian directors had to find ways and means to terminate the company's sequestered legal status and conclude a settlement with the state over the company's wartime activities. In this instance, Ruedemann carefully followed the actions of the Hungarian directors and approved the end result of their work, which was the most anyone could have expected under the complicated and hopeless circumstances.

Without asking for help from anyone within the company, Ruedemann set out to solve the problem the presence of the Red Army on

the oil fields presented. His first act was to apply for assistance he hoped he could find in the good offices of the American section of the Allied Control Commission and the U.S. Mission (both in Budapest) and the Department of State and Standard Oil Company's headquarters in the United States.

Before Ruedemann arrived in Hungary on November 14, 1945, Schoenfeld, who had been in Budapest since May 11, had already begun exploring the company's situation and the Red Army's activity on the oil fields. From John Grew, Schoenfeld received the following instruction on May 15, 1945:

> The Department has received information from Standard Oil concerning its Hungarian subsidiary MAORT, valued at approximately 58 million dollars. . . .
>
> Standard reports its fear that crude oil, refined products and petroleum equipment may be taken from MAORT and removed to Russia either in payment of reparations under armistice or otherwise.
>
> The Department would like to have information . . . if the Hungarian Government takes from the company crude oil, refined products or equipment for payment as reparation to the USSR. . .
>
> If MAORT equipment is taken by Soviet authorities directly from the company as war booty or on any grounds, you are authorized to ask General Key to make a preliminary request to Marshal Voroshilov to order the cessation of such removals pending clarification of American rights and interests involved and receipt of instructions from the United States Government.[19]

The first telegram from Washington D.C. to Budapest initiated a two-way stream of communications concerning MAORT that would not cease for years to come. On May 26, Schoenfeld replied: "The MAORT holdings were still in the hands of the Hungarian government, but the enterprise was entirely under Soviet control."[20] For days later, Washington instructed Major General Key, U.S. Representative to the Allied Control Commission, ". . . to make representations to Marshal Voroshilov regarding the MAORT properties to the effect that all removals of vehicles and equipment be discontinued . . . ."[21]

On June 13, 1945, a conference for American personnel connected with the ACC (Allied Control Commission) was held in Budapest. Major General Key, who was most acquainted with Hungarian affairs, answered several questions. Regarding the general situation in Hungary and a specific petroleum problem, General Key said:

> . . . the Soviets originally had an occupation force in the country approximating 2 million men, but this number had been reduced to about 5 hundred thousand. Under the armistice terms, Hungary has been compelled to support this large force with food and raw materials . . . . The Soviets were taking practically the entire production of petroleum . . . .[22]

General Key then made a very surprising statement:

> He pointed out that no petroleum equipment had been removed by the Russians except some automotive equipment and he did not contemplate any trouble along this line.[23]

To keep up with the latest developments, Major General Key was interested in visiting the oil fields. To the Representative of the United States State Department, Schoenfeld, he reported:

> After considerable effort to obtain authority from the Chairman of the Allied Control Commission, I officially visited the oil fields in the early days of September 1945 and spent two days inspecting the properties. On September 8, 1945, I informed the War Department by radio of my observations. I requested instructions whether it was desired that I should initiate any action here to secure return of these properties to the American owners. On September 12, 1945, I was informed by the War Department that the subject matter was under discussion between the State Department and the United States State Department Representative in Hungary and that I was authorized to initiate such protests as the United States State Department Representative in Hungary recommended.[24]

Schoenfeld had definite plans. He recommended

> . . . an immediate approach to the Chairman of the Allied Control Commission requesting withdrawal of Soviet troops on the ground that their interference in MAORT production matters constituted a shifting of the burden of reparations to American interests and rendered impossible the return of United States property to its owners.[25]

Meanwhile, American officials learned differently considering Major

General Key's statement that "no pretroleum equipment had been removed by the Russians." Schoenfeld telegraphed to Washington:

> MAORT's manager just informed me that on Oct. 24 and Nov. 3, Russians removed company equipment valued at 24 million pengos, current prices. Materials were reportedly moved to German oil fields in Hungary awarded by Potsdam to USSR.[26]

Once back in Hungary, Ruedemann wasted no time in setting out to free the oil fields from the Red Army. First, he decided to contact the Hungarian Minister of Industry. To him, in a letter of November 26, Ruedemann pointed out that "The oil fields were over-produced, produced inefficiently, and as a result, both gas and oil were being wasted."[27] He requested approval of reduction in the production rate as much as 20 percent. In the end of his letter, Ruedemann complained about the "attitude" and "misdeeds" of Zoltan Gombosi, Head of the Commission for Mineral Oil Production and Distribution, and asked for his removal.[29]

In early December, Ruedemann obtained permission from the Soviet authorities to inspect the fields in the company of Ralph B. Bolton. They found that

> There is no freedom of movement for the administrative and supervisory staff. A pass is required for every trip to the fields, and one must obtain from local Commanders local passes for the particular plant one intended to visit. Mr. Bolton and I were prohibited from inspecting the Kerettye casinghead plant because we had no pass from the local Commander.[29]

The American oil men noticed that Red Army personnel removed company-owned equipment without requisitions or receipts. While walking through the repair shops, they learned that

> Our workshops are required to make repairs on Russian military trucks and cars and to supply the repair material. From April to the end of October, a total of 75,460 man-hours of work was performed for this purpose, and it is still continuing.[30]

Ruedemann and Bolton also discovered that Russian soldiers were occupying several houses which were American property and which "they should

not have been requisitioned without full and adequate compensation."[34]

As soon as Ruedemann returned to Budapest, he prepared a detailed report of his tour of the oil fields and transmitted it to Schoenfeld. He also asked the American Minister for his assistance:

> We appeal to you to take, at the earliest opportunity, such measures as are necessary to obtain the withdrawal of Russian troops from our operations. The morale of our staff and workmen is at a low level; the fields are being produced in a manner contrary to sound oil field practices and at the sacrifice of millions of barrels of unrecoverable oil that will be left in the underground reservoir as a consequence.[32]

Schoenfeld was ready to cooperate. On December 15, 1945, he informed the Department of State of Ruedemann's findings and closed his despatch with the following words:

> Ruedemann voices objection to injurious domination of MAORT by Soviet Army of Occupation and requests earliest possible intercession to obtain withdrawal of Russian troops. Department's instructions are requested.[33]

For December 22, Soviet military authorities invited Ruedemann and Papp for two conferences and sent a car to provide them with transportation. The first conference began at 1:00 p.m. with Major General I. I. Levuhskin, who was Chief Headquarters [sic] ACC, and lasted one hour. The General informed Ruedemann that the Red Army needed more petroleum products, and he intended to increase production of crude. In his reply, Ruedemann stated that "it was impossible," and he recommended a decrease in oil production because "the fields were being damaged by the present wasteful methods."[34] The General reasoned that some Baku oil engineers came, examined the fields and said that "the wells could flow wide open without damage."[35] To this Ruedemann explained that there was a

> . . . difference in behavior between water-driven fields of the Baku type and gas-driven fields of the Hungarian and common U.S. type. I drew diagrams and tried to prove to him that in a short time Hungary would have very little oil unless conservation mea-

sures were immediately adopted.[36]

As neither side was ready to accept the other's point of view, the General changed the topic and

> . . . asked about the methods of production under German domination. Dr. Papp and I explained that the Company was unmolested and was permitted to produce in accordance with its own ideas and production technique.[37]

This statement was not challenged. Finally the General remarked:

> 'Well, we have not gotten anywhere. I will take it up with Lt. Col. Hagy and he will look at it from the Military angle.' I added: 'And also the oil angle, for he is an oil man, so is General Key; I would suggest you talk to both of them.' He laughed.[38]

In the second conference the Soviet participants were interested in finding out something about the ownership of the company. The main spokesman for the Red Army was Lieutenant General V. P. Sviridov, Deputy of Chairman (Voroshilov) ACC, who appeared to be "keen, forceful and determined" in his presentation. At the beginning, the General requested that he be given an opportunity to examine the company's books. Ruedemann replied that

> . . . our books would not show ownership and if he wished, I could get a certified statement from New York that the MAORT is a wholly-owned, American Company . . . . He was not granted permission to examine our records.[39]

The General asked Ruedemann about the bulletin which the American executive posted at several places around the fields and offices which, in three languages, stated that no information about the company should be released to anyone without his permission. To this Ruedemann replied that:

> . . . local Commanders could get production and geological data, but financial and other information cannot be included. He then asked if I would ask that production and geological data be made available; and I advised him this would be done.[40]

The participants next discussed the problem of increased produc-

tion. The parties could not come to an agreement; however, they mentioned that a committee of Russian and American engineers should be formed to decide how much crude and gas the fields should produce.[41]

At this point Papp interjected that some important machines were shut down becaue the company did not have enough lubricating oil available anywhere in the country. To alleviate this shortage

> . . . we were given an authorization for 15 tons lubricating oils . . . and the General added that in the future if we have difficulties we should refer to Col. Andreiff who would help us.[42]

At the end, Ruedemann "asked twice for a pass to the fields," but the Russians "side-stepped the request each time."[43]

Ruedemann drew several conclusions from this conference with the representatives of the Red Army. They were:

> (1) that they wished to be friendly toward Americans (2) our property rights will, after a fashion, be respected, and (3) the Russian staff in Budapest was probably told by their petroleum engineers that our fields are being damaged, whereas they told us it was their opinion the fields are not being damaged and the present rate could be maintained. In fact, they are bluffing and--as I discussed with Lt. Col. Hagy and advised Mr. Ecker-Racz--I am going to the fields to personally supervise the cutting back of production by ten percent. If this move succeeds, then we are another step ahead towards getting control of our operations and we will reduce production a further ten percent a month later.[44]

Ruedemann did not make empty promises. By Friday night, December 28, in the company of Schudel, he returned to the fields. During the next four days he engaged in formal and informal talks and arguments with each Soviet officer who was in charge of a section or operation of the fields. Still, in the midst of heated and often unfriendly conversations, Ruedemann and the Russians found time for an unusual dinner party.

Ruedemann first encountered Major Zwetkov from the Soviet armed forces Budapest headquarters, and Lietenant Colonel Bjelousov, a Russian

engineer in charge of the Nagykanizsa field office. Major Zwetkov informed Ruedemann that he came to increase production of crude, and the American oil man remarked that "he was considering the decrease of production as the fields were being damaged by over-production."[46] Because they could not come to an agreement, they decided to have a conference the next morning. This Ruedemann did not attend because he believed that "it was useless to argue with them on this subject. Their idea of what constitutes overproduction is as different as our definition of democracy is from their definition."[47]

Rather, Ruedemann went to visit the Lovaszi field where he met Lieutenant Colonel Kyrjakov, who was in charge of the operations there. He told the Russian officer that "it was an American property and he wanted to produce oil his way."[48] With these words, he handed over a list of 14 wells and asked the officer to order a reduction of bean sizes which would effect a reduction in production by 10 percent. Kyrjakov did not oppose Ruedemann's request; however, two Russian geologists, Ivanoff and Pominoff, who were present, objected to the execution of the order. At this point, Ruedemann ended the discussion by telling them that they were running around in circles, they with one point of view and he with another.[49]

The next morning, Sunday, December 30, Ruedemann and Schudel went to see Major Tyerskij, Commander of the Budafa field, "who was not an oil man and seemed to have very little education."[50] To Ruedemann's declaration that "we are an American company," he replied that "they [the Russians] were not sure whether it was Hungarian, Hungarian State or American."[51] At the end of a long argument about the ownership of the company, Major Tyerskij refused to give his permission to change the bean sizes. Next, Ruedemann said that it was his understanding that the

army was there to guard the property and not to interfere in the operations. He asked what Major Tyerskij intended to do if he ordered the bean sizes changed.[52] At this point

> Tyerskij became confused and what he next told us was important information. He said: 'I know this is an American company, but I have been ordered by Marshal Voroshilov not to pay any attention to the Hungarian engineers or Americans but only to our Russian experts. Until I get orders otherwise from Headquarters, I will prohibit the changing of beans.'
>
> I replied: 'That is all we wanted to know,' and we left.[53]

On Monday, December 31, Ruedemann called Kyrjakov and asked why he failed to reduce the bean size. "He replied that he did not know it would reduce production and could not allow it.[54]

On Tuesday, January 1, Ruedemann returned from the fields to Nagykanizsa and scheduled a conference with the two Russian geologists because "he wanted to know more about them and their plans."[55] Kyrjakov and Bjelousov also joined the conference of Ruedemann and the geologists, Ivanoff and Pominoff. In the conference room:

> The atmosphere was extremely unfriendly. Bjelousov shook hands hesitatingly and Kyrjakov refused. It was evident this was to be more than a geological discussion.
>
> They accused me of being an enemy of the Red Army; did I not know they were the occupying forces; under the Potsdam Agreement they could operate any properties they wished.
>
> I replied that this has nothing to do with oppositon to the Red Army, but concerned the protection of American property from ruin by the overproduction of oil; that I should think they would respect American property rights, as General Sviridov had recently told me they recognized this as American property and would respect the same, and it was my understanding the Red Army was here to guard the properties, not run them.
>
> It went back and forth this way for about a half hour.
>
> I then asked on what authority they took it upon themselves to issue orders concerning the operation of our properties.
>
> Bjelousov, the commander of all the MAORT operations, replied that their Budapest Headquarters had issued the instructions and they could do nothing until the orders were rescinded.
>
> I then stated that the matter was quite evidently too big to be handled here, and I would pursue the matter further in Budapest.[56]

By this time, each participant had an opportunity to vent his

anger and frustrations. As Ruedemann was leaving, the "atmosphere had cleared and the spirit of brotherly love had been restored,"[57] and he was invited to a New Year's dinner party that night. Ruedemann remembered it as follows:

> The dinner party consisted of Bjelousov, Kyrjakov, Ivanoff, Pominoff, Janko (interpreter), Gyulay, Barnabas and myself. (Unfortunately Mr. Schudel was sick with a bad cold.) The food was excellent, partly Russian and partly Hungarian cuisine. Beer, wine and cognac flooded the table. Many toasts were drunk to the New Year, to Russian-American solidarity, to comradship, to one another, and not a few drinks were downed without distinction. The conversation was animated and hilarious. In spite of the language difficulties, many ideas were exchanged.[58]

Consolidation of Soviet Power and the Ineffective American Response

Ruedemann's surprise appearance on the fields, his forceful appeal to reduce production and his courageous conduct in the execution of his mission signaled to the commanders of the Soviet armed forces that they needed to strengthen further their position. Their moves during the next two weeks were swift, thorough and downright.

Hardly had Ruedemann departed from the oil fields, when on January 8, Major Cwetkov of the Red Army arrived in Nagykanizsa at the central field office and called for an emergency meeting of engineers and administrators. To them he presented an "authorization granting him full power to manage the company including authority to direct shipments, production and drilling, which the ACC's Alien Property Custodian had issued to him."[59] He asked for office space in the central office for himself and a place where he could keep the important records of the company. The next day he instructed the supervisors and foremen that no work orders could be issued without his approval, and requested that the engineers "submit to him by the end of the month detailed plans for increasing crude production."[60]

To counterbalance the personal and single-handed management of the oil fields, Red Army representatives extended their strangle hold to the company's central office. A Soviet army delegation, under the leadership of Engineer Captain Saprikin, appeared in Ruedemann's office in Budapest on January 17, 1946. Captain Saprikin presented a document to Ruedemann which stated that he, a Soviet delegate of the ACC, was appointed by Marshal K. E. Voroshilov, Chairman of the Allied Control Commission, the manager of MAORT beginning on January 22. In this capacity, he was "authorized to exercise complete control over the activities of the firm by virtue of Article 18 of the Armistice Agreement and the 14th paragraph of instructions concerning the Activity of the Allied Control Commmission in Hungary."[61]

This action of the Red Army induced manifold responses from the American community dedicated to the return of the company to the American owners. The American attempts to effect the withdrawal of the Red Army from the oil fields were tenacious and repetitive and involved the same persons in Hungary with occasional participation by different Washington and Moscow state officials.

On January 10, just two days after Major Cwetkov assumed command over the oil fields, Schudel and Papp visited Major General Key and asked for his "aid in initiating action to recover control of their properties."[62] Later in the day, Major General Key wrote to Schoenfeld that "the occupational forces were increasing rather than lessening their control over the operation of the fields."[63] He pointed out to the American Minister "the apparent need for vigorous action to recover control of this property," and suggested that "they should again bring this matter to the attention of the State Department in the light of recent developments and find out what action, if any, should be taken

here."[64]

On the next day, January 11, Schoenfeld responded to General Key's suggestions and instructed him to proceed and "make appropriate representations to the Chairman of the ACC requesting that control of the MAORT properties be returned as soon as possible to the director appointed by the American shareholders."[65] On January 15, General Key delivered a note to Marshal Voroshilov stating that "MAORT was a wholly American-owned company and that continued exclusion of the owners of the properties from control of their operation was in effect shifting a part of the burden of reparations from the government and people of Hungary to American nationals."[66] He further pointed out that the

> . . . Armistice Agreement specifically provided for the restoration of all legal rights and interests of the United States and its nationals as they existed before the war and for the return of their property in complete good order . . . . I suggest that a date be fixed for the return of these properties to the control of the American owners.[67]

On January 17, Captain Saprikin visited Ruedemann and informed him that he had to leave for a few days, but on January 22 he would return and assume the managment of the company. As soon as the Soviet officer left, Ruedemann took the important records, "ledgers, balance sheets and financial papers of the firm and deposited them in the office of the U.S.A. representative of the ACC . . . ."[68] Later in the day he contacted Marshal Voroshilov and told him that "the firm would not recognize any orders from the ACC which the American and British members have not countersigned."[69]

Major General Key met Marshal Voroshilov on January 22 concerning his note of January 15 to Voroshilov. At the beginning of the conference, the American officer protested that "Marshal Voroshilov, in the name of the Allied Control Commission, appointed Soviet military

personnel to supervise the administration of MAORT, in addition to the technical control of the production which had been continuously exercised by Soviet authorities since their arrival in Hungary."[70] The Marshal replied that his actions resulted from the refusal of the oil company to maintain production and his belief that production was being deliberately curtailed to the disadvantage of the Soviet and Hungarian authorities. To this the Major General said: "From my own experience in oil production . . . the decline in production was a normal decline, inescapable, and that artificial means to maintain or increase it would result in waste of gas, with resulting loss of recovery of oil and resultant damage to the properties."[71] After listening to this reasoning, the Marshal "suggested that company engineers and Soviet engineers get together and try to agree on the amount and method of production."[72] General Key agreed with this.

Within hours after the conference, Major General Key contacted Ruedemann and asked him to prepare a crude production schedule which would be consistent with rational production methods of the field and satisfactory in volume to Soviet military authorities. On January 23, Ruedemann delivered the requested plan. On January 24, General Key submitted the plan to Marshal Voroshilov and wrote him: "It is my considered opinion that the reasons stated by Ruedemann for reducing the output are sound, reasonable and based on years of experience by the Standard Oil Company."[73]

In its particulars, Ruedemann's schedule revealed a willingness to cooperate with the Russian authorities. He wrote: "Our technical staff believes a 20 percent reduction should be made at once, but we are willing to make the cut in two stages of 10 percent a month for two months."[74] This planned reduction was in line with the normal and

natural decline in the output of the fields.

In the rest of his report, Ruedemann explained the economic and political implications of the company's oil production. Regarding the country he wrote:

> It is regrettable that this decrease is necessary at this time when the economy of Hungary so urgently requires all the raw materials that can be recovered. But it cannot be avoided. Unfortunately, the fields have passed their peak, and we have been unsuccessful in discovering new pools.[75]

Considering the Red Army's occupation of the fields, he observed:

> Our company has no objection to the presence of the Red Army in order to guard the installations. Moreover, we would appreciate the assistance of the Russian authorities in case of exploratory drilling.[76]

The future seemed to be promising provided that

> . . . we be permitted to produce the wells in accordance with our methods. We can assure the Russian authorities that we shall produce as much oil as is feasible without damaging the fields. We wish there were some compromise, but it is either produce at too rapid a rate and damage the fields, or produce at a rational rate and conserve the reservoir energy.[77]

The American Minister to Hungary, H. F. Arthur Schoenfeld, (formerly U.S. Representative to the ACC) who had been privy to the exchanges between the two Americans and the Russian, reported to Washington that

> . . . Marshal Voroshilov denied that the Soviets were in control of the property, an allegation which plainly was not in accord with the facts, but indicated a willingness to compromise. When . . . MAORT management made a compromise proposal . . . conditioned upon the withdrawal of Soviet troops, Marshal Voroshilov rejected this . . . and refused to withdraw his forces.[78]

Two days later, Major General Key intensified his efforts and threatened the marshal with an appeal to higher authorities. He said to Voroshilov: "I will inform my Government of your decision to reject our proposal and recommend that it be taken up on higher levels with Soviet authorities in Moscow."[79] To the American general's surprise, the

Soviet marshal ". . . agreed that such was the proper course and that Moscow and Washington should discuss and decide the matter."[80] Accordingly Major General Key ". . . wired the War Department and reported the impasse which had been reached here and recommended that strong representations be made to Moscow for the return of these properties."[81]

In early February, one thing was certain: neither side was willing to change its position. The Red Army (in the person of Major Cwetkov) controlled the oil fields; and through Engineer Captain Saprikin, it managed the central office. The American contingent stayed resolute in its efforts to remove the Red Army from the fields.

Having some free time at his disposal, Ruedemann collected data and impressions to expose the Russian oil men's lack of knowledge and experience in directing the operation of the fields. When reporting to Major General Key on February 13, Ruedemann noted that "Russian geologists . . . insisted upon the carrying out of experiments that were definitely damaging our wells."[82] The Russians appeared to be ". . . so determined to increase production that tests were being made which were not only foolish but seemed to indicate that they had no regard for our property or the opinion of our technical staff."[83] As an example, Ruedemann wrote:

> . . . Lt. Col. Kyrjakov and Mr. Ivanoff decided to perforate an upper horizon, although our geologists called their attention to the probability of getting only gas as the horizon is high structurally. Now the new well is producing much gas and little oil, and no effort is being made to shut off the gas horizon. . . . I trust that we can get control of the operations returned to us before the fields are completely destroyed.[84]

As soon as Ruedemann had an opportunity, he sat down and evaluated the situation concerning the Soviet oil experts "in order to give a clearer picture as to why we do not understand the Russian petroleum geologists and engineers and they don't understand us."[85] He found that

> At first the behavior of the two Russian geologists was regarded as enigmatic, but now it is evident they are acting partly from ignorance of modern oil production practices and party because of the system under which they work.
>
> Ivanoff, upon arrival at our fields, announced: 'I am here to prove there is no overproduction'--a simple, positive and revealing statement. He is the Chief Petroleum Geologist of the USSR and naturally a man of importance. Certainly, he is a party member--a boisterous type fellow who drinks a lot, gets drunk easily and expounds such theories as 'Man controls nature' and 'A nation of people who drink heavily is a strong nation.' His opposite, Pominoff, is truly an opposite; the pendantic type, modest and I am sure has a reasonably clear understanding of our problems but dares not speak out. He is older than Ivanoff, probably about fifty, and evidenty is a good geologist, whereas Ivanoff, who looks fifty but claims to be thirty-eight, boasts of the succession of jobs he has held--chemistry professor, judge, opera singer, and now petroleum geologist.[86]

After observing the two Russians at work, Ruedemann came to the conclusion that "They know absolutely nothing about the principles of reservoir behavior . . . . They want to produce more. . . . They are always reaching for percentage increases under five-year plans."[87] Ruedemann found that

> None of them can read an electric log. Other things such as their ignorance of the use of flow beans or a water knock-out also astonished us. This ignorance is not limited to the two geologists. Lt. Col. Bjelousov is a graduate petroleum engineer, so is Major Zwetkov. Lt. Col. Kyrjakov claims to be one, but there are doubts, although he has worked in oil fields. . . . We started out with the assumption they knew all about reservoir behaviour. Their boasts that America is fifteen years behind them and similar remarks, led us to believe they must at least have an understanding of modern production techniques. Now we know their boasts are merely a camouflage. They are probably the greatest nationalists on earth.[88]

Ruedemann was a positive and resourceful person. Even though the Russian experts appeared absurd and "professed to understand production methods . . . yet continued to waste reservoir energy . . . ,"[89] he believed that they were not beyond help. In an effort to contribute to their professional growth, he did the following:

> I have obtained from America the booklet entitled 'Petroleum Reservoir Efficiency and Well Spacings' and would appreciate the

> opportunity to present the same to Maj. Gen. Sviridov . . . .
>
> I recommend another publication that is even better than the above for the detailed study by petroleum engineers of modern production methods. Although the publication is German, it is in reality a compilation of American and other literature on the subject. The title is Fundamentals of Crude Production.[90]

While Ruedemann was occupied with his analysis of the Soviet oil men's professional competence, American Minister Schoenfeld and Major General Key simultaneously arrived at the conclusion that their efforts were useless and they needed outside help from their respective departments. Schoenfeld reported:

> MAORT provided revealing indications of Soviet technique in utilizing the Allied Control Commission to the end of Soviet national policy. . . . Soviet actions were calculated to damage present and to prevent future American investments in Hungary, in addition to extracting the maximum current benefits from all Hungarian resources.
>
> . . . After months of negotiations . . . the Soviets were determined both to remain in control of the fields and to maintain production at a high level.[91]

To Major General Key, the situation was equally clear. He admitted that the ". . . history of our negotiations with the Soviets emphasizes the weakness of our position," and therefore "I recommend that strong representations be made to Soviet authorities in Moscow, and that appropriate pressure be applied to obtain relinquishment by them of control of the American-owned oil properties."[92]

The responsible officials in the State Department accepted the recommendations coming out of Hungary and presented a note to the Soviet Foreign Office in Moscow on March 13, 1946. It started with a simple statement of fact: "The desire of the Soviet military authorities to maintain oil production in Hungary is apparent . . . ."[93] It continued with the expression that "My government must insist, under the circumstances, that the government of the Union of Soviet Socialist Republics take immediate steps to withdraw Soviet personnel from MAORT properties

and to return to the Company complete control and management." Surprisingly, the end of the note conveyed a set of significant concessions on the part of Standard Oil. It read:

> Upon the departure of the Soviet forces from the fields, the Company agrees to (1) produce at maximun rate possible without incurring serious loss of production within the forseeable future by damage to the reservoir or producing wells (2) maintain co-operative consultation with duly (tripartite) authorized Allied Control Commission representatives on legitimate production questions arising in connection with the Company's performance . . . .[94]

On March 22, Major General Key encouraged the Russian marshal to keep his part in their agreement and appeal for support to Moscow, and he affirmed that "The position of my Government is that the management of these properties should be returned immediately to their American owners, and that Soviet personnel should be withdrawn."[95]

On April 6, a Department of State official in Washington telegraphed to Schoenfeld that Soviet Foreign Minister Vyshinsky's reply to the United States' note of March 13 was "gratifying in promptness but not safisfactory in content."[96] The telegram instructed Schoenfeld to "continue to press the matter with the view of effecting immediate withdrawal of Soviet personnel from MAORT and the return of complete control and management of the company . . . ."[97] In its substantive part, the telegram informed Schoenfeld of two different, hitherto not mentioned, reasons ". . . for Soviet intransigence in the MAORT question."[98] They were ". . . Soviet expenditures on behalf of MAORT and the existence of German capital in MAORT."[99]

The mention in the telegram of "German capital in MAORT" was significant because it was not the first time that Soviet military or diplomatic authorities had made reference to it. Initially this point of contention surfaced between Soviet and American officials on Decem-

ber 23, 1945, during Ruedemann's first visit to the oil fields. Lieutenant General Sviridov, when talking to Ruedemann, had said that MAORT was a German interest and according to the Potsdam Agreement, the Soviet Union had a right to it. To this Ruedemann replied:

> . . . they were entitled to ascertain the German creditors of the Company but we had no records, these having been lost when the offices were bombed and burned out. Moreover, a statement had been given them to this effect and it would have to suffice. I then remonstrated with them for their methods of investigation and expressed my dislike of Lt. Col. Matvejenko's trip to our field offices, where from underlings, he collected data on German materials purchased during the war. I told him this was American property and had been paid for by the Company; that if they wanted data, they should come to our Management in Budapest, and we would decide whether they were or were not entitled to have the information.[100]

This incident with Lieutenant Colonel Matvejenko occurred earlier, on December 13, 1945:

> Lt. Col. Matvejenko, when told in Budapest that they were not entitled to data pertaining to our creditors, went to Nagykanizsa and demanded and got from our local staff a complete record of all equipment purchased from Germany. The Thomassen compressors (from Holland) and Cooper-Bessemer compressors (from U.S.) are considered by them to be German manufactured. We are afraid they intend claiming this equipment under the Potsdam Agreement. The value is several million dollars.[101]

Schoenfeld also knew something about the Soviet's attempt to exploit the company's relations with German firms. He noted:

> The Soviets inaugurated an attempt to gain control of MAORT under the Potsdam Agreement by the establishment of MAORT obligations to German companies. In this the Soviets encountered difficulty, partly because of the fact that the pertinent files had been destroyed during the war. They did not hesitate, however, to use methods of intimidation against company personnel who might have been able to throw some light on the question.[102]

In April, Ruedemann wrote an exhaustive report on the company's situation entitled "Russian Interference and Liabilities." He called it a "memorandum" in which he intended to ". . . summarize the losses incurred by the inefficient operation methods imposed by the Russian

experts."[103] It was a comprehensive work which exposed every previously mentioned problem. He ended it with the following words: "When all information will be at hand, the total loss to MAORT will be found to exceed 30 million dollars.[104]

The perplexing part of Ruedeman's "memorandum" was that in the end of it he listed German liabilities incurred during the war to the company:

> There is no complete record of German liabilities. Reports were destroyed by Russian bombing. However, it is highly probable that the Germans owe the MAORT for oil deliveries and monies advanced against equipment orders . . . . The MAORT has no record of sums owed German companies or of the sums owed MAORT by German companies. The only amounts due either way were incurred during 1944, and most records pertaining thereto were lost in a fire following the bombing of the office. The only person, the Chief Accountant, who would have known, lost his life in an automobile accident late in 1944.[105]

In spite of this lack of records, Ruedemann noted

> Large sums were advanced for materials ordered which were never delivered, and the DAFG was in arrears on payments for oil delivered. Our incomplete records show a balance owed by German companies to the MAORT of 158,866 R.M.[106]

For a few months after Ruedemann's April 11 memorandum, the American community and Soviet military leadership appeared to have come to an impasse in their struggle over the company. No urgent problems arose and no heated arguments developed for a while. One reason for this tranquil situation was the fact that both sides had again referred their cases to higher levels of their governments.

Soviet and American diplomats in Moscow and Washington often consulted with each other concerning details of impending peace treaties with the defeated nations, during which the issue of the Red Army's occupation and utilization of American property in Hungary had regularly surfaced. Points of these discussions reached the interested parties in Hungary, and the local responses to these points also found their way to

the capital cities.

Ruedemann continuously kept busy with the preparations of his reports. On July 10, he again perambulated the terrain of company problems. His closing thoughts were pervaded with feelings that no significant changes would be effected in the near future. He wrote:

> A review of the previous exchange of notes will convince one of the futility of continuing the debate. It has now been going on for eight months . . . . All such extraneous and irrelevant arguments as those presented in their replies are merely postponing their withdrawal from the properties and giving them an opportunity to entrench themselves in the operations.[107]

The Emergence of the "Hungarian Angle"

By the summer of 1946, both sides had exhausted efforts to find new and convincing arguments in support of their cases. However, there was another party which could be involved in this, one which had silently followed the controversy: the Hungarians.

