

ABSTRACT

Title of Thesis: NIGHTHAWKS: POLITICS, INTERSERVICE RIVALRIES,
AND MARINE CORPS SURVIVAL

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This thesis explores the efforts of the United States Marine Corps (USMC) to secure its institutional survival in the face of post-World War II defense unification pressures and existential threats. The study highlights the critical role of Marine Helicopter Squadron One (HMX-1) in establishing the Corps' continued relevance through helicopter innovation, both in combat and non-combat roles, particularly in amphibious warfare and presidential transport. Amid interservice rivalries and political resistance, HMX-1 symbolized the Marine Corps' adaptability and strategic importance. The research investigates the political dynamics, technological advancements, and lobbying efforts that enabled the USMC to preserve its unique identity and operational significance. It argues that HMX-1 was instrumental in shaping the Corps' enduring role in national defense.

NIGHTHAWKS: POLITICS, INTERSERVICE RIVALRIES, AND MARINE CORPS
SURVIVAL

By

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Author's Note

As an active-duty Marine and former Nighthawk (2021-2023), I was afforded an opportunity to come up with a research topic that I believe pays tribute to the service that I have been a part of for over a decade and to highlight a unit that stands out as a symbol of the Marine Corps and the United States of America. HMX-1 is a special unit with responsibilities and influence far exceeding those of a typical military squadron or unit. This work highlights an illustrious story that convinces readers of the crucial role a single unit plays in proving the worth of the Marine Corps within the defense establishment. It should be noted that any errors are entirely my responsibility. The work and conclusions presented here are my personal views derived from unclassified and publicly available sources. This paper does not reflect the opinions of the Marine Corps or any other federal or government entity.

Dedication

To all the Nighthawks, past, present, and future, may you continue to uphold the tradition of excellence. I am also incredibly grateful to my wife, Elizabeth, for her unwavering support as my first editor, reviewer, and, most importantly, critic.

Acknowledgments

I could not have completed this work alone. Many people have given me words of wisdom and insight that helped frame this project. In particular, I would like to thank my Professors at the University of Maryland and George Mason, Dr. Colleen Woods, Dr. Robyn Muncy, Dr. Christopher Hamner, and my advisor, Dr. Patrick Chung, for their time and guidance.

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List Of Abbreviations

CO – Commanding Officer

CMC – Commandant of the Marine Corps

CMR – Civil-Military Relations

CNO – Chief of Naval Operations

D-Day – The term denoting the unnamed day a previously planned military operation will commence.

FMF – Fleet Marine Force

HMX-1- Marine Helicopter Squadron One

HQMC – Headquarters Marine Corps

JCS – Joint Chiefs of Staff

MAGTF – Marine Air-Ground Task Force

MarDiv – Marine Division

MCS – Marine Corps Schools (Quantico, Va)

POTUS – President of the United States

SecNav – Secretary of the Navy

SOP – Standard operating procedures

Sqdn- Squadron

USA – United States Army

USAF – United States Air Force

USMC – United States Marine Corps

USN – United States Navy

VPOTUS – Vice President of the United States

VMO-6 – Marine Observation Squadron - 6

WHMO – White House Military Office

Introduction

“From the halls of Montezuma to the shores of Tripoli, the Marine Corps has fought its country's battles in the air, on land, and at sea, demonstrating unwavering dedication and excellence.”

- Marine Corps Hymn¹

The United States Marine Corps has faced numerous challenges over the last 250 years. Since its inception, Marines have operated on foreign land and at home. Surprisingly, domestic political battles have posed the greatest threats to the Marine Corps. While legal statutes now provide assurances for its continued existence, they only emerged after decades of maneuvering by the Marine Corps, from leadership to infantry on the front lines. Catchphrases such as “America’s 911 Force,” “America’s Force in Readiness,” and “First to Fight” have all come to symbolize a military branch distinguished by its capability in rapid response to crises ranging from combat to disaster relief.² The Marine Corps is designed to act swiftly to deter aggressors and reassure allies through presence, lethality, capability, and, above all, adaptability. The opening verse of the Marine Corps hymn captures the enduring legacy of adaptability across diverse geographical landscapes and various geopolitical and political-economic domains. This adaptability has enabled the Marines to survive and attach meaning to their accomplishments, troops, and missions. Most notably, the Marines who fought in the Pacific War have become an enduring symbol of the Corps' role in US national defense, especially those who participated in the Corps’ most defining battle: the Battle of Iwo Jima.

¹ U.S. Marine Band, The Marines' Hymn, United States Marine Band, Washington, DC, 1998, Audio.

² Bryan McGrath, U.S. Marines: America needs its 911 force more than ever, February 23, 2023, <https://www.19fortyfive.com/2023/02/u-s-marines-america-needs-its-911-force-more-than-ever/>.

The U.S. Marine Corps attacked Iwo Jima, a small volcanic island about 650 miles south of Tokyo, on February 19, 1945. The battle was part of the U.S. military's Pacific "island-hopping" campaign. Spanning just 8 square miles, the island held little strategic value in the broader context of World War II. It housed a few airstrips utilized by the Japanese to stage air raids into the Marianas. Unlike other Japanese-occupied islands in the Pacific, however, Iwo Jima was heavily fortified, featuring complex defenses controlled by the Japanese.³ Despite formidable odds, only days after the initial assault, the U.S. Marines emerged victorious. The victory was capped with the iconic raising of the American flag on Mount Suribachi by six Marines on February 23, 1945. Associated Press photographer Joe Rosenthal captured this moment. Hundreds of newspapers across the United States would pick up the photograph. As the war ended, the image would become an icon of the U.S. victory in the Pacific.

The Battle of Iwo Jima and Rosenthal's photograph were triumphs for the U.S. Marine Corps. Secretary of the Navy James Forrestal observed the flag flying on Mount Suribachi from the beach, and he remarked to General Holland M. Smith, "The raising of that flag on Mount Suribachi means a Marine Corps for the next 500 years."⁴ The positive public recognition, Forrestal believed, would ensure the Corps' longevity.

In many ways, he was right, as this image has become an enduring symbol of the Marine Corps' success and triumph. It appears on various memorabilia, is crafted into statues, and is frequently used as a shorthand for identifying the Marine Corps. Indeed, for many, the image

³ The island boasted 730 defensive positions, including 130 howitzers, 90 large mortars and rocket launchers, 69 antitank guns, hundreds of machine guns, and 24 tanks, Robert Heintz, *Soldiers of The Sea: The U.S. Marine Corps, 1775-1962* (The Nautical & Aviation Publishing Company of America, 1991), 479-481.

⁴ Holland M. Smith and Percy Finch, *Coral and Brass* (CreateSpace Independent Publishing Platform, 2017), 261.

represents the Marine Corps. At the same time, the image only encapsulates a small part of the organization's broader significance. Contrary to Forrestal's observation, the afterglow of Iwa Jima and World War II quickly faded following the war. During the postwar decades, the Marine Corps found itself under scrutiny. It had to struggle for resources and influence and, at times, justify its existence by highlighting its tactical, technological, and political significance. As this thesis demonstrates, Marine Helicopter Squadron One (HMX-1) is integral to the U.S. Marine Corps' ability to carve out a distinct role in the U.S. military during the Cold War and beyond.

Following World War II, the Marine Corps faced challenges in securing its survival and maintaining its role within the military. As the United States adjusted to the new political and technological realities of the Cold War, questions arose about the necessity of maintaining the Marine Corps as an amphibious fighting force.

From the Revolutionary War to the present, the Marines have distinguished themselves as the nation's smallest and most agile branch of service. The size and role of military services can change over time in response to shifting national security needs and global circumstances. The U.S. Constitution grants Congress the power to "maintain a navy" and "raise and support armies," enabling them to establish a military force that can adapt to various threats or national objectives.⁵ The Constitution did not initially include the Marine Corps as a branch of the military. On July 11, 1798, President John Adams approved "An Act for Establishing and Organizing a Marine Corps," which became law and reestablished the Marine Corps as a military service.⁶ However, there were no statutory details concerning the size, capability, or specified missions of the Marines. The primary purpose was to protect ships, and there was an additional

⁵ US Constitution, article 1, section 8, clauses 11-14.

⁶ Marine Corps History Division, "Congress Establishes Permanent U.S. Marine Corps," CHIPS, July 11, 2014, <https://www.doncio.navy.mil/chips/ArticleDetails.aspx?ID=5279>.

clause stating, “As the President, at his discretion, shall direct.”⁷ The term "discretion" in this law was beneficial but risky for the Marine Corps. This meant they could engage in various military operations beyond traditional amphibious activities conducted from ships. However, it also exposed them to the risk of being downsized, dismissed, or restructured by individuals who might not fully recognize their worth. The tension between the freedom to operate and the risk of losing their identity was why the Marine Corps was concerned about post-WWII restructuring. This fear led the Marines to contend for formal guarantees to protect their existence throughout this process.

The fight for the survival of the Marine Corps after World War II began in November 1943. At the time, General George C. Marshall, who was in charge of the U.S. Army, proposed separating the Army Air Corps from the Army and merging all armed services, land, sea, and air, into one single department led by a single military leader.⁸ The primary concern for the Marine Corps was the lack of guaranteed representation in defense discussions, which raised worries about losing their role in future military operations. This situation led the Marine Corps to engage in a political battle to defend its existence and avoid being dissolved or entirely absorbed by the U.S. Army.

Commonly referred to as “Defense Unification,” the debates over the future organization of the U.S. military primarily took place between 1944 and 1947. Multiple congressional and military committees, plans, and ideas emerged during this period. Each group expressed their ideal way to restructure the American military. President Truman would play a prominent role in shaping the debates. Truman disliked the “scrambled military setup. ” He had previously referred

⁷ U.S. Congress, *An Act for Establishing and Organizing a Marine Corps*, 11 July 1798, Section 6.

⁸ Heintz, 514, and James E. Hewes, *From Root to McNamara: Army Organization and Administration*, (Washington, D.C.: Center of Military History, U.S. Army, 1975,) 68.

to himself as “an ardent champion of single authority over everything that pertains to American safety.”⁹ He advocated for three military reforms: universal military training, desegregation, and radical reorganization to achieve the armed forces' unification. Of his three priorities, the restructuring of the military emphasized the insufficient and outdated system, which he aimed to get the most out of every tax dollar spent. President Truman was not the biggest supporter of the Marine Corps from a cost standpoint. When referring to the Marines, he said, “The Navy has its own little Army that talks Navy and is known as the Marine Corps, and it also has an air force of its own.”¹⁰ President Truman's remarks highlighted his thoughts on cost waste and redundancy. He believed the Marine Corps was redundant to the Army. Thus, the defense unification period required the Marine Corps to adapt and promote itself as something different.

This thesis highlights how HMX-1 became central to the US Marine Corps' case for greater power and resources. The legacy of HMX-1 aligns closely with the signing of the National Security Act of 1947. This legislation played a role in preserving the Marine Corps and enabled the establishment of an experimental unit, HMX-1. This unit was instrumental in testing and evaluating new helicopter tactics and doctrines. The designation "HMX-1" stands for "Helicopter, Marine, Experimental," with the number '1' indicating its status as the first helicopter squadron. The history of this unit includes milestones and contributions that have not only impacted the Marine Corps but have also influenced the tactics and doctrines of other military branches and helicopter aviation. Few academic works have explored these points beyond the Korean War. However, there is a connection between the creation of HMX-1 and the enduring presence of the Marine Corps in combat and non-combat operations.

⁹ Paolo Enrico Coletta, *The United States Navy and Defense Unification, 1947-1953*, (Newark: University of Delaware Press, 1981), 17-18.

¹⁰ Coletta, 18.

HMX-1, a unit widely recognized for its adaptability and advancement, symbolizes the Marine Corps' evolving ability. Even those unfamiliar with the unit are likely to recognize the green helicopters with white painted tops, a common sight when the President of the United States is on television leaving the White House. The unit's importance extends beyond its role in the early stages of helicopter development. HMX-1's adaptability was crucial in ensuring the Marine Corps' survival and effectiveness within the United States defense structure. Its early helicopter development, indirect involvement in the Korean War, and transformation into the premier transportation service for the highest elected office all underscore its remarkable adaptability and role in the Marine Corps survival.

While the significance of HMX-1 may be clear today, it is important to recognize that its trajectory was not always so promising. The success of HMX-1 demanded perseverance and risk to enable development. HMX-1 has had a vital role in supporting the Marine Corps' overall survival, serving as an essential asset that enables the Corps to meet its diverse operational requirements and to ensure a central role within the U.S. national security apparatus. The unit enhances the Marine Corps' capacity to execute missions effectively and maintain readiness through specialized helicopter operations, logistical support, and other critical non-combat functions. Without HMX-1's ongoing reliability, reputation, and innovation, the Marine Corps would have struggled to meet the political challenge presented during the postwar decades.

HMX-1 has been an emblem of the Marine Corps, showcasing its exceptional role in defending the nation. The notable missions and achievements highlight the Marine Corps' unique contributions to national security. A cornerstone of the Marine Corps' success is its infantry troops and historically heroic battles, such as those witnessed at Iwo Jima. However, valor alone cannot prevent the Marine Corps from facing scrutiny and constraints imposed by other military

services and political leaders. General Holland Smith, who commanded during the battle of Iwo Jima, famously remarked after the iconic flag raising, “When the war is over, and money is short, they will be after the Marines again, and a dozen Iwo Jima’s would make no difference.”¹¹ The challenge of securing funding in Washington has compelled military services to display their value and convince financial decision-makers of the necessity to support their future endeavors. While funding is crucial for the military's operational continuity, it serves merely as a means to an end. Establishing strong relationships to earn the confidence of political leaders in these capabilities is equally vital. The Marine Corps used HMX-1 and the helicopter more broadly to show political leaders the Corps' tactical, technological, and political contributions. They did so in technological demonstrations and expos, on the battlefield of Korea, and through the deployment of HMX-1 as presidential transport.

As such, HMX-1 represented a key pillar of the Marine Corps' civil-military relations (CMR) efforts. CMR is a complex concept that has been debated since the 1950s and has been greatly influenced by the work of political scientist Samuel P. Huntington.¹² This paper does not intend to engage with the prevailing scholarship on CMR directly. However, to ensure this paper is clear, I will briefly discuss Huntington’s theory of CMR and explain the decision to align more closely with the approach of political scientist Michael A. Robinson.¹³ Huntington defines CMR as the interaction between military officers and civilian leadership, suggesting optimal methods

¹¹ Victor H. Krulak, *First to Fight: An Inside View of the U.S. Marine Corps*, (Naval Institute Press, 2013), 15.

¹² Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil–Military Relations* (Cambridge, Mass: Belknap Press: An Imprint of Harvard University Press, 1981).

¹³ The argument of Robinson’s *Dangerous Instruments* is called the “Parallax Model; Michael A. Robinson, *Dangerous Instruments: Political Polarization and U.S. Civil-Military Relations*, (Oxford University Press, 2023), 15, 19, 37-46.

for controlling the military and ensuring effective military professionalism.¹⁴ In comparison, Robinson is interested in the behaviors, actions, and perceptions of all three actors in civil-military relations. Unlike other CMR theorists, Robinson contrasts the military, the public, and the partisan political establishment to understand the effects of politicization across a spectrum. Like Robinson, my discussion shifts the focus of CMR to encompass the broader public and their perceptions.

This thesis examines the broader relationships and negotiations between military officers, elected and appointed civilian officials, and the crafting of public image. Rather than concentrating on military control and operations during wartime, it addresses the challenges of navigating peacetime legislation. The dynamics between civilians and the military have contributed to establishing a supportive base for the Marine Corps in the face of demands for the unification of the military branches. The emphasis on public image, as perceived by elected officials and the American population, is the most distinct difference when understanding HMX-1's role in CMR. The helicopters of HMX-1 have shaped the public's perceptions of the Marine Corps. In addition to the civilian perspectives, support from former Marines in congressional positions, along with other congressional staff and elected officials who championed the Marine

¹⁴ Huntington's theory relates to military control. He uses the term objective civilian control, which he believes is the optimal means of asserting control over the military with an emphasis on professionalization. This contrasts with subjective control, which involves placing legal and institutional restrictions on the military's autonomy. Huntington's model of objective control can be boiled down to a few key components. First, there is a distinct separation between the civilian controller and the military regarding responsibility and power. The military must be a separate professional organization from society with morals and ethics dedicated to managing violence. Second, the military must be removed from politics to ensure that civilian control is maintained and that the military cannot destroy the institution it must protect. Third, civilian oversight has the power to direct the military muscle to carry out socially approved violence. Lastly, the professional military carries out the violence as they see fit and then returns to the tool belt of the civilian leaders and waits until the following directive to conduct violence arrives. Ultimately, Huntington understands a clearly defined division of responsibility between the military and civilian leadership. This division is meant to preserve civilian policy decision-making and military deference to civilian authority while maintaining military effectiveness during war, Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, Mass: Belknap Press: An Imprint of Harvard University Press, 1981), 2-3, 7, 14, 83, 260-261.

Corps, was crucial in maintaining Marine Corps involvement in defense unification discussions. HMX-1 would have struggled to establish itself without this support, which would have impacted the Marines' survival. HMX-1 not only advocated for the Marine Corps but also conducted demonstrations to bolster the political support of the Marine Corps' top generals. Even today, these demonstrations continue to shape the perspectives of key government leaders.

Confronted with challenges, the Marines advocated for continued existence through various political avenues. One of the most influential military theorists, Carl von Clausewitz, posited that war is an instrument of policy. He asserted, "This unity lies in the concept that war is only a branch of political activity; it is in no sense autonomous."¹⁵ At its core, Clausewitz's argument emphasizes the intrinsic connection between military actions and political objectives, which extends to the broader realm of politics. Grasping this relationship is essential for understanding the developments after World War II, particularly regarding the Marine Corps and its struggles with proposed defense unification. Despite the Marine Corps' impressive military credentials, they faced pressures for cost efficiencies and allegations of being merely a duplicate of the Army.

This research explores the Marine Corps' journey from facing potential dissolution to redefining itself as a critical and esteemed institution. What strategies did the Marine Corps employ to survive? HMX-1 exemplifies the Marines' vital role in preserving and enhancing their legacy, mainly through its involvement in the Korean and Vietnam Wars and exclusive transport services for the President of the United States. HMX-1 highlights the institution's adaptability, resilience, and strategic evolution. The significance of HMX-1 becomes increasingly apparent

¹⁵ Carl von Clausewitz, *On War: Introduction by Michael Howard*, trans. Michael Howard and Peter Paret (Everyman's Library, 1993), 731.

when examining its connection with politics, interservice rivalries, civil-military relations, and the broader implications for military strategy.

Historical Background of the Helicopter

Before the inception of HMX-1, the helicopter had a tumultuous and unsuccessful history within the Marine Corps.¹⁶ In the 1930s, the Pitcairn Autogyro OP-1 first arrived and was tested in Nicaragua to determine its possible military value.¹⁷ The early rotor-wing aircraft faced limitations due to their restricted payload capacity, which could only accommodate 200 pounds. This constraint rendered these aircraft both hazardous and impractical for widespread use. Moreover, the Marine Corps aspirations for rotary-wing technology were far ahead of the existing technological capabilities. This discrepancy between vision and reality hindered early rotary aircraft's development and operational effectiveness. Before the atomic bomb demonstrations of Operation Crossroads, General Roy Geiger highlighted the concern of the Autogyro's payload capacity in a memorandum. "To date, no type of Autogyro has been demonstrated to carry a reasonable fuel supply and military load...its use by the Marine Corps is not recommended."¹⁸ Other notable inventors of successful rotor-winged flights were Arthur M.

¹⁶ The foundational idea of the helicopter, is regularly attributed to Leonardo da Vinci in the 15th century, marks one of the earliest explorations into mechanisms capable of vertical flight. This early exploration established a precedent for subsequent advancements in vertical lift technology. Before da Vinci's conceptualization, vertical flight was exemplified around 320 AD by a simple toy called the "Bamboo Dragonfly" or "Chinese top." This toy consisted of a stick with a rotor attached to its top; when spun rapidly, it could lift off the ground, demonstrating the fundamental principle of achieving vertical lift. However, it was not until the invention of the steam engine in the late 18th century that a sufficient power source became available for helicopter propulsion. The initial helicopter designs were mainly theoretical and lacked the development and testing that characterized early 20th-century advancements utilized by the Marine Corps and HMX-1, Montross, 13; and Joseph Needham and Colin A. Ronan, *The Shorter Science and Civilisation in China: An Abridgement of Joseph Needham's Original Text*, (Cambridge: Cambridge University Press, 1978).

¹⁷ Eugene W, Rawlins and William J Sambito, *Marines and Helicopters, 1946-1962*, (Washington: History and Museums Division, Headquarters, U.S. Marine Corps, 1976), 1.

¹⁸ Rawlins, 1; and Montross, 27.

Young and Heinrich Focke. Focke designed the Focke-Wulf FW 61, the first fully controllable helicopter, in 1936, while Young's helicopter, the Bell Model 30, eventually called the Model 47, became the first certified commercial helicopter.¹⁹ However, individuals have yet to be given the same recognition for helicopter innovation as Igor Sikorsky.

Igor Sikorsky was a Russian-born immigrant who arrived at Ellis Island in the New York Harbor on March 30, 1919.²⁰ Sikorsky grew up fascinated with flying and started building helicopters in 1909 in Russia. Although his first designs lacked enough power, he never gave up on the idea of a helicopter. On September 14, 1939, his discoveries on vertical flight advanced and shaped the future of helicopter aviation. Unlike the inventors before him, Igor solved the helicopter problem. His solution was a single main rotor combined with a smaller vertical tail rotor to neutralize torque. This innovative discovery allowed for more efficient flight hovering and cruising, as demonstrated in the VS-300.²¹

The Air Corps showed the most initial interest in Sikorsky's innovations. It was the first to conduct tests in 1939. The Air Corps acknowledged the substantial promise in Sikorsky's updates and began funding a project designated as the XR-4.²²

In addition to the Army's early interest in the Sikorsky helicopter, the Coast Guard and the Navy began testing its capabilities before the Marine Corps. The Navy quickly decided that the helicopters were undesirable due to the lack of payload ability and the extremely high maintenance requirements. As World War II was coming to an end, all military branches were

¹⁹ Frank Colucci and John Bulakowski, *The Sikorsky Aircraft Centennial: A Tribute by the Igor I. Sikorsky*, (Historical Archives, Historical Archives, Igor I Sikorsky, 2024), 34.

²⁰ Colucci, 26.

²¹ Colucci, 33; Montross, 30; and Rawlins, 2.

²² Montross, 30.

concerned about their budgets. With demobilization approaching, they needed to carefully assess the importance of personnel and equipment to reduce costs. However, the Coast Guard quickly confirmed the usefulness of the helicopter and performed one of the first real-world applications of its capabilities on January 3, 1944. Near Sandy Hook, New Jersey, a Naval destroyer exploded, causing multiple victims to require blood and plasma. Commander Frank Erikson, the leader of the aviation unit at Floyd Bennett Field in Brooklyn, NY, flew a YR-4 helicopter (an improved version of the Army XR-4) to pick up plasma and deliver it to those in need at Sandy Hook. The flight, in total, was 14 minutes and was conducted in weather that had grounded all other military planes in the area.²³

The Air Force did not consider helicopters practical combat tools. It was most interested in long-distance strategic bombing by fixed-wing aircraft and wanted nothing to do with supporting ground troops through the air. Therefore, the Air Force's ideas for the helicopter were similar to those of the Coast Guard, focusing on search and rescue (S&R) and supply.²⁴

The Navy, Army, and Coast Guard conducted tests of the helicopter over water. The Navy's primary objective was to safeguard ships and explore the potential use of helicopters for anti-submarine warfare. They validated the helicopter's capability to land on a ship, but acknowledged that further innovation was required to fully realize any advantages. At the same time, the Marine Corps was focused on amphibious assault doctrine in the Pacific and paid little attention to helicopter aviation. A clear vision for their practical use was essential to ensure that helicopters became more than oversized paperweights.

²³ Montross, 33.

²⁴ McGowen, *Helicopter: An Illustrated History of Their Impact*, 78-83.

Fortunately for the civilian helicopter industry, the military services continued exploring various aircraft applications. Igor Sikorsky and his team were optimistic about the future capabilities of their helicopter. However, both the Army and the Navy considered the early helicopters of the 1940s unsatisfactory for their needs. Despite this, Sikorsky's optimism was contagious, and on June 6, 1946, the Chief of Naval Operations announced that the Secretary of the Navy had approved a helicopter development program.²⁵ The Marine Corps charged head-first into adapting the helicopter for combat use.

While the Marine Corps did not show initial interest in Sikorsky's new design, it became a leading booster of the new technology during the Korean War. In fact, the Marine Corps leveraged its advancements to reinforce its position with the changing Cold War military establishment. The Marines' early emphasis on tactical helicopter use paved the way for their effective deployment and helped other branches recognize the inherent value of this technology. Marine Corps aviation eventually proved other practical uses of helicopters and aviation in close air support, troop transport, reconnaissance, command and control, and even medical evacuations.

Historiography

While researching Marine Corps aviation, the National Security Act of 1947, and defense unification more broadly, I discovered the bitter lengths the Marine Corps went to maintain independence and relevancy. While providing essential background, the existing studies do not account for the importance of HMX-1 in the Marine Corps' struggle for survival.

²⁵ Montross, 55.

Official histories provide only a scattered discussion of HMX-1. One of the first Marine Corps historians, Lynn Montross, documents Marine Corps helicopter aviation's role in the Korean War.²⁶ Montross' work is one of the few accounts that discuss the role of HMX-1 in depth. It revolves around the history of helicopters but focuses on the Korean War. Montross' scope limits discussion on HMX-1 and does not answer questions about politics or interservice rivalries. A few other officially sanctioned Marine Corps histories exist, highlighting the Marine Corps' overall history of the use of helicopter aviation.²⁷

The scholarship on defense unification and the National Security Act of 1947 emphasizes the USMC's political aspects, discussions, and perspectives. Historians Gordon Keiser, Demetrios Caraley, and Robert Heinl have all contributed much to the Marine Corps political and civil-military relations categories on the subject.²⁸ Nevertheless, their discussions primarily center around the influence of military lobbying and particular political connections that shape defense policies. It is critical to emphasize the dynamic nature of technological advancements, as these innovations contribute to the effectiveness and operational capabilities of the Marine Corps. The strategic doctrines surrounding amphibious operations defined the Corps' mission and relevance in modern warfare. HMX-1 and helicopter vertical envelopment revolutionized military tactics, allowing for rapid deployment and maneuverability in various combat and non-

²⁶ Lynn Montross, *Cavalry of the Sky: The Story of U.S. Marine Combat Helicopters* (Harper & Brothers, 1954).

²⁷ There are two Marine Corps histories titled, *Marines and Helicopters*, Eugene W Rawlins and William J Sambito, *Marines and Helicopters, 1946-1962*, (Washington: History and Museums Division, Headquarters, U.S. Marine Corps, 1976); and Lieutenant Colonel William R. Fails, *Marines and Helicopters 1962-1973*, (Washington DC: History and Museums Division, HQMC, 1 May 1978).

²⁸ Gordon W. Keiser, *The US Marine Corps and Defense Unification 1944-47: The Politics of Survival*, (Fort Lesley J. McNair, Washington, DC: National Defense University Press, 1982), Demetrios Caraley, *The Politics of Military Unification; A Study of Conflict and the Policy Process*, (New York: Columbia University Press, 1966), and Heinl, Robert Debs Heinl, *Soldiers of the Sea: The United States Marine Corps, 1775-1962*, (Annapolis: United States Naval Institute, 1962).

combat scenarios. This bolsters a more complete argument for the continued importance and justification of the Marine Corps' existence within the military defense structure.

Studies of Marine Corps and helicopter innovation provide technical insight but do not highlight the political import of HMX-1. Historian John Horn III compares Marine Corps and Army helicopter development between 1945 and 1965. Horn's argument is closely intertwined with my work, but Horn has a different focus. He states, "Technology did not serve as the driving factor in tactical and doctrinal innovation..."²⁹ Although he does mention the fears of Marine Corps survival, his argument is less focused and developed. The argument attributes the Marine Corps' ability to make change easier because of the lessons learned while developing amphibious landing doctrine in the 1920s and 1930s. It claims that, if not always embraced, change was accepted by the Marine Corps as a road to survival.³⁰ However, this statement also lacks the complexity of Marine Corps development at the time. The terms "embrace" or "accepted" do not adequately convey the challenges of internal conflict during the early stages of helicopter development.

According to Horn, leadership at the highest levels of the Marine Corps hierarchy was well-informed and understood the urgent need for change. However, this understanding did not reach all of the leaders in the Marines. General Merrill B. Twinning recounts some of the difficulties he experienced. "As was to be expected, the winged dinosaurs who ran Marine aviation at that time, except for Lieutenant General Field Harris, took fright and opposed the scheme in every way, apparently fearful that they would lose pilot seats, or worse still, that they

²⁹ John C. Horn III, *Military Innovation and the Helicopter: A Comparison of Development in the United States Army and Marine Corps, 1945–1965*, (Order No. 3124083, The Ohio State University, 2003).

³⁰ Horn, 75.

would have to fly whirlybirds themselves."³¹ General Twinning was involved heavily in the Marine Corps Schools and the use of helicopters and was one of the biggest advocates of early helicopter aviation in amphibious operations and combat. Horn's study focused on innovation within the services and ended his scope in 1965. In comparison, this paper will show the critical influence that HMX-1 had well past 1965 to emphasize adaptation to the changing political environment of budget shortfalls and questioning the Marine Corps' relevancy after the signing of the National Security Act of 1947.