Ruedemann was the first to include the Hungarian government in his mission to advance the company owners' cause. In the writing of one of his numerous accounts entitled "A Brief Report on the Wastage of Hungarian Oil and Gas Resources," he placed himself in the role of a caring operator who found himself hamstrung by a wasteful, irresponsible government. He wrote:

> It is regrettable that the producer of a raw material should beg a Government to conserve its natural resources. Yet this is the unusual position in which the MAORT finds itself . . . . The oil and gas resources of Hungary are being carelessly squandered at the present rates of production.[108]

Ruedemann did not want the company to produce more than 10,000 barrels a day; therefore he called on the government to support this figure. He reasoned that

> Those responsible for the planning of the economy of Hungary should take facts into consideration and make commitments for only such quantities of crude oil and products as can be pro-

duced without waste.[107]

In the meanwhile, American and Soviet diplomats in their respective capital cities did not allow the discussion over the Red Army's occupation of MAORT to recede into the background. Eldridge Durbrow, American Charge d'Affaires in Moscow, told V. G. Dekanosov, Soviet Deputy Minister for Foreign Affairs, that Marshal Voroshilov's appointment of a Soviet administrator to manage MAORT ". . . constituted a clear contravention of Article XIII of the Armistice Agreement . . . ."[110] Dekanosov answered that Marshal Voroshilov "sent his representative to the MAORT Company because the company had evinced a desire to reduce its production . . . ."[111] Durbrow reassured the Russian diplomat that

> . . . the management of MAORT contemplated reducing its ouput solely to the level which would conform to what it considers . . . as sound oil field practice . . . .
>
> The level of production by MAORT would be more than adequate to meet Hungarian obligations on the account of Soviet reparations, and Soviet occupation's needs as well as Hungary's other oil commitments.[112]

Back in Hungary, Schoenfeld asked Brigadier General G. H. Weems, U.S. Representative to the ACC, to request of Lieutenant General V. P. Sviridov ". . . that the Soviet forces be instructed to relinquish the MAORT properties."[113]

The American general's request to his fellow Russian was conveyed in a language that displayed the traditional, courteous, diplomatic trappings. Brigadier General Weems addressed his counterpart as, "my dear General." Next, he concurred with him as he wrote: "I am sure you will agree, my dear General . . . ," and he assured him that "I know that I can rely upon your assistance . . . ."[114] These three phrases, together with the last one, "with assurances of my highest esteem . . . ,"[115] must have made some impression on the Russian sol-

dier, who was a Communist and an enemy of capitalists and imperialists.

Two weeks later the two generals met in person. Aspects of their conversation showed the unbridgeable differences in their points of view. The conversation quickly moved to the heart of the matter when Lieutenant General Sviridov awkwardly asked: "You wish to convince the Deputy Chief of the ACC that the firm is in the hands of the Occupation Forces?"[116] To this Brigadier General Weems replied: "Mr. Ruedemann informs me that it is under the control of a major of the Red Army."[117] Weems then capsulized the situation, and Sviridov responded in the following words.

> Before the arrival of Mr. Ruedemann, the fields were handed back to the firm. Mr. Ruedemann is directing activities in accordance with American principles. The whole output of the company is sold to the Hungarian Government at a very high price. The profits all go to Mr. Ruedemann. Production is completely in Mr. Ruedemann's hands. The Russian control of one person there does not interfere with operations. There is no interference in production or distribution. The Russian officer merely looks after the interest of the Hungarian Government and economy. Why does he do this? Because Mr. Ruedemann told him several times he intends to reduce production by 30 percent . . . . If Mr. Ruedemann is permitted to do this then the whole Hungarian economy would receive a severe blow . . . .[118]

At this point, the Soviet lieutenant general decided to use the Hungarian government to support his position:

> On the 4th of November, the Hungarian Prime Minister requested me to leave the MAORT Oil Company under Russian control or the Hungarian economy would be ruined . . . . We are keeping our control there on the request of the Hungarian Government. That is the true account of the MAORT Oil Company today.[119]

After a lengthy discussion of how much the company should produce and which engineering group (Russian, Hungarian or American) made what recommendations, the Russian general felt that it was time to summarize his position and said:

> This is the situation today as I have studied it . . . . There has been much discussion by General Key, General Weems and

[authorities] in Moscow. It all centers round Mr. Ruedemann who just doesn't want to increase production.

Therefore, we do not consider the MAORT Oil Company in our hands. That one man is there to prevent a decrease in production and actual operation is in the hands of Mr. Ruedemann.[120]

To punctuate his conclusion, he offered some cogent quotes. He said:

Colonel Hagy, in company with Mr. Ruedemann, made the statement: 'Let the oil stay in the ground until better days come along. It is not advantageous for us to produce oil, but let it lie in the ground.' He was very frank.[121]

Brigadier General Weems sarcastically, and at the same time politely, said:

I wish to thank the Chairman for a very clear explanation of the operation of the oil fields, but I do not see how this explanation allows Russia to violate Article XIII. The American company can protect the Hungarian Government just as well.

It appears to my Government, as expressed many times, that all this does not justify not turning back the property to its owner.[122]

The Russian general had a quick answer:

May I call to the General Weems's attention the fact that all letters mentioned one phrase: that the MAORT Oil Company will produce oil in sufficient quantity for home use and reparations. No mention is made of figures, and the oil company has no right to reduce production.[123]

To this the American general angrily responded:

No figures are mentioned in the Armistice Agreement. My government takes the stand that under the Article XIII this business should be returned to its owners and the question of production worked out between the Hungarian Government and the owners. The Hungarian Government could pass laws or take whatever action they want to get the necessary production of oil.[124]

The end of the discussion moved along in short rapid exchanges:

General Sviridov:
I assume that that is what will happen when Russian control has been withdrawn. Soviet control is temporary and is not harming the firm at all. As a matter of fact, it is increasing their profits and therefore might be considered protecting the property.
General Weems:
Still the firm is American-owned and ought to be turned back, but it cannot be returned as long as Russian control is there.
General Sviridov:

> The actual transfer has already taken place and when the Russians leave there is nothing further to do.[125]

Sviridov's explanations revealed only one new argument: "On the 4th of November, the Prime Minister requested me to leave the MAORT Oil Company under Russian control or the Hungarian economy would be ruined."[126] This was a surprising statement by the Russian officer, especially in the light of what Ferenc Nagy, Prime Minister of Hungary, had subsequently said to Schoenfeld on the very same topic. On November 22, "the Hungarian Premier denied to a member of the Legation staff that he had ever requested continued Soviet control of MAORT, but pointed out that he was not in a position to contradict General Sviridov."[127]

Sviridov's reason and the Hungarian Premier's denial of it made a serious impression on the members of the American community. Schoenfeld himself decided to pursue the matter further in the hope that he would receive a definite response from the Hungarian Premier. He sought him out and

> . . . the true situation of MAORT was explained to the Prime Minister. In response, he stated that he would proceed with representations to the Soviets to effect transfer of the control of the fields to the Hungarian Government, which procedure, it was felt, offered considerable chance of satisfactorily resolving this question. On December 11, the Prime Minister assured the American Minister that a solution along these lines might be expected soon.[128]

A copy of the minutes recording the conversation between the two generals found its way to Ruedemann. Arranged in the form of a dialogue, Ruedemann quoted some statements by Sviridov and provided them with his own answers. The completed work formed a memorandum which provided some important details about the company's operations. The first statement of General Sviridov (in quotation marks) dealt with the control of the company:

Statement:

'Mr. Ruedemann is directing activities in accordance with American principles.'

Answer:

The entire dispute centers around this point. At no time since the liberation has the Company been able to operate in accordance with American technical principles. During German occupation the Company was not interfered with in this regard.

Statement:

'Production is completely in Mr. Ruedemann's hands.'

Answer:

The Company cannot exercise its own judgement in the producing of wells but has to accept the orders of the Russian control officers.

Statement:

'The Russian control of one person there does not interfere with operations.'

Answer:

There are at present three officers and one 'expert.' If their wishes are not fulfilled they can call upon the Military to take action against those who do not obey instructions.

Statement:

'There is no interference in production or distribution.'

Answer:

The Russians control the production rate and the Hungarian Minister of Industries, in combination with the Russian element of the ACC, determines the allocation of each month's production beforehand. The Company has absolutely nothing to say regarding the production rate and distribution.

Statement:

'The Russian officer merely looks after the interests of the Hungarian Government and the Company.'

Answer:

A magnanimous gesture.[129]

The next few statements and answers explored the problem of the volume of production and its effect upon the future productivity of the fields without introducing any new or different material.

Ruedemann, who even in hopeless situations had always shown a sense for the humorous and philosophical bend, did not allow some of the Russian general's statements to pass by without subjecting them to his dry wit. When the Soviet "experts" stated that "It is the function of an engineer to overcome the forces of nature," Ruedemann commented: "They did not succeed, and it was a foregone conclusion that they could

ever succeed . . . ."[130] Another time, when Sviridov said that his presentation was "the true account of the company," Ruedemann retorted: "The definition of the word 'true' will have to be revised if it is to apply to such statements as given herein."[131] Listing one of the Hungarian government representatives' functions, Ruedemann could not refrain from concluding it with an expression of mild sarcasm.

> Mr. Gombosi, the former salesman for the Nyirbogdany Refinery, is now the Hungarian Government's Oil Commissar, and also the President of the Hungarian-Soviet Oil Company and President of the Hungarian-Soviet Refinery. He's a Government official with wide powers who works for the Russians--what a combination![132]

In answer to one of the statements, Ruedemann gave an accurate account of the Soviet occupying forces' share of the company's production:

> Statement:
> 'For me it is vague why Mr. Ruedemann wants to decrease production. Russia is not interested personally. We receive only 75,000 barrels.'
>
> Answer:
> The 15% royalty goes to the Russians. They are interested in maximum production. Russia is also receiving considerable quantities of petroleum products under the trade agreement, and it is rumored that a substantial quantity is being allocated for supplemental reparations in 1947, as well as quantities under the trade agreement.
>
> It is expected that the Soviets will receive under the trade agreement a total of 1,300,000 barrels of petroleum products by the close of the year, and negotiations are in progress for next year. According to confidential information they are also requesting 1,300,000 barrels for 1947. The prices they pay the Hungarian Government are ridiculously low and less than the cost to the Government. They are:
>
> | | |
> |---|---|
> | Gasoline | $2.53 per barrel |
> | Kerosene | 1.88 |
> | Gas Oil | 1.71 |
> | Fakura | 0.87 |
>
> This is in addition to amounts they squeeze out for supplemental reparations.[133]

At the end of the memorandum, a purported quotation came back to haunt Ruedemann and beg for clarification:

> Statement:

'Col. Hagy, in the company of Mr. Ruedemann, made the statement: "Let the oil stay in the ground until better days come along. It is not advantageous for us to produce oil now, but let it lie in the ground. He was very frank.'

Answer:

The writer does not recall when Lt. Col. Hagy made such a statement. The writer in the company of Lt. Col. Dunham, not Lt. Col. Hagy, discussed the problem with Gen. Levuskin and Gen. Sviridov. It is possible that Lt. Col. Hagy, during the inflation period may have made such a statement, for it is logical for a businessman to recommend that oil, for which only a few cents per barrels is being paid, should be left in the ground until the cost of production could be recovered.[134]

Eight days before Ruedemann wrote his dialogue-style memorandum, he sensed a renewed need for a summary of the company's situation to keep the cause of the company current in the mind of interested parties. This time he analyzed the company's plot from two separate Russian and Hungarian angles. He contended that "the continued occupation of the MAORT property was an action desired by both the Russians and certain Hungarian Government officials . . . ," however, "the objectives of the Russians differed from those of the Hungarians."[135] The Russians insisted upon the control over the company for three reasons. Hungarian oil represented strategic importance because Central Europe had no adequate crude deposits. According to Ruedemann, the Austrian wells were practically exhausted; Czechoslovakia had meager crude deposits; Poland had only negligible crude resources at the present; Yugoslavia had some potential oil deposits but had no technical means to explore them and exploit them in the near future; and ". . . the oil from Romania was needed for West Russia."[136] The second reason was ". . . industrial espionage: they [the Russians] wished to learn more about our methods and procedures."[137] The third one was simple self interest. In Ruedemann's words: "Under the Hungarian-Soviet oil agreement they get the 15% royalty formerly given the Hungarian Government. The higher the

production, the greater their return."[138]

The "Hungarian angle" was more complex. Ruedemann saw this as involving groups of people with two views: those in the Hungarian government who did not understand that excessive exploitation of the fields would eventually damage the field and substantially reduce the total yield of the fields; and those who had various reasons to view the Red Army's occupation of the oil fields as not only acceptable but desirable. People in this latter group were further divided into several sub-groups. In the first one, Ruedemann placed those whose "political aspiration and security were more important than the future economic welfare of Hungary."[139] In the second group were those who wanted MAORT to contribute toward the country's reparation obligations and economic rehabilitation. Members of this group believed that the company could fulfill this dual role if it put out as much crude as it could and earned as low a price for its product as was practicable. Moreover, they purposefully delayed, as often as possible, the delivery of scheduled payments for the oil to the company.[140]

In the third and last sub-group, Ruedemann placed those Hungarian state officials who had "private interests" involved in the Red Army's occupation of the oil fields. The "private interests" of the state officials broke down into three classes. In the first, belonged those who purposefully kept the price of the crude low in order to "make barter deals with crude oil and its products."[141] In Ruedemann's words:

> The Ministry of Industries is bartering oil with Switzerland, Poland and other distant places and expects the MAORT to reduce the crude price still further so that the oil might be competitive in spite of the excessive transportation costs, and the fact such places are readily accessible to oil from their own or nearby seaports.[142]

In the second class of the "private interest" sub-group were those who planned to accuse the company of "inefficiency and intention to obstruct." These individuals would advance their point of view in the following way:

> The non-payment of deliveries prevents the Company from making purchases of much-needed maintenance equipment and can lead to the accusation of sabotage. If operations are handicapped by the failure of equipment, they will not accept the explanation that the Company was unable to make purchases for lack of funds but will claim inefficiency and intention to obstruct.[143]

In the third class were those state officials who wanted "liquidation of the assets of the Company" by demanding that the company operate at "high production rates which would cause permanent and irreparable damage to the fields."[144]

The "Hungarian angle" in utilizing the company for its own purpose was predicated on the Red Army's control over the company. In Ruedemann's words:

> It is primarily by the utilization of Russian control that the Hungarian Government is able to force MAORT to contribute its capital for reparations and rehabilitation. Without Russian control the Company could suspend oil deliveries until prompt and adequate compensations were made.[145]

In order to stop this exploitation of the American company, Ruedemann suggested that

> . . . it is time that a meeting be called to bring to the attention of the Hungarian government the fact that they have no right under the Armistice Agreement to request the occupation of American property by the Soviets. This action of the Hungarians is an affront to American diplomacy . . . . The situation merits the strongest American representation.[146]

These last statements were based on Ruedemann's belief that Hungary was a sovereign state in spite of the presence of an occupying Soviet army.

Three days after Ruedemann shared his views on the "Russian and Hungarian angles" with Schoenfeld, he informed General Weems of the

latest company problem. Dr. Gyorgy Kertai, a knowledgeable and experienced Hungarian geologist who had been with the company since the beginning, published an article in the Kozgazdasag (Public Economics) sometime in the summer. At the end of the article, Dr. Kertai reached the conclusion that "The company's crude extraction method was noneconomical because large amounts of natural gas were vented."[147] This critical opinion did not escape the attention of the members of the Economic Chief Council (Gazdasagi Fotanacs) who on November 8, 1946, asked Dr. Kertai to explain how the wastage of gas could be stopped.[148]

Dr. Kertai's reply represented a concerted effort of the leading members of the company's technical and administrative staff. In Ruedemann's words:

> Dr. Kertai, who is one of our best geologists, was assisted in the preparation by our two ablest petroleum engineers. After completion of the memorandum it was reviewed at a meeting by Dr. S. Papp, Company Manager and geologist of international reputation, and by the writer. We all agree in the conclusion.[149]

In the beginning of the report, Dr. Kertai repeated the conclusion of his article: "Production proceeds at an excessive rate whence it follows that it is uneconomical. This was the gist of my article in the Kozgazdasag." He explained the necessity for pressure maintenance; the advisability of closing off wells which produced large amounts of gas; and finally, he quoted from the work of I. N. Gubkin (a fellow of the Soviet Academy of Sciences) who recommended the maintenance of a certain gas-oil-water ratio.[150]

To demonstrate the practical aspects of his observations and recommendations, Dr. Kertai quoted some important percentages which reflected the conditions of the oil fields. He noted:

> To date, 17.8% of the oil resources within the Budafa Field and 16% of the Lovaszi Field have been lifted. The question at

> issue is to find how much crude we shall be able to produce with the gas energy available. . . . Experience and time tell that recoverability . . . varies from 20%-40% of the entire crude resources. . . . We must strive to attain a recoverability of about 45% in the Budafa and Lovaszi Fields, because at the present-day state of knowledge of oil fields and at the present-day state of technique, such a level of recoverability is attainable.[151]

To follow an economical production rate, Dr. Kertai recommended the following:

> In the Budafa field we ought to produce daily only 3,700 barrels instead of the 4,600 barrels now lifted per day; and in the Lovaszi field we ought to lift only 7,200 barrels instead of 8,750 barrels a day . . . . This would be the "ceiling of production at an economical rate based on the figures of October 31, 1946. . . . In case of maintaining production at the economical levels, the yearly decline in production--as experience tells--would come in Budafa to 9.6% and to 13.2% in Lovaszi.[152]

Based on these considerations, Dr. Kertai offered his final production figures as follows:

> Under due consideration of the percentual decrease in production already mentioned above, quantities to be lifted in the course of the ensuing years should be as follows:
>
> | | |
> |---|---|
> | 1947 | 3,500,000 barrels |
> | 1948 | 3,000,000 |
> | 1949 | 2,500,000 |
>
> [153]

Dr. Kertai closed his report with two forceful sentences: "It is impossible to make forecasts on the duration of production when it progresses at a non-economical rate. Production can be increased only by means of discovering and working new fields."[154]

Dr. Kertai transmitted his report to the Economic Chief Council on November 19. Ruedemann, as had been his custom, submitted a copy of the report, together with his repetitive and emphasizing comments, to General Weems on November 21.[155]

Ruedemann's letter to General Weems was not the final event surrounding the Kertai report. In the beginning, the Economic Chief Coun-

cil requested information from Dr. Kertai because he was a member of the Hungarian Communist Party and happened to be employed by MAORT. When Dr. Kertai submitted his report, he did so privately and under his own name, not mentioning the fact that the report was the result of a concerted effort reflecting the position of the company. Apparently some members of the Economic Chief Council saw a degree of similarity between the company's previously expressed posture and Dr. Kertai's private stand on the matter; therefore they decided that Dr. Kertai needed further enhancement in his devotion to his party duties. What happened was reported by Robert S. Folsom, Second Secretary of the U.S. Legation:

> The latest development in this matter is that Dr. Kertai was invited to appear before the Economic Chief Council on November 26. When he appeared he was met by one of the secretaries of Mr. Zoltan Vas, Secretary General of the Council, and escorted to one of the local Communist headquarters. There he was questioned closely by various prominent Communist party members including a Mr. Berei alleged to be an important Communist organizer who lived in Russia for fifteen years and has spent the past two years in Belgium. Dr. Kertai, on the basis of his memorandum, was accused of being an 'enemy of democracy' and of 'spreading Americanism.' He was told that 'the Americans are not interested in an expanding oil industry in Hungary because it lies in the Soviet sphere of influence.' He was also told that MAORT was deliberately failing to teach its Hungarian engineers American methods of production.[156]

For one month there was silence on all sides concerning the Red Army's occupation of the oil fields and control over the company's offices. Then on December 27, Schoenfeld learned from MAORT officials that "Hungarian state representatives reported that the Soviets agreed to evacuate MAORT's properties on condition the Hungarians appoint a commission to supervise management, production, exports and price matters."[157] On the same day, a Hungarian Foreign Ministry official also conveyed the same information to Schoenfeld ". . . but he made no mention of the conditions."[158]

It took three more months for the Soviet military authorities to

withdraw from the properties of MAORT, and to insure that a Hungarian state control commission would be installed to oversee and regulate the operation of the company. On March 10, 1947, Schoenfeld reported to Washington: "The acting Chairman of the ACC confirmed withdrawal of all Soviet representation from MAORT fields and plants . . . . He also stated that Hungarian controllers were sent to MAORT to prevent decrease in production."[159]

On June 24, 1947 General Weems sent a summary of events to Washington and reported on its thirteenth point:

> In spite of repeated protests, the Soviet Occupation Forces controlled the MAORT Oil Company throughout practically the entire period of the Armistice. Control by Russian authorities was not released until March 1, 1947.[160]

Between the time when the Red Army considered leaving MAORT properties in December and when it actually left on March 1, the Soviet Union and the United States had signed a Peace Treaty (on February 10, 1947) with Hungary. Since the end of the war many things had changed which resulted in the release of the MAORT properties. The Russians no longer needed <u>in persona</u> control through the Red Army because during those two years after the war, it had the opportunity to prepare that post-war Hungary would follow its orders, and these properties could be controlled <u>in absentia</u>.

NOTES: CHAPTER SIX

1. No source recorded the exact day on which the oil fields changed hands.

2. Despatch 2361 (restricted), H. F. Arthur Schoenfeld, American Minister, U.S. Mission at Budapest, to Sec. of State, Dec. 18, 1946, NA Records.

3. Telegram 826 (restricted), John Kirk, First Sec. of Mission, to Sec. of State, April 29, 1945, NA Records, Suitland, Maryland.

In contrast, Hungary's twelve major crude refinery plants had been bombed several times, and some of them were completely incapacitated or destroyed in the later part of 1944. The country's peak refining volume of 10,000,000 barrels a year dropped to 760,000 barrels at the end of the war (The Hungarian Oil Industry, pp. 78-79).

4. Despatch 2361 (restricted), Schoenfeld to Sec. of State, December 18, 1946, NA Records.

5. The Hungarian manager recently returned from an extended sick leave that lasted from December 9, 1944 to the end of March ("Confessions of Papp," RHMMS, p. 13).

6. Despatch 2361 (restricted), Schoenfeld to Sec. of State, December 18, 1946, NA Records.

7. Despatch 435 (restricted), Leslie Albion Squires, Sec. of U.S. Mission at Budapest, to Sec. of State, July 12, 1945, enclosure entitled "Preliminary Report on the Hungarian Oil Industry," prepared by Paul A. Chadwell, Economic Analyst, no date, NA Records.

Horvath, editor of CHOMD document collections, summarizes several documents without allowing the reader to learn his source of information. He offers these summaries as connecting, transitory or explicatory text. He said the following regarding the coming of the Red Army and the conditions of the fields:

> The Soviet Army liberated the Transdanubian oil fields at the end of March 1945. With the liberating units came members of the Soviet Army's Oil Committee. . . . Returning workers saw burning tanks and destroyed buildings, and found turned-off wells and damaged pipelines. Of 43 drilling rigs only 7 were left, and only 2 of the 7 were in working condition.
>
> The oil fields suffered only minor damages. The English and American military leadership did not bomb the fields because they belonged to the American Standard Oil Company. The most significant losses to the fields were caused by the Szalasi government's "evacuation order" as the retreating fascist armies destroyed and burned everything in front of them. They moved to the West or left beyond the 1938 borders 80 percent of the

machinery, and equipment and 90 percent of pipes and building materials, and every operating vehicle of transportation.

With the directions of the Soviet Army's Oil Committee, MAORT workers . . . opened the closed oil wells. In the restoration of production, the Soviet Army's technical units also participated. The Soviet Army's Oil Committee took care of the most necessary pipes, building materials, tools and motor vehicles . . . . The Hungarian oil workers and Soviet experts' joint efforts were unmatched in the country (CHOMD, vol. 2, pp. 126-127).

8. The official historical term for the Soviet Red Army's defeat of the Hungarian army and the expulsion of German forces from Hungary is "liberation." The fourth of April is celebrated as Liberation Day.

9. Treaties and Other International Agreements of the United States 1776-1949 (Washington D.C.: U.S. Government Printing Office, 1969), vol. 3, p. 1223, hereafter cited as U.S. Treaties and Agreements.

Annex II was part of the "Protocol of Proceedings," but it was omitted from the "Final Report." While it was accepted in principle and duly signed, members of the conference decided that a complete and final version of it should be drafted by diplomatic personnel at a later date. Annex II was included at the request of the U.S. delegation (ibid., p. 1222).

10. Ibid., p. 998.

11. Letter, James C. Sappington, Assistant Chief, Petroleum Division, to Orville Harden, Vice President, Standard Oil Company, Feb. 22, 1945, NA Records.

Vacuum Oil Company was also interested in returning its representatives to Hungary (telegram 186 [plain], Schoenfeld to Sec. of State, July 10, 1945, NA Records).

12. Letter, Johnson to Darlington, July 27, 1945, NA Records.

13. Letter, Harold L. Febes, Petroleum Administration for War, to Sec. of State, Aug. 30, 1945, NA Records.

14. Telegram 272 (secret), John Grew, Department of State to Schoenfeld, July 10, 1945, NA Records.

Concerning embassy activity in Moscow, Febes had this to say:

On July 20, Assistant Secretary Dean Acheson replied, informing me that the American Ambassador at Moscow had been instructed to request the Soviet Government to issue appropriate instructions to its Allied Control Commission member in Hungary. He promised to keep me advised of developments, but evidently no further progress has been made in this matter (letter, Febes to Sec. of State, Aug. 30, 1945, NA Records).

15. Ibid.

16. Letter, William L. Clayton, Assistant Sec. of State, Dept. of State, to John Ickes, Standard Oil Company, Oct. 23, 1945, NA

Records.

17. Memorandum of Telephone Conversation, Rex Towsend, Department of State, with Edward L. Estabrook, Standard Oil, Nov. 20, 1945, NA Records.

18. In spite of having access to the necessary and accurate documents, Standard Oil's own publication states: "Ruedemann was not permitted by the Russians to enter Hungary until late in October 1945, and George Bannantine in February 1946," (SOPHM, p. 5).

19. Telegram 482 (secret), Grew to Schoenfeld, May 15, 1945, NA Records.

This telegram was the first focusing on MAORT, but not the first concerning the supply and distribution of petroleum products in Hungary. As early as March 14, Leslie Albion Squires, who arrived in Hungary in February and stayed in the eastern part of the country which had already been occupied by the Soviet armed forces, reported on the condition of Shell Oil properties in Budapest, and observed that the Soviet authorities had total control over gasoline stocks in Hungary (telegram 19 [secret], Squires to Sec. of State, March 14, 1945, NA Records). On April 27, he described the conditions of refining plants (telegram 96 [secret], Squires to Sec. of State, April 27, 1945, NA Records).

20. Telegram 77 (secret), Schoenfeld to Sec. of State, May 26, 1945, NA Records.

21. Telegram 103 (secret), Grew to Schoenfeld, May 30, 1945, NA Records.

22. Minutes of Conference taken by Mr. Loftus in the office of Mr. Dallas Dorth, LA, Budapest, June 13, 1945, NA Records.

Concerning future Hungarian-American relations, General Key had the following to say:

> He felt that there was a good possibility that the United States might work out an economic agreement with the Hungarians as the latter are quite favorably disposed to this country. He agreed that a note addressed to the Hungarian Government manifesting our interest in negotiating extension of credits would be most opportune

(ibid.).

23. Ibid.

At the end of the report Loftus noted:

> I received the impression that General Key is very well informed regarding all phases of economic affairs in Hungary, that he enjoys excellent relations with the Russian representative, General Voroshilov; and when properly appraised of American interests will undoubtedly do a splendid job of seeing to it that they receive appropriate consideration.

(ibid.).

24. Letter, Major General Key to Schoenfeld, April 12, 1946, NA Records, attached to Despatch 786 (confidential), Schoenfeld to Sec. of State, April 17, 1946, NA Records.

25. Despatch 2358 (confidential), Schoenfeld to Sec. of State, December 16, 1946, NA Records.

26. Telegram 888 (secret), Schoenfeld to Sec. of State, Nov. 9, 1945, NA Records.

27. Despatch 77 (confidential), Palmer to Sec. of State, January 5, 1946, NA Records.

28. Ibid.

29. Letter, Ruedemann to Schoenfeld, December 13, 1945, NA Records.

30. Ibid. 31. Ibid. 32. Ibid.

33. Despatch 1073 (confidential), Schoenfeld to Sec. of State, December 15, 1945, NA Records.

A change in the status of the U.S. mission in Budapest must be noted. On December 14, 1945, the Senate confirmed the nomination of Schoenfeld to be American Envoy Extraordinary and Minister Plenipotentiary to Hungary. It was not until January 26, 1946, that Schoenfeld presented his credentials as Minister and that the American Mission's classification was changed to U.S. Legation
(U.S. Foreign Relations, 1945, vol. 4, p. 921).

34. Letter, Ruedemann to Schoenfeld, Dec. 23, 1945, NA Records. They were accompanied by Lieutenant Colonel K. K. Dunham of the U.S. Army.

35. Ibid. 36. Ibid. 37. Ibid. 38. Ibid. 39. Ibid

40. Ibid. 41. Ibid. 42. Ibid. 43. Ibid. 44. Ibid.

45. Memorandum by Ruedemann, Jan. 5, 1946, attached to Despatch 208 (confidential), Palmer to Sec. of State, Feb. 14, 1946, NA Records.

46. Ibid. 47. Ibid. 48. Ibid. 49. Ibid. 50. Ibid.

51. Ibid. 52. Ibid. 53. Ibid. 54. Ibid. 55. Ibid.

56. Ibid. 57. Ibid. 58. Ibid.

59. Telegram 87 (secret), Schoenfeld to Sec. of State, Jan. 16, 1946, NA Records.

60. Ibid.

61. Telegram 128 (secret), Schoenfeld to Sec. of State, Jan. 21, 1946, NA Records.

62. Letter, Major General Key to Schoenfeld, April 12, 1946, NA Records.

63. Ibid. 64. Ibid. 65. Ibid. 66. Ibid. 67. Ibid.

68. Telegram 128 (secret), Schoenfeld to Sec. of State, January 21, 1946, NA Records.

69. Ibid.

70. Letter, Key to Schoenfeld, April 12, 1946, NA Records.

71. Ibid. 72. Ibid. 73. Ibid.

74. Letter, Ruedemann to Key, Jan. 23, 1946, NA Records.

75. Ibid. 76. Ibid. 77. Ibid.

78. Despatch 186 (confidential), Schoenfeld to Sec. of State, January 28, 1946.

79. Letter, Key to Schoenfeld, April 12, 1946, NA Records.

80. Ibid. 81. Ibid.

82. Letter Ruedemann to Key, Feb. 13, 1946, NA Records.

83. Ibid. 84. Ibid.

85. Memorandum by Ruedemann, Jan. 5, 1946, attached to Despatch 208 (confidential), Palmer to Sec. of State, Feb. 14, 1946, NA Records.

86. Ibid.. 87. Ibid. 88. Ibid.

89. Letter Ruedemann to Key, March 6, 1946, NA Records.

90. Ibid.

91. Despatch 668 (confidential), Schoenfeld to Sec. of State, March 4, 1946, NA Records.

92. Letter, Key to Schoenfeld, March 7, 1946, NA Records.

93. SOPHM, p. 6. 94. Ibid.

95. Letter, Key to Voroshilov, March 22, 1946, NA Records. Telegram 943 (secret), Department of State, Washington, to Legation, Budapest, April 6, 1946, NA Records.

96. Ibid. 97. Ibid. 98. Ibid. 99. Ibid.

100. Letter, Ruedemann to Schoenfeld, Dec. 23, 1945, NA Records.

101. Ibid.

102. Despatch 2358 (confidential), Schoenfeld to Sec. of State, Dec. 16, 1946, NA Records.

103. Despatch 761 (secret), Schoenfeld to Sec. of State, April 15, 1946, enclosed memorandum "Russian Interference and Liabilities," prepared by Ruedemann, April 11, 1946, NA Records.

Ruedemann's memorandum was discussed with two oil experts, L. L. Ecker-Racz, Chief, Economic Section, U.S. Legation in Budapest and Colonel Townsend, ACC, on April 10, 1946. Colonel Townsend also showed a copy of it to Major General Key (letter, Key to Schoenfeld, April 12, 1946, NA Records).

104. Ibid. 105. Ibid. 106. Ibid.

107. Letter, Ruedemann to Schoenfeld, July 10, 1946, NA Records.

108. Despatch 1919, (restricted), Ecker-Racz to Sec. of State, Sept. 10, 1946, enclosed, "A Brief Report on the Wastage of Hungarian Oil and Gas Resources," prepared by Ruedemann, Aug. 31, 1946, NA Records.

109. Ibid.

110. Despatch 451 (secret), Eldridge Durbrow, Charge d'Affaires ad interim, U.S. Embassy, Moscow, to Sec. of State, Oct. 3, 1946, enclosed, letter, Durbrow to V. G. Dekanosov, Deputy Minister for Foreign Affairs, Moscow, Sept. 26, 1946, NA Records.

111. Ibid. 112. Ibid.

113. Letter, Schoenfeld to Brigadier General G. H. Weems, U.S. Army, Chief United States Military Representative, ACC, Oct. 10, 1946, NA Records.

114. Despatch 2194 (secret), Folsom to Sec. of State, Oct. 30, 1946, enclosed, letter, Weems to Lieutenant General V. P. Sviridov, Deputy Chairman, ACC, Oct. 15, 1946, NA Records.

115. Ibid.

116. Despatch 2293 (secret), Folsom to Sec. of State, Nov. 26, 1946, enclosed, "Notes of Meeting of the Allied Control Commission for Hungary," Budapest, Nov. 12, 1946, NA Records.

117. Ibid. 118. Ibid. 119. Ibid. 120. Ibid.

121. Ibid. 122. Ibid. 123. Ibid. 124. Ibid.

125. Ibid. 126. Ibid.

127. Despatch 1868 (confidential), Schoenfeld to Sec. of State, Dec. 16, 1946, NA Records.

128. Ibid.

129. Memorandum by Ruedemann, no date, attached to Despatch 1193 (secret), Folsom to Sec. of State, Nov. 26, 1946, NA Records.

130. Ibid. 131. Ibid. 132. Ibid. 133. Ibid.

134. Ibid. 135. Ibid. 136. Ibid. 137. Ibid.

138. Ibid. 139. Ibid. 140. Ibid. 141. Ibid.

142. Ibid. 143. Ibid. 144. Ibid. 145. Ibid.

146. Ibid.

147. Letter, Ruedemann to Schoenfeld, Nov. 21, 1946, NA Records.

148. Letter, Economic Chief Council, illegible signature to Dr. Kertai, Nov. 8, 1946, NA Records.

149. Letter, Ruedemann to Schoenfeld, Nov. 21, 1946, NA Records.

150. Report by Dr. Kertai to Economic Chief Council, Nov. 19, 1946, attached to Despatch 2293 (secret), NA Records. Originally the report written in Hungarian, but it was translated into English either by someone on the MAORT or U.S. Legation staff.

151. Ibid. 152. Ibid. 153. Ibid. 154. Ibid.

155. Letter, Ruedemann to Weems, Nov. 21, 1946, NA Records.

156. Despatch 2293 (secret), Folsom to Sec. of State, November 26, 1946, NA Records.

157. Telegram 2366 (confidential), Schoenfeld to Sec. of State, December 27, 1946, NA Records.

158. Ibid.

160. Memorandum by Weems to Sec. of State, June 24, 1947, cited in Foreign Relations of the United States, 1947, vol. 4, pp. 327-28.

CHAPTER SEVEN

POSTWAR OPERATIONS: 1945-1948

The end of World War II found the oil fields under the control of the Red Army and the company technically, but not legally, still in use by the state. Ruedemann had applied his best efforts toward the removal of the Soviet soldiers from Standard Oil's Hungarian property. This eventually was accomplished, not because of Ruedemann's ardor or the efforts of the U.S. government agencies which were assisting him, but because of the signing of the Peace Treaty which convinced the commanders of the Red Army that they could leave the fields without jeopardizing their future access to this source of oil.

The Armistice Agreement of January 20, 1945, ordered the "return of United States property in complete, good order." The task of negotiating with a new and different Hungarian government to find a settlement which would compensate the American owners for the company's sequestration had fallen to Papp and the company's legal experts. The legal arguments were inventive and protracted, and the conferences were frequent and unfruitful. In the end, on November 7, 1946, the negotiators agreed that the status quo should permanently prevail.

The company's physical condition had badly deteriorated, and any hope for a quick renovation was remote. Supplies and materials were scarce; the machinery and equipment that was in good order had been carried off, leaving only the badly worn. New vehicles, or replacement parts for the old ones, were hard to find. Hungarian industry and agri-

culture were forced to produce in order to satisfy the needs of the Soviet Army and the requirements of reparation payments to surrounding countries.

From the early days of April 1945, the company's more than 3,000 workers exploited the oil fields without interruption. They were not hindered by the legal and military entanglements of the company's leadership, but only by the chronic shortages in equipment, machinery and materials. In spite of these uncontrollable difficulties, efficiency and dedication continued to hallmark the efforts of the entire work force.

The quantity of crude produced by each field in the postwar years had begun to subside. Smaller amounts of refined crude products remained available for distribution. Domestic consumption needs and war reparation quotas competed for the diminishing supply in a setting dominated by Soviet military authorities.

The number of oil wells which perforated the land of Transdanubia continued to grow; however, at the same time, the number of flowing wells decreased. This development was a direct consequence of the fields' deteriorating condition, an inevitable aging process, and of the forced wartime production and the unsatisfactory application of secondary production methods. Still, in 1947, the company could look forward to years of operating productively.

The financial and physical condition of the company were about the same. For the first time, MAORT had to borrow from the government to meet its payroll obligations. At the end of the year the books were closed with huge losses. In violation of the concessional Contract, the state had unilaterally set the price of crude at 30 percent of its real 1938 value. The company did not even receive this amount because the

refinery plants were unable to pay for the crude on time. A vicious economic cycle took hold of the company's finances.

While the Red Army was violating American property rights on the oil fields and the Hungarian government was instituting its own brand of unfair practices in the company, the U.S. Legation was extending services to the company in defiance of international laws and customs stipulated in binding treaties. These services included trafficking security materials, delivering money, planning the purchase of false passports, plotting industrial sabotage, soliciting information on secret oil deposits and representing company claims without checking on their veracity. To complete these activities, the Department of State stationed a Petroleum Attache in Budapest who was a director of Standard Oil and part owner of MAORT and whose duties were that of an intelligence officer rather than a diplomat.

The Winding Up of MAORT's Sequestration

To agree on a just compensation to Standard Oil for the December 20, 1941, take over of MAORT, state and company officials immediately engaged in a series of negotiations. On February 1, 1943, they reached the decision that their "mutual demands on each other will be put in order after the sequestration was declared null and void." After the war, Standard Oil officials learned that the Armistice Agreement of January 20, 1945, legally ended the company's sequestration; and they looked forward to the day when their property would be restituted "in complete, good order." First of all, they wanted to find out what was happening to their company in Hungary.

For this reason, Edward Johnson, general counsel of Jersey Standard in New York, attempted to gather information about the holding

company's Hungarian property. In spite of his efforts, he failed to learn enough and turned to Charles F. Darlington, Chief of the Petroleum Division in Washington, D.C. To him Johnson wrote:

> You will note from the letter . . . the Hungarian Ministry of Industry, dated July 6, 1945, that the taking over of MAORT by the Hungarian Government has been terminated as of January 20, 1945, the date of the Hungarian Armistice. However, the letter qualifies this direct statement as follows: 'The Ministry shall be in the position to have restitution as regards the works and the equipment and fittings on hand, effected upon receipt of permission by the Russian Military Authorities now exercising control over them.'
>
> We are not clear as to what happened to MAORT . . . . I assume that the Russians, if our information is up to date, are still exercising some control over MAORT. It may be that the management at Budapest has been restored to MAORT, but that jurisdiction over operations is retained by the Russians. Should this be true, management restoration would be largely ineffective. We will appreciate such light as you may be able to throw on this situation.[1]

To establish order and accountability in the company's Budapest central office and a measure of coordination with the field operations, normalization of relations between the company and state had to take place as soon as possible. The first move to clarify the post-war legal status of MAORT of the RHT began to unfold in early May of 1945 when Papp approached the new Minister of Industry, Antal Ban, and asked him to take the necessary steps to repeal the sequestration order and reestablish the company's independent position.[2]

On July 6, Ban notified Papp that in compliance with point thirteen of the Armistice Agreement of January 20, 1945, he nullified MAORT of the RHT's sequestration decree No. 79997/II/1941, issued on December 23, 1941. After this concise and significant beginning, Ban put forth some unusual and unexpected conditions and suppositions. He wrote that he could return the fields and the plants only when ". . . the Soviet authorities, who keep the fields and the plants in their possession, would give permission to me to do so."[3] He approved the initia-

tion of steps leading to a settlement concerning the company's sequestration and appointed Bela Pataky, a certified public accountant, and Istvan Propper, a former salesman with the Vacuum Oil Company, to take care of the matter. Next he wrote:

> In connection with the winding-up procedure, I would like to call your attention to that oral agreement of ours in which you requested that the company's taking over for use would be a pretended act [szinleges] and the Treasury would conduct the company's operation as an appointed executor, in British law, "trustee," in its own name but in the company's interest.
>
> As an outcome of this agreement, all earnings and debts produced during the time the treasury conducted the company's operation will belong to the owners . . . .[4]

On the same day, citing ministerial decree No. 1560/1945 M.E., which regulated state control over foreign-owned companies, Ban appointed Zoltan Gombosi (Ministerial Commissioner of Mineral Oil Production and Distribution Commission) and Istvan Propper to the company's Board of Directors. The Ministry of Industry reasoned that he had to do so to insure ". . . the continuity of business operations in enterprises whose managers are absent for one reason or another."[5] They were to fill the two vacancies on the Board of Directors created when Dr. Erno Hauer and Janos Dinda left the company and Hungary, and went with the German Army.[6]

By the time Papp received Ban's two orders dated July 6, he had been able to establish contact with Rockefeller Plaza through the "good offices" of two United States agencies stationed in Budapest. The Armistice Agreement of January 20, 1945, provided for the organization of the Allied Control Commission with ". . . the functions of regulation and control in Hungary for the period up to the conclusion of peace, over the exact fulfillment of the armistice terms . . . ."[7] The ACC was headed by a chairman who had to be a member of the Soviet Army and included United States and United Kingdom representatives. While the

representatives of the victorious powers cooperated with each other in implementing the provisions of the Armistice Agreement, they maintained their separate and distinct headquarters. Major General William S. Key and Major Lawrence Hagy were the two American members of the ACC.

The other agency was the United States Mission to Hungary, headed by H. F. Arthur Schoenfeld who was aided by Leslie Albion Squires.[8] For the next two years, the members of these two American organizations assisted and promoted the business of Standard Oil Company in Hungary. They formed a bridge of communication between New York and Budapest and represented the interests of Rockefeller Plaza against the occupying Red Army and against the Hungarian state.

During the summer of 1945, exchanges of letters between Ruedemann in New York and Major Hagy in Budapest grew frequent. On June 29, Hagy received two letters from New York; one asked for his continuous and invaluable support; and the other, he was supposed to hand over to Papp.[9]

From Ruedemann's letter, Papp learned that he would have to be more demanding in his dealings with the Minister of Industry.[10] Papp had received two decrees from Antal Ban which "symbolically terminated [jelkepesen megszuntette]" the company's sequestration and "intended to return the existing properties into our rightful possession."[11] Papp remarked that "since everything happened only symbolically, all claims and questions arising from the present changes would be taken up for consideration by Standard Oil only after the Hungarian properties had been actually repossessed by the American company."[12] He continued that since the company regained its "independence symbolically," he would have to request in the name of the company's shareholders that Ban repeal his decree 817/1945 M.E. which forbade the company to convene its

General Assembly of Shareholders and grant the company permission to hold a special meeting of the General Assembly of Shareholders to elect new members who would complete the membership of both the Board of Directors and Board of Supervisors.[13]

Papp continued to point out that because the business of the company was proceeding "undisturbedly" under the present leadership, and because steps had already been taken to complete the membership of two governing boards of the company during the next special meeting of the stockholders, the company regarded the Minister of Industry's July 6 decree 1640/1945. M.E., which appointed two persons to the governing boards, "immaterial (targytalannal)," and demanded that this order be "placed out of force (hatalytalanitani)."[14]

Without changing the tone of his letter, Papp also directed the Minister's attention to point 11, indentation 1, of the company's contract with the state, which stipulated that the price of crude had to be established in "agreement (egyetertesben)" with the company's representatives. Therefore, Papp requested that the price of crude be reset in agreement with the company's officials and that this price be made retroactive to January 20. Also, the state should immediately pay the company for all the oil shipments which had already been made that year. In the last sentence Papp wrote: "We repeatedly request an out of ordinary permission for the holding of a special assembly meeting . . . and the immediate attention to the aforementioned problems."[15]

The next turning point occurred on August 9 in the company's Budapest central office. Here, a conference took place between representatives of the company and the state where they attempted to clarify the company's tangled legal business. The agenda concerned the carrying into effect the ministerial decrees issued thus far; the acknowledgement

of the end of the taking over for use of the company; and the defining of procedures for the restitution of the company's properties. The participants agreed upon the following: the company's sequestration ended on January 20, 1945; the actual repossession of the company's Budapest offices and oil facilities had taken place; a statement on the financial affairs of the company would be drawn up as of August 31 and used to ascertain the company's financial affairs as of January 20. Abel Bodog and Dr. Gabor Temesvary expressed that

> . . . restitution and termination of the taking over should be, for the time being, regarded in token only, the more so as neither the works nor the assets of the company have as yet been restored; and for this reason the company shall issue a statement as regards the claims arising out of the taking over by the Magyar Treasury or will arise up to the time of effecting actual repossession, as well as regards the claims arising from the terms and conditions of the Armistice Agreement only after the words and assets of the company in full will have been restored.[16]

In response to these reservations, Gusztav Faller, Ministerial Councilor representing the Minister of Industry, and Bela Pataky said that

> . . . damages, if any, payable by the Magyar State to the company by virtue of the Armistice Agreement constitute a problem quite independent of the present negotiations. Therefore, they may not be dealt with at the same time as the terminating of the taking over for use and as the return of the works of the company.[17]

It was decided that beginning on September 1, 1945, business correspondence would be carried on under the original name of the company, MAORT. Everyone present agreed that under present conditions the company could not take the oil fields into actual possession; however, Papp and Faller "declared and stated that they would take the necessary steps to induce the Russian authorities to render restitution possible."[18] Faller said that he would set a date for effecting repossession of the oil fields as soon as he received permission to do so from the Russian military authorities.[19]

The legal language which expressed the Hungarian government's action to terminate the company's being taken-over-for-use status, to restart the company as an independent entity, and to effect actual repossession of the fields brought some words and phrases of dubious origin, intention and meaning. In the Protocol of August 9, Abel Bodog and Dr. Gabor Temesvary referred to "termination and repossession" as "symbolic (jelkepesnek)," meaning that in reality nothing had been "as yet restored," because the Red Army was occupying and using the fields. Significantly, the Protocol did not mention the "oral agreement" between Papp and Ban concerning the allegation that the "taking over for use" was "pretended (szinleges)." Major Hagy had his translator put these phrases to Rockefeller Plaza as follows ". . . your attention is called to our oral agreement to the effect that the entire taking over upon your request had been but a feigned one . . . ."[20] In New York, Edward F. Johnson apparently did not know anything about these issues when he wrote the following to Charles F. Darlington:

> I ask your attention to the fifth paragraph in the aforesaid letter written by the Hungarian Ministry of Industry to MAORT. This paragraph refers to an oral agreement between MAORT and the Ministry. The MAORT properties were not taken over, so I am informed, on the request of MAORT but by the Hungarian Government on its own initiative acting under a Hungarian law, a copy of which we have not seen. There has been no agreement on the part of MAORT that the operation of that company by the government was to be at MAORT's expense.[21]

In his correspondence, Papp had never mentioned an oral agreement between himself and Ban concerning a "symbolic," "pretended" or "feigned" sequestration. However, it was possible that Papp, under Rockefeller Plaza's instruction, made a volteface agreement suggesting a special, modified application of Standard Oil's wartime policy of ". . . assigning to the executives of its German affiliates the right to vote shares of the holdings."[22] Major Hagy, who had not been accustomed

to corporate board-room maneuvers, offered this opinion to Ruedemann: "They do seem to have funny ideas about the whole matter."[23]

In New York, Ruedemann was eager to travel to Hungary to resolve the company's postwar problems. A few days after he received permission from Soviet military authorities, the American oil man arrived in Budapest on November 14, 1945. A ministerial decree allowing him to convene an extraordinary meeting of the company's General Assembly of Shareholders had already been waiting for him at MAORT's headquarters. Two days later, the assembly gathered and elected the members of the first postwar Board of Directors and Board of Supervisors.[24]

This apparently accommodating action of the government was quickly counteracted when on November 22, 1945, in MAORT's Nagykanizsa central field office, Gusztav Faller convened a meeting for company and state officials. The state officials represented a commission which had been assembled prior to the meeting to study the company's legal and business relations with the state. Besides Faller, Dr. Ferenc Magyarossy (chief legal counsel in the Department of Mining), Dr. Jozsef Laszy (counselor in the Ministry of Finance), Bela Pataky and Istvan Propper were members of the commission. The immediate purpose of the meeting was the restitution of the oil fields and its facitities. Faller opened the meeting and summarized what had been achieved thus far in bringing about the return of the company to the American share-holders.[25]

Zoltan Gyulay, an engineer who was head of the Engineering Department and Dr. Laszlo-Pap, a lawyer heading the Nagykanizsa office Legal Department, both minor officials, represented MAORT. To them, Faller handed over 101449/II/1945 ministerial decree which stated that the Minister of Industry received permission from Soviet military

authorities to return the oil fields and facilities to the company.[26]

Next, Dr. Ferenc Magyarossy made the following statement:

> The company's taking over for use, in accordance with indentation 5, Paragraph 7, and Article 11 of the 1939 National Defense Law was at the request of the company, pretended, and the new treasury company conducted the business of the old company as a trusted executive, in English law,'trustee,' in its own name but in the interest of the old company. The existence of the trusted executive relationship had been proven by many facts, but most of all by the fact that Dr. Simon Papp, Chief Mining Councilor, was appointed as the manager of the treasury company and was also a member of the old company's Board of Directors.[27]

Dr. Magyarossy noted that from this trusted executive relationship evolved the fact that all the earnings and debts which were generated by the treasury company would belong to the company. Then he continued as follows:

> The existence of the trusted execution of the company's business was a fact and not a legal question. Therefore, the company's directors could not refer the making of the decision in connection with this question to the company's foreign-American shareholders. The company was the firm which was registered in Budapest, and according to the regulations of the firms, the company was represented by its directors and not by its shareholders. All contracts and agreements made by the directors were binding for both the company and the shareholders.[28]

Dr. Magyarossy moved along with his presentation and concluded it with a surprising, inevitable conclusion:

> In case the representatives of the company, in view of these facts, would still deny the existence of the trusted execution of the company's business, the Treasury would be compelled to claim possessional right to the income and investments of the company which the company generated during the taking-over-for-use period. In case of a denial of the trusted execution of the company's business, the taking-over-for-use legal relationship would have to be regarded as a forced taking over for rental, and naturally in this situation, the particular civil law articles would gain application.[29]

Dr. Magyarossy clinched his legal fact-finding report with the following words:

> The commission states that the company, even at the present, holds in its possession the furnishings and the plants that had

> been taken over for use; therefore, there is no place for any restitution. The commission restricts itself to the ascertation of this fact; at the same time, it reaffirms the fact that the company has earlier, on its own volition, repossessed its properties.[30]

In the afternoon, the members of the commission and the two company representatives toured the oil fields and facilities. As they moved from place to place, they presented their Soviet military authorities' pass proving that they had permission to move about. At the end of the tour

> . . . members of the commission and the representatives of the company asserted that the company did in fact hold the plants and the furnishings in its possession and had continued the operation independently, under its own name and with its own personnel.[31]

The two company representatives observed the proceedings without commenting. At the end, however, Gyulay stated that "while we acknowledge the appearance of the Commission, we are not empowered to make an announcement regarding the position of the company. This, the directors would do by issuing a position report."[32] For that purpose they requested that an official copy of the minutes be forwarded to the company's central office as soon as possible.[33]

Ruedemann and the other directors of the company listened closely to Dr. Szabo-Pap and Gyulay's reports and carefully studied the minutes of the meeting. By this time, they had learned that the Hungarian government intended to nationalize the mining companies in the country. In view of these events, Ruedemann asked Dr. Geocze, the company's legal counselor, to draft a position report in which he would review the developments so far and explore the options left for the company to finally resolve the compensation and restitution controversy between the company and the state. Dr. Geocze completed his work toward the end of the year and submitted it to Ruedemann on January 7, 1946.[34]

At the outset, Dr. Geocze offered the company's (Ruedemann's) version of Papp's "oral agreement" in which Papp allegedly "requested" that the company's taking over for use by the state would be a "symbolic act," and the state would act as a "trustee" in its own name for the company's benefit. Dr. Geocze noted that at the time of the sequestration agreement's signing, Papp was led by a twofold consideration. One was that "everything would remain unchanged in the operation of the company." The second emanated from the first, that this way "he would be able to delay the implementation of the sequestration decree until the shareholders could communicate their views to him."[35]

Dr. Geocze reviewed the Hungarian government's position as it was stated in the minutes of the November 22, 1945, meeting in Nagykanizsa. He noted in a bold manner:

> The only purpose of the Nagykanizsa meeting was the restitution of the plants to the company; in other words, the return of the plants into the company's actual possession and disposal. Contrary to this purpose, Dr. Ferenc Magyarossy, obviously to lessen the Hungarian Treasury's obligation to pay for damages, glided over the fact of the actual restitution, explained it away and dealt with problems which fell outside of his competence and were not subjects of this meeting . . . .[36]

Dr. Geocze went on to explain that on December 23, 1941, the company directors "actually turned the plants over and into the possession of the Hungarian Treasury." According to Hungarian law, "actual taking into possession" meant that "someone moved into the position in which he, in his own interest, could exercise power over the things given into his possession."[37] The directors accomplished this in 1941; however, Dr. Geocze said:

> In contrast to this, at the present, the company is not able to exercise actual power, because of the presence and activities of the occupying authorities to which the company is subordinated in all respects. For these reasons, the company did not advance into the position that it could exercise actual power in its own interest.[38]

Dr. Geocze concluded this portion of his report:

> Therefore, one could not speak of actual repossession or restitution. The goal of this rhetoric was to alleviate the treasury's responsibility with respect to those belongings which the occupying authorities would probably carry away.[39]

After this assertion, Dr. Geocze returned to analyze the legality of the state's taking-over-for-use order. He wrote that the company's concessional rights had been preserved partly in laws and partly in contracts. In 1941, invoking pertinent sections of the National Defense Law of 1939, representatives of the "state simply placed the Company's granted rights out of effect [a Reszvenytarsasag jogait egyszeruen hatalyon kivul helyezte]." From this point of international law, representatives of the state had the right to do so. This right was based on the principle of lex posteriori derogat priori, a later law supersedes an earlier law. But "validation of material justice [anyagi igazsag ervenyesulese] required that fulfillment of obligations taken up in legal contracts by agreeing parties could not be unilaterally and arbitrarily terminated because of one party's unwillingness [egyoldalu akaratelhatarozassal]; not even if the unwilling party happened to be the state."[41] For instance, this doctrine gained validity in the thirteenth point of the Armistice Agreement which stipulated that "the Hungarian state obligated itself to restore to the citizens of the United Nations all legal rights and interests in complete, good order. The twelfth point stated that "Hungary also had to pay for the losses and damages which would be assessed and determined at a later date."[42]

Without a shadow of a doubt, the Armistice Agreement stated that the Hungarian state had to fulfill its obligation of restitution and reparations. The only question which remained was how large a repara-

tion bill should the company present to the state.[43]

Having established the legal grounds, Dr. Geocze moved on to detail the damages and losses the company suffered during the war and the claims the company planned to file with the Hungarian state. He defined three general principles which guided him in the assessment of damages and losses and consequent claims.

General Principles:
1. The company's rights had to be completely restored as they existed before the war.
2. The company's properties had to be restored in complete, good order.
3. The company had to receive compensation for all damages caused by the war.[44]

The direct damages and losses for which the company was entitled compensation were the

1. Value of property damages caused by air raids and ground fighting
2. Value of properties which the German Army carried away to Germany and Austria
3. Value of properties which had been taken as war booty
4. Value of services rendered to and value of materials taken by the occupying armies[45]

In a second group of damages and losses labeled as indirect, Dr. Geocze included restrictions placed upon the company:

1. The company could not conduct its own business.
2. The company had to do some business it would have refused to do had it been able to operate freely.
3. The company's contracts were broken arbitrarily by the state.[46]

To be compensated for the direct and indirect damages and losses, Dr. Geocze listed eight particular claims:

1. The company should be entitled to all profits and capital investments which the sequestered company generated and accumulated.
2. The company should be credited with 11,339,876 pengos (the value of this sum, as all the following ones would have to equal the purchasing power of the pengo in the stated particular year) which the Royal Hungarian Treasury called back from the company's export earnings on the grounds that the company charged higher prices and sold more crude than

was permitted.

3. The company should be repaid 10,000,000 pengos which the company paid MAORT for the gas wells in Yugoslavia.
4. The company would be paid for the full cost of the pipeline construction in Transylvania and the value of equipment, material and machinery left in Transylvania. Together, losses amounted to 3,513,736 pengos.
5. The company should be compensated for lost earnings which accrued because the government, which should have set the price of crude in consultation and agreement with the company as the contract stipulated, set the price of crude arbitrarily low and rejected the company's realistic crude price request twice. This way, on October 7, 1943, the company requested that the price of crude should be raised from 14.53 pengos to 29.00 pengos a barrel. The government did not grant this request until April 1, 1945. As a result the company lost 80,716,170 pengos in earnings.

   On July 6, 1945, the company asked for another upward adjustment in the price of crude. This request was honored late and only in part. Therefore, the company could not collect 1,311,883,650 pengos [inflationary figure]. The company insisted that the government would have to pay for these lost profits.
6. On a 'special account,' the company's bank deposits amounted to 20,581,916 as of March 31, 1945. These deposits represented surplus earnings by the company for exported crude. The Hungarian Treasury kept this amount on this "special account" and ordered that only the Treasury had the right to withdraw from it. No one used this money, and it lost its value because of inflation. The company should have this sum, in its real value, at its disposal now.
7. Before the company was sequestered on December 23, 1941, the company had already paid for different taxes in the amount of 45,000 pengos. This amount should be returned to the company.
8. The officials who were appointed to wind up the administrative particulars resulting from the return of the company had been compensated by the company. This should not have been so. The company should be credited with the amounts paid to those individuals, because had there been no sequestration of the company, there would not have been need for the services of these officials.[47]

In the last part of his situation report, Dr. Geocze analyzed implications of the government's interpretation of the "trusteeship type of management" for the present and the future of the company. In the beginning, he asserted that it was immaterial to the company which one of three approaches the company would choose to take toward the "institution of trusteeship"--accept it as it was presented, reject it or

prepare a new interpretation--since the Armistice Agreement had guaranteed full compensation for all damages and losses suffered by the company during the war.[48]

In case the company accepted the government's legal interpretation of "trusteeship," the company would "tacitly acknowledge the government's right to the taking over for use of the company and relinquish its right which had been guaranteed in both law and contract."[49] While these two consequences at the present had no practical meaning, they could serve as precedents in the future. A second implication would present itself in the case of taxation. If the company were returned to its American owners in accordance with the government's stipulations, the company would have to pay all pertinent taxes going back to the day of the sequestration in one lump sum in 1946. The sequestered company had paid all due taxes during the years of the war; and this would mean double taxation, an occurrence which even the government would want to avoid.

In case the company refused to accept the government's way of looking at the situation, the ownership of the sequestered company would redound to the state. This would not last long because the company's owners could demand compensation and restitution in accordance with the Armistice Agreement. The profits and investments the company generated during the war years while the state managed the operation of the company would not belong to the state, because the state did not make any new or additional investments in the company.[50]

Dr. Geocze reasoned that rejection of the government's interpretation of trusteeship did not matter in reaching a satisfactory financial settlement--the Armistice Agreement took care of that final outcome. At the most, rejection of the state's way would only delay an

inevitable settlement between the company and the state.

At this point, Dr. Geocze was ready to put forth his proposal, a third approach which would be acceptable to the company. He wrote:

> . . . The company's name as MAORT in the use of the Royal Hungarian Treasury should be expunged from the record books kept at the Court of Firms; the government should declare that the company's taking over for use was a symbolic act; the company would accept the government's operation of the company together with the profits, debts and investments made during the time of sequestration, but with the exception of those losses and damages which had been earlier listed; with all these proposals accepted by both company and state, the company could prepare the balance sheets retroactively for each year.[51]

Ruedemann, in consultation with Rockefeller Plaza and other directors of the company came to the conclusion that Dr. Geocze's situation report offered an evaluation and described such solutions to the problems which were realistic and acceptable to the company. As a consequence, Ruedemann transmitted a copy of Dr. Geocze's report to the Minister of Industry on October 30, 1946, and he also found Dr. Geocze's report acceptable.[52]

The final meeting between the representatives of the company and the state took place on November 7, 1946. In addition to the Ministry of Industry, Finance and Treasury, the Ministry of Foreign Affairs also represented itself. The participants accepted the same conditions and terms for the settlement of their problems as were expressed in Dr. Geocze's report.

The first part of the meeting was devoted to a summary of significant events since the time of the sequestration, leading up to the present. This part closed with the following assessment:

> The Company's Budapest central offices on August 8, 1945, and oil field plants on November 22, 1945, were symbolically returned. For the time being, operation of the fields is under the control of the Soviet military authorities, and it proceeds according to the demands of this authority. At the present, exploitation of the fields takes place in agreement with the

Soviet authorities and according to the orders of the Minister of Industry.[83]

The Minister of Industry agreed that he would report to the Court of Firms that MAORT of RHT ceased to exist and requested that this name be deleted from the List of Firms.

The company would transcribe into its own books all the business transactions which took place during the time the state managed the company and accept all the gains and losses. On the other hand, the state would turn over to the company all rights, licenses and titles of new properties which were acquired during the time of sequestration so that the company could prove that these properties belonged to it.