An argument linking the Marine Corps' first helicopter squadron to the defense of the services' survival needs to be more present in the historical record. I argue that HMX-1 was vital to the Marine Corps gaining a seat at the Joint Chiefs of Staff (JCS) table and ensuring its future over the last 75 years. The Marine Corps' merits stand tall, but without the innovative and cutting-edge gamble on helicopter aviation and HMX-1, the Marine Corps may have been nonexistent in the 21st century. From the initial trials in Korea to the continued development of tactics and strategy in Vietnam, HMX-1 displayed continued value to Marine Corps significance. In addition to the combat role, HMX-1 earned the role of presidential transport, which added to the political importance and heightened the impact that HMX-1 had on maintaining the Marine Corps' relevance off the battlefield. Combining combat and non-combat involvement, HMX-1 is a well-rounded tool for the Marine Corps to use in gaining support and defending against "total emasculation."³²

³¹ Merrill B. Twinning and Neil G Carey. *No Bended Knee: The Battle for Guadalcanal*, (Novato, CA: Presido, 1996), 193.

³² On May 6, 1946, General Alexander Vandegrift testified regarding armed forces unification in front of the Senate Naval Affairs Committee. During his testimony, he explained that the merger bill S. 2044 would effectively sterilize the Marine Corps and would not enable their ability to remain a "force in readiness"; Alexander Vandegrift and Robert B Asprey, *Once a Marine: The Memoirs of General A. A. Vandegrift*, United States Marine Corps, (New York: Ballantine Books, 1982), 315-316; In General Victor

The history of HMX-1 also provides an opportunity to discuss the role of journalism and popular media in the Marine Corps CMR efforts. The Marine One helicopter frequently appears in media coverage and official events, reinforcing its iconic status in American culture. Images and footage of the President boarding or disembarking from Marine One are regularly in news reports, further embedding its significance in public perception. In the 21st century, helicopter replicas resembling HMX-1 have appeared in various Hollywood films and television shows with themes related to the presidency, government operations, and national security. The themes highlighted in this media accentuate the power and mobility linked to the Marine One helicopter in the modern day.

Significance and Scope

During the consideration of defense unification in the US Congress, Marine Corps aviation underwent significant changes. The Korean War increased the importance of helicopter technology, which strengthened arguments for maintaining the distinct functions and identity of the Marine Corps. In addition to the political lobbying conducted by military personnel and their allies within Congress, the Marine Corps sought further tangible evidence of its relevance following the establishment of the Joint Chiefs and the independent United States Air Force. The establishment of HMX-1 by the Marine Corps and its rapid prominence stressed the importance of helicopters for military strategists and political leaders. However, demonstrating the necessity of helicopters for future warfare would demand more than mere demonstrations and courtesy rides. Historically, the focus on helicopters in military contexts has primarily centered on their tactical or combat roles in response to the atomic threat, which served as the initial framework.

Krulak's recollection, he refers to the merger plans as planned emasculation of the Marine Corps, Victor H. Krulak, *First to Fight: An Inside View of the U.S. Marine Corps*, (Naval Institute Press, 2013), 35-36.

The reality, however, is more complex. Since 1957, HMX-1 has provided operational assets that maintain the Marine Corps' relevance and viability.

This study will identify and recognize the role that the HMX-1 helicopter had in shaping domestic and international politics, mobility, and power that followed the signing of the National Security Act of 1947. While this act was a critical turning point in Marine Corps history, it was in the subsequent years that forming a helicopter squadron solidified the Marine Corps' reputation as an influential military service, particularly during the Korean War and the Eisenhower administration. HMX-1 was instrumental in testing and refining new tactics and doctrine for the service. Its contributions influenced the development and employment of military strategy and doctrine across other branches of the armed forces. The broader significance of this history lies in its political and strategic implications for the United States. The early involvement of HMX-1 in interservice rivalries sparked discussions on tactics concerning air power and amphibious operations. These debates ensured a comprehensive application of emerging technologies, enhancing the United States' preparedness for future conflicts and national defense.

Fast forwarding to the modern-day Marine Corps, the withdrawal from major operations in Iraq and Afghanistan and the long-term effects of the "Forever Wars" raised questions reminiscent of those after WWII.³³ This led to a reassessment of the Marine Corps' role in national defense. After two decades of efforts that seemed redundant and resembled those of a land army, General David Berger, the 38th Commandant, outlined his force design plan for

³³ "Forever Wars" has become a common term for the wars in Iraq and Afghanistan post-September 11, 2001, as depicted in some of the following works; Dexter Filkins, *The Forever War*, (New York: Alfred A. Knopf, 2008), Lisa M. Munday, *Fighting the Forever War: The U. S. Service Member Experience in Afghanistan, 2001-2014*, (Jefferson: McFarland & Company, Incorporated Publishers, 2022), and Suzanne C. Nielsen, "Lessons Unlearned: The U. S. Army's Role in Creating the Forever Wars in Afghanistan and Iraq," (*Journal of Political & Military Sociology* 48, no. 2 2021), 276.

2030.³⁴ The same dilemma faced 18th Commandant General Alexander Vandegrift in 1946, as he emphasized the importance of amphibious operations and the role of Marines at sea. The proposed changes, however, sparked inquiries and resistance. The goal is to draw lessons relevant to contemporary issues. Analyzing HMX-1 also sheds light on how the Marine Corps has navigated such challenges. Factors such as defense unification, civil-military relations, and overarching threats to national survival have triggered political upheaval in Washington, necessitating innovative leadership to overcome these obstacles.

Today, HMX-1 is more than just a means of presidential transport; it symbolizes the military's role in facilitating the operations of the US government, both in everyday functions and during crises, through its flexibility, security, and reliability. The unit's history answers essential questions about the military's role in protecting national leadership, ensuring the continuity of government, and projecting American strength through mobility, technology, and operational readiness. HMX-1 highlights the intertwined relationship between politics and military strategy in modern governance. The focus on HMX-1 requires attention to the people who have served in the unit. The Marines operating in HMX-1 and those supporting the early ideas of helicopter aviation were pivotal for Marine Corps survival and ability to remain competitive with the other services.

Defense unification emerges as a central theme within the narrative of HMX-1, particularly concerning its ongoing survival and operational effectiveness. Within this paper, the use of "defense unification process" refers to the roughly 10-year period after WWII when

³⁴ "Force Design 2030," Navy Department, Defense Department, (Government, Defense Department, March 2020), <https://www.hqmc.marines.mil/Portals/142/Docs/CMC38%20Force%20Design%202030%20Report%20Phase%20I%20and%20II.pdf>.

military leadership and politicians in the federal government attempt to figure out how to restructure the military and the Department of Defense. This study, however, does not aim to suggest ideal methods for organizing and managing the Department of Defense as a whole. Instead, my primary objective is to shed light on the influence employed by a single unit and its supporting personnel in promoting and facilitating the Marine Corps' role in the broader defense unification process. In this context, it is important to recognize that the Marine Corps embraced pluralistic principles, which contrast with the strategic monism prevalent in both the Army and the Air Corps at the time. This difference in approach stresses the Marine Corps' unique philosophy and ability to adapt to various challenges in modern warfare. The intent is to illuminate the dynamic role of HMX-1 in advancing the Marine Corps' mission and fostering essential support within and across inter-service collaborations. HMX-1 has strengthened and solidified the Marine Corps' reputation as a distinguished and indispensable branch of the US military, capable of operating effectively in a unified defense framework while maintaining a distinctive identity.

Method and Structure

This study comprises research material from military and civilian sources. Most of the primary sources were obtained from the Marine Corps archives, particularly the personal collections of the Commandants of the Marine Corps, beginning with World War II and the National Security Act of 1947. Additional materials were sourced from presidential libraries, starting with President Harry S. Truman and continuing through the Gerald R. Ford administration in the 1970's. I found valuable primary sources from the command chronologies of HMX-1 at the National Archives in College Park, MD, and the Marine Corps Archives in Quantico, VA. In addition to primary sources, I used secondary sources addressing defense

unification, civil-military relations, and Marine Corps helicopters. The motivation behind this research stemmed from the observed lack of correlation between Marine Corps aviation—specifically Marine Corps helicopters—and the enduring significance of the Marine Corps as an essential component of the American armed forces. Understanding the importance of HMX-1 highlights the helicopter squadron's role in the Marine Corps' survival, leading to its full membership in the Joint Chiefs of Staff in 1978.

The motivation for this research topic arose from the noticeable disconnect between Marine Corps aviation—particularly Marine Corps helicopters—and the longstanding importance of the Marine Corps as a distinct part of the American armed forces. By leveraging this insight and a comprehensive understanding of HMX-1, a compelling argument was made regarding the helicopter squadron's pivotal role in the survival of the Marine Corps over the past 75 years. In the following three chapters, the importance of HMX-1 will be evident in keeping the Marine Corps traditions alive. Chapter 1, titled *Marine Corps on the Menu*, traces the discussions and concerns over defense unification, the Marine Corps fight to be heard and judged, and highlight the friends and foes the USMC faced during the post-WWII national defense reshaping. The legacy of HMX-1 relies on understanding the conversations, fears, and rivalries among the Marines and other branches to establish and ultimately thrive.

Chapter 2, *A Seat at the Table*, refers to the Marine Corps gaining a position on the Joint Chiefs of Staff (JCS), proving the worth of HMX-1 and the helicopter during the Korean War, and ultimately earning the mission or presidential transport for a President that was quite the critic of Marines. This chapter discusses early Marine Corps helicopter aviation and the trials and tribulations of HMX-1 in its infancy. It will also demonstrate the flexibility and adaptable spirit that HMX-1 and the Marine Corps embody, which in due course earned them the right to

transport the President of the United States frequently. The last chapter, *The Presidential Mission*, highlights the role and notoriety of HMX-1 after 1958. This chapter examines HMX-1's continued success in support of the White House while maintaining other roles supporting Marine Corps priorities. This chapter aims to show the legacy HMX-1 created, resulting in full membership in the JCS in 1978 and further protecting the USMC from the fear of termination. In conclusion, the epilogue will weave the narrative into the context of the 21st century. It will highlight the transformations following September 11th and the ongoing advancements in research and development that demonstrate our ability to adapt to a changing world. The epilogue will finish by emphasizing the role HMX-1 has in helicopter aviation, serving as a leader in innovation, a symbol of power and mobility, and a testament to Marine Corps success.

While financial support and funding are necessary for military survival, the extensive discussion of the military-industrial complex is beyond the scope and intention of this argument. HMX-1 maintains close ties with the civilian defense industry to collaborate and coordinate advancements in helicopter technology. The connection between the two organizations goes beyond solely addressing the survival of the Marine Corps. However, indicators such as funding must be considered to support the argument regarding the role of HMX-1 in survival and growth. Beyond financial resources, the number of helicopters and the establishment of helicopter units within the Marine Corps demonstrate the organization's capability to endure defense unification and thrive, particularly evident during the Korean and Vietnam Wars.

This thesis is organized to examine historical periods in chronological order. The primary discussion focuses on the innovation and impact of HMX-1, leading to conclusions about the Marine Corps' ongoing efforts to secure funding and establish its position within the Joint Chiefs of Staff. With its ongoing support of the White House, HMX-1 is well-positioned to maintain its

role in advocating for the Marine Corps as an essential and valuable element within the Department of Defense. Understanding the history of HMX-1 offers insights into the broader context of non-combat units, which can have a crucial role in shaping the public image and perception of the force. Although challenging to quantify, this impact is no less significant.

The United States Marine Corps has consistently demonstrated its value on battlefields across the globe, as reflected in each verse of the Marine Corps hymn. However, questions from the American public and the US government, such as, "What have you done for me lately?" can give rise to doubts about the Corps' continued relevance. The courage of infantry forces alone cannot justify the Marine Corps' existence. The establishment and innovative contributions of HMX-1, along with the support it garnered, particularly from helicopter aviation, alleviated these concerns and played a central role in the Marine Corps' development following World War II.

By fostering creativity, adaptability, and perseverance, HMX-1 emphasized the importance of promoting diverse avenues of military innovation to enhance competition and progress within the armed services. The squadron improved military abilities and strategies. It impacted politics, civil-military relations, and competition between military branches. This progress highlights how political influence and civil-military relations shape military capabilities. The USMC's narrative is marked by resilience and determination as it navigated uncertainty to secure its position within the broader defense framework. Without the innovation led by HMX-1 and its Marines, the Marine Corps might have risked diminishing its role at the national defense table. Instead, it capitalized on the opportunity to remain essential in the nation's defense.

“If you are not at the table, you are on the menu.”

Chapter 1: Marine Corps on the Menu

After the attack on Pearl Harbor, President Franklin D. Roosevelt and British Prime Minister Winston Churchill created the Combined Chiefs of Staff at the Arcadia Conference in Washington, D.C. The body was responsible for overseeing the strategic direction of the Anglo-American war effort. At that time, the United States had no formal agency to provide input to military committees. In contrast, the British Chiefs of Staff Committee effectively coordinated military operations, offered tactical support, and provided strategic direction. This committee had planning and intelligence staff to facilitate the war effort and served as the central body advising the War Cabinet and the Prime Minister on military matters. The Prime Minister established the principle of collective responsibility for the British committee in 1924 and communicated this directive to each new member.³⁵

Without an equivalent to the British Chiefs of Staff Committee, the United States found itself disadvantaged regarding military capabilities and strategic planning. The nation needed to quickly enhance its resources, technologies, and coordination efforts to engage in global military operations effectively. This urgency was driven by the increasing complexity of international security challenges, necessitating a worldwide collaborative approach to military initiatives. Therefore, a comprehensive strategy was essential for the US to align its military readiness with the demands of contemporary global threats.

U.S. Navy Admiral William D. Leahy introduced the concept of a "unified high command," which addressed the need for coordinated staff operations. The United States adopted this concept in 1942 and became the US Joint Chiefs of Staff. During World War II, this group

³⁵ "Origins of the Joint Chiefs of Staff," Joint Chiefs of Staff, <https://www.jcs.mil/About/Origin-of-Joint-Concepts/>.

functioned without legislative approval or a formal definition from the President, as President Roosevelt believed this approach provided the flexibility necessary to meet the demands of the war.

The initial members of the U.S. Joint Chiefs of Staff were comparable to the British Chiefs of the Army, Navy, and Royal Air Force. However, a distinction was that the U.S. Army Air Corps was not considered an autonomous and coequal military organization. In the United States, Admiral Leahy served as the Chief of Staff to the Commander in Chief of the Army and Navy; General George C. Marshall held the position of Chief of Staff of the Army; Admiral Ernest J. King was the Chief of Naval Operations and Commander in Chief of the U.S. Fleet; and General Henry H. Arnold functioned as the Deputy Army Chief of Staff for Air and Chief of the Army Air Corps. In December 1944, each member was promoted to the rank of Five-Star General when the positions of General of the Army and Fleet Admiral of the United States Navy were officially established.³⁶ Notably, the Marine Corps was not a part of this new formation, and their most senior officer only held two stars.

The wartime exclusion of the Marine Corps from the initial establishment of the Joint Chiefs of Staff foreshadowed postwar debates about the Marines' survivability and role in military operations. The National Security Act of 1947 made no provision for the Marine Corps' inclusion at the top levels of the newly established National Military Establishment, later renamed the Department of Defense. No Marine was invited to the newly formed Joint Chiefs of Staff (JCS). As a result, the Marine Corps was compelled to operate independently to ensure its continued relevance and guard against potential dissolution. One advantage for the Marine Corps

³⁶ Henry Hitch Adams, *Witness to Power: The Life of Fleet Admiral William D. Leahy*, (Annapolis, Md: Naval Institute Press, 1985).

was the disarray and horse-trading among the various services and political leaders. The Army, Navy, and Army Air Corps focused on their roles and missions, often at the expense of the Marine Corps and one another, leading to a lack of coherence in national security priorities and military budgeting.

Without direct representation on the JCS, the Marine Corps became an afterthought among many when top-ranking Generals of the Army, Admirals of the Navy, and political elites. This situation was not new. Historically, the Marine Corps was known as the smallest and often the most arrogant branch of the military, making it a frequent target for budget cuts and calls for disbandment. The disdain other branches held toward the Marines fueled the desire to dismiss the Marine Corps altogether, claiming it was redundant to the Army.³⁷

This chapter will explore the political struggles, interservice rivalries, and the Marine Corps Commandant's commitment to fostering innovation and implementing change. The years from 1945 to 1950 were crucial for the Marine Corps as they secured support within Congress and navigated the initial reorganization mandated by the National Security Act. The Marine Corps utilized every available resource to uphold its status as an active service, yet it ultimately recognized that this effort was a temporary solution. The brief period after World War II was crucial for identifying the need for HMX-1 by the Marine Corps. With the emergence of nuclear weapons, the Marines recognized that change was necessary and that helicopters could be pivotal on future battlefields. These aircraft had the distinct advantage of taking off and landing without the need for an established airstrip and allowed for greater dispersion of troops. Working groups

³⁷ Keiser, 9; Throughout this period, the claims that the Marine Corps was a duplicate effort were used to justify the United States Army's expansion and funding and the creation of an independent Air Force. These attempts to downplay the Marine Corps' contributions emphasized to Marine Corps leaders that defined functions get put into law.

and committees leaned on the Marines' amphibious heritage and modernized their strategies while maintaining strategic relevance. The Marines believed that integrating helicopters into their tactics would enable them to adapt to the evolving character of warfare. These advancements strengthened amphibious doctrine and laid the groundwork for incorporating helicopter technology, which would prove invaluable during the Korean War. The early efforts established a foundation for the future resilience and strength of the Marine Corps.

It is imperative to conduct a comprehensive analysis of the sequence of events that shaped the decisions made by the individuals involved, as this will enhance the understanding of the impact of a single unit on the Marine Corps. Introducing new technological systems and doctrine entails calculated risks and thoughtful decision-making to ensure success. One could contend that the Marine Corps did not stop fighting after World War II; instead, the challenges they encountered involved different rules of engagement and heightened stakes for the institution's future.

“A Little Army”

In February 1926, Brigadier General Harry A. Smith, USA, Assistant Chief of Staff, spoke about the Marine Corps and their historical significance. In a discussion over the unification of services to the House of Representatives, the Committee of Military Affairs. General Smith stated, “I admire The Marine Corps; I think they are wonderful, but...they do not need that organization...There is one little reason why it should be there.”³⁸ His comments reflected an understanding of the Marine Corps' unique position within the larger military framework. The Marine Corps has been well aware of its relatively minor role compared to other

³⁸United States Congress House Committee on Military Affairs. *Department of Defense and Unification of Air Service: Hearings before the Committee on Military Affairs, House of Representatives, Sixty-Ninth Congress, First Session, (January 19 to March 9, 1926), 630.*

branches of the armed forces, a reality shaped by constraints such as limited staffing and financial resources. This recognition of their limitations underscored the Marine Corps' pragmatic approach to its operations and mission, acknowledging its strengths while navigating the challenges posed by its size and budgetary considerations. The newly formed JCS exacerbated this problem by lacking Marine Corps inclusion.

In response to General Smith, Congressman Hill from Maryland said, "They are really a police force, are they not?" General Smith replied, "Yes. You must remember that the Marine Corps is a little army."³⁹ This would not be the last time the Marine Corps would be identified as a "police force." The stigma of the Marine Corps as a little army or as a redundancy to an armed service that the United States already had was not a good reputation to have. The history of Marine Corps accomplishments is held tightly to the chest of all Marines with pride in many successes. However, when budget strains and fears of recession or depression hit, the Marine Corps soars to the top of discussions to trim and cut costs. Due to this scrutiny, the Marines in leadership frequently looked towards the future, using innovation and new concepts to propel the Marine Corps past its peers in the defense industry. This emphasis on modernization and future focus instills a sense of hope and anticipation about the Marine Corps' potential.

In the 1930s, Marine Corps Officers and their allies in Congress had reasons to believe that President Herbert Hoover was considering abolishing the Marine Corps at the urging of General Douglas MacArthur. Despite these concerns, from 1933 to 1940, the Marine Corps nearly doubled in size, growing from 15,343 to 26,568 personnel. The change in size was a direct reflection of Marine Corps reliance on amphibious mission capabilities. In this instance, the

³⁹ United States Congress House Committee on Military Affairs. *Department of Defense and Unification of Air Service: Hearings before the Committee on Military Affairs, House of Representatives, Sixty-Ninth Congress, First Session, (January 19 to March 9, 1926), 630.*

Marine Corps emphasized its amphibious capabilities to seize and control advanced bases across the Pacific Ocean.⁴⁰ In addition to refitting the amphibious role for the operating environment, the Marine Corps rebranded itself from expeditionary units to be called the Fleet Marine Force (FMF). Seemingly just a name change, the FMF allowed the Marine Corps to sell itself to Congress as a multifaceted and capable “force” that would be able to meet amphibious needs and, more importantly, United States foreign interests in the Pacific by establishing and defending forward bases. The focus on rebranding and refocusing on its amphibious roots demonstrated the Corps' resilience and determination to survive.⁴¹ This would also not be the first time adapting amphibious operations to the changing environment would keep the Marine Corps alive.

The expansion of the Marine Corps resulted in increased competition for funding and personnel with the United States Army. During a time of peace, military funding was not a high priority, which intensified this competition. Although the rivalry primarily existed between the Marine Corps and the Army, the Navy also felt its effects. Marine Corps leaders understood the necessity of demonstrating their value and expertise in roles beyond traditional land army capabilities. They chose to concentrate on amphibious assaults. While the Marine Corps' amphibious capabilities were instrumental in the Pacific during World War II, how would they adapt in the atomic age? What set the Marine Corps apart from the Army in terms of capability? How did the Marine Corps intend to illustrate that investing in and sustaining its expertise would serve the interests of American citizens? The early development of the helicopter and the far-reaching concepts regarding its application became the path that the Marine Corps pursued.

⁴⁰ Allan Reed Millett, *Semper Fidelis: The History of the United States Marine Corps*, (New York: Free Press, 1991), 330.

⁴¹ Heintz, 296-297, 309.

Post-WWII Unification

The political turmoil surrounding defense unification traces back to the pioneering proposal by USA General George C. Marshall in 1943. Marshall, who served as the Army's senior general during World War II, championed consolidating military operations under a single Department of War. This notion marked a departure from the prevailing anti-unification sentiment prevalent among military leaders of the time.⁴² Determined to address the inefficiencies he observed, Marshall aimed to eliminate the pervasive overlap and duplication of efforts among the various branches of the armed forces. He crafted his proposal and presented it to a military committee, inviting discussion, thorough research, and careful examination of the potential implications of restructuring.

However, his initiative encountered resistance from influential Navy leaders, including Admiral Ernest King and Admiral William D. Leahy. These senior officers vehemently opposed creating a singular military department, fearing that such a change would undermine the Navy's established way of life and threaten its operational autonomy. Their concerns extended beyond operational control; they were deeply apprehensive that reallocating resources associated with this unification would compromise the Navy's funding, ultimately weakening its quality and combat effectiveness.

An important aspect of these early discussions was the absence of representation from the Marine Corps to advocate for their interests. The JCS's initial membership did not allow for a Marine Corps representative, leaving Navy leadership solely responsible for considering Marine Corps interests during hearings and proposals. This system posed a problem, as the Navy often

⁴² Caraley, 23-24.

prioritized its interests over those of the Marine Corps. Consequently, when faced with difficult decisions, the Navy was willing to cut support for the Marine Corps in favor of its initiatives, such as funding the construction of additional aircraft carriers.⁴³

The Woodrum hearings to discuss defense unification concepts began on April 24, 1944.⁴⁴ The hearings aimed to determine the War Department's future and understand the post-war military's framework and organization. Generals and Admirals from the different services testified to support their services and what they believed would best benefit the U.S. defense. During congressional testimony, General Marshall and General Collins of the U.S. Army emphasized the importance of integrating and coordinating the Joint Chiefs of Staff functions. However, what was notably absent from their discussion was the assignment of land-based air assets to the new Air Force, without any reference to the Marine Corps and their land-based aviation capabilities.⁴⁵ The role of Marine Corps aviation led to some of the most contentious interservice disputes during the defense unification process.⁴⁶

During hearings in 1945, General Dwight D. Eisenhower testified that "the Army will undertake major amphibious operations in the future, and consequently the Marine Corps will not be appreciably expanded in time of war." Similarly, Army Air Force Commanding General C. H. Spaatz stated that "the size of the Marine Corps should be limited to small lightly armed units, no larger than a regiment, to protect U. S. interests ashore in foreign countries, and to provide interior guard of naval ships and shore establishments."⁴⁷ The Marine Corps was a central point

⁴³ Keiser, 43-45, and specific prioritization of aircraft carriers by the Navy can be found in Barlow, *Revolt of the Admirals*, 131-157.

⁴⁴ Keiser, 8.

⁴⁵ James E. Hewes, *From Root to McNamara: Army Organization and Administration*, (Washington, D.C.: Center of Military History, U.S. Army, 1975), 135.

⁴⁶ As cited by Hewes, 135, and Caraley, 28, 48.

⁴⁷ Heintz, 515.

of contention and focus. The Joint Chief of Staff papers further captured the continued emphasis on shrinking the Marine Corps to irrelevancy.

The Joint Chief of Staff papers (JCS 1478) encapsulated the most aggressive push toward the dissolution of the Marine Corps. Based on Senate and committee hearings, the classified documents spelled out the Army's plan for their desires in the defense unification process, emphasizing the differences in structure between the Army and the Navy.⁴⁸ According to Lieutenant General Victor Krulak, two significant conclusions were relevant to the Marine Corps. "First, we were distressed to see that the Navy members of the committee had agreed (without any consultation with the Marines) to the following among the stated "*Responsibilities of the Navy Department*": "To maintain a Marine Corps for the execution of minor operations in war and peace, and to supply requisite minor garrisons and naval guard services afloat and ashore." We had no illusion as to what the term "minor" could be made to mean when dollars were short, and two or three other services were calling the shots. Second, we were disturbed to see that the document was classified as "Top Secret." There was no reason to treat it with that high degree of sensitivity, but as long as it was thus classified, we could not use the 1478 papers to show what the other services were planning for the Marines' future."⁴⁹

General Eisenhower and General Carl Spaatz (U.S. Army Air Corps) favored JCS 1478 papers and the classification level.⁵⁰ General Eisenhower did not support the complete dissolution of the Marine Corps. However, his emphasis on a smaller, reduced size and role would limit resources for an already struggling service, effectively undermining its capabilities.⁵¹

⁴⁸ Krulak, *First to Fight*, 33.

⁴⁹ Krulak, *First to Fight*, 33.

⁵⁰ Krulak, *First to Fight*, 34.

⁵¹ Keiser, 50-51.

In addition to General Eisenhower's extreme limitations, General Carl Spaatz added another decisive blow by advocating the Air Corps' complete control of land-based aviation.⁵² If approved, the proposals would make the Marine Corps too small and ineffective for future conflicts. With such reductions, the next logical step would be to completely dissolve the Marine Corps and redistribute its funds to the larger military branches. Securing monetary funds was a primary goal for all military services, but the spending plans varied between branches. For the Marine Corps to survive any unification efforts, they needed to find a way to access appropriated funds. Those who held control of the Joint Chiefs of Staff directly regulated these funds and set national defense priorities.

Defense Unification Plans

The official restructuring plan presented by the Army was called the "Collins Plan," named after Lieutenant General J. Lawton Collins. As the plan's spokesman, General Collins did not advocate a complete merger of services but did advocate for a single military chief of staff.⁵³ The Army's primary goal in this proposal was to limit the access of the other services to the President and Congress. As the largest branch, the Army would undoubtedly hold the chief of staff position and thus command and control the entire military policy and budget moving forward.

In addition to the Army's primary plan, senior Army Generals voiced their concerns and ideas to Congress. General Eisenhower was a highly admired and trusted advisor to the American people, and what he said mattered. Although he claimed not to be interested in having the Army completely consume the Marine Corps, he did express a desire to severely limit the

⁵² Keiser, 50-51.

⁵³ Keiser, 25.

Marine Corps in size and scope. According to his Joint Chiefs of Staff proposal to Congress, General Eisenhower expressed his belief that the Marine Corps should be limited in size and organized in units no larger than a regiment and lightly equipped for minor operations against objectives in which the Navy is primarily interested, and for employment as interior guards of naval vessels and the guarding of shore establishments. He also stated that Marine Corps units the size of divisions should not exist and that a division size unit in the Marine Corps would infringe on an Army function.⁵⁴

The Eberstadt Report, named after its author, Ferdinand Eberstadt, who served as the former Chairman of the Army-Navy Munitions Board, provided a comprehensive overview of the U.S. Navy's strategic priorities in the aftermath of World War II. To navigate the complexities of military organization in the postwar era, Secretary of the Navy James Forrestal tasked Eberstadt with examining how the military services would operate going forward.⁵⁵ Upon its release, the report was generally well-received by the Marine Corps, as it acknowledged their contributions and importance within the broader context of U.S. military operations. However, a takeaway from the report was its clear stance against the unification of the military services. The Navy, in particular, was persistent about maintaining its status as an independent service, viewing itself as essential to national security alongside the Army.

Despite the Navy's nuanced support of the Marine Corps, the report highlighted the limitations of this support. The Navy's priorities were increasingly focused on addressing budget constraints, enhancing naval aviation capabilities, and advancing the development of new aircraft

⁵⁴ Demetrios Caraley, *The Politics of Military Unification* (University Presses of California, Columbia and Princeton, 1966), 133. The size of a division varies, but it is typically commanded by a Major General (two-star General) and ranges from 10,000 to 15,000 personnel.