The state acknowledged that tax payments made during the time the company was taken over for use by the state were done in place of and in the name of the company.

The company and the state agreed that with the exception of the next three points they would have "no demands upon each other (egymassal szemben kovetelesseik nincsenek)." Concerning these three cases, the company reserved all its rights, especially as those rights had been defined in the Armistice Agreement: (1) The sum of 8 million pengos which the state used declaring that this income accrued to the company because the export price of crude was higher than the inland price (2) The sums of 6 million pengos, dating to November 3, 1944, and 4 million pengos dating to March 9, 1944, which the sequestered company paid to the MANAT (3) For materials, labor and equipment used in building a gas pipeline in Transylvania in 1942, the company must be compensated in the future.

The company promised that it would approach the Yugoslav government to retroactively acknowledge and sanction the sequestered company's

purchase of MANAT's gas wells located on Yugoslav land. It would also ask the Romanian government to return the materials and equipment which were left in Transylvania.

As the last act of the meeting, the Treasury's representative stated that with the signing of the minutes Dr. Simon Papp's appointment as the manager of the sequestered company would end.[54]

Physical Condition of the Company

"Worn out," "requires repair or replacement," "not operable any longer," "carried away to the West," "left in Transylvania" and "not available at home or abroad" were phrases company and state officials used when they referred to most parts of the company's physical facilities. This had been the situation at the end of the war; and the discouraging aspect of the situation was that three years later, in 1948, the phrases still applied.

During the war, the accelerated production tempo placed great demands on the facilities. Repair and replacement activities were limited throughout because of the scarcity of raw materials. This left behind worn out or inoperable machinery. Toward the end of the war, the company had no time to bring back its belongings from several work projects in Transylvania. Instruments, supplies and machinery were lost--the best in quality and quantity--during the evacuation campaign to the West. By March of 1945, the material needs of the company became so extensive that it ceased production.

In order to restart production, the company needed help, mostly in the field of transportation, from the occupying Red Army. In a short time, however, it paid dearly for this assistance. The Soviets used company resources and manpower to make necessary repairs and replace-

ments on Soviet military hardware. In addition, after the Hungarian-Soviet Oil Company took over the development of the defunct Hungarian-German Oil Company's concession in the eastern part of the country, Russian soldiers requisitioned essential materials and equipment and transported it away to the place of need.

For years the country was rebuilding from the extensive damages of the war. The massive reconstruction effort placed a high premium on raw materials and finished products. Moreover, as soon as Hungary attained a measure of economic recovery, it had to commence reparation payments to the Soviet Union and to each of the surrounding countries. These two activities enormously taxed the country's ability to produce and consequently made the the company's efforts to procure any type of supplies difficult.

Simon Papp was the first high-ranking official to inspect the fields at the end of the war. As soon as the Soviet armed forces completed the liberation of all Budapest on February 13,[55] Papp established contact with them and "he arrived at the oil fields with the Russian troops."[56] He found only minor damages to the wells and buildings but discovered that more than a hundred railroad cars filled with records, instruments, machinery and supplies had been taken to the West; and there were almost no operating motor vehicles.

With some material help and "16 trucks in very weak condition"[57] from the Russians, the company workers were able to repair the broken pipelines and put things back in working condition. By March it could be said that under "orders of the Russians, the company is pumping crude to the refineries."[58] The company did not receive compensation for the crude, but the Russians promised that they would pay 1939 prices for the oil. This would amount to 1.2 million inflationary pengos.

Papp disclosed that security was tight:

> At the orders of Russian commanders no one is allowed to enter the area of the oil field and no one is allowed to give out any information concerning the company, not even to Hungarian authorities.[59]

Ruedemann also decided to check the company's postwar situation when he returned to Hungary. He found that

> After the occupation of Hungary, company employees with company money and company equipment put the oil fields and pipelines back into operation.
>
> The Russians did not bring the oil fields into operation. The fields were very little damaged. Had they left our transportation and much other equipment instead of taking these away, no help would have been needed. As for organizing the work, they do not understand organization and did not assist in any manner in the regrouping after the siege. Our people knew what to do.[60]

Ruedemann, just as Papp before him, had to acknowledge the reception of some help from the Russians:

> Since there was not a single car and truck left, the Red Army loaned the part-time use of 15 cars and trucks. They are now calculating the mileage and will deduct this from the estimated value of equipment they recently took from our warehouses.
>
> During the troublesome times when much looting was going on, Russian guards prevented other Russians from stealing.
>
> The Russians permitted our people to bring in such abandoned German war equipment as could be used in the operations.
>
> The Russians furnished considerable telephone equipment from German supplies. The value of this has been fixed and will be balanced against the warehouse equipment mentioned above.[61]

Papp and Ruedemann's reports, although sweeping and sketchy, provided a general picture of the company's postwar physical condition. (For additional details regarding war damages, see pages 254-55.) The most serious loss to the company was the equipment and supplies carried off to the West. Eighty percent of the machinery, 90 percent of the supplies, almost all of the company's operable motor vehicles were taken, enough to paralyze the company.[62]

Beginning in November 1944, German and Hungarian soldiers, together with employees of MAORT of the RHT packed up these valuable

belongings of the company, put them in railroad cars and transported them out of the country. Their destination was Germany, and the last stop was Furstenek in Lower Bavaria. The cars were pushed onto dead-end tracks, the cargo unloaded on the side of the tracks and left under the winter sky unprotected.[63]

Over the months, the evacuated properties amounted to a considerable collection. By January of 1945, the contents of 53 railroad cars[64] of drilling machinery and supplies were deposited. In February, a dozen trucks arrived with the company's administrative and technical records, along with geophysical and other pressure-measuring instruments. When members of the local government (Wolfstein Landrat) learned of this, they declared the property "war booty" and distributed the pipelines to local people who put them underground for water lines.[65]

On September 24, 1945, the German Wirtschaftministerium took possession of this company property and assigned it a title which it filed with the U.S. Army's Property Control Department. Erno Budai, a former MAORT of the RHT employee, was assigned custodian of the property. This agency paid for the pipelines which the local government had sold.[66] The American military agency contacted Josef Sanger, a director of the Bavarian DAPG, and asked him to decide upon the disposition of the properties afer consulting with Standard Oil's New York office.[67]

Along with the consigned goods, employees of the MAORT of the RHT also left the country for the West. Some left because they were afraid of the Soviet soldiers and others because they believed that the German military, technical commanders would carry out orders which stated that ". . . those MAORT technical employees who refused to move to the West at the time of the military evacuation of the fields would

be shot in the head [fobeloves]."[68] As a result, a few dozen employees, some alone and others with their families, left Hungary for Austria or Germany.[69] The employees who left had occupied vital positions in the company as geologists, engineers and administrators. The highest ranking of these were Dr. Erno Hauer and Janos Dinda who were members of the Board of Directors. The latter left with his family and lived in Traunkirchen. Neither ever returned to Hungary again.[70]

Fortunately for MAORT of the RHT, both the Austrian and German evacuated property and personnel fell in the occupational zone of the United States Army. Between 1945 and 1946, some, but not all, equipment and employees returned to Hungary and to the company.[71] When the situation showed signs of settling, an official inventory and appraisal of the evacuated properties indicated that the loss to the company expressed in American currency amounted to $11,057,469. Of this sum $2,360,609 represented machinery.[72]

The company was not so fortunate with its belongings which employees had to abandon at work sites in Romania and Yugoslavia when they were retreating from the westward-moving Soviet forces. The Hungarian government attempted to have these properties returned with no success. MAORT of the RHT left in North-Transylvania, near the city of Marosvasarhely, $1,914,134's worth of equipment, and in Yugoslavia where the company was forced to take over the gas wells of MANAT, $1,239,131 of property was not recovered. In a final attempt to retrieve some of this, the Hungarian Minister of Industry asked Ruedemann to appeal to the Allied Control Commissions in the countries. He did so to no avail.[73]

Because of the loss of so much of its equipment, the company was left in an inefficent state. In the fall of 1944 there were 13 large

powerful well-drilling outfits operating. Of these, 3 had been evacuated and of the 10 remaining, 3 could not be repaired at all and the others were worn out. This, of course, severely limited the company's drilling capability. One company report stated:

> In 1939-40-41, the monthly average footage drilled by one drilling equipment amounted to 3,320 feet. In 1946, this figure was 780 feet. The 7-to-12-year-old American outfits drilled so far an average monthly footage of 2,100 feet while the newer German outfits drilled 850 . . . . With the American outfits 6 times as much can be drilled to their total wearing out than with German outfits.[74]

In the fall of 1944, the company owned 150 motorized vehicles ranging from heavy caterpillar tractors to light motorcycles. At the end of the war not one remained that worked. The Hungarian army requisitioned some, the evacuating German Army drove away in some, and company employees heading to the West took some. To resume production, the company needed the 15 vehicles which the Red Army allowed them to use.[75] During 1945, service men in the repair shops were able to rebuild some vehi- cles, others were returned from the West and still others were acquired with the help of the government. One year after crude production had resumed, the company had use of 106 vehicles. One report noted:

> Automotive equipment of the MAORT at the beginning of April 1946 consisted of 18 passenger cars, 63 trucks, 3 military trucks and 22 tractors. [The] majority of the cars were assembled from junk material. A characteristic figure of the adverse conditions is that on an average, 41% of the automotive equipment was in repair in January, 39% in February, 40% in March and 35% at the beginning of April--but 59% of the tractors. The bad condition of the tractors especially hinders drilling operations.[76]

Another report at about the same time focused on the vehicles which serviced the drilling rigs and producing wells. It said:

> The transportation equipment, servicing drilling rigs . . . are in very bad condition. There are 3 nearly worn out Caterpillar tractors and instead of 2 trailers to each, only 2 worn

> out trailers are available. . . . Due to lack of transportation equipment, moving of a rotary rig requires 4 to 5 days instead of the standard one and a half days.[77]

Two years after the resumption of oil producing, the company's motor vehicle fleet had grown to an almost satisfactory size. Ruedemann was able to report on June 14, 1947:

> There has been a considerable improvement with regard to auto cars and trucks. We now have 31 motor cars, 3 motorcycles, 45 motor trucks, 22 caterpillar tractors and 3 road tractors.
>
> Of the 154 vehicle fleet of June 1st, 23% of motor cars, 19% of motor trucks, and 52% of tractors were in repair. This also shows that our position . . . has improved very much.
>
> The tractor position is invariably critical as well as the position with regard to caterpillar trucks necessary for the transportation of heavy equipment on any roads. Only the purchase of American vehicles in the estimate would help here.[78]

In April 1947, the Economic Chief Council formed the Technical Sub-Commission under the chairmanship of geology professor, Dr. Peter Eszto. (For details on this sub-committee, see p. 374.) Members of the group made a thorough study of the company's physical condition, operation and needs. It found that the gasoline plants were in good shape, nonetheless, "2 compressor units were under repair and there was a lack of spare parts for the required repairs."[79] On each field the company generated its own electricity. Members of the sub-commission found that

> The generators are in very poor condition. At the time of our inspection trip, from 9 units only 3 were in operation; 1 required minor repair, 2 general repair and 3 will be out of operation for a long time to come.[80]

When evaluating the condition of the repair shop and supply of spare parts, members of the sub-commission found: "There was still a need for a larger, combined planing machine, a larger lathe and grinding machine. The purchase of the planing machine is especially esssential."[81]

From the plants the investigators went to inspect the pipeline

system:

> The Fonyod section of the pipeline is in very bad shape, because originally the pipeline had to be laid on swampy territory, for which reason in spite of insulation the corrosion is great. Here the re-laying of a 12-mile section is urgently contemplated. This is really very urgent, because a break in the pipeline would cause shutting downs and a considerable loss of crude. Unfortunately, pipes available are only sufficient to rebuild a 2-mile section. For welding of pipes only 4 electric welding machines powered by gasoline motors are at our disposal. Two of these are in operating condition; the other two are under repair. To carry out efficient pipe laying and repair jobs, at least 8 good welding machines would be required.[82]

Even if the company were ready to repair sections of the pipelines, the workers would not have certain materials:

> There is a great lack in insulating paper which is detrimental, because the whole pipeline should be inspected in order to find eventual damages. . . . A hole in the pipeline was also found in Budafa. To carry out this investigation the pipeline ought to be lifted at every 100 m, the insulation wrapped off and the corrosion inspected. This cannot be done until sufficient insulating paper is available. Until such time the danger of eventual breaks and the risk of heavy losses in crude have to be assumed. At present, due to lack of materials, breaks in the pipeline can be repaired only with pipe clamps.[83]

The Technical Sub-Commission made its final recommendations concerning the task of how the company could improve its operation. They centered around the purchase of new machinery and additional supplies. The inspectors approved 23,100,000 forints' worth of new items and ". . . emphasized that this list contained only urgent replacements and new purchases for the drilling and producing operations only."[84] They warned that

> From these a maximum of 60% should be purchased locally, the rest should be purchased in America because superior quality is required due to the enforced use and frequent overloads. Experiments with other manufacturers would involve high expenditures and would be detrimental . . . .[85]

Dr. Szentivanyi, who was a member of the Technical Sub-Committee, prepared an additional report of his own in which he recommended that additional money be allocated to MAORT for necessary

investments. He wanted to include

> . . . an additional 14 million forints investment, divided so that 10 million would be used for the erection of the projected gasoline and compressors plant in the Pusztaederics field, and 4 million to supplement the drilling and production equipment of the Pusztaederics field. This 14-million-forint investment has to be placed in the 1947 budget in spite of the fact that there are no definite data available as yet pertaining to the recoverable oil and gas reserves of the Pusztaederics field.[86]

Dr. Szentivanyi went on to suggest that the money be spent abroad for high-quality equipment.[87]

Soon after the Technical Sub-Committee left, Gyorgy Fenyvessy, mining engineer and ministerial councilor, came to the fields alone for an inspection. (For more information on Fenyvessy and his mission, see p. 374.) Fenyvessy believed that if the company were to change from its present flat-hourly-wage system to a performance-based, compensation system, the company's production would increase. He recommended that derrick-erecting, foundation-laying and boiler-assembling workers be paid according to the amount of work they accomplished. Moreover, pipeline, workshop, transportation, storing and building workers should be ". . . paid on a piece or jobbing basis."[88]

According to Fenyvessy

> The MAORT wage system is based on the so called 'Workers Collective Agreement' concluded between the Executives of the MAORT and the Central Workers Council of the Company. It is based on the 'MAORT norm,' the figure of which is 25 barrels of crude produced per week (7 days) per head of personnel. This is inefficient.
>
> It must be changed to the performance and piece-wage system. Moreover, there will be jobs where the piece work rate or formula may be extended to contain a bonus to reward the faultlessness of work. . . . I propose to engage the Company and the Workers Council to work out a wage system in the above sense with experts delegated by the Chief Economic Council or the Board of Trade Unions within a fixed limit of time.[89]

Fenyvessy commented that his written recommendations should ". . . present a good occasion to all workers to denounce the current Collective

Agreement . . . Workers could realize higher wages by demanding performance wages."[90] He believed that ". . . the majority of the MAORT workers were rural workers who have received a few years of on-job-training and did not possess a developed worker's consciousness and would not necessarily realize that their class interest lay in performance wages."[91]

When Ruedemann received a copy of Fenyvessy's report, he wrote: "To introduce piece rates into every phase of oil production would be very difficult. The quantity of production depends upon natural circumstances and not on individual effort."[92] More specifically he added:

> In drilling, production (crude and gasoline) and oil transportation, work on basic piece rates is hardly conceivable. In ancillary works piece rates would lead in the case of excellent performances under favorable conditions to wages higher than those obtained in the principal production departments, which would not be desirable. With the worn condition of our plant and equipment, temporary stoppages in consumption goods supply, the necessary surplus in transport facilities and the excessive number of operatives in some departments, continuity and uniformity of work is not to be realized or can be assured only with great difficulty. Others of our jobs are typical field jobs where work performance depends upon location and atmospherical conditions. There are dangerous jobs (erecting derricks); others require special care (pipe welding, paraffin cleaning, etc.) where factors influencing performance are to be accounted for with difficulty. Our workshops are typical repair shops: apart from exceptional cases, individual pieces are repaired, basic piece rates would have to be determined separately for each piece, and savings on payrolls would be balanced by surplus costs of the technical staff and payroll department.[93]

Ruedemann tried to show flexibility regarding expected future action on the part of the government:

> However, even knowing these difficulties, we are prepared to cooperate with the special commission charged with the inquiry into the problem of performance wage on piece rates.[94]

As the company was slowly moving toward recovery, Red Army personnel started increasing its demands for supplies and services. In the fall of 1946, Papp noted that

> The Russians have, and are taking material from the Field. The company's employees are attempting to maintain a list of these acquisitions . . .. Ten propane-butane cars of over fifteen tons capacity each have also been taken by the Russians.[75]

Ruedemann was able to prepare a list of Soviet army requisitions:

12	Typewriters, calculating machines
27	Engines (diesel, electric motors, etc.)
35	Machines (lathes, grinding machines, etc.)
94	Tons of tool steel and other steel
1,018	Drilling and production equipment (rotary hoses, wire lines, valves, telephones, etc.
2,357	Barrels and tanks
2,839	Roller bearings
5,450	Tools (wrenches, tongs, hand tools, etc.)
12,000	Barrels of gasoline, lubricating oil, gasoil, etc.
300,491	Dollar equivalent of pengos taken in cash[76]

In addition to this hard-to-replace equipment, the company's shops also provided repair material and skilled labor for the maintenance of the Red Army. Up to November 1, 1946, company workers performed 112,799 hours of labor. Ruedemann estimated that the material and labor contributions amounted to 3 million dollars.[77]

The contributing force which enabled the company to tolerate the material shortages and obsolete equipment was the support and diligence of the employees. At the time the company resumed production in April 1945, only 30 percent of the field workers were at hand; but within months, the number of employees rose sharply. By 1946, the work force reached an all-time high of 3,788 full-time workers. In 1948, with the gradual aging and decreasing productivity of the fields, MAORT's record number of employees dropped to 3,594, made up of 2,987 blue collar and 607 white collar workers. The latter group consisted of 421 office workers, 19 mining engineers, 25 other engineers, 16 geologists and 126 technicians. (For a set of employment figures, see table 13.)[78]

Purchasing new equipment and machinery to replace the inoperable and worn out ones would have been a normal course of events for the

company, but often this was not possible. Most equipment the company needed was not available in Hungary. The company had no funds to replace the needed orders, and so it had to apply to the government for advanced funds. Ordering equipment from abroad was complicated. Acceptable currency had to be obtained from the government, export and import permits had to be secured from governments and transportation for the shipments had to be arranged. Each step required time; and often in the end, the ordered equipment never arrived.

After several months of preparation, in January 1947, with the assistance of Hungarian and U.S.A. state agencies and the approval and cooperation of Rockefeller Plaza, Ruedemann was able to place the first postwar order for supplies and machinery in the United States. The requisition, worth $100,000, consisted mostly of compressors[99] and drilling accessories. The shipment arrived on March 29, 1947, but the Hungarian state transporting agency could not deliver the 70-ton cargo until September 1948.[100]

On September 17, 1946, MAORT placed an emergency order with the Ganz Works in Budapest for several engine parts. "Until the middle of April, no definite reply had been received by the Company; therefore no delivery time could be brought up for discussion with their people."[101] Another large Hungarian industrial plant, the Weiss Manfred Work received an order for pump rods from MAORT on December 2, 1946. Until the middle of April it did not reply. In March 1947, a state inspector came to MAORT and ". . . found five complete pumping outfits manufactured by the Ganzt Works. The driving engines for those were ordered in 1943. They [the Ganzt Works] had not even replied to the inquiries."[102]

Ruedemann was ready to place another order with the United

States in April 1947. He wrote:

> The second lot of our requirements was not available in this country . . . We ordered from America on April 2, 1947 . . . We applied for a currency allocation of $12,400. The cable confirmation of the order required 4 months . . . which shows that even the American industry was not in the same position of supply as before the war.[103]

This time, John W. Brice, a counselor of Standard Oil refused to cooperate. On August 26, 1948, he informed Ruedemann that "We are having problems in securing export permits from the Hungarian Legation in Washington . . . At any rate, we do not want to invest large amounts of money in material which would lie around for long periods of time."[104] He suggested that Ruedemann attempt to make his purchase somewhere in Europe.[105]

Drilling and Exploration

Drilling activity for producing and exploratory wells had gradually subsided between 1945 and 1948. The three producing fields had moved into the early stages of old age. The fields were over drilled. Distances of 2,000 feet between any two wells had narrowed to 1,000 feet and in many cases even 500 feet. There were no new pay zones to be opened under individual fields and no new pools to be discovered under other fields. Up to 1948, the company drilled 332 wells of which only 42 turned out to be dry holes. Twenty-five wells developed into only gas producers, and 262 lifted crude oil at different time intervals.[106] (For a comprehensive report on wells and their functioning, see table 3.)

In the summer of 1947, the company owned 165 producing wells. Of these 107 were on natural flow, 45 were on gas lift and 13 were pumped by compressors. Of the 112 non-producing wells, 59 were classified as hopeless for production because of water intrusion into the pay

zone; and 53 were wells that could be restarted with some repair work.[107]

In the Budafa field, the company had drilled 130 wells of which only 9 turned out to be dry holes. The 73 producers were made up of 37 wells which were on natural flow, 29 on gas lift, and 8 on compressor pumps. Thirty-nine wells were shut down because of low yield and gas or water intrusion. Five wells were used to inject dry gas back into the formation and only 1 new producing well was added in 1947.[108]

In the Lovaszi field, there were 82 producers in 1947 which included 61 on natural flow, 18 on gas lift and 3 on pumps. Two wells never produced anything, and 32 stopped producing. Geologists planned to add about a dozen more wells in the postwar period.[109]

The smallest field, Hahot, had only 7 producing wells altogether; and 2 of those were shut down because of water encroachment during the war. As many as 18 wells turned out to be dry holes over the years. It was near this field that the company concentrated its exploratory efforts after the war.[110]

The company drilled only 27 wells after the war, 16 producing wells and 11 exploratory wells. The Budafa field received 2 and Lovaszi 13 new producing wells. The Hahot field received only 1 which turned out to be a dry hole. Most of the 11 exploratory wells were located near Hahot where a large gas field was discovered. The crews drilled 5 wells at Pusztaederics of which each produced gas. Two at Igal turned out to be dry holes and the 1 at Vetyem produced wet gas and small quantities of crude. One was drilled at Salamonvar which was abandoned, and the same thing happened to the 1 at Pincehely. In 1947 when most of these wells were drilled, 1 foot of drilling a producing well cost 150 to 200 forints, and 1 foot of drilling an exploratory well cost 200 to

300 forints.[112]

Production of Crude Oil and Natural Gas

The significant characteristic of well performances was the decrease in the quantity of oil and gas the company was able to bring to the surface in each field. The down turn showed a complete reversal of production trends which prevailed during the war. For a complex set of reasons, some internal and others external, the company could never forestall the gradual decline.

In 1945, the fields' yield declined 19 percent in comparison to the previous year's output. Total production for the year reached 5,019,129 which broke down to 13,751 barrels of average daily production. This was the first year in the history of the company that exploitation of hydrocarbons stopped. Workers were idle for several days toward the end of March but production started again a few days into April.[113] (For additional details and sources, see table 1 and 3.)

In the course of the next three years, with the exception of the first, production markedly decreased. In 1946, wells of all fields brought to the surface 5,151,798 barrels of crude which represented a slight increase over the previous year's production.[114] In 1947, crude production figures again started declining; and in comparison to 1945, the decrease was almost 2,000 barrels a day.[115] In 1948, the twelfth year in the company's operation, production dropped to the record low of 3,579,593 barrels. The daily average output registered 9,807 barrels which was only a few barrels more than half of the record 17,604 barrels daily average in 1943.[116]

With the upward surging crude, natural gas was often emitted by itself in gaseous form or sometimes it was dissolved in the crude in a

liquid state. In both cases, the gas provided energy for the crude to break to the surface. Because of natural aging, forced production and failure to pressure gas back under the fields, the gas-to-oil ratio greatly increased. Typical gas-to-oil ratio (GOR) in 1943 was 1 barrel of crude to each 1,464 cubic feet of natural gas: in 1946 this ratio changed to 1 to 2,823. While the GOR increased, total production of gas increased only moderately--more gas came with each barrel of crude; however, fewer barrels of crude were produced on the whole.[117] (For a complete chart on GOR's, see table 14.)

Two weeks before the war ended for Hungary, on March 21, 1945, Simon Papp reported that the company had so far produced 38 billion cubic feet of natural gas and estimated that the company could recover 90 billion cubic feet more before the fields would ultimately become exhausted.[118] Up to the end of 1948, the company obtained 42 billion cubic feet more gas, leaving behind only 42 billion cubic feet still to be produced of the total estimated reserves.[119]

In 1945, the Lovaszi field was still the most prolific gas producer. It yielded 8,767 million cubic feet; Budafa, 4,010; and Hahot, 59. The total for the year reached 12,836 million which broke down to a 35.16 million daily average production. Both the Lovaszi and Budafa fields utilized gas as the primary source for kinetic energy.[120] (For a comprehensive chart on gas production and sources, see table 2.)

The following year's 14,557 million total production represented a record. The record daily average production reached 39.88 million cubic feet.[121] In 1947, gas production subsided somewhat; however, crude production dropped a great deal. The daily average of 36.19 added up to a yearly aggregate of 13,211.[122]

In 1948, gas production of all fields further declined to 11,347

million cubic feet, and the daily average yield reached only 31.08 million cubic feet of gas.[123]

The Transdanubian oil fields of the Standard Oil Company had passed their prime hydrocarbon-producing phase. MAORT and government geologists agreed that of the 182,000,000 barrels of initially estimated crude reserves and 130,000 million cubic feet of iniatially estimated natural gas reserves, the company already exploited 38,000,000 barrels of crude and 68,000 million cubic feet of gas by May 31, 1947. Using rational production techniques which involved allowing only so much crude to come to the surface as the available amount of gas in the formation would warrant and repressuring as much of the produced gas into the formation as possible, the company could still recover 32,000,000 barrels of crude and 60,000 million cubic feet of gas. In percentages, the company, so far, gained approximately 20 percent of crude and 52 percent of gas of the original reserves; it could ultimately gain 18 percent more crude and 46 percent more gas for a total of 38 percent of crude and 98 percent of gas which, in comparison to other similar fields around the world, would amount to average recovery rates.[124]

Distribution of Refined Crude Products

In the course of the war, Allied air raids severely damaged Hungary's refining plants scattered around the country. Each of the ten plants suffered damages, with the majority of them becoming totally inca- pacitated by the end of the war. The country's wartime peak refining output of 9,000,000 barrels a year sank to a dismal 800,000 barrels, an all-time low, in 1945. However, by early 1946, refining capacity expanded to 3,500,000 barrels a year; the following year to

6,500,000; and in 1948, it again reached 9,000,000 barrels. Because domestic crude production fluctuated around 5,000,000 barrels a year and Romania stopped shipping in crude, a large portion of the refineries' volume went unused after the war.[125]

The largest and most efficient refinery plants incurred the most extensive damages in the war. The rebuilt plants, while some were refurbished with modern equipment and could accommodate advanced processes, were still inferior in the quality of operations they could perform in comparison to plants in Western Europe or the United States. With the exception of the Pet plant, which operated a cracking unit, the other installations were not capable of changing the molecular structure of hydrocarbons they processed, or of putting out a great variety of high-grade petroleum products. In general, they were limited to accomplishing only simple fractional distillation.[126]

In spite of the outdated, technical features, the refineries obtained high percentages of light distillates from the crude MAORT piped to them. On the average, from one hundred barrels of crude, they distilled 32 barrels of gasoline, 26 barrels of fuel oil, 20 barrels of kerosene, 15 barrels of diesel oil and a few barrels of asphalt, paraffin wax and other residual low (heavy) fractionates. The main reason for these desirably high yields of light distillates was the excellent quality of the Transdanubian crude, which, similarly to the Texas one, contained high portions of light hydrocarbon components.[127]

From the beginning, Hungary's ten refinery plants were underutilized after the war. On the average, they were operating between 46 to 52 percent of their combined capacity. For example, in 1946, the four largest refineries operated at the following percentages of total capacity: Molaj (later Maszovol), 53 percent; Petfurdo, 64 percent;

Shell, 52 percent; and Vacuum, 49.5 percent. The rest of the plants, the six smaller ones, operated at a combined 46 percent of their total capacity.

In the long run, the portion of capacity at which each refinery operated depended on the amount of crude MAORT produced. In the short run, the amount of crude each refinery received from MAORT rested with Soviet military and Hungarian state authorities. MAORT's declining production, which even at its highest postwar level could occupy the refineries only half the time, created a troublesome situation for all parties involved. On the one hand, there was competition among the plants; on the other, they struggled with the authorities for larger allocations. Moveover, the tripartite ownership, in equal proportions of the refining capacity, (Shell and Vacuum--British and American, Maszovol--Hungarian and Soviet, the rest--Hungarian state, ownership) exacerbated the already troubled and difficult situation.[128]

The refined finished petroleum products moved from the storage tanks to supply the requirements of three major consumer groups: domestic, Soviet and foreign. Each group broke down further into smaller components. Hungary's domestic consumption requirements had four parts: industry, agriculture, transportation and military. Soviet requirements also had four divisions, even though the lines of demarcation were not always easy to discern: Red Army shipments--were large and frequent; they went without compensation and stopped only with the signing of the peace treaty in 1947; Soviet Union reparation consignments--left the country on rail; Soviet-Hungarian Trade Agreement--were regular cash-and-carry transactions; and Soviet irregular shipments--represented compensation for past reparation delinquencies. Finally, the foreign export allotments went to three countries: Czechoslovakia, Poland and

Switzerland.

Uncharacteristically, for the entire postwar period in the remainder of MAORT's history, data concerning the distribution of refined crude products gathered in Hungary and transmitted to Washington and New York became scarce and consisted mostly of estimates. One reason for this situation was noted by John P. Palmer, Secretary of the U.S. Mission:

> I have the honor to submit data on the distribution of oil production in Hungary during July, August, and September, 1945, obtained confidentially from the National Bank of Hungary. It is reported that no reliable records were kept for the preceding quarter.[129]

Absence of reliable records was also true in the case of oil shipments to the Red Army or to the Soviet Union. On May 3, 1946, Schoenfeld wrote:

> Figures prior to July, 1945 are not available. It is not known whether any deliveries were made for reparations during this period or whether, if made, proper credit is to be given for such shipments in the reparations accounting.[130]

Later, members of the U.S. Mission were able to obtain exact distribution figures, but only for the second half of 1945. Of 2,569,000 barrels of refined crude products the Red Army received 1,031,500 barrels; and the Soviet Union, as a reparation installment, 605,000 barrels; for a combined total of 1,638,300 barrels. This left Hungarian consumers 931,700 barrels, which constituted 37 percent of the total production. Of the critical refined product, gasoline, the Soviets altogether received 846,500 barrels or 89 percent of the total 947,300 barrels.[131] (For additional details, see table 17.)

Exportation of refined products other than shipments to the Soviet Union or requisitions by the Red Army was planned to have begun in the summer of 1945. The first postwar oil trade agreement was con-

cluded with Czechoslovakia on August 16, 1945. The contract called for the delivery of 187,000 barrels of kerosene, 18,000 barrels of crude oil, 16,500 barrels of diesel oil and 19,000 barrels of gasoline by December 31, 1945. Because of transportation breakdowns, no deliveries were made as of May 6, 1946.[132]

But Czechoslovakia was not left too long without Hungarian oil. On May 3, 1946, Schoenfeld reported the following:

> Vacuum Oil Company officials state that some of the products delivered from their refinery for . . . the Soviets were shipped to Czechoslovakia. It has not been possible to find out whether these are . . . for reparations or the Red Army or what quantities are involved.[133]

On October 4, 1945, Hungary agreed with Poland to sell 600,000 barrels of gasoline. Because of difficulties, the parties amended the agreement on February 2, 1946, to remain in force until the specified amount of gasoline would be delivered. On May 6, 1946, still no shipment had been received by Polish agencies.[134]

Whether Czechoslovakia ever received any oil from Hungary in 1945 could not be determined with certainty. On May 3, 1946, Schoenfeld noted:

> When figures for the third quarter of 1945 were obtained, it was stated that exports of crude to Czechoslovakia had been started in October. However, the figures obtained for the fourth quarter make no mention of such shipments.[135]

Numerical quantities, exactly showing the distribution of petroleum products to supply the requirements of each major consumer group, were not available for 1946. However, ". . . estimates, prepared by Hungarian government officials for intra-governmental use . . . and in close accord with the opinion of the MAORT management" were preserved.[136] They were based on a plan that crude production would reach 5,500,000 barrels for the year. This amount, the refineries would dis-

till into four main fractions in the following proportions: 32 percent gasoline (1,900,000 barrels), 26 percent fuel oil (1,300,000 barrels), 20 percent kerosene (1,000,000 barrels), and 15 percent diesel oil (800,000 barrels).[137]

Distribution of the distilled crude products proceeded during the year in recognition of the Soviet Union's dominant position. The four Soviet requirements received more than half of the production (2,465,000 barrels); Hungarian requirements were satisfied with less than half of the production (2,113,000 barrels); and export requirements were allotted the remaining production (565,700 barrels).[138] (For details regarding each group and amounts of various distillates, see table 19.)

The Hungarian governments' export program showed several interesting and surprising aspects. In exchange for the oil consignments to Switzerland, government officials hoped to receive much needed convertible currency. In addition to refined products, the government projected to sell 160,000 barrels of crude to Czechoslovakia; and the following year, the two countries also signed a trade agreement for unexplainably large quantities of both crude and refined products. (For details of this transaction, see p. 342.) The most remarkable export item was to go to Poland. While government experts did not specify the type and amount of oil export, they noted that ". . . exports to Poland would be covered from the balance reserved for domestic consumption."[139] On the whole, the officials who compiled the estimates completed a creditable piece of work. Their base crude production estimate for the year was placed at 5,500,000 barrels, and actual production reached 5,150,000 barrels for the year.[140]

The year 1947 was exceptional; complete and accurate distribu-

tion figures were obtained and preserved, but without breakdowns regarding the final destinations of each refined product. Thus, the size of allocations to the Soviet Union or Switzerland could not be discerned; and the unexplainably large quantity of refined products apportioned to domestic consumption, implied that the Red Army's requisitions were included in this category.

For this unusual year, the refineries distilled 3,611,132 barrels of the four major petroleum products. Of the total, 1,463,000 barrels were exported and 2,415,704 were set aside for domestic consumption. With 1,283,381 barrels, gasoline was the distillate with the largest volume; and this quantity was almost evenly divided between the two major distribution categories.[141] On the whole, the final export quantity turned out to be less than adequate: the total of 1,463,000 barrels had fallen short by as many as 434,000 barrels from the country's export commitments for the year.[142] (For a breakdown of export quantities, see table 18.)

In spite of the decreasing crude production and apparent problems with fulfilling export orders, the Hungarian government concluded the largest crude oil and refined products' sale agreement with Czechoslovakia on November 1, 1947. According to this contract, in 1948 the refineries had to deliver 75,000 barrels of kerosene and 1,275,000 barrels of various distillates. In addition MAORT had to ship 459,000 barrels of crude oil.[143]

If 1947 was an exceptional year, 1948 was also. For this year no distribution (consumption) figures were available in documents. In such a case, in place of a summary some generalizations will suffice. Focusing on domestic consumption for the postwar years, one researcher wrote:

> Domestic consumption in 1946 was the same as prewar, 1,950,000 barrels. It remained relatively stationary at 1,987,500 barrels during the Three Year Plan years of 1947 to 1950, and then it began to rise.[144]

In surveying the export of crude and refined oils, the same author observed that

> . . . postwar exports went east to the Soviet Union, with smaller quantities being taken by Yugoslavia, Czechoslovakia and Poland. Exports amounted to 2,550,000 barrels in 1946 and 1,886,250 barrels in 1947. Of these, 1,012,500 barrels and 187,500 barrels respectively constituted war reparations.[145]

Production of hydrocarbon byproducts, casing-head gasoline (natural gasoline), liquid butane and propane, continued at approximately the same rate as during the war. Complete and accurate figures for the postwar years were not available.

Complete production figures for natural gasoline and liquid butane and propane--each a product of compressed wet gas--were available only for 1945 in the postwar era. In that year the gasoline plants yielded 252,714 barrels of natural gasoline and 31,228 barrels of liquid butane and propane.[146] (For a comprehensive chart, see table 5.) The next available production figures were only for the first nine months of 1947, when the plants "squeezed out" 93,839 barrels of natural gasoline and 52,840 barrels of liquid butane and propane.[147]

Distribution figures for products derived from the "squeezing of wet gas" were available in the case of natural gasoline but only for 1945. From the production of the first three months, the company sold to Germany 45,533 barrels of natural gasoline. Later, in the course of the year, the company sold in Hungary 23,755 barrels, blended into crude 69,543 barrels and used up for its own purposes 417 barrels. In this way the company accounted for 139,240 barrels of the yearly total production of 252,714 barrels.[148]

For the utilization or consumption of natural gas between 1945 and 1948, figures were available; however, most of them were based on percentages or estimations and few of them were the results of careful and accurate measurements. The first nine months of gas production in 1947 belonged to the last group of figures. During this period the two main fields produced 10,300 million cubic feet (Budafa 2,850, and Lovaszi 7,450). Of the total, the company dissipated into the air 4,250 million cubic feet (1,350 million dry gas, and 2,900 million wet gas) and piped to the gasoline (compressor) plants 6,050 million cubic feet of gas.[149]

Only estimates were available regarding the utilization of natural gas. During the years of 1945 and 1946, one half of all gas produced was allowed to escape into the air.[150] In 1947, MAORT used for its own purposes 35 percent, returned to formation 39 percent and wasted 35 percent of all the gas produced.[151]

The Financial Situation of the Company

The extremely low price structure of crude oil which prevailed throughout the postwar years presented the company with another serious unsolvable problem. Without consultation with company representatives, the powerful ECC (Economic Chief Council--a body in which each ministry received representation and made the important economic decisions for the country) set the price of crude in each instance. Such arbitrary action violated the state's agreement with the company. The concessional contract stated:

> The prices at which the N.C. is entitled to sell its crude oil . . . shall be fixed from time to time by the Royal Hungarian Minister of Finance and the N.C. Failing to reach an agreement between the two parties, the selling price of the above mentioned crude oil shall be the market price corresponding to the natural level of prices of the time.

The company could only complain and the officials did so relentlessly, but their efforts were in vain.

The impact of low prices on the company's operation was magnified by the refinery plant's inability to pay MAORT for the crude on time. As the years went by, they had fallen in arrears with their payments more and more. The company officials complained to higher authorities but to no avail. This twofold financial problem started the classic vicious cycle. Because the company did not receive an adequate price for its crude, it could not make the necessary investments in capital goods. This in turn, contributed to the company's poor physical condition which brought about reduced production rates which further reduced the company's already meager income. Each progressive phase in the cycle created an unfair cause for the state to accuse the company of engaging in sabotage of the country's crude production.

The company emerged from the war with a price tag, determined by the state on October 7, 1943, to be 14.53 pengos on a barrel of crude oil. While prices of raw materials and industrial products rose 30 to 60 percent during the war, the company was still able to earn a profit because the cost of production was rising much slower than the output of the crude. In April 1945, Papp received only a promise of payment from the Soviet authorities for the supply of crude used exclusively by the Red Army. The price was to correspond in value to the 1939 price.[152] On June 15, 1945, the ECC set the first postwar price of a barrel of crude at 146.66 pengos a barrel and made this retroactive to April 1.[153]

After the June 15, 1945, price establishment, subsequent price adjustments on a barrel of crude proved to be inadequate as well as useless, because Hungary began experiencing the most spectacular inflation

that had ever taken place anywhere in the world. Between June 15, 1945, and June 20, 1946, the price of crude changed upward twenty-one times. The price began at 146.66 pengos and ended at 13,464,000,000,000. The government decided to make a tax stamp available which could be purchased in banks to place on bank notes. Because it was not possible to issue new currency to deal with the rampant inflation, this stamp would reduce the numerical size of the bank note and increase its purchasing value. Using this system, the price of a barrel of crude dropped to 533,333 tax-stamped pengos on June 27. However by July 17, three official adjustments later, the price quickly soared to 4,266,666 tax-stamped pengos.[154]

On August 1, 1946, the Hungarian government issued a new currency called the forint. Looking back on the old monetary unit, Ruedemann made this observation:

> Prior to August 1st, in agreement with the Price Authority and the Minister of France, a price of 45.60 forints a barrel was accepted effective as of August 1st. This was based upon the pre-war price of 14.40 pengos times the factor 1.5 and the common multiplier applied to all commodities of 2.07. The factor of 1.5 was not considered high as coal was given a factor of 2.0 and manufactured goods all higher, some even factors of 4.0 or more. Oil, along with farm products, was among the lowest.[155]

The bilaterally established price level lasted for only 15 days. During the weeks of

> . . . August 5th and 12th, pressure was brought to decrease the price. The company was invited to a meeting of the entire cabinet and price experts. The agricultural group claimed it took several times as much wheat to buy a litre of gasoline as in 1938. Later it was shown that the reason was the taxes and not the crude oil price.
>
> Particularly aggressive was a bloc consisting of Messrs. Rakosi, Vas, Gero and Gombosi. They insisted oil be produced at world-market dollar values. The MAORT's answer to this request was that the forint cannot be compared to dollar values as long as it is not a free, strong exchange.
>
> A committee was appointed by the Prime Minister, and two meetings followed to discuss the price. MAORT agreed to accept

> the price of 30.16 forints a barrel, provided the government made two promises . . . . On August 15th the new price was announced but the promises made the MAORT had not yet been fulfilled.[156]

In order to reduce the impact the lower price of crude would make on the officials of the company, members of the ECC attempted to counterbalance their price action with two "promises" intended to remedy a longstanding problem. Because MAORT's need for motorized vehicles was great, the

> Economic Chief Council granted permission to MAORT to purchase for cash 20 Jeeps and 25 trucks of the motor vehicles to be imported with the aid of an American loan.[157]

Ever since the war ended, the company was experiencing grave difficulties with collecting money for the delivered crude from each of the country's refinery plants. To force the refineries to make prompt payment, the ECC ordered that

> Crude shipments should be regarded as cash transactions for which consideration must be paid within 8 days as specified by law.[158]

In Ruedemann's calculations, the 30.16 forints per barrel reduced price represented ". . . in relation to prewar prices, a relative purchasing power of 64 percent; in other words, MAORT was, in effect, selling for 69 percent of the prewar price."[159] This method of looking at the price situation received further treatment when Ruedemann, for the benefit of a group of state officials, contrasted the current reduced price with the cost of production of 24.26 forints in August, 24.26 in September, 199.13 in October and 208.02 in November. Ruedemann's cost of production figures did not take into consideration profits and investments in capital goods.[160]

One stipulation of the ECC order which reduced the price of crude was that this price would remain in effect until December 31,

1946. The Hungarian government was serious concerning this date. As of January 1, 1947, the powerful ECC unilaterally reduced the price of a barrel of crude to 22.66 forints. Already on December 6, 1946, Schoenfeld learned the following from a telegram:

> Secretary High Economic Council Vas informed MAORT officials that crude oil price to be reduced to 22.66 forints per barrel January 1. Price reduction based on comparison MAORT price and US price crude oil at exchange rate 11.74 forints per dollar. Comparison held incorrect by MAORT. (1) US price is at field and MAORT price is at refinery and (2) purchasing power of forint well below exchange evaluation.[161]

Ruedemannn was prepared to fight the latest price reduction. On January 15, 1947, he filed his objections with Gombosi: the present price did not provide enough income to the company to maintain state prescribed production levels, and according to the contract the government had no right to reduce the crude price unilaterally without consultation with the company.[162]

Gombosi did not attempt to rationalize Ruedemann's objections on their own merit. Rather, on February 10, he sent two reasons for the price increase to the American manager. The new price approximated the U.S.A. price at the official exchange rate between forints and dollars, and the contract also stated that the company had to consider the economic interest of Hungary.[163]

After his futile attempt, Ruedemann, as had been his routine, turned to Schoenfeld. To support his contention, he sent to the American Minister a study comparing the price of crude oil to other commodities in Hungary. The study found that

> . . . prices for commodities used in the oil industry . . . have increased an average of 309% and the payroll and related taxes 218% as compared with prewar figures. On the other hand, the crude oil price of 30.16 forints per barrel, was only 105% higher than the prewar price.
>
> The crude oil price of 30.16 forints per barrel, which the Company accepted effective August 15, 1946, allowed for a pur-

chasing power of 52.5% as compared with the prewar price. In order to establish a 100% purchasing power it would require a price of 57.44 forints per barrel. The price of 22.6 forints per barrel imposed on MAORT by the Government effective January 12, 1947, reduces the purchasing power of the crude oil to 39.53% as compared with the prewar price.[164]

Ruedemann found that comparing dollars to forints when talking about crude prices was also unfair. The MAORT report stated:

> The price of 22.66 forints per barrel was approximately the same as the Gulf Coast price of $1.90 per barrel for East Texas crude converted at the official rate of exchange (11.62 forints to $1.00). In establishing the new price of 170.00 forints per ton, the Government failed to consider the fact that prices for oil field materials and supplies in the United States had increased only 15%-20% compared with a general increase of 291% in Hungary. On this latter basis, the MAORT price compared to Gulf Coast should amount to $4.66 per barrel. Further, taking into consideration the purchasing power of 52.5% which was accepted, the price would be $2.45 per barrel for 209.15 forints per ton. This price does not make an allowance for the lesser operating efficiency in Hungary as compared to that in the United States. This lesser efficiency is the natural result of the war and it will take some time to overcome it. Furthermore, it is not fair to convert the Gulf Coast crude oil price at the official rate of exchange because the Forint is a strictly controlled currency and the purchasing power is quite evidently much less than that assumed.
>
> In connection with the 'Natural Level of Prices' may it be pointed out that the cost of East Texas crude (approximately Hungarian quality) would amount to over 93.00 forints per barrel, delivered at Budapest.[165]

The cost of production also made the price of crude higher. Ruedemann shared the following conclusion of the report:

> Company records indicate that the cost of producing crude oil is increasing. If the funds were available for necessary repairs and replacements, the present costs would be even higher. The postponement of repairs and replacements due to lack of funds will eventually result in future abnormal producing costs. The Company is furthermore not free to lay off a surplus of several hundred employees in order to reduce costs.[166]

In addition to the price study, Ruedemann transmitted to Schoenfeld his latest evaluation of the company's situation. In organized and neatly arranged paragraphs, Ruedemann included the major grievances of his firm. While the letter traveled over familiar

grounds, Ruedemann did mention a few items in certain ways that expressed the company's situation as becoming untenable. He noted that

> Under normal conditions the MAORT would suspend deliveries of crude oil to customers who refuse to pay, or if a fair price was not obtained. But now the MAORT is helpless because their production as well as their deliveries are controlled by the Hungarians and, at least indirectly, Soviet authorities.[167]

This "helplessness" of the company was difficult to accept especially when

> On the one hand the U.S. Government is extending substantial assistance to this country and on the other hand, the recipient treats an American interest in a non-cooperative manner. This is aside from the many humiliations suffered at the hands of the Soviets.[168]

In evaluating the Hungarian government's actions, Ruedemann came to an ominous conclusion.

> Certain groups have a tendency to disregard their own faults and to blame failure upon others. The present Hungarian Government is no exception. A continuation of the present opposition to American interests can lead to serious repercussions resulting in the loss of the MAORT properties. There is a danger that the blame for the failure to augment the declining oil production will be placed upon the Company and lead to the proposal that the properties be nationalized. The true facts would be disregarded, and the slow drilling rate attributed to sabotage or similar misrepresentation.

For these reasons he suggested to the American Minister that "the time has come for more positive action in our relation with the Hungarian Government and aiming toward the protection of American interests."[169]

Schoenfeld did not fail to recognize the serious difficulties in which Ruedemann found his company. As a result, the American Minister prepared an official note based on Ruedemann's report and delivered it to the Foreign Ministry of Hungary on March 3, 1947. At the end of the several-paged note, Schoenfeld concluded that the Hungarian government's

> . . . actions in the view of the United States Government, were contrary to well established commercial practices. Furthermore, such an action was contrary to the rights of American nationals

in Hungary under the Armistice of January 20, 1945.[170]

He recommended that the

> . . . prices of crude oil and petroleum products be adjusted to levels adequate to cover the costs of production plus a reasonable return on investment and . . . that pay out for deliveries of crude and petroleum products be prompt and effective.[171]

The reception of the American note started feverish activity in the Ministry of Industry. Officials of this branch of government started drafting situation reports and action plans in order to advise Ferenc Nagy on how he should prepare his reply. First the officials suggested that an interministerial committee be formed with the inclusion of MAORT officials. This committee should examine the company's reasons for regarding the crude price low and should prepare a report on its findings.[172]

Officials in the Ministry of Industry came to the conclusion that the company's problems were not the results of actions on the part of the Hungarian government but were directly and indirectly caused by the U.S. government. The Hungarian government was limited in its ability to pay the refineries (who couldn't pay the company) because it had to pay the Soviet Union, Czechoslovakia and Yugoslavia reparations. These were high and the U.S. would not do anything to reduce them. The American government should not expect that because MAORT was not compensated on time that it should have the right to export its crude to foreign refineries. This would cause unemployment, and even the U.S. would not wish this on the Hungarian workers. When the Hungarian government exported oil, it used the currency to purchase necessary machinery for MAORT. The government had the right to send inspectors to the company, especially when the crude production of the company was declining so rapidly. This indicated that there was trouble, and it was

the duty of the government to find out what it was.[173]

The rest of the company's problems were caused by Standard Oil Company in New York. At the end of the war, hungry, poverty-stricken and unpaid Hungarian engineers and workers started rebuilding and operating the company of American owners. Rockefeller Plaza did not aid the company at all. Moreover, this large multinational company did not even request that MAORT's belongings from the U.S. sector in Germany be sent home. It just did not care at all. It did not export capital to Hungary to assist its own property to become profitable again. Standard Oil had no consideration at all for the difficulties of the company and the Hungarian state.[174]

After looking over the plans and reports, Ferenc Nagy, with officials of the Ministry of Foreign Affairs, sent a short, polite and sensible reply to the U.S. Legation on April 2, 1947. They promised an investigation of MAORT's claims concerning the low pice of crude and informed the Americans that the Ministry of Finance had advanced 6 million forints to the refineries with 2.5 million earmarked for MAORT.[175] Two weeks later, the U.S. Legation acknowledged the receipt of the Hungarian response and expressed its hopes that the Hungarian state would be able to work out its problems with the company in the spirit of the Contract of 1933 and subsequent international agreements between the U.S. and Hungary.[176]

The interministerial committee formed to study the crude price structure met once under Dr. Fenyvessy's chairmanship on September 29, 1947. Branches of the government including finance, industry, interior and commerce were represented; and experts from the engineering and geology departments of the University of Budapest were present. MAORT sent Ruedemann and Bannantine. The meeting did not last long.

Ruedemann stated that in view of the situation, the company was planning to produce only enough for domestic consumption. This had been stated in the Contract, and the state could not force the company to violate the written agreement. In response, Dr. Fenyvessy who represented the ECC, said that he saw two alternatives. The company could declare bankruptcy and then the state would again take over the fields, or the price matter could be referred to a Jury of Referees for binding arbitration. Ruedemann accepted the latter.[177]

In spite of the exchange of notes between Hungary and the United States and the formation of the committee to look into the problem of crude prices, no measurable change came in the relations of the government and the company. For the rest of 1947 and during the first part of 1948, MAORT attempted to operate as well as it could. On July 17, 1948, Ruedemann noted that "in respect with prices MAORT had been treated most unjustly among all branches of industry, as the present price represented 23 percent of the 1939 price."[178] In his opinion, the company needed to earn 45.00 forints for a barrel of crude in order to make a modest profit. The 45.00 forints per barrel would cover 24 forints for cost of production, 12 forints for drilling fees and allow 5 forints for profit to be distributed among the shareholders.[179]

Decreased earnings due to low prices and output represented only one part of MAORT's financial problems. The other part was created by the refinery plants who were unable or unwilling to meet their financial obligations. This went to such an extreme that in time the accumulated debts rendered MAORT completely dependent on the state for funds.

This problem of financial insolvency began to surface just after the war ended. By the time the stabilized currency, the forint, appeared, the major refineries were in deep debt to MAORT. The price of

crude was lowered to 30.18 forints per barrel and the Minister of Finance ordered the refineries not to delay payment for more than 8 days. But the Ministerial decree 167 810/1946 did not change the situation. By the beginning of 1947, the seven major refinery plants owed MAORT 25.7 million forints which represented 3 months' income of the company. The three plants with the greatest debts were the Hungarian-Soviet Oil Works with a debt of 8.5 million forints, Shell Refinery Plant which owed 6.5 million forints and Pet Nitrogen Works with an indebtedness of 5.2 million forints.[180]

At every opportune moment, Ruedemann appealed to the proper Hungarian state and American diplomatic authorities for assistance concerning the irresponsible business conduct of the refineries. In a memorandum to Ban, Racz and Vas, Ruedemann stated:

> We have informed your office on various occasions that the refineries are not paying us promptly enough for our crude oil deliveries with the result that we are handicapped in our operations for lack of funds.
>
> Our accounts receivable from the refineries are steadily increasing and amounted to over twenty-five million Forints on February 12th for crude oil delivered since August 1, 1946.
>
> We also wish to call to your attention that when we accepted the price of 30.16 Forints per barrel, we were assured that arrangements would be made for the payment of our crude oil deliveries eight days after the date of delivery. With this promise we expected that we would be given better consideration than that which we actually received.
>
> We should appreciate it very much if you would assist us in the collection of our accounts receivable from the refineries in order that we may be able to carry out our program of development and exploration necessary to maintain our present production and find new oil reserves.[181]

While he essentially reported the same facts to Schoenfeld, Ruedemann expanded his list of grievances by mentioning Hungary's exports to Poland. He wrote

> The Hungarian Government still owes the equivalent of approximately $40,000 for crude shipped to Poland in July 1946.
>
> MAORT crude oil is exported for barter purposes which is largely to the benefit of the importers since MAORT receives

only the fixed, inland price. The importers are able to obtain world market prices in the bartering which greatly exceeds MAORT's fixed price.[102]

This was the situation in early 1947, one year after Marshal Voroshilov had threatened to punish the managers of the major refineries who were delinquent in their duties. The Russian officer's letter to Prime Minister Nagy read

> MAORT is unable to make the necessary repairs because it has no money.
>
> The refineries owe large sums to MAORT because the Hungarian government does not pay them for the refined products which they ship out either for reparations or inland use.
>
> I request that you, Prime Minister, immediately issue orders which would effect the equalization of debts between the refineries and the state on the one hand and the refineries and MAORT on the other.
>
> At the same time, I hope that you will find it necessary to begin an investigation of this matter and then give the guilty ones who attempt to disrupt the normal productive work of the oil industry exemplary punishment.[103]

In accordance with the Marshal's request, Vas, head of the ECC, initiated an investigation. This attempt did not result in any change in the paying habits of the refineries.[104]

Ten months later, the Vice President of the ECC, Finance Minister Dr. Jeno Racz, was forced to send a memorandum to the Hungarian Mineral Oil Refinery Plants' National Organization in which he demanded that each member ". . . undertake with due haste the proportional settlement of your debts to MAORT."[105] He placed the execution and supervision of his order in the hands of the Common Deliveries Revisory Work Community (Kozszallitasok Revizori Munkakozossege) which formed a semi-independent group within his ministry.[106]

Two months later, this work community reported that the refineries increased their indebtedness. From the sums which the Hungarian National Bank and the Reparation Office placed on the accounts receivable of the refineries to pay for crude deliveries, MOLAJ transferred 25

percent; Shell, 11 percent; Peti Nitrogen Works, 5 percent; and Vacuum, 0 percent to MAORT in the month of February.[187] Radical action appeared to be in order. On March 26, Racz, in the name of the ECC, issued the following authorization to MAORT:

> As of May, 1, 1947, the Economic Chief Council authorizes MAORT to deliver crude only to those refineries which paid in cash for the crude within eight days of the delivery.
>
> In the opposite case, in spite of existing delivery quotas imposed upon MAORT by state authorities, the company has the right to refuse delivery of crude to those refineries which have fallen in arrears with their payments and to sustain the embargo until the refineries make good on their debts.
>
> MAORT, the refineries, the Economic Chief Council and the Ministry of Finance will sit together and decide ways and means to take care of the debts which the refineries incurred before May 1.[188]

The stern measures improved the refineries' payment records but did not eliminate MAORT's cash flow problems. While the refineries maintained regular payments for crude deliveries after May 1, they made slow progress in rolling back their pre-May debts. The combined debts of the refineries amounted to 23.6 million forints on May 1, 1946. They paid back to MAORT 13 million by July 31, 1948. The worst offenders were Vacuum and Shell owned by British, American and Dutch stockholders. The former still owed MAORT 73 percent and the latter, 64 percent of the pre-May debts in the summer of 1948.[189]

Several considerations hindered the refineries in their willingness and ability to pay regularly for the crude deliveries. The most frequently mentioned and most understandable reason was that they needed large amounts of cash to rebuild their plants which were almost completely destroyed during the war. Fenyvessy, who had inspected both MAORT and the refineries several times, noted in the spring of 1947 the following:

> I would point out that the financial position of the MAORT is to be cured through the refineries . . . .

> In the line of refineries there is one serious reserve and this is painful, but it is the only secure operating knife. This can not be but the reduction to a minimum of the reconstruction work carried on by the refineries as long as the position of the MAORT necessitates this. Refineries will be reconstructed in vain if the Lispe Field is ruined in the meantime.[190]

Pal Kiraldi, who was a chief mining councilor in the Ministry of Industry, wrote a comprehensive report on the country's oil industry for Antal Ban which evaluated the situation succinctly and correctly in the following words:

> The rebuilding program of the damaged refineries has succeeded to such an extent that the refineries' present combined capacity more than twice exceeds our decreasing crude oil production. We command at the present a yearly throughput of 9,000,000 barrels.[191]

(In 1947, crude production reached 4,374,365 barrels, and 3,579,593 barrels in 1948.)

Ruedemann, who had also studied and evaluated the problems of the refineries, especially the reasons for their apparent inability to pay for crude deliveries, arrived at the same short and accurate conclusion as the others: "The Shell and Vacuum--others also--appear to have brought on their difficulty by spending money on reconstruction or expansion that should have been paid to MAORT."[192] In particular, Ruedemann found that:

> Vacuum appears to have invested 10 to 15 million forints on reconstruction and . . . is still putting money into its plants. Four hundred men are being employed in rehabilitation and improvements out of a total of 700 at the plant.[193]

Considering Shell, he found that

> Shell is doing very little such work now and seems to have made its heavy expenditures prior to the time the refineries were ordered to pay MAORT currently . . . .
>
> The impression our informant got of the Shell's expenditures was that they directed their efforts more toward improving labor relations and making themselves comfortable (They luxuriously rebuilt and furnished their Budapest office) rather than increasing the income potentialities.[194]

In spite of these problems with Shell and Vacuum, Ruedemann was ready to strike a deal with them. In the case of Shell, he achieved the following:

> An agreement has been consummated with the Shell for the payment of their debt to MAORT. In outline the arrangement is:
>
> Payment: 70,000 frt. cash weekly
> Payment about 30,000 frt. weekly in products
> Interest at 5% per annum on the balances left unpaid each month in accordance with the payments required under the decree
>
> At this rate they will be paid up in about a year. The same arrangement is to be offered the Vacuum when Mr. Lineau returns. Vacuum paid only 300,000 frt. in January and not 1,300,000 frt. as they stated they would in the cable to their office and which we discussed at a meeting before my departure.[195]

Ruedemann could have offered them easier terms, but his experiences as a manager within a multinational company suggested otherwise. He thought that

> It would be politically unwise for us to grant the above two more favorable treatment than the others; therefore, similar propositions will have to be offered to the other refineries if they cannot pay as prescribed by the decree.[196]

Ruedemann doubted that large expenditures on rebuilding were the reasons behind the two foreign interest refineries' inability to remain financially solvent. He believed that

> The fact that the refineries are in bad shape financially is due largely to bad management. They were spending their revenue freely in the expectancy they would not have to pay for the crude oil. They also failed to take seriously MAORT's reports on declining production rate and had their Association request the Government's Mineral Oil Commissioner to force MAORT to produce at a higher rate; as if MAORT was sabotaging and only needed prodding to bring up the production rate.[197]

He also did not believe that the Hungarian government's alleged slow and low compensation for distilled products was the single source of financial problems for the refineries. He wrote:

> The constant argument they give is that the Government fails to pay them, and both Vacuum and Shell recite fantastic figures of the amounts owed them. . . . Vacuum says the Shell claims are padded, and they don't see how Shell can collect enough to

> pay MAORT. Shell says the same about Vacuum. A swell bunch! In any case their argument that they cannot pay because the Government does not pay is a childish one.[198]

Ruedemann did not deny the fact that

> . . .MAORT's money has contributed heavily to the reconstruction of all plants. Let us say a million dollars. A rather nice contribution by MAORT shareholders to the Hungarian refining industry.[199]

Looking back on his evaluation of the refinery problem he wrote:

> I trust I have not been too critical. It is difficult to describe the present low level of business morals. And it is equally difficult to get someone who has not lived with this situation to believe the morals can be so corrupt.[200]

In the last analysis, Ruedemann believed that the background and present posts of the head of the Mineral Oil Production and Distribution Commission, Zoltan Gombosi, also had something to do with the refineries' unwillingness to pay for the crude. Gombosi was a refinery employee during the war; afterwards he sat on the board of several refineries in addition to being a Commissioner;[199] and as Ruedemann intimated to Schoenfeld, "he was the President of the Hungarian-Soviet Oil Company, a competitor of MAORT."[202]

Decreasing crude prices conjoined with long-delayed recompenses from refineries placed the company's financial operation into a precarious, if not dangerous, situation. Often the company could simply not meet its basic financial obligations. It was a new and different experience for the directors who had been used to creating "sinking funds" to decrease the unexpectedly large profits. Surprisingly, from the beginning of the company's troubled financial circumstances, the government was always there to grant a new loan or issue a voucher for more credit.

The general financial problems of the company commenced with the end of World War II. The Red Army, which occupied and supervised the

operation as well as used the oil and services of the company, only promised to pay for whatever kind of benefits it derived from the company. As a result, right away, in order to satisfy a payroll of 5,000,000 pengos, the company had to borrow 3,000,000 pengos from the government on May 18, 1945.[203] This first-time dependency continued to the end of the company's existence.