⁵⁵ Keiser, 17.

carriers. These critical concerns took precedence over the existence and funding of the Marine Corps. This prioritization became more apparent during testimonies from Navy leadership, including statements made by James Forrestal himself. He indicated a troubling readiness to "sacrifice the Corps if that is what it took to preserve naval aviation," revealing the stark reality faced by the Marine Corps in an era marked by shifting military priorities.⁵⁶ Consequently, the Marine Corps found itself in a precarious position, advocating fiercely for its survival while grappling with an uncertain future amongst the Navy's agenda. The report and its implications emphasized a challenging dynamic within U.S. military strategy, where loyalty and resource allocation were increasingly at odds with Marine Corps survival.

The Marine Corps' most significant obstacle was the Army Air Corps, led by General Carl A. Spaatz. General Spaatz's priorities and strategic ideals differed from those of the Army and the Navy. Spaatz advocated, first and foremost, for an independent Air Force. Second, he believed all land-based aviation assets belonged to the Air Force. In a strategic sense, General Spaatz expressed, "The Army Air Forces can perform all the functions of the armed forces requiring the land-based aircraft. I recommend that they be charged with this responsibility in Its entirety, thus ensuring maximum use of the inherent flexibility of air power."⁵⁷ In the mid to late 1940s, Army Air Forces personnel firmly believed they had decisively ended World War II through strategic bombing. With the use of atomic weapons, they thought that the same bombing tactics would have the same effects in future conflicts.⁵⁸

⁵⁶ Krulak, *First to Fight*, 32-33.

⁵⁷ Jeffrey G. Barlow, *Revolt of the Admirals: The Fight for Naval Aviation, 1945-1950*, (Washington D.C.: Naval Historical Center, Dept. of the Navy, 1994), 35.

⁵⁸ Jeffrey G. Barlow, *Revolt of the Admirals: The Fight for Naval Aviation, 1945-1950*, (Washington D.C.: Naval Historical Center, Dept. of the Navy, 1994) 108-109.

Each service outlined priorities based on its unique capabilities. The Army was gaining an advantage in the push for unification, which put Marine Corps leadership in a defensive position. The Marines recognized that their proficiency in amphibious warfare was under threat, particularly from the Army Air Corps, which challenged their aviation forces. General Vandegrift and his staff understood the necessity of updating their amphibious tactics and strategy and knew they needed to take action to buy time before it became too late.

General Vandegrift “No bended Knee”

General Alexander A. Vandegrift fought his first battle as the Marine Corps Commandant and the highest-ranking Marine officer on American soil. This battle was fought not with weapons but with words and persuasion. General Vandegrift joined the Marine Corps in 1909 and participated in military campaigns, including the Banana Wars and World War II. His extensive experience and expertise led to several promotions, ultimately resulting in his appointment as Commandant of the Marine Corps in January 1944.⁵⁹ In his memoirs, General Vandegrift details the issues he inherited and the problems he had to overcome in the fight for USMC's survival.

In response to the attacks on the Marine Corps and the explicit plans outlined in JCS 1478, Major General Vandegrift took decisive steps to protect the Corps. With the assistance of senior Marine Corps officers, he crafted a speech that aimed to provide the Marine Corps with the necessary breathing room to survive. On May 10, 1946, General Vandegrift delivered this speech to Congress and the public.⁶⁰ During his address, he characterized the unification plans as direct threats to the Marine Corps and emphasized the inadequate protection the Corps would

⁵⁹ A. A. Vandegrift and Robert B. Asprey, *Once a Marine: The memoirs of General A. A. Vandegrift Commandant of the U.S. Marines in WWII*, (Marine Corp Assn Bookstore, 1982).

⁶⁰ Krulak, *First to Fight*, 37.

receive from other military branches.⁶¹ Without disclosing the confidential details of JCS 1478 (classified as "Top Secret"), he expressed his concerns for the future of the Marine Corps and directly appealed to Congress for a decision.

In the closing remarks of his speech, he stated, "The Marine Corps believes that it has earned this right—to have its future determined by the legislative body which created it—nothing more...The bended knee is not a tradition of our Corps. If the Marine, as a fighting man, has not made a case for himself after 170 years of service, he must go..."⁶² General Vandegrift's powerful testimony galvanized public support nationwide, breathing new life into the Marine Corps and successfully halting the planned unification.⁶³ His speech reiterated the Marine Corps' battlefield successes and leaned on its legacy. However, he recognized that this momentary victory would merely postpone future challenges to the Marine Corps. To truly secure its place in the atomic age, the Marine Corps must present compelling evidence of its importance and relevance in addition to war.

The debates and discussions of defense unification came to a halt in 1947. On July 26, President Truman signed what would become known as the National Security Act and, shortly after, Executive Order 9877, "Functions of the Armed Forces." However, these actions only temporarily ended a three-year battle in Washington, D.C. Although a political ally of the Marine Corps, James Forrestal, was appointed the first Secretary of Defense, the Marine Corps still had an uphill fight. The bills effectively created an independent Air Force and, on a positive note, gave the Marine Corps military functions in statutory language. The law rejected the proposal for

⁶¹ Alexander Vandegrift and Robert B Asprey, *Once a Marine: The Memoirs of General A.A Vandegrift, United States Marine Corps*, (New York: Ballantine Books, 1982), 316-318.

⁶² Alexander Vandegrift, 318.

⁶³ Krulak, *First to Fight*, 38.

a single chief of staff and established the JCS. However, the Marine Corps was again excluded, not given a seat at the table, and not acknowledged as a separate military branch.⁶⁴

The National Security Act's celebratory period was short-lived. In October 1947, General Spaatz claimed that separating aircraft by tactical and strategic value was wrong.⁶⁵ He wanted to emphasize that the newly independent service of the Air Force should maintain and control all aviation assets as the sole Air Force.⁶⁶ He focused primarily on the money spent on Navy and Marine Corps aircraft, which he believed would be better spent in the hands of the Air Force. In Washington, while debates and discussions unfolded, the search for improved technology and military advancement continued unabated. The hot topic revolved around naval aviation, Army Air Corps aviation, and the idea of an independent Air Force, which led military leaders to test out the new vertical rotor-winged aircraft: the helicopter.

Amphibious Operations

Amphibious operations became the Marine Corps' calling card. Since its inception, the Marine Corps has been closely associated with amphibious operations. According to historians Jeter A. Isley and Philip A. Crowl, "The most important contribution of the United States Marines to the history of modern warfare rests in their having perfected the doctrine and techniques of amphibious warfare to such a degree as to be able to cross and secure a very energetically defended beach."⁶⁷ The USMC is credited with developing and perfecting ship-to-shore amphibious landing tactics and doctrine in the 1920s and 1930s. These operations became a defining feature of the Marine Corps, its primary capability. Other branches looked to the

⁶⁴ Keiser, 112-113.

⁶⁵ Keiser, 129.

⁶⁶ Barlow, 56.

⁶⁷ Jeter A. Isley and Philip A. Crowl, *The U.S. Marines and Amphibious War: Its Theory, and Its Practice in the Pacific* (New Jersey: Princeton University Press, 1951), 3.

Marines regarding amphibious assault. The Army based its amphibious assault doctrine on the Marine Corps *Tentative Manual on Landing Operations*, published in 1934.⁶⁸

During the Second World War, the United States Army primarily operated in the European theater, while the Marine Corps concentrated its efforts on Japan and the Pacific. The Army conducted several notable amphibious landings in African and European theaters, including D-Day operations at Normandy.⁶⁹ In the most critical amphibious assault in the European theater, the USMC was involved with only around 700 troops. The Allied coalition, spearheaded by the United States Army under the command of General Dwight Eisenhower, launched the invasion of Normandy, France. This operation remains the largest amphibious assault to date. With nearly 3.5 million troops participating, the assault on the beaches of Normandy demonstrated that the United States Army was just as capable as the USMC in executing amphibious landings and assaults.⁷⁰ This success of the Army only further reignited discussions about the Marine Corps being an expensive duplication of effort.

Although the Army assimilated lessons from Marine Corps doctrine, it adopted a distinct methodology for conducting amphibious operations. According to the biography of Fleet Admiral Ernest J. King, the Army argued that its tactics resulted in fewer casualties, but the Marines' approach was quicker. Capturing an island would take the Army longer, exposing the naval fleet to more danger and forcing the ships to remain in restrictive waters to support operations. Admiral King believed that, from the Navy's perspective, the Marine Corps' method

⁶⁸ Montross, 39.

⁶⁹ Historian Lynn Montross highlights Marine instructors trained four U.S. infantry divisions in amphibious operations. Three of these divisions were essential in the landings at Oran, Casablanca, and Normandy, while the fourth effectively operated in the Pacific, including Attu and Okinawa

⁷⁰ *D-Day; the Greatest Invasion*, The Army Times, (New York: Putnam, 1969), 1-5.

of conducting amphibious assaults was superior.⁷¹ Despite these adaptations, the Army leveraged this capability to bolster its claims about mission duplication. In the eyes of a budget, there is a trivial difference between the capabilities provided by the Army and the Marine Corps. Ironically, this was not the last instance in which the Army appropriated concepts from the Marine Corps and presented them as its own to gain an advantage.

The Marine Corps understood the landings successfully conducted by the Army as a problem. Due to the Army's demonstration of similar capabilities, the need for a future Marine Corps was questioned. Army leaders challenged the need for a Marine ground element by suggesting that the Army's air and ground arm could deal with future operations.⁷² General Vandegrift emphasized recognizing the Marine Corps' expertise in amphibious operations. He believed the Army underestimated an integrated air-ground force's unique capabilities and potential.⁷³ A few years later, events confirmed General Vandegrift's concerns regarding the threats to the Marine Corps' existence. His top priority was demonstrating the necessity and value of Marine Corps amphibious operations for future conflicts. Eight months later, establishing HMX-1 became his most decisive response to this internal challenge.

The Birth of HMX-1

The end of World War II brought two challenges for the Marine Corps: demobilization and defense unification. According to Marine Corps General Victor H. Krulak, the Corps had to contend with "[the] bone-deep hostility to the Marine Corps entertained by the army as well as

⁷¹ Thomas B. Buell, *Master of Sea Power: A Biography of Fleet Admiral Ernest J. King*, (Boston: Little Brown, 1980), 359.

⁷² Millett, *Semper Fidelis: The History of the United States Marine Corps*, 452.

⁷³ Millett, 452.

the service's determination to engineer the elimination of the Corps.”⁷⁴ As the head of the Marine Corps, General Alexander Vandegrift took on the brunt of this fight, which would continue years after his retirement in 1949. However, even before the war’s end, General Vandegrift knew that demobilization was inevitable, and he understood the delicate nature of downsizing a branch that had reached 500,000 officers and enlisted troops. Although there was not yet an established force size by law, General Vandegrift had established a plan before the end of WWII to maintain 108,000 marines, 8,000 officers, and 100,000 enlisted personnel.⁷⁵ The difficulty of such a drastic change was ensuring the Marine Corps did not become obsolete and could not carry out military operations. Demobilization was only one issue that General Vandegrift would face regarding the service's size and capabilities.

In addition to demobilization, Defense Unification forced the military services to highlight their unique capabilities in support of national security. In response, the Marine Corps refocused on its amphibious roots to distinguish itself from being seen as a second army. Army leaders believed the type of Marine Corps that fought during World War II would not be necessary.⁷⁶ The focus of their argument was the development of nuclear weapons. Nuclear developments led military leaders to question the feasibility of conducting amphibious assaults in future wars. The Marine Corps watched the nuclear tests along with the other services, but they came to a different conclusion.

⁷⁴ Merrill B. Twining and Neil G Carey, *No Bended Knee: The Battle for Guadalcanal*, (Novato, CA: Presidio, 1996), xi.

⁷⁵ Alexander Vandegrift and Robert B Asprey, *Once a Marine: The Memoirs of General A.A Vandegrift, United States Marine Corps*, (New York: Ballantine Books, 1982), 295. Congress established the peacetime strength of the Marine Corps to be 107,000 in 1945, Heinl, 500.

⁷⁶ Millett, *Semper Fidelis: The History of the United States Marine Corps*, 452.

Marine Corps General Roy Geiger observed the nuclear tests during Operation Crossroads at Bikini Atoll in the Summer of 1946.⁷⁷ General Roy S. Geiger was a figurehead in Marine Corps aviation as Marine Corps pilot #5. He held active roles in WWI and WWII and was well-trusted as a leader and pilot. Immediately after witnessing the nuclear tests, he wrote the Commandant of the Marine Corps. Addressed on August 21, 1946, a letter to General Alexander Vandegrift was sent, "It is my opinion that future amphibious operations will be undertaken by much smaller expeditionary forces, which will be highly trained and lightly equipped and transported by air or submarine, and movement accomplished with a greater degree of surprise and speed than has been heretofore visualized."⁷⁸ General Geiger passed away from complications related to lung cancer less than six months after advocating for a review of amphibious operations. However, the urgency in his letter invoked immediate action and a sense of readiness in the Marine Corps.

General Vandegrift was already familiar with the possible benefits of aviation and had an open mind about their use in the future. Early in his career, he trained at Quantico and participated in regular field exercises before major events. He recognized the essential role of aviation in these maneuvers. Vandegrift had always been interested in the air arm; his thesis at the School of Application in 1909 was titled "Aviation: The Cavalry of the Future," reflecting his

⁷⁷ Alan, Millet, *In Many a Strife: General Gerald C. Thomas and the U.S. Marine Corps, 1917-1956*, (Annapolis, Md: Naval Institute Press, 1993), 250.

⁷⁸ Roy S. Geiger Collection, COLL/2349, Ltr to CMC, August 21, 1946, Archives Branch, Marine Corps History Division, Quantico, VA; "Under the assumption that atomic bombs can be produced in large quantities, that they can be used in mass attacks against an enemy objective, and that our probable future enemy will have in possession of this weapon, it is my opinion that a complete review and study of our concept of amphibious operations will have to be made. It is quite evident that a small number of atomic bombs could destroy an expeditionary force as it is now organized, embarked, and landed. Such a force might not fare so badly on the high seas if properly dispersed...It is my opinion that future amphibious operations will be undertaken by much smaller expeditionary forces, which will be highly trained and lightly equipped and transported by air or submarine, and movement accomplished with a greater degree of surprise and speed than has been heretofore visualized."

early thinking. However, it was marked as 'unsatisfactory,'” it showcased his early vision on the subject.⁷⁹

General Vandegrift took General Geiger’s advice seriously and established a special board of senior officers to examine the matter. The board's focus centered on addressing ship-to-shore amphibious landings and assaults amidst the emerging atomic threat.⁸⁰ The board consisted of trusted and tested Marine Corps officers. Known as the Shepherd board, it consisted of three Major Generals, Lemuel C. Shepherd Jr., Oliver P. Smith, and Field Harris, and a Secretariat of three more officers, Colonel Merrill B. Twinning, Colonel Edward C. Dyer, and Colonel Samuel R. Shaw, were all given General Roy Geiger’s letter. Along with special instructions from the Commandant, “The Special Board...is directed to propose, after thorough research and deliberation, the broad concepts and principles which the Marine Corps should follow, and the major steps which it should take, to fit it to wage successful amphibious warfare at some future date...”⁸¹ The six men had experience in military command, war, and staff positions, and as they dissected the problem, the solutions began to take hold. Colonels Twinning and Dyer were instrumental in creating the helicopter program within the group. Although Colonel Dyer was initially skeptical of helicopters, his aviation experience and procurement ability were vital in getting the program off the ground.⁸²

As they digested the problem, dispersion became the main focus in response to the atomic threat. While other branches of the military considered using nuclear weapons and the

⁷⁹ Vandegrift, 63.