Two months later, a worried Rockefeller Plaza executive, Edward F. Johnson, was inquiring from Charles F. Darlington whether he knew of a loan to MAORT which was "the equivalent of about $4,500,000, according to the last pengo exchange rate that we have . . ."[204] Johnson wanted to learn "by whom the money was furnished or the type of expenses the loan was to meet, whether current, capital, or of some other variety."[205]

There were the initial loans to MAORT from the government, and in time, they became regular sources of cash for the financially troubled company. On August 27, 1946, Ruedemann was reporting to Schoenfeld:

> The MAORT is in a desperate financial situation. The refineries are unable to pay for the oil deliveries and to date the Company has received a total of 2,129,518 forints since August 1st. The sum of 979,518 was paid on account and the 1,150,000 remainder obtained as loans from banks. The Government offers the privilege of further loans which the MAORT has refused. If the Government can arrange loans it can also pay.[206]

A year later the situation had not changed much. The ECC ordered the extention of a 10-million-forint loan to the company to underwrite the spring quarter's production.[207]

For the whole postwar period there appeared to have been only one General Assembly of Stockholders meeting and even this one was extraordinary. On November 16, 1945, Papp, as president of the company, opened the meeting and noted the the company's stocks had grown to

32,000 during the war years. The purpose of the meeting was to elect or re-elect the members of the Board of Directors and replace Erno Hauer and Janos Dinda who had decided to stay in the West. Papp, who represented 31,998 votes by proxy, nominated the following persons: Ralph P. Bolton, John W. Brice, Edward L. Estabrook, John Finke, Leonard McCollum, Paul Ruedemann, Emil Schudel, Bodog Abel, Zoltan Gyulay, and Gabor Temesvary. They were unanimously elected and the meeting was closed.[208]

The only fully documented Board of Directors meeting took place on March 2, 1946. Papp, as president of the Board of Directors, opened the meeting and related how he had been elected to this post on December 15, 1941, during an emergency session. He reviewed the events of the past years in several sweeping generalizations and then got down to the business of the meeting, the elections. Ruedemann was nominated and elected president. Papp turned over the position to him with these words: "We hope that under your wise leadership the company will recover from the damages it suffered during the war and will again start moving toward prosperity."[209] Ruedemann suggested that those employees who had worked for ten or more years for the company should be awarded gold medals. This was accepted and Ruedemann closed the meeting.[210]

There are only traces of information left behind from two other Board of Directors meetings. During the March 12, 1946, meeting, Ruedemann proposed that an oil worker should be invited to future sessions. On April 17, 1946, Ruedemann suggested that those employees who worked in Budapest should have opportunities to listen to lectures concerning the oil fields and the production of crude oil.[211]

Balance sheets provided comprehensive reports on the financial status of the company from year to year, but after the war not one of

these important documents survived or could be found. Only numbers scattered in different documents and on pages of texts could be located. One source stated: "For the first time, the year 1945 closed with losses . . . The company suffered 22.5 million pengos loss."[212] Another reference to the same year noted that "The 1945 business year, in contrast to other profitable years, closed with a loss of 12,465,935 pengos."[213] According to these disjointed figures, the 1947 year started with assets placed at 341,567,706 forints and closed with 391,523,606. This indicated that the company made 49,687,899 forints in profit.[214]

U.S. Legation Activities

Through the personnel in diplomatic posts around the world, the Department of State has traditionally assisted American businessmen abroad. Because Americans came somewhat late to international business activity, the Department of State promulgated an "Open Door Policy." While it was always easy to follow the precepts of this policy, diplomatic personel found that when they attempted to interpret and apply it, there were no specific guidelines as to the limits of their assistance. American oil men received treatment that varied depending on the post, the time and the place.

After World War II, the fluctuating intensity received some definition. The Department of State started to systematize its aid to multinational American oil companies in recognition of the fact that

> Historically, petroleum has played a larger role in the external relations of the United States during the twentieth century than any other commodity.[215]

The legal instrument which gave the right to American multinational companies to operate in foreign countries was the concessional

contract. In case the United States government, through its foreign service agencies, wanted to support American oil interests abroad, it had to uphold and defend the overriding importance of this contract. It did so in the following words:

> In connection with the sanctity of concession contracts, there has been no change in the State Department's position. It still upholds the principle enunciated in the Anglo-American Oil Agreement 'That all valid concession contracts and lawfully acquired rights shall be respected and that there shall be no interference directly or indirectly with such contracts or rights.'[216]

In support of this policy

> The United States Government would take every appropriate means to encourage, assist and protect American nationals in the development of foreign oil reserves.[217]

The preceeding policy came to public attention in the fall of 1946; however, certain Department of State actions had already begun carrying the new policy into effect in the summer of 1946. With the explicit intention of assisting American oil interest abroad and also of gathering oil-related information anywhere in the world for the Department of State, the following circular was sent from Washington to each diplomatic post:

> The Secretary of State transmits herewith an instruction on petroleum reporting which has been formulated to describe the basic duties of petroleum officers and the types and frequency of the reports they are to submit.[218]

To implement this policy

> . . . the Department proposed, among other things, to institute a regularized system of petroleum reporting at all Missions abroad and to appoint experienced petroleum specialists who would participate in analyzing the political and economic problems relating to petroleum in strategic areas and keep the Department fully informed.[219]

The "experienced petroleum specialist," officially the Petroleum Attache

> will act as technical adviser and principal reporting officer on matters pertaining to the petroleum industry within his

> district. When required, he will serve as consultant to the Military and Naval Attaches of the Mission. He will coordinate the economic reporting of petroleum specialists operating within his jurisdiction who are sent abroad by all United States governmental agencies.[220]

In addition to these duties, he would have

> to follow, report on and interpret all legislative and executive acts of government, and all political and economic trends affecting petroleum and American petroleum interests within his area of responsibility.[221]

The first petroleum specialist to come to Hungary was Ray P. Walters. He arrived in July of 1945, several months before Ruedemann. Robert S. Folsom noted:

> I have the honor to submit herewith a report on the Hungarian Oil Industry prepared by R. P. Walters, Foreign Service Auxiliary Officer, United States Mission, Bucharest, Rumania.[222]

The events which surrounded the report took place as follows:

> While on a trip to Budapest in July, Mr. Walters contacted MAORT and Vacuum representatives, and the report is based largely on information obtained from them.[223]

This was not how Walters wanted to gain his information. He preferred to go straight to the oil fields, but this was not possible.

> A request was made for persmission to visit the fields, but the Russian A.C.C. refused to grant the request. In refusing, the A.C.C. stated that the fields were under the control of the fighting army and threfore not under the jurisdiction of the Control Commission.[224]

Walters returned to Hungary for a longer stay as a full-fledged Petroleum Attache in 1948.[225] He wrote several comprehensive reports on MAORT's operation, certainly a topic he would be interested in, because unless a series of coincidences were at play, this Ray P. Walters had been a long-standing employee of Standard Oil who sat on MOART'S Board of Directors from 1938 until 1940.[226]

When, during the early years of the war, members of the Enemy Oil Committee in Washington listed Walters's name among MAORT's direc-

tors, they also classified him as one who ". . . may be looked to for information of possible value . . . ." Walters evidently gathered information for himself.[227]

Before the war, members of the U.S. Legation had assisted MAORT officials by allowing them use of the legation's fast and secure communication system. Most of the information which left Hungary had military implications; therefore, this service violated the 1925 Treaty of Friendship Commerce and Consular Rights. After the war, the legation resumed this service to the company. The following examples support this:

> I have the honor to transmit herewith, for delivery to Mr. Leonard McCollum, 30 Rockefeller Plaza, New York, at the discretion of the Department, a report on the concession in Hungary of the Magyar-Olasz Asvanyolajipari R.T., prepared by Dr. Simon Papp, representative of the Magyar Amerikai Olajipari R.T., at the suggestion of Mr. Ray P. Walters, Petroleum Attache on the staff of this Legation.
>
> The preparation of this report was suggested by Mr. Walters prior to his recent departure for the United States. It represents, in his opinion, a valuable contribution to the documentation available regarding oil rights in Hungary.[228]

> In accordance with your telephone request of August 4, 1947, I am enclosing for your information paraphrase of a recent message from Budapest. This telegram refers to certain orders issued by Mr. Ruedemann to reduce the MAORT production to 48,000 tons during August and to render no further assistance to Hungarian controllers placed in the MAORT organization.[229]

> The Charge d'Affaires ad interim at Budapest has the honor to enclose herewith a letter dated June 18, 1948 with enclosures addressed to Mr. John W. Brice, Standard Oil Company (New Jersey), 30 Rockefeller Plaza, New York 20, N.Y.
>
> If the Department preceives no objection, the transmittal of this letter to the addressee would be appreciated.[230]

> I have the honor to enclose a series of maps and pamphlets . . . which supplement the text and data submitted . . . dealing with the production of Hungarian crude oil.[231]

Some of the interesting maps were:

> Schematic tectonical map of Transdanubia, Hungary based on geophysical investigations
>
> Structure contour map of the oil fields of Lovaszi and

> Budafapuszta, showing also the distribution of water, oil and gas in the Ratka and Patka sands
> Map of oil and gas concessions in Hungary in 1944
> Map of prospective oil territories of Hungary
> General map showing the existing oil fields, the location of the latest prospecting boreholes and the likely structures[232]

Sometimes the information flow reversed going from New York to Budapest:

> I am attaching hereto a letter addressed to Mr. P. Ruedemann, Shareholder Representative of the Standard Oil Company (N.J.) in Hungary. If you see no objection, I would appreciate your kind offices in arranging for the placement of this communication in the diplomatic pouch for the Legation in Budapest, and for its delivery by hand on arrival to Mr. Ruedemann.[233]

Some information appeared to be so valuable that the Budapest legation sent a copy of it to be placed in the Department of State's files.

> I have the honor to transmit herewith a confidential memorandum prepared by the Budapest office of the MAORT Company dealing with the history, production operations, oil reserves and field personnel of the Hungarian subsidiary of the Standard Oil Company of New Jersey. It will be of interest, I believe, to the Department.[224]

Before the war, with the exception of the information clearing service, MAORT officials asked for no other kinds of assistance from the U.S. Legation. After the war, the situation changed. Ruedemann sometimes demanded help. At the end of his report describing the company's financial situation, Ruedemann pleaded with Schoenfeld:

> The severe handicaps imposed upon the MAORT make it imperative that adequate assistance be given by your Legation. It is only by strong pressure that the MAORT can be rescued from the present difficult position. It does not appear that positive, forceful assistance would jeopardize the broader political aspects . . . .[235]

As a result of these appeals, the U.S. Legation in Budapest and the Department of State in Washington addressed notes to the Soviet and Hungarian governments without even checking on the claims and allegations of the company.

At times legation officials were so eager to help persons repre-

senting American interests that they wandered into dangerous territories. To help two Hungarian employees of Sacony escape from Hungary, legation officials considered a "procedure for purchasing Hungarian passports . . . as it is known that passports have been purchased in the recent past."[236] When Washington learned of this, a Department of State official telegraphed the following response: "Department considers Legation's involvement in transaction of purchasing passports . . . to be unwarranted risk of embarrassment. If you feel otherwise, we will discuss it with Sacony."[237]

Receiving and gatherimg information concerning secret Hungarian oil deposits were also a part of the legation's work. On July 23, 1946, G. T. Kerekes, Assistant Chief of the Foreign Exchange Section of the U.S. Mission in Vienna, reported that a Hungarian lawyer employed by the ACC's Hungarian Investigation Division came to visit him upon request of mutual American friends in the Mission and told him the following:

> He is a friend of Dr. Loczy, Hungary's foremost geologist and Director of the Hungarian Geographic Institute, who, at the request of the late Premier Teleki, surveyed Hungarian oil resources. Sometime ago, Loczy called him and told him that the most valuable Hungarian oil wells are neither those of the Standard concessions, nor those of the former German concessions; but they are somewhere else. At the time Loczy made this discovery, it was withheld so as not to give the information either to the Germans or to the Russians, and neither of them know the location of these deposits. Loczy, who is sincerely perturbed by the lack of American interest in Hungary, would be willing to talk about the location and wealth of these deposits to appropriate American authorities with the purpose of enducing a more active American participation in the Hungarian economy.[238]

Kerekes's report came to the attention of John G. Erhardt, Political Representative at the Headquarters of the United States Forces in Austria, who contacted Dr. Loczy. To Erhardt,

Dr. Loczy stated that surveys conducted over the last twenty

> years have shown the existence of oil fields in Hungary superior in importance to the western fields under concession to Standard Oil Company and the eastern fields for which exploitation rights were granted to the Germans. He says that the secret fields are superior to those in Rumania or any other fields in Europe. He desired to reveal their existence to United States authorities with the idea that this knowledge might be an important element in the development of American ecnomic policy toward Hungary and might lead to a stronger orientation of Hungarian economy toward the west.[239]

Erhardt sought out the Hungarian lawyer who was the first source of information and learned

> . . . that the matter could be further developed only by conferring with Dr. Loczy outside of Hungary, since he is the key man, is the only individual who holds all the information available, and cannot be contacted in Hungary. Dr. Loczy apparently is not in wholly good standing politically with the present regime and the Soviets. He has been kept in office because of his outstanding ability, but it is almost certain that he would not be granted permission to leave the country. If there were some indication that authorities in the United States desired to investigate the possibilities of this matter and to confer with Dr. Loczy, he probably could find means to leave the country. Travel out of Hungary to Austria has been comparatively easy up to this point, but it is becoming more and more difficult and closely controlled. If the Department wishes to develop further the information contained herein, it would be desirable that an indication be given as soon as possible.[240]

The Department of State official who was placed in charge of developing the information further and who became known only by his initials, D L, decided to check the report out. The result he wrote in pencil on the despatch: "Discussed with Walters of SONJ, 9-25-46, with completely negative response."[241]

NOTES: CHAPTER SEVEN

1. Letter, Edward F. Johnson, General Counsel at Rockefeller Plaza, to Charles F. Darlington, Chief of the Petroleum Division at the Dept. of State, July 27, 1945, NA Records.

2. CHOMD, vol. 2, p. 190.

3. Letter, Antal Ban, Minister of Industry, to MAORT of the RHT, July 6, 1945, cited in CHOMD, vol. 2, pp. 190-92. A somewhat abridged translation of this letter is also attached to Letter, Johnson to Darlington, July 27, 1945, NA Records.

4. Ibid. The critical passage in the Allied Control Commission office's translation reads: ". . . attention is called to our oral agreement to the effect that the entire taking over upon your request had been but a feigned one and the Treasury acted as what is known in legal terms as trustee in their own name but for and on behalf and at the expense of your company (ibid.).

5. Letter, Ban to Zoltan Gombosi, Ministerial Councilor, and Istvan Propper, State Controller to MAORT, July 6, 1945, attached to Letter, Johnson to Darlington, July 27, 1945, NA Records. Ban's letter was translated by Mrs. Hagy (ibid.). The original Hungarian was not included in CHOMD.

6. Letter, Hagy to Ruedemann, July 13, 1945, NA Records.

7. U.S. Treaties, vol. 3, p. 1002.

8. These U.S. representatives came to Hungary relatively early; the first to arrive in the eastern city of Debrecen, where the Provisional Hungarian Government had its headquarters, was Major General Key on February 18. Next came Squires on February 21; Schoenfeld flew to Budapest on May 11 (Foreign Relations of the United States, 1945, vol. 4, pp. 799, 804, 807).

9. Letter, Hagy to Ruedemann, July 13, 1945, NA Records.

10. Letter, Papp to Ban, July 12, 1945, cited in CHOMD, vol. 2, p. 192.

11. Ibid. 12. Ibid., p. 193 13. Ibid. 14. Ibid.

15. Ibid., p. 194.

16. Minutes, Aug. 9, 1945, MAORT Papers, pkg. 49, HNA, cited in CHOMD, vol. 2, pp. 195-96; under the title Appendix 11, SOPHM, pp. 35-37

reprinted an English translation to the minutes.

17. CHOMD, vol. 2, p. 197. 18. Ibid., p. 198.

19. Ibid. In addition to those whose names and positions were mentioned in the text as participants, Dr. Jozsef Laszy, representing the Hungarian Treasury, was also present (ibid.).

20. Letter, Hagy to Ruedemann, July 13, 1945, NA Records.

21. Letter, Johnson to Darlington, July 27, 1945, NA Records.

22. Larson, Knowlton and Popple, New Horizons, p. 384.

23. Letter, Hagy to Ruedemann, July 13, 1945, NA Records.

24. CHOMD, vol. 2, pp. 199-200. Unfortunately, no document that could give details of the assembly meeting could be found.

25. Minutes of meeting, Nov. 22, 1945, MAORT Papers, bundle 49, HNA, cited in CHOMD, vol. 2, pp. 200-1.

26. Ibid., p. 200. 27. Ibid., p. 202.

28. Ibid., p. 202-3. 29. Ibid., p. 203.

30. Ibid., pp. 203-4. 31. Ibid., pp. 204-5.

32. Ibid., p. 205. 33. Ibid., pp. 205-6.

34. Report, Geocze to Ruedemann, Jan. 7, 1945, MAORT Papers, pkg. 49, HNA, cited in CHOMD, vol. 2, pp. 206-16.

35. Ibid., p. 207. 36. Ibid., pp. 207-8.

37. Ibid., p. 208. 38. Ibid. 39. Ibid., p. 209.

40. Ibid. 41. Ibid. 42. Ibid., p. 209-11.

43. Ibid., p. 210. 44. Ibid., p. 211. 45. Ibid.

46. Ibid., pp. 211-12. 47. Ibid., pp. 217-18.

48. Ibid., p. 214. 49. Ibid., pp. 214-15.

50. Ibid., p. 215. 51. Ibid. 52. Ibid., p. 216.

53. Minutes, November 7, 1946, Ministry of Industry, Gombosi Papers, pkg. 2, HNA, cited in CHOMD, vol. 2, p. 218. Uncharacteristically, the minutes do not list the names of the participants.

54. Ibid., pp. 219-22.

55. The Pest part of Budapest was liberated on January 18 and the whole country on April 4.

56. "Minutes Concerning Papp's Visit," May 3, 1945, Ministry of Industry, Gombosi Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, pp. 5-6.

In addition to unusual circumstances which surrounded the origin of this document it contained inaccurate dates and figures. Sometime more than a month after the Red Army gained control over the oil fields, Zoltan Gombosi summoned Papp to come to his office in the Ministry of Industry and give a comprehensive report concerning the company's post-war condition. On April 30, Papp complied with Gombosi's request; however, minutes were taken of Papp's report on May 3. In the body of his report, Papp said that the evacuated company equipment and material filled 300 railroad cars and that at the orders of the Russians, the company started delivering crude to the refineries on March 11 (ibid.). There is no supporting evidence for these dates and figures; they are incorrect.

57. Ibid. 58. Ibid. 59. Ibid.

60. Letter, Ruedemann to Schoenfeld, Nov. 18, 1946, NA Records.

61. Ibid.

62. CHOMD, vol. 3, p. 127. The list of the company's belongings which were damaged by the war or were evacuated to the West filled 800 pages (ibid., p. 3).

63. Letter, Erno Budai, custodian of MAORT of the RHT's properties in Furstenek, Germany, to Zoltan Gyulay, Head of Production Department in Nagykanizsa, May 9, 1945, MAORT Papers, pkg. 49, HNA, cited in CHOMD, vol. 3, pp. 19-22.

64. Fifty-three railroad cars of belongings appear to fall closer to the truth than Papp's figure of 300 cars.

65. Ibid.

66. Budai deposited the received amount in the Rohrbach Spar und Darlehnskasse on the company's account (ibid.).

67. Ibid.

68. Letter, Zoltan Gyulay to Papp in Budapest, Sept. 3, 1945, Minister of Industry, Gombosi Papers, pkg. 2, HNA, cited in CHOMD, vol. 3, p. 16. Gyulay wrote this letter for two reasons. He needed the evacuated workers back to restart the operation of the company; he wanted Papp to use his connections to facilitate the return of these employees. At the end of his letter he noted that "the Workers Committee approved the contents of my letter" (ibid.).

69. Ibid.

70. Letter, Gyulay to Papp, Sept. 7, 1945, Ministry of Industry, Gombosi Papers, pkg. 2, cited in CHOMD, vol. 3, pp. 17-18. The letter was based on information gained from Jozsef Giczi, an employee of the company who had just returned from his western sojourn.

In Gmuden, some company property was also stored. Two large

trucks, several office machines and some office records made up the list of the company's properties evacuated to Austria (ibid.).

71. Ibid.

72. Report by Karoly Revay, certified public accountant and ministerial expert, to Economic Chief Council, Sept. 16, 1946, Antal Ban, Minister of Industry Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, p. 84. Revoy was despatched to examine MAORT's books by the ECC and he conducted his examination between June 14 and September 16 (ibid.).

73. CHOMD, vol. 2, pp. 223-70. Several lists of the abandoned and consequently lost properties are reproduced on pp. 226-227, 249-251 and 266-270.

74. "Eszto's Report Two: Drilling and Production," no date, NA Records.

The American rigs were steam driven and the German ones had diesels motors.

In addition, the company owned 7 smaller, well-completion outfits which were mostly used to recondition old producing wells (ibid.).

75. "Minutes Concerning Papp's Visit," May 3, 1945, Ministry of Industry, Gombosi Papers, pkg. 1, HNA cited in CHOMD, vol. 3, p. 3.

76. "Eszto's Report One: Economy and Rationalization," April 19, 1947, NA Records.

77. Eszto's Report Two: Drilling and Production, no date, NA Records.

78. "MAORT's Remarks on Fenyvessy's Pay Incentive Report," June 14, 1947, NA Records.

79. "Eszto's Report One: Economy and Rationalization," April 19, 1947, NA Records.

Regarding the report of the commission, Ruedemann noted:

> The Technical Sub-Commission examined the condition of our plants and equipments on the spot and has found that the greatest part of them is worn. The Commission has examined every item of our cost estimate containing necessary purchases and checked their necessity ("MAORT's Reply to Eszto's Report," June 13, 1947, NA Records).

80. "Eszto's Report One: Economy and Rationalization," April 19, 1947, NA Records.

81. Ibid. 82. Ibid. 83. Ibid. 84.Ibid. 85. Ibid.

86. "Dr. Szentivanyi's MAORT Investment Report," May 13, 1947, NA Records.

87. Ibid.

88. "Fenyvessy's Control and Contract Report," no date, NA

Records.

89. Ibid. 90. Ibid. 91. Ibid.

92. "MAORT's Remarks on Fenyvessy's Pay Incentive Report," June 14, 1947, NA Records.

93. Ibid. 94. Ibid.

95. Despatch 2361 (restricted), Schoenfeld to Sec. of State, Sept. 18, 1946, NA Records.

96. Letter, Ruedemann to Schoenfeld, Nov. 18, 1946, NA Records.

97. Ibid.

98. MAORT Papers, pkg. 3, HNA, cited in CHOMD, vol. 3, p. 416.

99. For a complete bill of materials, see CHOMD, vol. 3, pp. 287-89.

100. Letter, MAORT to Minister of Commerce, Aug. 31, 1948, Ministry of Industry Papers, Main Group C, pkg. 1, cited in CHOMD, vol. 3, pp. 286-89

101. "Fenyvessy's Control and Contrast Report," no date, NA Records.

102. Ibid.

103. "MAORT's Remarks on Fenyvessy's Pay Incentive Report," June 14, 1947, NA Records.

104. Letter, John W. Brice, counselor to Standard Oil Company, New York, to Ruedemann in Budapest, Aug. 26, 1948, MAORT Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, p. 285. The letter was in Hungarian.

105. Ibid.

106. Pal Szekely, "A MAORT-Ugy Hattere," [The Background of the MAORT Case] Gazdasag, vol. 3, no. 19, p. 1140.

The total number, the number of the different types of wells and the dates vary depending on the source. In most cases the discrepancies are understandable. For instance, some sources mention 10 wells for the Hahot field, others 43. In this case the writers are including the gas and exploratory wells drilled around Pusztaederics, which was adjacent to the Hahot field. There are also cases when a writer is using a different set of classifications for the wells. The largest numerical discrepancies are caused by when the countings took place.

107. "MAORT's Remarks on Fenyvessy's Pay Incentive Report," June 14, 1947, NA Reports. According to Ruedemann there were 154 producing wells in the fall of 1946 (letter, Ruedemann to Weems, Nov. 21, 1946, NA Records).

108. "Eszto's Report Two: Drilling and Production," no date, NA Records.

109. Ibid. 110. Ibid.

111. Dr. Raul Vajk, "Review of Petroleum Geology in 1947--Hungary," Quarterly of the Colorado School of Mines, vol. 43, no. 3, July 1948, pp. 146-47: and Despatch 274 (restricted), Schoenfeld to Sec. of State, March 24, 1948, enclosure, "Exploration for and Production of Oil in Hungary," no author, no date, NA Records.

112. Ministry of Industry, Gombosi Papers, pkg. 4, HNA, CHOMP, vol. 2, p. 298.

On August 1, 1946, the Hungarian government issued a new currency, the forint, to replace the inflationary pengo. At the time of its issuance, one dollar was equivalent to 11.8 forints.

113. Pal Szekely, "A MAORT-Ugy Hattere" [The Background of the MAORT Case], Gazdasag, vol. 3, no. 19, October 1, 1948, p. 1,140. A translation of this article is attached to Despatch 8876 (plain), Schoenfeld to Sec. of State, Oct. 20, 1948, NA Records.

114. Ibid. 115. Ibid. 116. Ibid.

117. "Hungary's Oil Production," report by Folsom to Sec. of State, Oct. 29, 1946, NA Records, Suitland, Maryland; "Eszto's Report Two: Drilling Production," no date, NA Records; and CHOMD, vol. 2, p. 234.

118. "Hungarian Oil Industry," report by Papp, July 21, 1945, NA Records.

119. The Hungarian Oil Industry, pp. 37-40.

120. Ibid. 121. Ibid. 122. Ibid. 123. Ibid.

124. "Eszto's Report One: Economy and Rationalization," April 19, 1947, NA Records; "Eszto's Report Two: Drilling and Production," no date, NA Records; "Dr. Szentivanyi's MAORT Investment Report," no date, NA Records; and "MAORT's Remarks on Fenyvessy's Report," June 14, 1947, NA Records; The reports and replies were attached to Despatch, 186 (confidential), Schoenfeld to Sec. of State, Aug. 3, 1947, NA Records.

These reports and some others connected to them require explaining. In the spring of 1947, the Chief Economic Council of the Hungarian government appointed a committee of experts to investigate MAORT's operation and prepare a comprehensive report based on their findings. Dr. Peter Eszto, a geology professor and chairman of the group; Bela Faludi, mining engineer and ministerial councilor; and Dr. Ferenc Szentivanyi, a geologist who was employed by the Hungarian-Soviet Oil Company, were the members. These associates of Dr. Eszto's Technical Sub-Commission spent considerable time on the fields and in the offices and completed two reports and one supplementary report. The first was entitled "Economy of the Oil and Gas Reserves and Rationalization of Production;" it bore the names of the three experts as authors and showed the date of April

19, 1947. Hereafter this report will be referred to as "Eszto's Report One: Economy and Rationalization."

The second report had the title of "Drilling and Production"; it had the same authors but no date. Hereafter, this report will be cited as "Eszto's Report Two: Drilling and Production."

The supplementary report received the title, "Investments to be Made by MAORT"; Dr. Szentivanyi wrote it and the other experts approved it. The date of the document read May 13, 1947; and hereafter, it will be cited as "Dr. Szentivanyi's Report: MAORT Investments."

After reading the two reports and the supplementary report, Ruedemann and some of his colleagues wrote comments on each and attached them to the reports before they sent all the documents to Rockefeller Plaza through the U.S. Legation. The set of comments to Dr. Eszto's reports had the title, "Reply of the MAORT to the Reports of Professor Peter Eszto, Prepared for the Chief Economic Council." It was dated June 13, 1947, and hereafter will be cited as "MAORT's Reply to Dr. Eszto's Reports."

The company's reception and evaluation of Dr. Eszto's reports were expressed in the first paragraph of the reply which read:

> The reports of Professor Eszto, signed also by the two other members of the Technical Sub-Commission appointed by the Chief Economic Council, engineer Bela Faludy and geologist Dr. Francis Szentivanyi, is complete and detailed and its statements are correct so far that we hardly have anything to add to same.

Ruedemann and his collegues did not send Dr. Szentivanyi's financial supplemental report to New York without a response either. They entitled their observations "Remarks of the MAORT upon the Supplementary Report of Dr. Francis Szentivanyi, Geologists, prepared for the Chief Economic Council." It was dated June 14, 1947, and will be referred to as "MAORT's Remarks on Szentivanyi's Investments Report." In these remarks, the company vehemently disagreed with the recommendations of Dr. Szentivanyi.

In June 1947, two months after Dr. Eszto's Technical Sub-Commission concluded its work, government authorities dispatched Gyorgy Fenyvessy, a mechanical engineer, to study and evaluate MAORT's organization and operation. The main task of Fenyvessy was to draw up a plan for the company to adopt a new incentive type of compensation system. He entitled his report "Contract and Control." It had no date and hereafter will be referred to as "Fenyvessy's Report: Contract and Control." Fenyvessy's report ended with the following two sentences:

> The ultimate conclusion of all the problems investigated is that the situation found at the MAORT is serious and alarming; therefore, it calls for an immediate remedy. Every delay threatens the existence of our at present most important natural source of power.

Before sending this document to Rockefeller Plaza, MAORT officials attached to it their observations entitled, "Remarks of the MAORT on the Report of Mr. George Fenyvessy, Mechanical Engineer, Prepared for the Chief Economic Council." It was dated June 14, 1947, and hereafter will be cited as "MAORT's Remarks on Fenyvessy's Report." Ruedemann, to show his early and quick opinion of Fenyvessy's report, prefaced his remarks with the following words:

> Mr. Fenyvessy was a mechanical engineer and a member of the Communist Party. He spent five days in the fields and it was his first visit to an oil operation. He was sent down by the

government in connection with the Central Labor Union to put everything possible on an incentive pay system. He seemed to have spread out and given advice regarding the entire operation. His report was confusing as would be expected from someone who had not made a serious study.

The reports and replies were attached to Despatch 186 (confidential), Schoenfeld to Sec. of State, Aug. 3, 1947, NA Records.

125. The Hungarian Oil Industry, pp. 78-79.

126. Ibid., p. 78.

127. Despatch 221 (confidential), Folsom to Sec. of State, March 20, 1946, NA Records, Suitland, Maryland.

128. A summary of the country's refining industry's accomplishments and difficulties after the war can be found in Despatch 2540 (confidential), Schoenfeld to Sec. of State, Feb. 4, 1947, subtitled, "Discrimination against American and British Oil Refineries as a Result of Soviet Control of Distribution of Crude Oil," attached, report by Robert S. Folsom, Second Secretary of Legation, "Distribution of Hungarian Crude Oil Among Refineries," and The Hungarian Oil Industry, pp. 75-80.

129. Despatch 4 (restricted), John Peabody Palmer, Secretary of U.S. Mission, to Sec. of State, Jan. 5, 1946, NA Records, Suitland, Maryland.

Other researchers have also found a similar situation regarding postwar consumption figures. For instance:

> There are no precise export-import data available for the chaotic years 1944 and 1945, when Hungary was a battlefield, and the oil fields were under first German, then Red Army supervision. . . . Of the 1945 production of 4,920,000 barrels, the Germans took about 750,000 barrels, while the Red army seized over 3,000,000 barrels

(Hungarian Oil Industry, p. 18).

The author of this publication did not know more concerning the later years either. For instance:

> In 1945-1946, the bulk of the crude went to the Red Army without payment, while in the following years 1946-1948, much went to the Soviet Union and neighboring satellites as forced exports or as reparations. During this period, the crude had to be delivered to the government at arbitrarily fixed prices

(ibid., p. 11).

130. Despatch 1446 (confidential), Schoenfeld to Sec. of State, May 3, 1946, NA Records, Suitland, Maryland.

131. Despatch 1446 (confidential), Schoenfeld to Sec. of State, May 3, 1946, enclosure no. 4, entitled, "Distribution of Hungarian Oil Products July 1 to December 31, 1945," NA Records, Suitland, Maryland.

132. Despatch 235 (restricted), Ray P. Walters, Petroleum Attache, U.S. Legation at Budapest to Sec. Of State, May 6, 1946, NA

Records, Suitland, Maryland.

On July 8, 1945, Hungary signed a commercial treaty with Romania calling for the importation of small quantities of lubricating oils (ibid).

133. Despatch 230 (restricted), Schoenfeld to Sec. of State, May 3, 1946, NA Records, Suitland, Maryland.

134. Despatach 235 (restricted), Walters to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland.

135. Despatch 230 (restricted), Schoenfeld to Sec. of State, May 3, 1946, NA Records, Suitland, Maryland.

136. Despatch 224 (confidential), Folsom to Sec. of State, March 20, 1946, NA Records.

137. Ibid. 138. Ibid. 139. Ibid. 140. Ibid.

141. Despatch 234 (confidential), Hilton to Sec. of State, March 9, 1948, NA Records.

142. Ibid. 143. Ibid.

144. Hungarian Oil Industry, p. 19.

145. Ibid., pp. 18-19.

146. Despatch 64 (plain), Bigelow to Sec. of State, April 29, 1946, NA Records.

147. Despatch 234 (confidential), Hilton to Sec. of State, March 9, 1948, NA Records.

148. Memorandum by Eszto to Gombosi, Oct. 28, 1947, Ministry of Industry, Gombosi Papers, pkg. 2, HNA, cited in CHOMD, vol. 3, pp. 230-31.

149. Ibid. On the average, 1200 cubic feet of gas yielded one barrel of natural gasoline (ibid).

150. Despatch 231 (confidential), Schoenfeld to Sec. of State, Oct. 29, 1946, enclosed, "Hungarian Gas and Oil Production," report by Robert S. Folsom, Second Secretary of U.S. Legation, no date, NA Records, Suitland, Maryland.

151. Dr. Raul Vajk, "Review of Petroleum Geology in 1947," Quarterly of the Colorado School of Mines, vol. 43, no. 3, July 1948, p. 148.

152. Despatch 2361 (restricted), Schoenfeld to Sec. of State, Dec. 18, 1946, NA Records.

153. Ministry of Industry, Gombosi Papers, pkg. 1, cited in

CHOMD, vol. 3, pp. 42-43.

154. Ibid.

155. Despatch 1869 (secret), L. L. Ecker-Racz, Chief, Economic Section, U.S. Legation, Budapest, to Sec. of State, Aug. 29, 1946, enclosure no. 1, letter, Ruedemann to Schoenfeld, Aug. 27, 1946, NA Records.

156. Ibid. and Memorandum by Dr. Istvan Varga, in place of Antal Ban to MAORT, Aug. 14, 1946, Ministry of Industry, Ban Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, p. 70.

157. Despatch 1869 (secret), L. L. Ecker-Racz, Chief, Economic Section, U.S. Legation, Budapest, to Sec. of State, Aug. 29, 1946, enclosure no. 1, letter, Ruedemann to Schoenfeld, Aug. 27, 1946; attachment to enclosure no. 1, memorandum by Dr. Jeno Racz, Minister of France to MAORT, Aug. 13, 1946, NA Records. The last item was translated from Hungarian into English and was signed "Gordon."

158. Ibid. 159. Ibid.

160. Minutes of Meeting, participants: MAORT and Hungarian state official, chairman Fenyvessy, Sept. 29, 1947, Ministry of Industry, Gombosi Papers, pkg. 2, HNA, cited in CHOMD, vol. 3, p. 237. The major cause behind the rise of cost of production was the decline in the crude production of the fields.

161. Telegram 2270 (confidential), Schoenfeld to Sec. of State, Dec. 6, 1946, NA Records; and Memorandum by the Vice President of the Economic Chief Council, Minister of Finance, no name, January 3, 1947, ECC Papers, pkg. 4, HNA, cited in CHOMD, vol. 3, p. 99. Dr. Jeno Racz, Minister of Finance, was this body's vice president.

162. Report by Gombosi, Special Group 3D, Ministry of Industry, Feb. 10, 1947, Gombosi Papers, pkg. 2, HNA, cited in CHOMD, vol. 3, pp. 105-7.

163. Ibid.

164. Despatch 2722 (confidential), Folsom to Sec. of State, March 10, 1947, enclosure no. 2, letter Ruedemann to Schoenfeld, Feb. 25, 1947; and enclosure no. 4, "Report on Crude Oil Prices in Relation to Other Commodity Prices, by ES, Feb. 22, 1947, NA Records.

165. Ibid. 166. Ibid. 167. Ibid. 168. Ibid.

169. Ibid.

170. U.S. Legation Note No. 439 of March 3, 1947, in Hungarian translation, Ban Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, pp. 114-20; and Despatch 2722 (confidential), Folsom to Sec. of State, March 10, 1947, enclosure no. 1, U.S. Note #439 to Hungary of March 3, 1947, NA Records.

171. Ibid.

172. Note to Prime Minister Fenenc Nagy, no author, March 24, 1947, Ban Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, pp. 126-27.

173. "Draft of the Hungarian Ministry of Industry's Reply to U.S. Legation Note No. 439 of March 3, 1947," no author, no date, Ban Papers pkg. 1, HNA, cited in CHOMD, vol. 3, pp. 121-25.

174. Ibid.

175. "Reply of the Hungarian Ministry of Foreign Affairs to U.S. Note #439 of March 3, 1947," April 7, 1947, April 16, 1947, in original Hungarian, Ban Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, p. 127.

176. "U.S. Legation's Comments on Hungarian Reply Dated April 2, 1947," April 16, 1947, in original Hungarian, Ban Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, pp. 128-29.

177. Memo to Prime Minister Lajos Dinnyes from Commissioner of MPDC, September 29, 1947, Ministry of Industry, 3B Division Papers, pkg. 1, cited in CHOMD, vol. 3, pp. 244-45.

178. Letter, Ruedemann to ECC, July 17, 1948, Ministry of Industry, C Head Group Papers, pkg. 1, cited in CHOMD, vol. 3, pp. 318-20. Ruedemann used the title "Representative of American Shareholders, President of MAORT."

179. Ibid.

180. Despatch 2722 (confidential), Folsom to Sec. of State, March 10, 1947, enclosure no. 1, U.S. Note #439 to Hungary of March 3, 1947; enclosure no. 2, letter Ruedemann to Schoenfeld, Feb. 25, 1947; ecnlosure no. 3, letter MAORT to Antal Ban, Feb. 16, 1947, translated from Hungarian into English; and enclosure no. 4, "Report on Crude Oil Prices in Relation to Other Commodity Prices," by ES, Feb. 22, 1947, NA Records.

181. Ibid. 182. Ibid.

183. Letter, Voroshilov to Nagy, March 25, 1946, Ministry of Industry, Gombosi Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, pp. 150-51.

184. Memorandum Vas to Reparation Office, March 11, 1946, Ministry of Industry, Gombosi Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, p. 153. On March 11, Zoltan Vas charged the Reparation Office [Jovateteli Hivatal] with the investigation; at the same time he requested that the results of the inquiry be transmitted to him as soon as they became available (ibid.).

185. Memorandum by Racz to Hungarian Mineral Oil Refinery Plants' National Organization (HMRPNO), Jan. 14, 1947, ECC Papers, pkg. 4, HNA, cited in CHOMD, vol. 3, pp. 109-10. Zoltan Vas and the head of the ECC also signed the document.

186. Ibid.

187. "Proposal of Racz to the ECC," no date, ECC Papers, pkg. 4, HNA, cited in CHOMD, vol. 3, p. 111.

188. Memorandum by Racz to MAORT, April 16, 1947, ECC Papers, pkg. 4, HNA, cited in CHOMD, vol. 3, p. 112.

189. CHOMD, vol. 3, p. 315.

190. "Fenyvessy's Contract and Control Report," no date, NA Records.

191. Memo by pal Kiraldi, chief mining councilor, Jan. 13, 1948, attached to Despatch 174 (secret), Schoenfeld to Sec. of State, Feb. 25, 1948, NA Records.

193. Ibid. 194. Ibid. 195. Ibid. 196. Ibid.

197. Ibid. 198. Ibid. 199. Ibid. 200. Ibid.

201. CHOMD, vol. 3, p. 163.

202. U.S. Note #439 to Hungary, March 3, 1947, attached to Despatch 2722 (confidential), Folsom to Sec. of State, March 10, 1947, NA Records.

203. CHOMD, vol. 3, p. 41.

204. Letter, Johnson to Darlington, July 27, 1945, NA Records.

205. Ibid.

206. Despatch 1869 (secret), L. L. Ecker-Racz, Chief, Economic Section, U.S. Legation, Budapest to Sec. of State, Aug. 29, 1946, enclosure no. 1, letter, Ruedemann to Schoenfeld, Aug. 27, 1946, NA Records.

207. Memorandum by Racz, March 26, 1947, ECC Papers, pkg. 4, HNA, cited in CHOMD, vol. 3, p. 113. Vas cosigned this memorandum.

208. Minutes of General Assembly of Stockholders Meeting, Nov. 16, 1945, MAORT Board of Directors Papers, pkg. 2, HNA, cited by CHOMD, vol. 3, pp. 24-27. The minutes were taken by Raul Vajk and also present were Istvan Pozel and Lajosne Derek (ibid.).

209. Minutes of Board of Directors Meeting, March 2, 1946, Ministry of Industry, Mineral Oil Head Group 1/A Papers, HNA, cited in CHOMD, vol. 3, pp. 63-66. Present were: Ruedemann, Papp, Bannantine, Schudel, Abel and Temesvany (ibid.).

210. Ibid. 211. CHOMD, vol. 3, p. 67. 212. Ibid., p. 42.

213. Report by Karoly Revay, accountant, Sept. 16, 1946, Ban

Papers, pkg. 1, HNA, cited in CHOMD, vol. 3, p. 85.

214. Ibid., p. 271.

215. Statement by Mr. Charles Rayner, Petroleum Advisor for the Department of State, before the annual meeting of the Independent Petroleum Association of America, at Fort Worth, Texas, October 29, 1946, NA Records, Suitland, Maryland.

216. Ibid. 217. Ibid.

218. "Instructions on Petroleum Reporting" to American Diplomatic and Consular Offices," Aug. 1, 1946, Foreign Service Circular, No. 568, attached, "Duties of Petroleum Attaches," Department of State, NA Records, Suitland, Maryland. The present quotation continues:

> This instruction supersedes Department's circular airgram instructions of May 12, 1943, Foreign Service Circular Instruction No. 321 of January 31, 1945, and any other outstanding circular and individual instructions in conflict with its provisions

(ibid.). The numbers and types of superseded instructions indicate that the new policy had not had an extensive background.

219. Ibid. 220. Ibid. 221. Ibid.

222. Despatch 331 (confidential), Robert S. Folsom, Secretary of Mission, to Sec. of State, Sept. 25, 1945, enclosed, "Hungarian Oil Industry," report by Ray P. Walters, no date, NA Records, Suitland, Maryland.

223. Ibid. 224. Ibid.

225. "Hungarian Oil Industry," report by Ray P. Walters, Petroleum Attache, May 6, 1946, not attached, NA Records, Suitland, Maryland.

226. For his MAORT affiliation, see pp. 55, 65, 66, 139.

227. See pp. 65, 66.

228. Despatch 1486 (unrestricted), Leslie A. Squires to Sec. of State, May 16, 1946, NA Records.

229. Letter, Robert H. S. Eakens, Acting Chief of Petroleum Division in the Department of State, to Koegler, Rockefeller Plaza, Aug. 15, 1947, NA Records.

230. Despatch 554 (confidential), no signature, to Sec. of State, June 22, 1948, NA Records. Note on despatch: "Letter and enclosures forwarded, 6-24-48."

231. Despatch 156 (confidential), Palmer to Sec. of State, Aug. 3, 1945, with enclosures, NA Records.

232. Ibid.

233. Letter, F. O. Canfield, Rockefeller Plaza, to Daniel E. Longanecker, Petroleum Division, Department of State, Aug. 28, NA Records.

234. Despatch 2361 (restricted), Schoenfeld to Sec. of State, Dec. 18, 1946, NA Records.

235. Despatch 2722 (confidential), Folsom to Sec. of State, March 10, 1947, enclosed, letter, Ruedemann to Schoenfeld, Feb. 25, 1947, NA Reecords.

236. Telegram 9277 (confidential), Cochran, U.S. Legation, Budapest, to Sec. of State, Aug. 23, 1949, NA Records.

237. Telegram 3110 (secret) Acheson, Dept. of State, to American Legation, Budapest, Oct. 13, 1949, NA Records.

238. Memorandum (secret) by G. T. Kerekes, Assistant Chief, Foreign Exchange Section, U.S. Mission, Vienna, Austria, June 25, 1946, to A. W. Marget, Lt. Col. Chief, Finance Division, document unattached, NA Records.

239. Despatch 1491 (secret), John G. Erhardt, Political Representative, Headquarters United States Forces in Austria, to Sec. of State, July 23, 1946, Vienna, NA Records.

240. Ibid. 241. Ibid.

CONCLUSION

The history of the Hungarian-American Oil Company divides into technical and managerial parts. The first one involves the discovery and exploitation of crude oil through the application of modern technology and skillful effort; the second deals with the management of the obtained crude according to the self-interests of those who held control of the oil fields. In times of stability and peace, the controlling self-interests were guided by lawful considerations. In times of change and war, the controlling self-interests became synonymous with the wishes of military and political power wielders. While different, the two parts complemented each other and formed the foundation for a history of a modern industrial company which operated in a time when significant changes were taking place in East-Central Europe.

Eminent success followed the company's technical operations in all but two aspects. At the start, consistent and extensive application of improved gravity torsion balance instruments provided the crucial difference in the discovery of crude in Transdanubia. Still, geologists decided to cross-check the data of this relatively new oil-detecting instrument of Hungarian origin with those obtained by magnetic and seismic as well as topographic and stratigraphic methods. Once the first oil wells augured profitable production, a group of American and Hungarian oil men established MAORT, a crude producing company which was supported by the vast industrial resources and business expertise of the Standard Oil Company.

MAORT's operation showed failure only in two instances. Both were related to natural gas. Officials of the company had not developed plans for the utilization of natural gas except to use a small quantity of it for heating purposes in and around the fields. Also, they had not devoted enough effort and capital into building efficient secondary production facilities involving repressuring and pumping services that would extend the life of the fields and increase the total recoverable amount of oil.

The mitigating circumstances for these two failures were identical. To have followed up on these two neglected activities the company would have needed to purchase large quantities of pipelines and compressors at a time of increasing scarcity of materials and machinery. When the investment for these activities became timely, the American managers had to leave the country and the Hungarian managers were preparing to accelerate production. After the war there was almost no money or supplies needed to correct the two failures. During the war, Hungarian and German state self-interests were aimed at the fulfillment of needs in the short and not in the long run.

To find oil is one thing, but to know what to do with it is another. A simple line which struck through the managerial decisions concerning what to do with the oil was the self-interest of the groups which gained control over this natural resource. Before the war, the company turned the state's potential oil reserves into flowing wells in accordance with a contract. Both parties followed the rules of the contract because it was mutually satisfactory. The country became self-sufficient in petroleum products and the company had its first opportunity to pay the shareholders one quarter of a million dollars in dividends.

With the outbreak of World War II, a change occurred in Hungary's hierarchy of self-interests. The interest to realize some parts of the country's revisionist-expansionist foreign policy turned out to be greater than the state's self-interest in the continuation of its contractual relations with MAORT. The state sequestered the company and ruinously accelerated crude production. It placed its oil resources at Germany's disposal in order to reciprocate for Germany's irreplaceable military assistance which alone made the country's territorial expansion possible. The pursuit of this self-interest was sustained for four years.

When the Red Army came, it acted as any army would, in its own self-interest. It followed no rules or agreements with anyone. It built what it needed for the company and it took what served its needs. There was truth in the statement of the Soviet commander who, to the charges that the army failed to follow some international conventions, responded: "It is a fighting army."

But at the same time the Red Army was more. Gradually, through native Communist leaders, it prepared the country for the establishment of a new socialist economic and political order which would follow Moscow's policies. When this self-interest of the Soviet forces was served out, it withdrew from the fields.

In 1948, "for political reasons" the Hungarian state's self-interest required the nationalization of MAORT. In the massive presence and under the watchful eye of the Soviet military forces, the country was moving with deliberate speed toward the establishment of a new socialist economic system. To make this new system a mixed economy, featuring native socialist and foreign capitalist elements, was not feasible. Keeping in view the fact that MAORT was an American com-

pany's subsidiary and the United States was one of the victorious nations in World War II, the Hungarian state could not nationalize the company outright. The state had to build a case against the American and Hungarian managers of the company, take them to court, find them guilty, publicize the verdict and then nationalize the company.

With the nationalization of mines on December 6, 1945, the Hungarian state gave a clear and early signal to foreign-owned companies as to what to expect in the future. Against MAORT, the state began implementing a program of unfair and punitive practices rendering the company's normal operation almost impossible. Because several state controllers assigned to supervise the company's operation, and several committees dispatched to inspect the company's activities failed to turn up evidence of wrong doing by company officials, the state had to institute drastic actions. Late in the summer of 1948, the state ordered the arrests and imprisonment of the main Hungarian and American managers. The secret police obtained incriminating confessions from each employee. With the confessions as evidence for criminal activity, the state went to the justice system to seek indictments. At the end of a seven-day trial, the judges found the Hungarian managers guilty of sabotage and sentenced them. By this time the American managers were expelled from the country and the company was taken over by the state. The publicizing of the trial in Hungary and in the United States and the official nationalization of MAORT were the only events left to be accomplished.

BIBLIOGRAPHICAL ESSAY

The primary source materials which form the basis of this work are company, diplomatic and military records deposited in the National Archives of either the United States in Washington, D.C. or of Hungary in Budapest.

The American documents consist of reports, despatches and telegrams exchanged between the U.S. Legation in Budapest and the Department of State in Washington, D.C. They form an integral part of the General Records of the Department of State, Decimal Files. Under this general classification each document is further grouped according to a three-tiered system of country, topic and date. In the present case each document displays the number 864.000 denoting Hungary, the decimal number 6363 specifying the topic of petroleum, and the date after a slash mark marking the document's origin in time.

In this group's containers are also other pertinent documents bearing the same number designation; however, they originate from other related branches of the federal government. These other agencies which contributed documents were the War Production Board, Petroleum Administration for War (Foreign Production Department), Petroleum Industry War Council, Foreign Claims Settlement Commission, Army-Navy Petroleum Board, Intelligence Section-Plans, Enemy Oil Committee, Petroleum Division of the Board of Economic Warfare and Division of European Affairs. Some of these documents are housed in Suitland, Maryland. Most of them are still classified; however, archivists are accommodating and they declassify them without delay.

Other documents which contain references to Hungarian oil are included in the Hungarian Collection, N. A., Microcopy T-973 Washington, D.C. and Hungarian Collection; World War II Records Division, N. A., Alexandria, Virginia.

Researchers can find pertinent information in the captured German documents. They come under the following titles: Records of Headquarters, German Armed Forces High Command, N. A., Microcopy T-77, Washington, D.C. and Miscellaneous German Records Collection N. A., Microcopy T-88, Washington, D.C. They provide materials for most of the trade transactions between Germany and Hungary during the war. Invaluable are the records of the Trade Section of the Reich Foreign Office, especially those that have been prepared by its chief, Carl Clodius. While oil was just one of the commodities sold to Germany, it was mentioned most often in the records.

Several special collections of papers or letters of persons who had had long standing connections with Hungary before and after the war are useful, not so much in reference to MAORT but rather for gaining an

understanding of the political background of the period. Fluornoy J. Montgomery Correspondence 1933-1939, 3000 items, Yale University Library, Arthur Bliss Lane Collection, New Haven is one of them; the author of this correspondence was Ambassador to Hungary from 1933 until 1940. Papers of Herbert Pell, F. D. Roosevelt Library, Hyde Park, New York is another; Pell was Chief of Legation at Budapest from 1945 until 1947. Papers of Cordell Hull, Library of Congress, Manuscript Division, Washington, D.C. also contains information concerning Hungary.

No research could be considered complete concerning MAORT without consulting with officials of Exxon Corporation, successor to Standard Oil Company, New Jersey. After several months of tireless correspondence with several executive-type employees, Alice M. Bertrand, Assistant Secretary, expressed the large multinational corporation's position with respect to unwanted researchers on August 18, 1974, in the following words: "Exxon Corporation does not maintain an archive of its historical records nor does it employ an archivist. If you have some specific questions as to which you seek information, we are willing to consider them." Not unexpectedly, in response to specific inquiries concerning certain persons and issues connected with MAORT, Exxon wrote to the present writer that it had no information at all. Nonetheless, not to appear completely uncooperative, it sent a hard-back copy of its 1948 publication of MAORT.

The Hungarian documents on MAORT consist mostly of business correspondence with different government agencies. They are not filed in accordance with the customary decimal system. They are grouped in packages under names of ministries, ministers, companies, organizations or persons. The most disconcerting fact about them is that they are available only to historians with special permission. The present writer was not allowed to see them.

But fortunately, sometime in the early 1960's, with the permission of the government, the Hungarian Crude Oil and Gas Trust commissioned Andras Nemeth, a member of the History Institute, to compile the documents in the holdings of the National Archives which related to crude oil and natural gas exploitation in Hungary. Nemeth's work was finished in 1965; he handed over documents organized into three volumes to the trust which mimeographed each two hundred twenty times and distributed them to certain libraries whose personnel placed the volumes on the "restricted, only for official use" shelves.

The complete title of his work is Andras Nemeth. A Magyar Koolajbanyaszat Torteneti Dokumentum Gyujtemenye 1919-tol 1949-ig. Keszult as Orszagos Koolaj es Gazipari Troszt Megbizasobol a Magyar Orszagos Leveltar Anyaga Alapjan, Kezirat, Czak Hivatalos Hasznalatra, III. Kotet, 220 Peldanyban [Collection of Historical Documents Pertaining to Hungarian Crude Oil Mining from 1919 to 1949, Compiled at the Request of the National Crude Oil and Gas Trust and Based upon the Holdings of the Hungarian National Archives, Manuscript, Only for Official Use, III. Volumes, issued in 220 Copies]. Budapest: Muzeumok Rotauzeme, 1965. These three volumes comprise approximately 1000 documents relating to petroleum mining from 1350 until 1949 and not from 1919 as the title states. One is inclined to believe that these volumes do not contain all the available documents in the National Archives, for

some reason many have been left out.

Two years later, Nemeth completed a doctoral disseration based on these documents. Andras Nemeth. "Magyarorszagi Koolajkutak es Banyaszat Tortenete 1935-tol 1949-ig [History of Hungarian Oil Wells and Mining 1935-1949]." Unpublished Doctoral Dissertation, Budapest: Magyar Tudomanyos Akademia, 1967. At each of three places where dissertations are deposited in Hungary, the present writer was told in 1974 that he could not read them because of copyright restrictions.

Writing the history of MAORT, the present writer often consulted the following published volumes of documents for exact texts of treaties and agreements: U.S. Department of State-Foreign Relations of the U.S. Washington: Government Printing Office, volumes for 1938-1948, U.S. Department of State-Treaties with Foreign Nations. Washington: Government Printing Office, volumes for 1920-1948 and Bulletin-United States Department of State. Those pertaining to Germany are Akten zur Deutschen Auswartigen Politik 1918-1945. Serie D., Bd. IV und V., Baden Baden: 1950-1953; Magda Adam, Lajos Kerekes and Gyula Juhasz. Alliance Hitler - Horthy - Mussolini. Budapest: Akademiai Kiado, 1966; Gyorgy Ranki; Lorant Tilkovszky es Gyula Juhasz, ed. A Wilhemstrasse es Magyarorszag [Wilhelmstrasse and Hungary]. Budapest: Kossuth Kiado, 1968; and Elek Bolgar, ed. A Nemetek Magyarorszagi Politikaja Titkos Nemet Okmanyokban [The German's Hungarian Policy as Revealed in Secret German Diplomatic Records]. Budapest: Szikra, 1947. The Hungarian ones are Magda Adam; Gyula Junasz; es Zsigmond Laszlo, eds. Diplomaciai Iratok Magyarorszag Kulpolitikajahoz 1936-1945 [Diplomatic Papers Pertaining to Hungary's Foreign Policy 1936-1945]. Budapest: Magyar Tudomanyos Akademia, 1964, IV vols.; Miklos Szinai and Laszlo Szucs, ed. The Confidential Papers of Nicholas Horthy, Budapest: Corvina Press, 1965. Kepviselohazi Naplo [Diary of the House of Representatives]. Budapest: Athenaeum R. T., volumes for 1939-1945; and Orszaggyulesi Naplo [Diary of the National Assembly]. Budapest: Athenaeum R. T., volumes for 1938-1945. The reason for inclusion of the last two titles is that before the Hungarian goverment granted a concession, changed the stipulations of a concession or terminated one, the House had the right to debate the issue. In the case of MAORT, several debates took place.

Altogether there are three secondary sources, each written in English, which deal all or in part with MAORT. The Hungarian Oil Industry. New York: Mid-European Studies Center National Committee for Free Europe, Inc., 1954 is a 106-page work by a group of refugee and emigre Hungarian oil men. It tells the history of the Hungarian oil industry in fair terms and devotes at least half of its pages to MAORT's operation. In the other half of the book the authors describe the country's refining industry. Two valuable contributions of the book are the excellent geological maps of Hungary and the extensive bibliography at the end of each chapter.

To vindicate the nationalization of MAORT, the Hungarian government published simultaneously, in English and Hungarian, a set of selected documents which include the confessions of each arrested official. The slim but significant book, Report of the Hungarian Ministry of Home Affairs on the MAORT Sabotage. Budapest: Athenaeum, September 1948, allows historians to gain insight into the machinations

of Hungarian authorities to justify a fait accompli. To publicize its reasons for the take over of MAORT, the Ministry of Interior decided to send a complimentary copy to all major universities in the United States, including the University of Maryland.

The New Jersey Company responded in kind by issuing Standard Oil Company (New Jersey) and Oil Production in Hungary by MAORT 1931-1948. New York: European Gas and Electric Company-Standard Oil Company (New Jersey), 1949. This diminutive 65-page publication contains mostly company documents which are offered to refute the charges of sabotage.

The scholarly work of Mario D. Fenyo. Hitler, Horthy and Hungary, German-Hungarian Relations 1941-1944. New Jersey: Yale University Press, 1972, mentions MAORT and contains some crude oil production figures; however, for some reason the author does not elaborate on or place in perspective the significance of Hungarian oil. Dr. Fenyo worked for two years at the National Archives and began the arduous task of cataloguing some of the captured German documents relating to the military affairs of Hungary.

The official history of the Standard Oil Company of New Jersey, by Henrietta M. Larson; E. H. Knowlton; and C. S. Popple. New Horizon 1921-1950. New York: Harper and Row, 1971, is the only book whose authors, members of the Harvard Graduate School of Business Administration, were allowed to research selected records of Exxon. This volume devotes altogether two pages to MAORT with primary emphasis on the process of nationalization. There are some other histories of Standard Oil but they lack thoroughness and do not mention MAORT.

There are several hefty books in Hungarian which deal with the country's geology and oil-drilling technology. While each mentions MAORT, none of them has much to say about the company's operation.

Odon Alliquander. Az Olajfuras Multja Jelene es Jovoje [Past, Present and Future of Oil-Drilling]. Budapest: Akademiai Kiado 1962. This is a general account in which the author, a distinguished Hungarian oil geologist, comments on the progress made in drilling technology. At one time, the author was sent to MAORT by the government to inspect the company's operation. Sandor Papp, A MAORT Kutatasai a Dunantulon [Research for Oil by MAORT in Transdanubia]. Budapest: Banyaszati es Kohaszati Kiado, 1939, offers a summary of drilling sites selected by MAORT and explains the geological reasons for the presence of oil at some sites. The author was one of the Hungarian directors of MAORT. Gyorgy Kertai. A Magyarorszagi Kolaj-es Foldgaztelepek Keletkezese [The Origins of Crude Oil and Gas Fields in Hungary]. Budapest: Magyar Tudomanyos Akademia, Tudomanyos Osztaly, 1952. In fine detail the author describes the geological history of southwest Hungary. A summary of drilling techniques practiced in Hungary is presented by Geza Szurovy, ed. Kolajkutatas es Feltaras Modszerei Magyarorszagon [Crude Oil Exploration and Drilling Methods in Hungary]. Budapest: Akademiai Kiado, 1957. Odon Aliquander, Magyarorszag Banya es Kohoipara [Hungary's Mining and Iron Industry]. Budapest, Athenaeum Kiado, 1931, 2 vols. is a comprehensive account, unfortunatey at that time there were no known commercially profitable crude oil fields in the country. A general description of crude oil refining techniques, lists of refineries and

their capacity over a fifteen year period are offered in Bela Adamy, A Magyar Koolajfeldolgozas Tortenete az Allamositasig [History of Crude Oil Processing in Hungary to the Nationalization]. Budapest: Orszagos Koolaj es Gazipari Troszt, 1968. Each of these Hungarian publications offers some insight into the operation of MAORT or some other data useful for historians.

Because of the multidisciplinary nature of this work, the present writer had to study to some extent, several books on widely separate fields. The following volumes turned out to be useful:

A. Petroleum, Geology and Technology:

Holliman, W. C. and Smith, M. H. Composition of Petroleum. Washington: Bureau of Mines, Government Printing Office, 1950.

Leroy, W. L. Subsurface Geological Methods. Golden : Colorado School of Mines, 1950

Levorsen, Arville. Geology of Petroleum. San Francisco: W. H. Freeman and Co. 1954.

Technical Publications 1946-1949. New Jersey: Allied Companies, 1950.

Yearbook - Royal Hungarian Geological Institute 1906. Budapest: Athenaeum Press, 1907.

B. Petroleum History and Business:

Auletta, Ken. The Art of Corporate Success: The Study of Schlumberger. New York: Putnam Publisher, 1984.

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Fleming, Harold. Oil Prices and Competition. Washington, D.C.: American Petroleum Institute, 1953.

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Rouhani, Fuad. A History of O.P.E.C. New York: Prager Publishers 1971.

Williamson, Harold F. The American Petroleum Industry, Evanston: Northwestern University Press, 1963.

C. American-Hungarian Relations:

Major, Imre M. "American-Hungarian Relations 1918-1944." Unpublished Ph.D. Dissertation, Texas: Christian University, 1972.

Rupprecht, Paul. "Image of Hungary's International Position in American Foreign Policy-Making 1937-1947." Unpublished Ph.D. Dissertation, University of Minnesota, 1967.