⁸⁰ Aaron B. O’Connell, *Underdogs: The Making of the Modern Marine Corps*. Cambridge, (Massachusetts: Harvard University Press, 2012), 14.

⁸¹ CMC letter to Chairman, Special Board, dated September 13, 1946, Subject: Effect of Atomic Explosion on Amphibious Warfare; Rawlins, 12.

⁸² Twinning, *No Bended Knee*, 191-193.

offensive capabilities required for their deployment, the Marine Corps emphasized the adversary's potential and future capabilities of atomic weapons against the United States. Their focus was on conducting future amphibious operations with the understanding of an enemy with tactical atomic capabilities. The board knew the task was about more than developing proposals for alternatives to the amphibious techniques used during the nation needed a reason to keep the Marine Corps in the post-war drawdown years.

The Special Board of 1946 aimed to provide viable options for the Marine Corps as it sought to remain relevant. Recognizing that atomic weapons would affect traditional beach assaults, the board emphasized the importance of dispersion and speed in future amphibious operations. It explored various methods for projecting combat power ashore, including gliders, submarines, transport aircraft, and parachutists. Although the Marine Corps did not own a helicopter, the board unanimously agreed on the potential of helicopters and recommended further examination of their use. General Vandegrift accepted the results, and three days later, he directed the implementation of a helicopter program to redefine amphibious assault with what would later be called vertical envelopment.⁸³ His swift and decisive action demonstrated his commitment to adapting the Marine Corps to survive.

In April 1947, another group of officers generated the Erskine board report. The board convened to inquire about and make recommendations regarding the size and organization of the peacetime establishment of aviation.⁸⁴ Consisting of aviators and ground officers, this board debated the importance of Marine Corps aviation. Within the results, they noted the importance of continuing the development of the helicopter. "Developments of major significance to the fleet

⁸³ Rawlins, 14.

⁸⁴ Erskine Board Report April 30, 1947, Amphibious files Coll/3634, Box 18, Archives Branch, Marine Corps History Division, Quantico, VA.

marine forces are already apparent in such projects as the flying LST and the transport helicopter...If the development proves completely successful, it may very well become a principal and major element of general air support.”⁸⁵ The board's review emphasized the continuance of efforts, and in conjunction with the Shepherd board report, the Commandant of the Marine Corps recommended to the CNO that HMX-1 be created.⁸⁶

Under the leadership of General Vandegrift and his team of trusted Marine officers, the Marine Corps recognized the need to adapt amphibious warfare strategies in response to the atomic age. Establishing the Shepherd board brought together experienced leaders to explore solutions to ensure the Marines remained relevant in the changing defense landscape. The Marine Corps laid the groundwork for survival by prioritizing speed and agility, focusing on dispersion and the integration of helicopters. The challenges highlighted the benefits of diversity in thought and Marine Corps adaptability. The Marine Corps' capacity to innovate and respond to new circumstances exemplifies the spirit essential for success in the complex national defense environment. Vandegrift's proactive approach addressed immediate concerns and reinforced the Marine Corps' role within the broader military structure during uncertainty. Ultimately, General Vandegrift secured more time for the Marine Corps to “fight another day” and allowed the next Marine Corps Commandant to continue solidifying Marine Corps survival with the support of HMX-1.

⁸⁵ Erskine Board Report April 30, 1947, Amphibious files Coll/3634, Box 18, Archives Branch, Marine Corps History Division, Quantico, VA, 13-14.

⁸⁶ Rawlins, 14.

Chapter 2: A Seat at the Table: From Concepts to Operations 1947-1953

General Alexander Vandegrift retired as Commandant of the Marine Corps on December 31, 1947. As General Vandegrift turned his seat over to General Clifton Cates, he knew the threat to the independent Marine Corps was not over. The signing of the National Security Act and President Truman's Executive Order 9877, "Functions of the Armed Forces," reorganized the US military. Military authority was centralized into what was initially called the National Military Establishment and later renamed the Department of Defense. The new system gave the Marine Corps some legal protections. The act and the order were enacted to streamline the United States military by restructuring and reorganizing after the substantial influx of personnel during WWII. However, the new system did not guarantee the long-term survival of the Marine Corps. The final discussion and drafting of both documents excluded the Marine Corps leadership, and this lack of collaboration and participation was directly reflected in each document. Indeed, the immediate postwar period was referred to as the "dark days" by General Gerald Thomas and Colonel Robert D. Heinl. They recalled that the Marine Corps became increasingly marginalized in decisions that impacted its future.⁸⁷

General Vandegrift passed on to General Cates his three concerns about the future of the Marine Corps. He recommended reorganizing the entire Marine Corps fighting force to address the atomic threat, making it less vulnerable, reducing reaction time, and enhancing preparedness. The second step was to determine the most effective use of atomic weapons.⁸⁸ The two primary concerns led to the helicopter and the creation of a helicopter squadron, HMX-1. From 1947 to

⁸⁷ Gerald C. Thomas, Interview by Benis M. Frank, Transcript, 1966 Quantico, Virginia, Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 298.

⁸⁸ Vandegrift, 322.

1949, the Marine Corps progressed in helicopter development and application in amphibious operations; however, skepticism remained. There was notable opposition regarding the necessity of amphibious landings in future conflicts. Influential leaders such as the Chairman of the Joint Chiefs of Staff, General Omar N. Bradley, United States Army (USA), remarked in late 1949, “Large-scale amphibious operations will never occur again.”⁸⁹ General Bradley was wrong.

This chapter examines the period of the Marine Corps following the slight relief provided by the National Security Act of 1947. The act lacked specific protection for the Marine Corps size and, more importantly, left them out of the JCS table. Without such representation, how did the Marine Corps continue to survive threats to its existence? HMX-1 and its personnel were important in the survival and growth of the Marines, particularly during the Korean and Vietnam Wars, and became the exclusive transport for the President of the United States (POTUS). This part of the history of HMX-1 is well-documented but lacks a discussion of the role in politics and defense of the Marine Corps.⁹⁰

Historians have noted that the National Security Act of 1947 did little to fix the problems of organizational reform and the roles and missions assigned to the military services.⁹¹ The new military governance system excluded the Marine Corps from the Joint Chiefs of Staff, making it clear that a Marine perspective was not desired on the Joint Staff. As a result, the Marine Corps

⁸⁹ General Omar Bradley, USA, quoted in Col Robert D. Heintz, USMC (Ret), “The Inchon Landing: A Case study in Amphibious Planning (May 1967),” *Naval War College Review*, 51, No.2, 1998, 118.

⁹⁰ Lynn Montross, *Cavalry of the Sky: The Story of U.S. Marine Combat Helicopters*, (Harper & Brothers, 1954).

⁹¹ Michael J. Hogan, *A Cross of Iron: Harry S. Truman and the Origins of the National Security State, 1945-1954*, (Cambridge: Cambridge University Press, 1998), He stated, “The exchange of tantrums between the Air Force and the Navy, not to mention the revolt of the admirals, underscored the complete failure of the National Security Act. The military establishment had been unable to dampen interservice disputes or work out reasonable assignment of roles and missions...It also called into question the efficacy of the Joint Chiefs of Staff and fed the demand for organizational reform,” 194.

was not included in strategic planning and received no guarantees of its future involvement in the nation's defense.⁹² General Vandegrift knew that the executive order would stand no chance against any future President or Secretary of Defense with disdain of the Marine Corps who wished to omit their roles and functions.⁹³ It did not take long for such a person to take office. In 1949, Louis A. Johnson assumed the position of Secretary of Defense from James Forrestal. Unlike Forrestal, who had a soft spot for the Marine Corps, Johnson hated the Marines and immediately cut their budget and manpower.⁹⁴ The next Marine Corps Commandant, General Clifton B. Cates, recognized that the Marine Corps' fight for survival was ongoing. "In mid-1948, General Cates told a newspaper reporter, my biggest worry is to keep the Marine Corps alive. There are lots of people here in Washington who want to prevent that, who want to reduce us to the status of navy policemen or get rid of us entirely."⁹⁵

In Chapter 1, the historical context established the groundwork for the formation of HMX-1. It emphasized the contributions of various individuals through a collaborative exchange of ideas and the interactions between civil and military authorities that shaped policy. In comparison, the text presents valuable ideas and concepts. Chapter 2 details how these were effectively transformed into practical tools that impacted the battlefield and shaped the perceptions of Congress and the American public.⁹⁶

⁹² Victor H. Krulak, *First to Fight: An Inside View of the U.S. Marine Corps*, (Annapolis, MD, Naval Institute Press, 2013), 52-53.

⁹³ Alexander Vandegrift and Robert B Asprey, *Once a Marine: The Memoirs of General A.A Vandegrift, United States Marine Corps*, (New York: Ballantine Books, 1982), 324.

⁹⁴ Aaron B. O'Connell, *Underdogs: The Making of the Modern Marine Corps*, (Cambridge, Massachusetts: Harvard University Press, 2012), 126.

⁹⁵ Robert Debs Heinl, *Soldiers of the Sea: The United States Marine Corps, 1775-1962*, (Annapolis: United States Naval Institute, 1962), 524.

⁹⁶ Gordon W. Keiser, *The US Marine Corps and Defense Unification 1944-47: The Politics of Survival*, (Washington, DC: National Defense University Press, 1982); Demetrios Caraley, *The Politics of Military Unification; A Study of Conflict and the Policy Process*, (New York: Columbia University Press, 1966);

This chapter introduces the establishment of HMX-1 and its early actions as the newest unit in the Marine Corps, testing, evaluating, and demonstrating helicopter capabilities. Next, it covers the advent of the Korean War and the impact of helicopters in combat and strengthening the Marine Corps, which led to greater civilian support and the passing of the Marine Corps bill in Congress in 1952. This chapter will demonstrate that HMX-1 strengthened the Marine Corps through advancements in helicopter technology. By effectively utilizing helicopters, HMX-1 Marines developed tactical and doctrinal innovations that were ready for validation during the Korean War. This conflict served as a further proof of concept for the Marine Corps, which helped secure additional support for its continued existence. The Marine Corps had to go beyond rhetoric to defend its legacy, traditions, and survival. Rivalries among military branches ignited a spirit of competition during the Cold War era, shifting the focus towards the Marine Corps' strategic and technological advancements to reaffirm value.

The Marine Corps' only defense for survival was to continue to gain support in Congress and the public. To accomplish this, the helicopter and HMX-1 flew to the forefront. Marine Helicopter Squadron One played a crucial role in the survival of the Marine Corps by embracing helicopter aviation at an early stage. From 1949 to 1958, HMX-1 emphasized the importance of encouraging diverse sources of military innovation to foster competition and progress among the services. The squadron influenced military capabilities and strategy by emphasizing the complex interactions of politics, civil-military relations, and interservice rivalries.

and Robert Debs Heinl, *Soldiers of the Sea: The United States Marine Corps, 1775-1962*, (Annapolis: United States Naval Institute, 1962).

The First Helicopter Unit

The U.S. military began testing helicopters in the 1930s. However, they were deemed unsuitable for military use due to their limited lift capacity of only 200 pounds.⁹⁷ Not until after World War II did helicopters regain attention in military applications. The establishment of Marine Helicopter Squadron One in 1947 marked a turning point, as it paved the way for integrating helicopters into Marine Corps combat operations. HMX-1 showcased its capability to transport Marines from ship to shore and conduct observation missions for artillery during training exercises in 1948 and 1949.⁹⁸ However, HMX-1 was behind schedule in advancing the helicopter due to continued limitations in the lift capacity of the early helicopter models.⁹⁹ Another problem was the conflicting goals of introducing helicopters into squadrons while reducing the number of active aviation units to meet budget constraints, which restricted the Marine Corps.¹⁰⁰ From July 1948 to July 1950, the Marine Corps was required to decrease its aviation strength from 23 units to 12 units. The decrease also affected research and development (R&D), production, and operational funds.¹⁰¹ Marine Corps planners struggled to continue developing the helicopter with such restrictions, but HMX-1 persisted.

The command of HMX-1 is unique compared to other units in the Marine Corps. On December 1, 1947, Colonel Edward Dyer became the first Commanding Officer of the newly established Marine Helicopter Experimental Squadron One (HMX-1). The squadron consisted

⁹⁷ Eugene W Rawlins and William J Sambito, *Marines and Helicopters, 1946-1962*, (Washington: History and Museums Division, Headquarters, U.S. Marine Corps, 1976), 1-2.

⁹⁸ Rawlins, 26-27.

⁹⁹ The early helicopters had limited capacity for personnel. The HRP-1 was capable of carrying two crewmen and 8–10 passengers or 2,000 lbs and the HO3S-1's could only lift three people. The overall goal for the Marine Corps was to be able to lift an entire regimental combat team (RCT) into the battlefield. An RCT consisted of 4000-5000 troops. Rawlins, 24-25.

¹⁰⁰ Rawlins, 33.

¹⁰¹ Rawlins, 33.

of only nine personnel: eight officers and one enlisted Marine. They had no helicopters at its formation, and none of the troops had ever flown in one. Despite this, the unit was established with two specific missions assigned by the Commandant of the Marine Corps. The first mission was to "develop techniques and tactics for the movement of assault troops by helicopter in amphibious operations." The second directive was to "evaluate a small helicopter as a replacement for the existing O.Y. type aircraft for gunfire spotting, observation, and liaison missions in connection with amphibious operations."¹⁰² Both missions highlighted the Marine Corps' focus on improving amphibious operations in the context of the emerging era of atomic weapons. HMX-1 received its first helicopters in February 1948, and the unit quickly began its work.

The new helicopter technology captured the attention of every military branch. However, many remained skeptical about its application for military requirements. Before taking command of HMX-1, Colonel Edward Dyer addressed the Commandant in a letter emphasizing that helicopter development would continue and eventually meet the Marine Corps' needs. Concurrently, other branches started to invest in helicopters. The Navy and the Air Force began to develop a larger helicopter, the Piasecki XH-16, but the Air Force was only interested in a helicopter for search and rescue.¹⁰³ The Coast Guard sought out the same interests as the Air Force. The Army had acquired a few small helicopters in the late 1940s, but they were limited in lift capacity and not a priority for the organization.¹⁰⁴ Colonel Dyer, however, believed that the helicopter requirements for the Marine Corps were different and should develop independently from those of the Navy and the Air Force. Dyer envisioned a helicopter for the Marine Corps that

¹⁰² Montross, 79.

¹⁰³ Montross, 134.