Sik, Endre. Egy Diplomata Feljegyzesei [Notes of a Diplomat]. Budapest: Kossuth Konyv Kiado, 1966.

Varkonyi, Peter, Magyar-Amerikai Kapcxolatok 1945-1948 [Hungarian-American Relations 1945-1948]. Budapest: Kossuth Konyvkiado, 1971.

D. German-Hungarian Relations:

Basch, Antonin. The Danube Basin and the German Economic Sphere. London: Kegan Trench, 1944.

Feledy, Alexander. "Hungaro-German Economic Relations." Unpublished Ph.D. Dissertation, McGill University, Canada, 1971.

Winchester, Betty Jo. "Hungarian Relations With Germany 1936-1939." Unpublished Ph.D. Dissertation, Indianna University, 1970.

E. Hungary in World War II:

Czebe, Jeno and Tibor, Petho, Hungary in World War II: A Military History of the Years of War. Budapest: New Hungary, 1946.

Nemes, Dezso. Magyarorszag Felszabaditasa [The Liberation of Hungary]. Budapest: Kossuth Konyv Kiado, 1960.

Ranki, Gyorgy, Emlekiratok es Valosasag Magyarorszag Masodik Vilaghaborus Szereperol [Memoires and Reality about Hungary's Role in World War II]. Budapest: Kossuth Konyv Kiado, 1964.

Toth, Sandor. A Szovjet Hadsereg Felszabadito Harcai Magyarorszagon [The Soviet Army's Battles of Liberation in Hungary]. Budapest: Zrinyi Katonai Kiado, 1965.

F. Hungarian Foreign Policy:

Karsai, Elek es Szinai, Miklos, Orszaggyarapitas Orszagvesztes [Increasing - Losing the Country]. Budapest: Kossuth Konyv Kiado, 1961, 2 vols.

Kertesz, Stephen D. Diplomacy in Whirlpool. South Bend: University of Notre Dame Press, 1953.

Kis, Aladar, Magyarorszag Kulpolitikaja A Masodik Vilaghaboru Eloestejen [Hungary's Foreign Policy on the Eve of World War II]. Budapest: Kossuth Konyv Kiado, 1963.

Nemes, Dezso. A Bethlen-Kormany Kulpolitikaja [The Bethlen Administration's Foreign Policy]. Budapest: Akademiai Kiado, 1964.

Sakmyster, Lawrence T. "Hungary and the Coming of the European Crisis 1937-1938." Unpublished Ph.D. Dissertation, Indiana University, 1971.

G. Revisionism:

Gasztony, Bela E. "Revisionist Hungarian Foreign Policy and the Third Reich's Advance to the East." Unpublished Ph.D. Dissertation, University of Oregon, 1970.

Rock, Joseph, A. "A Decade of Revisionism," Unpublished Ph.D. Dissertation, Georgetown University, 1958.

Tilkovszky, Lorant, Revizio es Nemzetiseqpolitika Magyarorszaqon 1938-1941 [Revisionism and Nationality Politics in Hungary]. Budapest, Akademiai Kiado, 1967.

H. Hungarian History:

Juhasz, Gyula; Pinter, Istvan: es Tilkovszky, Marton. Magyarorszag Nemzetkozi Helyzete es Belpolitikai Viszonyai 1938-1945 [Hungary's International Position and Internal Relations]. Budapest: Akademiai Kiado, 1966.

Karfunkel, Thomas. "A Critical Evaluation of Hungarian Governmental Policies 1941-1944--The Role and Policies of Horthy with Regard to the German Pressure on the Hungarian Regime." Unpublished Ph.D. Dissertation, New York University, 1968.

Ogden, William. "Communism and Hungary." Unpublished Ph.D. Dissertation, Columbia University, 1965.

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Montgomery, Fluornoy J. Hungary, The Unwilling Satellite New York: Devin Adair, 1947.

I. Hungarian Economy:

Berend, Ivan T. es Ranki, Gyorgy, Magyarorszag Gazdasaqa az Elso Vilaghaboru Utan 1919-1929 [Hungary's Economy after the First World War]. Budapest: Akademiai Kiado, 1966.

Berend, Ivan T. es Ranki, Gyorgy, Magyarorszag Gyaripara A

Masodik Vilaghaboru Elott es a Haboru Idoszakaban 1933-1144 [Hungary's Industry before World War II and during the War]. Budapest, Akademiai Kiado, 1958.

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Magyar Torvenytar [Hungarian Law Depository]. Budapest: Franklin Tarsulat, 1940.

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K. Periodicals:

History periodicals and newspapers are excluded from the present bibliography because no relevant articles have been found in them However, petroleum and geology periodicals contain a substantial number of useful studies.

Asvanyolaj [Mineral Oil]. 1945-1948
Banyaszati es Kohaszati Lapok 1880-1949 [Mining and Metallurgy Gazette].
Das Erdol [The Oil]
Gazdasag [Economy]
Geologia [Geology
Geophysics
The Lamp
Magyar Kemikusok Lapja [Hungarian Chemists Gazette]
Magyar Kozlony [Hungarian Law Review]
Oil Forum
Petroleum Press Service
Quarterly of the Colorado School of Mines
World Petroleum Report

TABLE 1
CRUDE OIL PRODUCTION OF MAORT
(Figures in Barrels)

Year	Budafa	Lovaszi	Ujfalu	Hahot	Total	Daily Average
1937	10,120	. . .	. . .	. . .	10,120	27
1938	288,423	. . .	. . .	. . .	288,423	790
1939	1,102,623	. . .	. . .	. . .	1,102,623	3,020
1940	1,914,559	21,160	. . .	. . .	1,935,719	5,303
1941	2,189,405	1,064,707	4,856	. . .	3,258,977	8,928
1942	2,297,808	2,619,493	3,377	196,477	5,117,155	14,019
1943	2,022,600	3,838,363	4,791	559,964	6,425,718	17,019
1944	1,709,559	3,810,114	329	684,063	6,204,065	16,997
1945	1,540,460	3,122,498	. . .	356,171	5,019,129	13,751
1946	1,569,168	3,029,931	. . .	552,699	5,151,798	14,114
1947	1,235,554	2,625,151	. . .	468,660	4,329,365	11,861
1948	1,097,000	2,145,593	. . .	337,000	3,579,593	9,807

SOURCES: "Hungarian Oil Industry," report by Walters to Sec. of State, May 6,1946, NA Records, Suitland, Maryland; NA Microcopy T-84, roll 135,1437969, cited in FENYO, Hitler, Horthy and Hungary, p. 94; Pal Szekely, "A MAORT-Ugy Hattere," [The Background of the MAORT Case] Gazdasag, Oct. 1948, p. 1140; and The Hungarian Oil Industry, p. 86.

NOTE: These sources and some others show figures which are close to each other for each field and each year.

TABLE 2
NATURAL GAS PRODUCTION OF MAORT
(Figures in Millions of Cubic Feet)

Year	Budafa	Lovaszi	Ujfalu	Hahot	Total	Daily Average
1937	82	. . .	. . .	. . .	82	.22
1938	530	. . .	. . .	. . .	530	1.45
1939	1740	. . .	. . .	. . .	1740	4.76
1940	2610	72	. . .	. . .	2682	7.34
1941	3452	1370	.3	. . .	4822.3	13.21
1942	3780	3700	7	34	7521	20.60
1943	3975	5330	1.3	92	9398.3	25.74
1944	3801	7059	. . .	112	10972	30.06
1945	4010	8767	. . .	59	12836	35.16
1946	4507	9963	. . .	87	14557	39.88
1947	3700	9444	. . .	67	13211	36.19
1948	4000	7294	. . .	53	11374	31.08

SOURCES: Despatch 115 (plain), John Peabody Palmer, Secretary of Mission, U.S. Legation at Budapest to Secretary of State, July 21,1945, attached to it,"Report on The Production of Hungarian Crude Oil," prepared by Papp, NA Records; "Hungary's Gas and Oil Production," report by Robert S. Fisher, Second Secretary of U.S. Legation at Budapest, to Secretary of State, October 29,1946, NA Records, Suitland, Maryland; Despatch 64 (plain), Donald F. Bigelow, Counselor of Legation, U.S. Legation at Budapest, to Secretary of State, April 29,1946, NA Records; and The Hungarian Oil Industry, (New York: Mid-European Studies Center, Inc., 1954), p. 8 and pp. 37-40.

TABLE 3
WELLS' FUNCTIONS AND DRILLING OUTFITS CONFIGURATION

Year	Budafa Oil Wells	Budafa Gas Wells	Budafa Dry Wells	Lovaszi Oil Wells	Lovaszi Gas Wells	Lovaszi Dry Wells	Ujfalu Oil Wells	Ujfalu Gas Wells	Ujfalu Dry Wells	Hahot Oil Wells	Hahot Gas Wells	Hahot Dry Wells	Number of Oil Prod. Wells	Number of Gas Prod. Wells	Number of Drilling Outfits
1937	2	0	0	–	–	–	–	–	–	–	–	–	2	0	1
1938	8	1	1	–	–	–	–	–	–	–	–	–	8	1	3
1939	27	2	2	–	–	–	–	–	–	–	–	–	27	2	4
1940	56	3	2	3	0	0	–	–	–	–	–	–	59	3	5
1941	71	3	3	22	0	1	1	0	0	–	–	–	94	3	5
1942	82	6	4	48	1	4	3	0	0	3	1	0	133	8	9
1943[a]	83	8	9	74	4	10	5	0	1	5	2	3	167	14	11
1944	87	21	17	98	12	19				6	2	10	191	35	13[b]
1945	63	38	27	93	18	24				10	3	18	169	59	7[c]
1946	56	41	34	82	28	31				9	4	28	147	73	6
1947	43	43	46	72	36	44				7	3	33	122	82	4

SOURCES: "Hungarian Oil Industry," report by R. P. Walters, Petroleum Attache, U.S. Legation at Budapest, to Sec. of State, May 6, 1946, NA Records, Suitland, Maryland; CHOMD, vol. 2, pp. 117,306; Raul Vajk, "Hungarian Petroleum Production Data," Quarterly of the Colorado School of Mines, vol. 43, no. 3, July 1948, p. 173; Pal Szekely, "A MAORT-Ugy Hattere,"[The Background of the MAORT Case] Gazdasag, vol. 3, no. 19, Oct. 1948, p. 1140; The Hungarian Oil Industry, p. 38; "Esto's Report Two; Drilling and Production," no date, NA Records; "Fenyvessy's Control and Contract Report," no date, NA Records; and "MAORT'S Remarks on Fenyvessy's Pay Incentive Report," June 14, 1947, NA Records.

NOTE: Discrepancies among numbers from the various sources were unreasonably large.

[a]Because of the poor quality of the crude this field was shut down.
[b]Three outfits were evacuated to Germany.
[c]Of these, 2 were not repairable, 3 were always in repair, and the rest were worn out.

TABLE 4
COMPARATIVE WELL DATA FOR 1944

Name of Fields	Holes Drilled	Finished Wells	Dry Holes	Producing Wells	Mode of Production		
					Gas Lift	Repress. Gas	Compress. Pumped
Budafa	130	106	24	73	59	7	7
Lovaszi	123	78	45	78	68	0	10
Hahot	29	9	20	9	9	0	0
Ujfalu	7	2	0	0	0	0	0
Other*	8	0	0	0	0	0	0
Total	292	195	97	160	136	7	17

SOURCE: CHOMD, vol. 2,p. 123.

*Includes 3 test wells drilled during the war.

TABLE 5

NATURAL GASOLINE AND LIQUID BUTANE-PROPANE PRODUCTION OF MAORT

(Figures in Barrels)

Year	Natural Gasoline	Liquid Butane-Propane
1939	2,344	. . .
1940	32,546	1,352
1941	31,988	25,967
1942	49,437	58,477
1943	109,324	106,216
1944[a]	291,151	89,001
1945	252,714	31,228
1946		
1947[b]	93,839	52,840
1948		

SOURCES: Despatch 115 (plain), John Peabody Palmer, Secretary of Mission, U.S. Legation at Budapest to Secretary of State, July 21,1945, attached to it, "Report on the Production of Hungarian Crude Oil," prepared by Papp, NA Records; and Despatch 1424 (plain), Donald F. Bigelow, Counselor of Legation, U.S. Legation at Budapest, to Secretary of State, April 29,1946, NA Records; and Memorandum by Eszto to Gombosi, October 28,1947, Gombosi Papers, pkg. 2, HNA, cited in CHOMD, vol. 3, pp. 228-231.

[a]For the first ten months

[b]For the first 9 months

TABLE 6
PETROLEUM PRODUCTS CONSUMPTION IN HUNGARY
(Figures in Barrels)

Years	Gasoline	Kerosene	Diesel Oil	Heating Oil	Refined Oil	Asphalt	Paraffin	Wax	Total
1937	482,026	492,392	261,515	326,791	95,564	45,030	6,004		1,709,324
1938	560,610	521,935	286,189	290,051	125,129	21,036	4,200		1,784,229
1939	713,283	596,665	336,632	380,497	123,267	16,200	2,086		2,168,632[a]
1940	657,365	561,321	338,595	261,150	112,259	20,056	8,800		1,959,236[b]
1941[c]	718,500	529,500	360,750	282,750	225,000	183,750	33,750		2,334,000[d]
1942	555,000	630,000	390,000	180,000	262,500	201,000	35,250		2,242,500
1943	666,000	585,000	450,000	247,500	180,000	180,000	35,250		2,405,250
1944									
1945									
1946									
1947	644,597	401,100	379,665	574,147	216,195[e]				2,253,996

SOURCES: Hungarian Refinery Plants' National Organization, bundle 1, HNA, cited in CHOMD, vol. 1, p. 280; The Hungarian Oil Industry, p. 88; and Despatch 234 (confidential), Hilton to Secretary of State, March 9,1948, NA Records.

[a] On September 2, rationing commenced.
[b] Shows the initial effect of rationing.
[c] In addition to returned areas from Czechoslovakia and Romania, this year Hungary acquired areas from Yugoslavia.
[d] Includes consumption of returned areas.
[e] Includes 77,032 barrels of imported lubricating oils.

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TABLE 7
PETROLEUM PRODUCTS EXPORT OF HUNGARY
(Figures in Barrels)

Year	Gasoline	Refined Oil	Diesel Oil	Heating Oil	Crude Oil	Total
1941	208,165	147,735	54,157	. . .	322,852	732,909
1942	632,315	494,422	156,435	82,481	423,000	1,788,653
1943	1,095,369	1,031,212	461,730	152,327	349,417	3,473,460
1944*	732,028	787,927	386,797	393,421	1,373,287	3,673,460
1945						
1946						
1947	637,500	345,500	300,000	172,500	. . .	1,455,500
1948						

SOURCE: Despatch 200 (restricted), John Peabody Palmer, Secretary of Mission, U.S. Legation at Budapest to Secretary of State, August 24,1945, subtitled, "Report Summarizing Activities of Various Hungarian Refineries During War Years", enclosure, "Mineraloil Products Exported From Hungary During 1941-1944", prepared by Zsigmond Boros and Imre Hunft of vacuum Oil Company R.T. Budapest, August 14,1945, NA Records; and Despatch 234 (confidential), H.J. Hilton to Secratery of State, March 9,1948, NA Records.

*Includes only the first 10 months of the year.

TABLE 8
NATURAL GAS UTILIZATION BY MAORT
(Figures in Millions of Cubic Feet)

Year	Wet Gas to Gasoline Plants	Gas for own use	Gas Sold	Gas to Air	Gas Returned to Formation	Total Gas Production
1937	. . .	34		48	. . .	82
1938	. . .	178		352	. . .	530
1939	125	492		1122	2	1740
1940	1660	688		74	240	2682
1941	1573	943		2209	97	4822
1942	2141	1037		3240	1103	7521
1943	4127	1291	33	1631	2316	9398
1944		2503	79	5648	2742	10972
1945		2481	129	7465	2761	12836
1946						14551
1947						13211
1948						11347

SOURCES: Despatch 115 (plain), John Peabody Palmer, Secretary of Mission, U.S. Legation at Budapest,to Secretary of State, July 21,1945, attached to it,"Report on the Production of Hungarian Crude Oil," prepared by Dr. Simon Papp, NA Records; and Dr. Simon Papp, "Nyersolaj Kutatas es Termeles Magyarorszagon," [Crude Oil Discoveries and Exploitation in Hunguary] Magyar Kemikusok Lapja, Budapest, vol. 1, no. 6, November 1946, p.91.

TABLE 9
ANNUAL SALARY OF MAORT'S
TOP 20 EXECUTIVES IN 1943

NAME		PENGO
Simon	Papp	153,985
Erno	Hauer	78,529
Janos	Dinda	65,419
Zoltan	Gyulay	51,938
Walter	Graf	36,493
Raul	Vajk	35,920
Abel	Bodog	30,468
Ferenc	Angyal	28,174
Kalman	Bosze	27,370
Bela	Halasz	27,119
Kalman	Barnabas	25,916
Ferenc	Benedek	25,907
Antal	Gaal	25,820
Jozsef	Redl	25,394
Lajos	Remenyik	25,102
Gyula	Abzinger	25.083
Laszlo	Ruzsinszky	24,782
Ferenc	Pocker	24,518
Bela	Majerszky	24,386
Laszlo	Graf	24,214

Source: Ministry of Industry Papers, bundle 1, HNA, cited in CHOMD, vol. 2, p. 112-113.

NOTE: Some important names like Gabor Temesvary and Bertalan Geocze were obviously left out.

TABLE 10
QUANTITY AND COST OF CRUDE*
IMPORTED FROM ROMANIA
(Figures in Barrels and Dollars)

Year	Quantity	Cost per Barrel
1937	1,734,480	1.96
1938	1,226,937	2.12
1939	1,102,227	2.35
1940	245,995	4.06
1941	75,000	

SOURCE: Hungarian Refinery Plant's National Organization, bundle 7, HNA, cited in CHOMD, vol. 1, p. 282.

*It was "sweet crude," a mixture of crude and refined products to avoid Romanian export duty on crude and Hungarian import duty on refined products.

TABLE 11
CRUDE PRODUCTION OF THE HUNGARIAN GOVERNMENT
OWNED AND OPERATED BUKKSZEK OIL FIELD
(Figures in Barrels)

Year	Production
1937	9,950
1938	40,430
1939	13,935
1940	5,935
1941	3,628
1942	3,139
1943	2,598
1944	1,387
1945	1,735
1946	1,567
1947	1,500
1948	1,300

SOURCES: Despatch 115 (plain), John Peabody Palmer, Secretary of Mission at Budapest to Secretary of State July 21, 1945, attached, "Report on the Production of Hungarian Crude Oil," prepared by Papp, NA Records; CHOMD, vol. 1, p. 232; and The Hungarian Oil Industry, (New York: Mid-European Studies Center, 1954), p. 30.

TABLE 12
COMPARISON OF MAORT'S PRODUCTION WITH HUNGARY'S CONSUMPTION
AND EXPORT/IMPORT OF ALL PETROLEUM PRODUCTS
(Figures in Barrels)

Year	Consumption	Export	Total	Difference	Total	Import	Prod. Min. 15%[a]	Production
1940	1,959,236[b]		1,959,236	-1,042	1,958,194	312,832	1,645,362	1,935,719
1941	2,334,000[c]	732,909	3,066,909	-221,778	2,845,131	75,000	2,770,131	3,258,977
1942	2,242,500	1,788,653	4,031,153	+318,429	4,349,582	. . .	4,349,582	5,117,155
1943	2,405,250	3,090,055	5,495,305	-33,444	5,461,861	. . .	5,461,861	6,425,718
1944	2,500,000[d]	3,673,460	6,173,460	-900,004	5,273,456	. . .	5,273,456	6,204,065

[a]Standard figure for evaporation, wastage, etc.
[b]Shows effect of rationing.
[c]Includes consumption of regained areas.
[d]Estimate

TABLE 13
MAORT'S LABOR FORCE

Year	Physical Workers	Salaried Staff	Total
1938	236	52	288
1939	400	105	505
1940	898	147	1045
1941	1798	208	1806
1942			
1943			
1944			3788
1945		523	
1946	3265		3594
1947		607	
1948	2987		

SOURCES: Despatch 114 (confidential), Pell, to Secretary of State, August 12, 1941, enclosed, "Status of Operations," report by Ruedemann, August 7, 1941, NA Records; CHOMD, vol. 3, p.416 ; and Fenyvessy's "Control and Contract Report," no date, NA Records.

TABLE 14
AVERAGE GAS-OIL RATIOS 1937-1947
(Figures show Cubic Feet per Barrel)

Year	Budafa	Lovaszi	Ujfalu	Hahot	Average
1937	7854	. . .	. . .	. . .	7854
1938	1795	. . .	. . .	. . .	1795
1939	1543	. . .	. . .	. . .	1543
1940	1386	3439	. . .	. . .	1403
1941	1593	1313	1998	. . .	1498
1942	1667	1414	1952	1163	1481
1943	1969	1391	1275	1163	1464
1944	2233	1857	1181	1163	1773
1945	2603	2807	. . .	1164	2557
1946	2875	3282	. . .	1163	2440
1947	2903	3481	. . .	1165	2516

SOURCES: "Hungary's Oil Production," report by Folsom to Secretary of State, October 29,1946, NA Records, Suitland, Maryland; "Esto's Report Two: Drilling and Production," no date, NA Records; and CHOMD, vol. 2, p.234.

TABLE 15
WAREHOUSE BALANCES
(Figures in Dollars)

Dates	Total	Budafa	Lovaszi	In Transit
January 1, 1940	249,551	175,697	. . .	73,854
March 31, 1940	228,661	195,900	. . .	32,761
June 30, 1940	267,991	256,783	. . .	11,208
September 30, 1940	381,556	357,937	. . .	23,619
December 31, 1940	448.881	388,591	43,157	17,133
March 31, 1941	644,956	447,080	167,413	30,463
May 31, 1941	677,148	492,021	166,935	18,192

SOURCE: "Status of Operations," report by Ruedemann, August 7, 1941, NA Records.

TABLE 16
COST OF PRODUCTION
(Figures in Dollars per Barrel)

Cost and Expenses	1940 (year)	1941 (half year)
Lease and Well Expense	.04822	.07863
Overhead	.12209	.11739
Finding Cost	.19440	.08587
Depreciation	.08136	.08587
Total Gross Operating Cost	.44607	.43324
General Operating and Other Charges	.03824	.07281
Total Cost of Net Production	.48431	.50605
Pipe Line Transportation	.01849	.02131
Storage, Handling and Shipping Expenses	.02831	.02173
Total Cost F.O.B. Tankcars	.53111	.54910

SOURCE: "Status of Operations," report by Ruedemann August 7, 1941, NA Records.

TABLE 17
DISTRIBUTION OF REFINED PRODUCTS FROM JULY 1 TO DECEMBER 31, 1945
(Figures in Barrels)

Purpose	Gasoline	Kerosene	Diesel Oil	Fuel Oil	Total
Soviet Reparations	115,800	306,600	183,400	. . .	605,800
Red Army Requisitions	730,700	16,700	117,200	166,900	1,031,500
Total Soviet:	846,500	323,300	300,600	166,900	1,638,300
Domestic Use	100,800	225,600	128,600	476,700	931,700
Grand Totals:	947,300	548,900	429,200	643,600	2,569,000

SOURCE: Despatch 1446 (confidential), Schoenfeld to Secretary of State, May 3, 1946, enclosure no. 4, entitled, "Distribution of Hungarian Oil Products July 1 to December 31, 1945," NA Records, Suitland, Maryland.

TABLE 18
DISTRIBUTION OF REFINED
PRODUCTS IN 1947
(Figures in Barrels)

Distillates	Production	Consumption	Export
Gasoline	1,283,381	644,597	637,500
Kerosene	749,347	401,100[a]	345,500
Diesel Oil	680,332	379,665	300,000
Fuel Oil	749,145	547,147	172,500
Lubericants	148,927	216,195[b]	7,500
Total	3,611,132[c]	2,415,704	1,463,000

Source: Despatch 234 (confidential), H.J. Hilton, U.S. Legation at Budapest, to Secretary of State, March 9, 1948, NA Records.

[a]Includes imports of 420 barrels.
[b]Includes imports of 77,032 barrels.
[c]Total crude production for the year was 4,329,365.

TABLE 19
ESTIMATED DISTRIBUTION OF
REFINED PRODUCTS IN 1946[a]
(Figures in Barrels)

Requirements	Gasoline	Kerosene	Diesel Oil	Fuel Oil	Total
Industry	57,800	375,000	195,000	750,000	1,377,800
Agriculture	85,000	225,000	150,000		460,000
Transportation	212,500		37,500		250,000[b]
Military	10,200	15,000			25,200
Total	365,500	615,000	382,500	750,000	2,113,000
Red Army	995,000	67,500	135,000		1,197,500
Reparations	85,000	75,000	30,000		190,000
Trade Export	170,000	150,000	150,000	300,000	770,000
Late Penalties		112,500	45,000	150,000	307,500
Total	1,250,000	405,000	360,000	450,000	2,465,000
Czechoslovakia	170,000	78,500	43,000		291,500
Switzerland	113,000			161,200	274,200
Poland[c]					
Total	283,000	78,500	43,000	161,200	565,700
Grand Total	1,898,500	1,098,500	785,500	1,361,200	5,147,000[d]

SOURCE: Despatch 224 (confidential), Folsom to Secretary of State, March 20, 1946, NA Records.

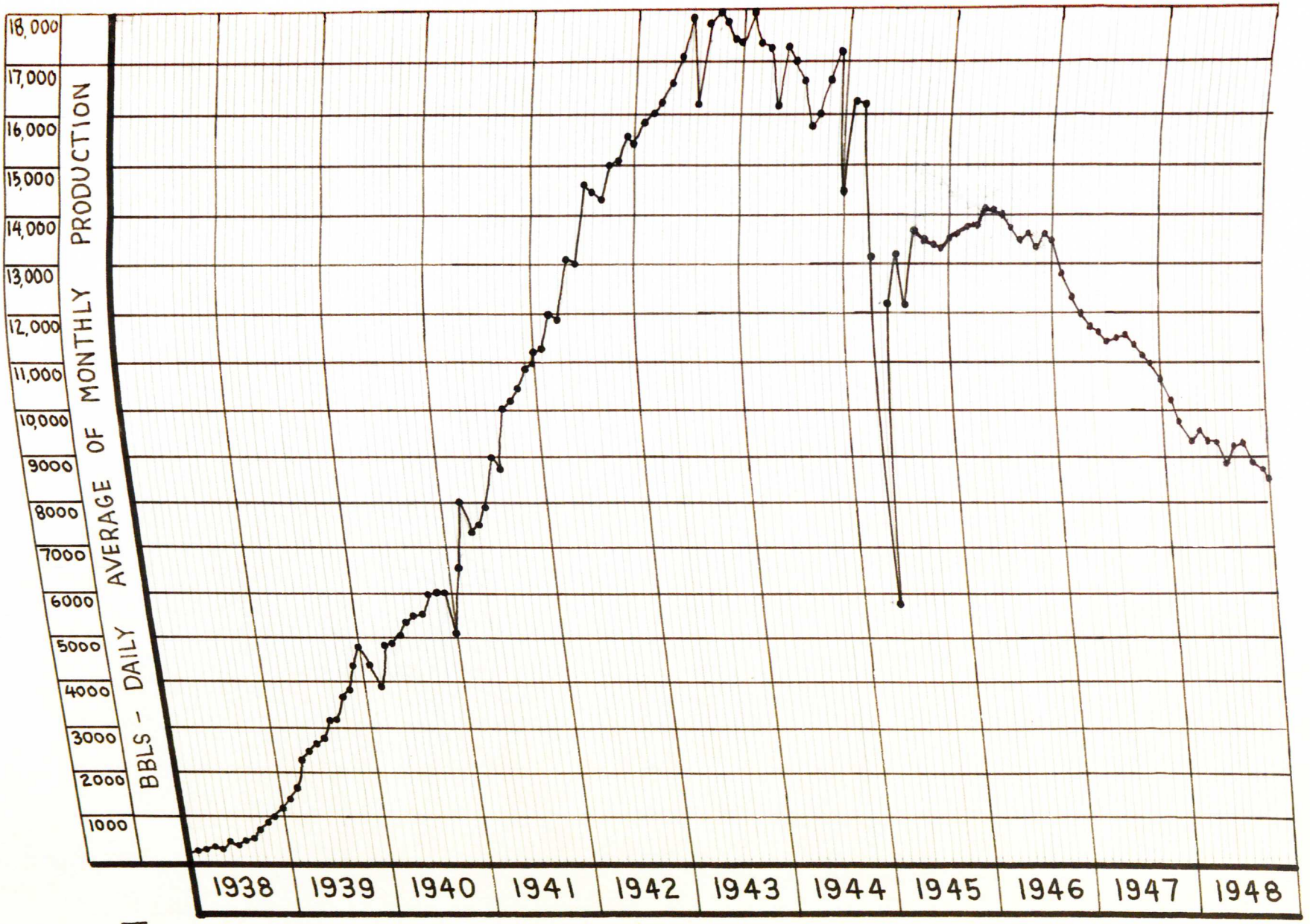
[a]For explanatory information see p. .
[b]Only 20,000 motor vehicles were operable in the country.
[c]To be estimated later and covered from reserves for domestic consumption.
[d]Based on an estimated crude production of 5,500,000 barrels.

TABLE 20
HUNGARY'S REFINING INDUSTRY IN 1944

Name of Refinery	Annual Capacity in Barrels	Owner Company
Magyar Olajmuvek R.T. (Hungarian Oil Works) Szony	2,200,000	Hungarian State
Vacuum Oil Co. R.T. Almasfuzito	2,000,000	Socony Vacuum Oil Co.
Shell Koolaj R.T. (Shell Rock Oil Co.) Budapest, Csepel	1,750,000	Royal Dutch Shell Group
Peti Nitrogenmuvek R.T. (Pet Nitrogen Works) Petfurdo	1,100,000	Hungarian State
Magyar Olaj es Vegyipari (Hungarian Oil & Chem. Co.) Budapest	820,000	Hungarian Oil and Chemical Co.
Nyirbogdanyi Petroleumgyar R.T. (Nyirbogdany Petroleum Factory) Nyirbogdany	550,000	Nyirbogdanyi Petroleum Factory
Fanto Egyesult Asvany-olajgyarak R.T. (Fanto United Mineral Oil Factories) Budapest	430,000	Fanto
Szoregi Petroleumgyar R.T. (Szoreg Petroleum Factory) Szoreg	250,000	Szoreg Petroleum Factory
Total	9,100,000	

SOURCES: "Brief Summary of the Present Situation of the Hungarian Mineraloil Industry", prepared by Zsigmond Boros and Imre Hanft, Vacuum Oil Company R.T., Budapest, Hungary, August 14, 1945, attached to Despatch 200 (restricted), John Peabody Palmer, Sec. of U.S. Mission at Budapest to Sec. of State, August 20, 1945, NA Records; The Hungarian Oil Industry, pp. 75-87; and "Petroleum Facilities of Hungary," prepared by the Enemy Oil Committee, May, 1944, NA Records.

NOTE: Some small, short-lived and private refineries together with a few similar companies, operating in the areas recovered by Hungary since 1940, were omitted.


BBLS – DAILY AVERAGE OF MONTHLY PRODUCTION
18,000
17,000
16,000
15,000
14,000
13,000
12,000
11,000
10,000
9000
8000
7000
6000
5000
4000
3000
2000
1000
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948