¹⁰⁴ Rawlins, 38.

would suit operations from the decks of small Navy carriers. He explained in his letter, “Such a helicopter should be designed for carrier-based operations... capable of carrying a payload of 3,000 pounds (15 combat-ready Marines) and have sufficient fuel to operate in a radius of about 100 miles.”¹⁰⁵ This letter also received the endorsement of General Lemuel C. Shepherd, who was serving as the Commandant of Marine Corps Schools (MCS) in Quantico. Renowned for his forward-thinking approach, General Shepherd would later emerge as a passionate advocate for helicopter aviation during his tenure in Korea and as the Commandant of the Marine Corps. The MCS and HMX-1 collaborated to explore and develop innovative concepts for helicopter operations. These Marine Corps leaders firmly believed that helicopters held the potential to accomplish far more than other military branches recognized. Their conviction and determination would soon manifest groundbreaking achievements in the years ahead.

¹⁰⁵ As cited in Rawlins, 31, CO HMX-1 letter to CMC, dated June 25, 1949, Subj: Transport Helicopters, development and procurement of.

The first test for HMX-1 came during a training exercise called PACKARD II in May 1948, less than a year after the unit was established. As illustrated in Figure 1, one of HMX-1's primary objectives was to transport troops from the USS Palau to the shore using helicopters. Members of the Marine Corps Schools at Quantico planned the operation, with support from two personnel from HMX-1, to verify that the assigned tasks were appropriate and met the helicopter weight requirements.

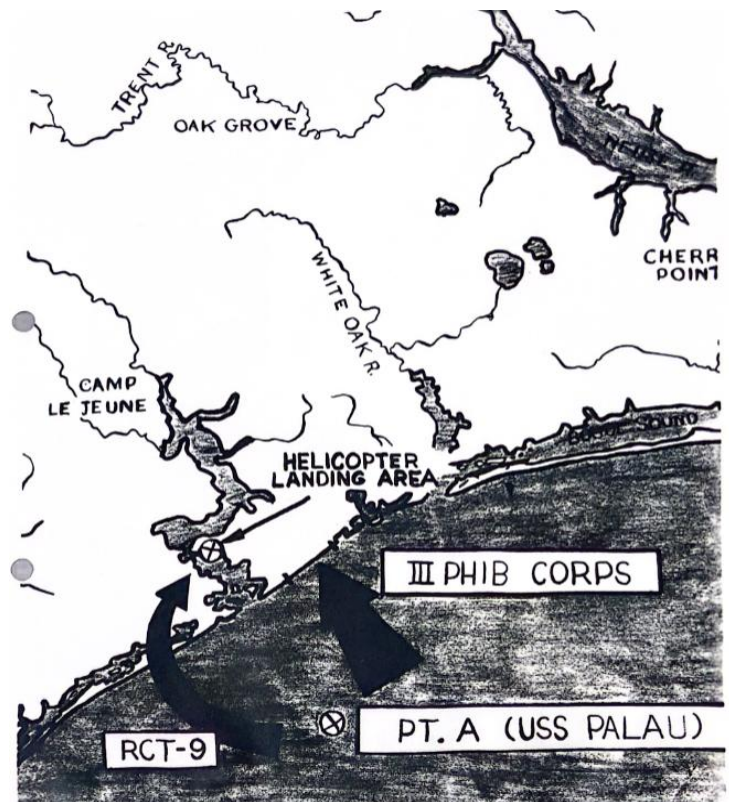


Figure 1, Operation Packard II, Camp Lejeune, NC. Amphibious files Coll/3634, Archives Branch, Marine Corps History Division, Quantico, VA.

The two HMX-1 pilots identified four objectives to assess the unit's progress. Although the objectives seemed straightforward, the inherent complexity of helicopter aviation presented challenges for military operations.¹⁰⁶ The first was to advance the development program by

¹⁰⁶ Operation PACKARD TWO Command post exercise 10-26 May 1948, Box 18, Historical Amphibious files, Collection 3634, Marine Corps Archives, Quantico, Virginia.

successfully landing troops with aircraft carrier-based helicopters. The second and third objectives were interrelated: the first focused on gaining experience in operating helicopters aboard a carrier, which would inform the creation of sound doctrine and policies for such operations; the second aimed at collecting expertise to prepare for more extensive operations. Lastly, the most crucial objective was determining the future requirements for landing troops via helicopters.

PACKARD II marked the beginning of the future role that HMX-1 would play in the survival of the Marine Corps in ensuring growth and relevance as a military service after WWII. At the time of the event, the squadron operated five HO3S-1 observation helicopters. Due to the aircraft's limited lift abilities and the uncertainties involved at the time, the helicopter phase of Packard II had certain restrictions.¹⁰⁷ Nonetheless, the operation was successful and provided valuable experience. At the end of the exercise on May 26, 1948, the concluding remarks and recommendations for future exercises were enough for the Marine Corps and HMX-1 to continue developing and pursuing transport helicopters. Some of the concerns were related to the capabilities of the current helicopter systems.

¹⁰⁷ According to Operation PACKARD TWO Command post exercise 10-26 May 1948, "It was decided that because of the many unknowns involved that only a minimum satisfactory performance would be sought rather than a maximum performance which might develop unforeseen difficulties, jeopardize the operation and destroy the opportunity for learning. The projected operations were therefore purposely limited and a number of artificialities were accepted but not to such an extent that the instructive value of the operation was reduced." This operation concluded, the HO3S-1 helicopter was not designed for troop transport, which meant that large troop movement was not feasible. To achieve quick landing in battle formation, the time taken and the limited capacity for troops during this operation highlighted the necessity of a transport helicopter that could accommodate at least eight passengers. Furthermore, the equipment was confined to operations in low-wind conditions up to 22 knots. To effectively operate in the high wind conditions typically encountered during carrier operations at sea, they identified that it was essential to develop anti-coning devices.

PACKARD II was successful in the eyes of Marine Corps leaders and participants. Shortly after the exercise, Colonel Dyer and Colonel Victor H. Krulak wrote what would become PHIB-31, also known as *Amphibious Operations—Employment of Helicopters (Tentative)*.¹⁰⁸ The 52 pages contained the ideas and capabilities of helicopters as understood by Colonel Dyer and Colonel Krulak. During an interview, Krulak explained later: "So, the two most enthusiastic people in the helicopter business in Quantico sat down and with no knowledge, nothing to inhibit us whatever, we wrote the book."¹⁰⁹ This publication was disseminated throughout the Marine Corps and gained interest across other military branches, and eventually, the Army copied it.¹¹⁰

Despite the wider recognition of helicopters within the Marine Corps, their role in combat operations was still a subject of debate. In addition to the debate of helicopters in combat, historian Gordon Keiser argued that military lobbying was indispensable during the early defense unification process, as it helped to gain political support for the Marine Corps as a worthwhile military service.¹¹¹ The Marine Corps employed a diversified and decentralized approach to lobbying, utilizing both direct and indirect tactics. According to Robert Heinl, "We took help wherever we could."¹¹² HMX-1's training events and operations were crucial for testing and demonstrating helicopter capabilities. On May 9, 1949, a turning point was reached when Marine Corps and Navy officers, as well as congressional legislators from the 81st Congress, witnessed demonstrations by HMX-1 in Quantico, Virginia.¹¹³ Marine air and ground forces executed a

¹⁰⁸ PHIB-31, *Amphibious Operations—Employment of Helicopters (Tentative)*, Box 14, Historical Amphibious files, Collection 3634, Marine Corps Archives, Quantico, Virginia.

¹⁰⁹ Victor H. Krulak, Interview by Benis M. Frank, Transcript, 1970 Quantico, Virginia. Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 122.

¹¹⁰ Lemuel C. Shepherd, Interview, 60, and Stanley S. McGowen, *Helicopter: An Illustrated History of Their Impact*, (Santa Barbara, Ca: ABC-CLIO, 2005), 61.

¹¹¹ Keiser, 123-129.

¹¹² Interview with Colonel Robert D. Heinl, Jr., 1970, As cited by Keiser, 127.

¹¹³ Rawlins, 26-27.

two-part demonstration during this event. The first part showcased Marine Corps assault preparations, which utilized eight helicopters to transport 56 infantry Marines in full combat gear. The congressional observers witnessed the helicopters' take-off and flyby, followed by the Marines' landing in the designated assault zone. Simultaneously, fighter aircraft laid smoke screens for the helicopter landings. The helicopters landed, deployed their troops, and departed within 25 seconds. In addition to troop deployment, the helicopters employed the "Aerial Crane" technique. The "Aerial Crane," also known as the "Flying Crane," involved the helicopter transporting a 75mm pack howitzer slung beneath the aircraft. During the demonstration, HRP helicopters delivered the large howitzers, which were then unhooked and positioned for the ground forces to use.¹¹⁴ These joint civilian orientation conferences became recurring events. During these events, HMX-1 demonstrated its capabilities through various operations, including landing troops, resupplying units, laying communication wires, conducting artillery spotting, and performing casualty evacuation. Such demonstrations began to pave the way for the future of helicopter operations in the Marine Corps.

Between Packard II and Packard III, HMX-1 experienced growth in both its officer and enlisted ranks. Immediately following the May 1949 congressional demonstrations, HMX-1 participated in another command post exercise at Camp Lejeune, North Carolina. The Packard III exercise marked the second time Marine Helicopter Squadron One participated in the Marine Corps Schools Amphibious Command Post Exercise, an essential initiative aimed at improving helicopter utilization in amphibious operations. Leading up to the event, the squadron's aircraft inventory expanded to include nine HRP-1 transport helicopters and one HTL-2 observation helicopter. More importantly, the squadron accumulated a wealth of practical experience through

¹¹⁴ As cited by Rawlins, 27.

rigorous training operations at Quantico and active participation in various fleet exercises, solidifying its expertise in helicopter operations.

Like Packard II, the plan for Packard III involved embarking on a segment of the landing force. HMX-1 had three primary objectives for this exercise. First, it aimed to achieve a notable advancement in the use of rotary-wing aircraft in amphibious warfare by employing transport helicopters for the first time in ship-to-shore movements. This initiative would contribute to formulating tactical doctrines and operational procedures, offering practical experience and encouraging innovative thinking regarding the operation of large transports from aircraft carriers and the movement of assault troops via these helicopters. Ultimately, the exercise aimed to evaluate the operational capabilities of a small observation helicopter launched from a landing ship for artillery and infantry observation and liaison purposes.¹¹⁵

The Packard III helicopter exercise was the most ambitious test to date. It aimed to validate the role of helicopter aviation in amphibious operations and the military. With only eight aircraft, the pilots from HMX-1 demonstrated the feasibility of vertical envelopment by airlifting personnel from the ship and transporting them to the rear of the beach area on land. While the original aim was to move a regiment in size, the swift and precise troop movement demonstrated the practical capabilities of helicopter aviation to observers.

The emerging technology of the helicopter prompted ongoing demonstrations for interested personnel both within and outside the Marine Corps. At that time, the aircraft was still in its infancy, and its initial flights featured prominent government officials and influential

¹¹⁵ *Operation PACKARD Three (III)*, U.S. Marine Corps Aviation Unit War Diaries & Unit Histories, 1941-1949, Marine Aircraft Wings, Records of the U.S. Marine Corps Record Group 127, From National Archives at College Park, College Park, MD.

figures, commonly referred to as VIPs. The flights shaped their perceptions of the technology and the Marine Corps. HMX-1 pilots recognized early on that flying political elites would be one of the most persistent missions.¹¹⁶ Although it would not be until a decade later that the most influential VIP would take their first flight on an HMX-1 helicopter, the unit was already contributing to the Marine Corps' reputation as a cutting-edge force in readiness.

More significant than the operations were the visitors present during the demonstrations, as they gained firsthand insight into Marine Corps capabilities and advancements achieved quickly. A particularly critical lobbying effort occurred in June 1950, when HMX-1 conducted a demonstration for President Truman, Joint Chiefs of Staff members, and other influential politicians. During this event, HMX-1 performed an airborne amphibious assault.¹¹⁷ The New York Times highlighted the significance of the Marine Corps in an article titled "Marines, to Win President, Storm 'Budget Beachhead.'" The article featured a photo of President Truman observing the demonstration through binoculars.¹¹⁸ In the two photographs below, Figures 2 and 3, President Truman and his staff observed HMX-1 training in action, witnessing firsthand the helicopter's capabilities for troop movement, spotting, and aerial reconnaissance. In the front row (Figure 3), President Truman observed the newly developed tactical use of helicopters on display. Like the demonstration presented to the 81st Congress the previous year, President Truman watched a simulated amphibious assault.¹¹⁹ Figure 2 depicts the deployment of Marines

¹¹⁶ Montross, 89.

¹¹⁷ Marks, Major Wesley R. Jr. (USMC), "A History of HMX-1: The Marine Corps' First Helicopter Squadron," Unpublished Research Paper, Command and Staff College, Marine Corps University Archives, Quantico, VA, 1981-82, 16.

¹¹⁸ Austin Stevens, "Marines, to Win President, Storm 'Budget Beachhead': TRUMAN WATCHING MARINES IN ACTION MARINES ASSAULT BUDGET BEACHHEAD Taking the Beachhead Everybody is there, President is Pleased," New York Times, June 16, 1950, <https://www.proquest.com/newspapers/marines-win-president-storm-budget-beachhead/docview/111687364/se-2>.

¹¹⁹ Rawlins, 27.

from helicopters as they landed in the assault zone and proceeded to the target area. In contrast, Figure 3 shows the helicopter taking off after dropping off artillery for use in the assault.

Although President Truman criticized the need for a Marine Corps, he acknowledged that the demonstration was impressive. According to Edward Dyer, President Truman asked the Army Chief of Staff General Collins why the Army was so far behind in developing helicopter tactics.¹²⁰ The results from the demonstration left an impact on Truman. He remarked, “The unification of the services has arrived, and what he witnessed showed an immense amount of the right training.”¹²¹ The Marines of HMX-1 led the training demonstration featuring the Piasecki "flying banana" helicopters. The following day, HMX-1 participated in a parade honoring General Lemuel Shepherd as he concluded his tenure at the MCS. The largest helicopter "fly-by" was executed during the parade, with 13 HMX-1 helicopters soaring overhead.¹²² The demonstrations led by HMX-1 garnered more support from Congress for the Marine Corps.¹²³

¹²⁰ As quoted in Butler, 12-13, Edward C. Dyer, Interview by Benis M. Frank, Transcript, 1973 Quantico, Virginia. Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 234.

¹²¹ Stevens, 2.

¹²² Montross, 105; Rawlins, 28; Marks, 16;

¹²³ Horn, 73-74.



Figure 2: President Truman visits the HMX-1 helicopter training demonstration aboard Quantico Marine Base on June 15, 1950. Collection HST-PHC: Photograph Collection. Harry S. Truman Library, Independence, Missouri.



Figure 3: Helicopter maneuvers being observed during President Harry S. Truman's visit to the U. S. Marine Base, Quantico, Virginia. President Truman is fourth from the left in the front row. All others are unidentified; Collection HST-PHC: Photograph Collection. Series: Photographs Relating to the Administration, Family, and Personal Life of Harry S. Truman. Harry S. Truman Library. Independence, Missouri.

HMX-1 in Korea

The rapid success of helicopters during the Korean War contributed to the development of helicopter aviation and personnel growth within the Marine Corps. HMX-1 has always been a non-deployable unit. However, it has significantly impacted domestic and foreign roles and missions on behalf of the Marine Corps. The reliance on HMX-1 training, personnel, and doctrine during the Korean War was substantial. The pilots of HMX-1 emerged as influential leaders within the Marine Corps during this conflict. For instance, in 1950, the Marine Corps conducted a landing at Inchon, South Korea, and HMX-1 took a critical indirect role in the operation. Given that helicopter technology was still in its infancy, there was considerable overlap in personnel across various helicopter units. HMX-1's impact extended beyond the Marine Corps, influencing other branches of the United States military. The Korean War presented an opportunity for the Marine Corps to expand, and helicopters played a role in this process.¹²⁴

On June 25, 1950, war broke out in Korea. At the start of the Korean conflict, the JCS did not include the Commandant of the Marine Corps, General Clifton B. Cates. Not until late into the planning stages in Washington, D.C., did Cates manage to force his way into the discussions by offering the Marines to assist General Douglas MacArthur in the Pacific. The Marine Corps had plans to create two additional helicopter squadrons by 1953.¹²⁵ In July 1950, General Cates suggested that the Secretary of the Navy quickly increase the number of Marine Corps aviation

¹²⁴ Peter B. Mersky, *U.S. Marine Corps Aviation: 1912 to the Present*, (Baltimore, Md: Nautical & Aviation Publishing, 1998), 128.

¹²⁵ Carl John Horn III, "Military Innovation and the Helicopter: A Comparison of Development in the United States Army and Marine Corps, 1945–1965," Order No. 3124083, The Ohio State University, 2003, 100.

squadrons, but the Chief of Naval Operations strongly opposed his recommendation.¹²⁶

Unbeknownst to HMX-1's personnel, the Korean War was a big break in development as they tested the helicopter in combat and continued developing the tactics and doctrine under extreme conditions. It was also quickly determined that there was an urgent need to expand and increase the Marine Corps' helicopter units.

The Korean War and the Marine Corps' role in the Inchon landing drastically changed the requirements for downsizing. On July 2, 1950, General Douglas MacArthur, the Supreme Commander of United Nations forces, requested the deployment of a Marine Corps regimental team with aviation capabilities to Korea. Only a few days later, on July 7, Marine Brigadier General Edward Craig activated a provisional Marine brigade.¹²⁷ On the same day, Headquarters Marine Corps directed HMX-1 to temporarily send eight pilots and 30 enlisted Marines to the Marine Corps Air Station at El Toro, California, to join Marine Observation Squadron 6 (VMO-6).¹²⁸ Within the personnel from HMX-1, Captain Victor A. Armstrong became second in charge as the executive officer of VMO-6. Captain Armstrong's new position allowed for more influence over the usage and training of helicopters and their pilots. His experience was crucial in the following weeks as the unit quickly entered Korea and was involved in major operations.

On August 2, 1950, Marine Corps unit VMO-6 arrived in Korea. It was the first composite squadron of fixed-wing and rotary-wing aircraft. When the squadron was reactivated

¹²⁶ Memorandum on Mobilization of MarCorps Aviation, July 19, 1950, Box 9, Folder 3, Clifton B. Cates Collection, COLL/3157, Archives Branch, Marine Corps History Division, Quantico, VA.

¹²⁷ Brigade report, 1stProvMARBrig special action report, 7 Jul-6 Sep 1950, as cited in Lynn Montross, *Cavalry of the Sky: The Story of U.S. Marine Combat Helicopters* (Harper & Brothers, 1954), 106; and Gary W Parker and Frank M Batha, *A History of Marine Observation Squadron Six*, (Washington, D.C.: History and Museums Division, Headquarters, U.S. Marine Corps, 1982), 13.

¹²⁸ Montross, 107

in November 1944, the primary mission of observation and aerial artillery direction used fixed-wing aircraft.¹²⁹ When the unit arrived in Korea, they were quickly put to work. The squadron's missions early in the conflict consisted of resupply, reconnaissance, and medical evacuation (MEDEVAC).¹³⁰

Marines from HMX-1 made an immediate impact in Korea. On August 8, VMO-6 helicopters rescued six Marines from Chindong-ni and took them to the naval hospital. Following this rescue, Captain Armstrong of HMX-1 led the first nighttime helicopter mission. The limitations of the HO3S-1 helicopter restricted night flights, but Captain Armstrong had confidence in the helicopter's capabilities and piloting skills. He prioritized the urgent need to save lives over the night flight restrictions and conducted the first of nearly 1,000 night flight missions that VMO-6 would eventually carry out in Korea.¹³¹ The experience from HMX-1 gave Captain Armstrong the confidence to perform such operations, and he proved influential in proving the worth of HMX-1's mission. Shortly after the helicopters arrived on the battlefield, the military swiftly acknowledged their value as a powerful addition to combat operations. With their rapid deployment capabilities and advanced technology, these aircraft transformed the dynamics of ground operations, providing unparalleled support and enhancing the effectiveness of troops in combat. Brigade Commander General Craig emphasized the invaluable contributions of his team and called for an immediate increase in helicopters and pilots. However, the demand for helicopters surpassed the available production capacity.¹³²

¹²⁹ Parker, 6.

¹³⁰ Parker, 15; and Rawlins, 42-43.

¹³¹ Parker, 15-16.

¹³² Rawlins, 43-44.

The high demand was another victory for HMX-1 and the Marine Corps. The constraints on production capacity for helicopters and pilots validated a requirement for additional aviation units within the Marine Corps. As the demand for these aircraft continued, it was evident that the existing resources were insufficient to meet operational needs. In response to the helicopter gap, Marine Corps leadership requested more funding and an urgent increase in contracts and deliveries to the maximum.¹³³ The Marine Corps required these expanding capabilities to support ongoing and future missions. Due to the increased number of aviation units, there were shortfalls in training. Due to their experience, HMX-1 was tasked with taking on additional responsibilities as a training command. The added training requirement was eventually passed to the Naval Air Training Command in Pensacola, Florida. However, for a couple of years, HMX-1 trained pilots and mechanics who directly participated in the Korean War.¹³⁴ This strategic move aimed to augment the fleet and enhance overall operational readiness and survival.

The initial perceptions of helicopter capabilities in combat and their potential operational impacts varied across the services and within the Marine Corps. Marine Corps General Gerald Thomas was an early advocate of helicopter aviation. From April 1951 to 1952, he was the Commanding General of the 1st Marine Division and saw first-hand the positive impact of helicopters on the battlefield. He recalled, "We continually used those people [helicopter pilots], and they were a godsend to us."¹³⁵ The uses of helicopters in Korea varied between medical evacuation, search and rescue, reconnaissance, and command and control. All the uses were important, but command and control impacted the war and senior military officers' minds. Using a helicopter to fly the commander around a battlefield so he could gain first-hand knowledge and

¹³³ Rawlins, 44-45.

¹³⁴ Rawlins, 47.

¹³⁵ Gerald C. Thomas, Interview, 321.

understanding of the situation was groundbreaking. The rapid travel to meet other commanders to discuss concerns also added an informational advantage in Korea's vast and dispersed operating areas.¹³⁶ General Lemuel C. Shepherd was one of those commanders. At the onset of the Korean War, General Shepherd held command of the Fleet Marine Forces, Pacific, stationed at Pearl Harbor. As the commanding officer, he participated in the pivotal landing at Inchon, a notable victory for the relevancy of the Marine Corps. It showcased the continued viability of amphibious assaults, especially with the integration of helicopters.

General Shepherd was previously familiar with helicopters and their possibilities, but Korea was the first time he saw them perform in an active war zone. During an interview years later, General Shepherd recalled, "Twenty miles outside of Pusan was the first time I ever saw a helicopter in action – they used helicopters for the first time in combat. I have always been interested in helicopters."¹³⁷ General Shepherd was initially skeptical about using helicopters in combat due to their vulnerability to enemy fire, which was alleviated through experiences in the Korean conflict. Despite sustaining numerous bullet holes, the helicopters demonstrated remarkable resilience, continuing to fly unless critically damaged. Their pivotal role in conducting daring rescue missions in hostile territories, such as retrieving captured pilots from enemy hands, underscored their invaluable contribution to military operations.

The challenging landscape of Korea highlights the operational potential of helicopters. Their ability to swiftly navigate and transport personnel in rugged terrain played a pivotal role in the success of military operations in the region. An exceptional demonstration of the effective

¹³⁶ Parker, 15.

¹³⁷ Lemuel C. Shepherd, Interview by Robert D. Heintz Jr. Transcript, 1967 Quantico, Virginia, Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 59-60.

use of helicopters occurred after the battle of Naktong. In this case, helicopters facilitated the rapid deployment of outpost guards on steep terrain by reducing the time they would have taken to reach their positions walking. This experience left a lasting impression on General Shepherd and the Marines, highlighting the indispensable role of helicopters in combat operations and further cementing the advancement of helicopters in the Marine Corps.¹³⁸

In Korea, helicopter operations depended on HMX-1's experience and the MCS's doctrinal conclusions, as history has shown that no new weapon is more effective than its doctrines and techniques.¹³⁹ On September 9, 1950, Headquarters Marine Corps transferred operational control of VMO-6 to the 1st Marine Division, which was already part of the Army X Corps. VMO-6 planned to participate in the Inchon landing; however, they were forced to divide into two echelons due to a lack of available space. This division reduced their capabilities and arrival into the area of operations. The first group to arrive consisted of 10 pilots, 48 enlisted personnel, and four helicopters. The helicopter mission was able to start immediately after the initial assault on Inchon. On September 16, reconnaissance and medevac missions began. As the operation moved further inland, so did the helicopters to support the main effort. Captain Armstrong and his fellow pilots continued to prove the worth of HMX-1's training and development through rescues of downed fixed-wing aircraft, observation, and assisting in command and control by moving senior officers around the battlefield.¹⁴⁰ Another Marine, General Victor H. Krulak, recalled what he deemed the most essential operations: the planning

¹³⁸ Lemuel C. Shepherd, Interview by Robert D. Heintz Jr. Transcript, 1967 Quantico, Virginia, Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 82.

¹³⁹ Kenneth J. Clifford, *Progress and Purpose: A Developmental History of the United States Marine Corps, 1900-1970*, (Washington: History and Museums Division, United States Marine Corps, 1973), 78.

¹⁴⁰ Parker, 18-19.

and execution of helicopter missions conducted by Marine Transport Helicopter Squadron 161 (HMR-161).¹⁴¹

The proficiency and leadership of HMX-1 personnel drove the advancement of Marine Corps helicopter aviation capabilities. In January 1951, the Marine Corps commissioned another helicopter unit with personnel from HMX-1. HMX-1 leadership had a direct role in selecting the personnel in the early helicopter units. HMX-1 alumnus Lieutenant Colonel George Herring was chosen to command HMR-161.¹⁴² HMR-161 was deployed to Korea in August 1951, and it conducted thousands of flight hours and hundreds of missions in support of the Marine Corps and the Army. While in Korea, its role became “anything a horse can do.”¹⁴³ George Herring was the executive officer of HMX-1 in 1949, making him a perfect fit to continue the testing and development from concepts to battlefield trials. When his command time ended, Colonel Keith McCutcheon, the current commander of HMX-1, relieved him. The two officers swapped commands, and Lieutenant Colonel Herring took his Korean experiences to Quantico to command HMX-1.¹⁴⁴ HMX-1 and the Marine Corps made it a point to bring back such experience to continue concept development. Lieutenant Colonel William P. Mitchell said, “HMX-1 accomplished more than formulating early tactics...it was also foremost in establishing the requirements for new helicopters for military use.”¹⁴⁵ He attributed the Marine Corps' success in helicopter aviation to using a single developing source, HMX-1.

¹⁴¹Victor H. Krulak, Interview by Benis M. Frank, Transcript, 1970 Quantico, Virginia, Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 166, General Krulak mentioned three operations conducted by HMR-161, Windmill I, Windmill II, and Blackbird. He claimed they were the first tactical operations conducted by helicopters and that although they lacked capability, the missions succeeded. The tactics used during the operations are similar to those used in 1970.

¹⁴² Rawlins, 50-51.

¹⁴³ Montross, *Calvary of the Sky*, 175.

¹⁴⁴ Montross, *Calvary of the Sky*, 176.

¹⁴⁵ As cited by Montross, 176, LtCol William P. Mitchell, USMC, ltr to Lynn Montross, July 21, 1953.

The Korean War highlighted the importance of the Marine Corps helicopter concept and increased both size and funding for the Marine Corps. On April 27, 1951, General Cates was informed by Admiral Forest P. Sherman of a plan to maintain 204,000 troops, rather than the initially proposed 175,000, throughout 1952.¹⁴⁶ In addition to the growth, an article from the *New York Times* published on May 28, 1951, expressed the great importance of the helicopter and the experimental testing conducted in Quantico.¹⁴⁷ Such favorable endorsement in the public eye helped to bolster the case in favor of the Marine Corps. Coincidentally, after this article was published, the Marine Corps was approved to continue with its plans for the future of the helicopter. On July 17, 1951, Marine Corps Schools in Quantico, Virginia, sent a letter briefing the Chief of Naval Operations (CNO) on the Marine Corps helicopter concepts. This letter also requested the CNO's concurrence on continuing and moving forward.¹⁴⁸ The CNO signed and returned approved on August 13, 1951. The CNO's concurrence was essential in moving forward with the helicopter concept because the design of amphibious lifts included using naval vessels to land and take off.¹⁴⁹ The advancements in the helicopter program increased funding for the Marine Corps and helped defend its existence. However, the fight was far from over, as debates regarding the Marines' roles, missions, and size created further contention.

The firsthand experiences of Marine leadership reinforced arguments and shaped the future priorities of the Marine Corps. When referring to the Marine Corps' most important developments, Colonel Robert Heinl wrote, "Far and away, the most important was the

¹⁴⁶ Memorandum for 204,000 Proposal, April 27, 1951, Box 9, Folder 3, Clifton B. Cates Collection, COLL/3157, Archives Branch, Marine Corps History Division, Quantico, VA.

¹⁴⁷ Hanson W. Baldwin, "Marines Revise Tactics: Use of Helicopter in Amphibious Attack among Techniques Tested at Quantico Air Superiority Needed Other Projects Under Way," *New York Times*, May 28, 1951, <https://www.proquest.com/newspapers/marines-revise-tactics/docview/111928725/se-2>.

¹⁴⁸ Memorandum for Approval of Helicopter Concept August 14, 1951, Box 9, Folder 3, Clifton B. Cates Collection, COLL/3157, Archives Branch, Marine Corps History Division, Quantico, VA.

¹⁴⁹ Rawlins, 25-27.

helicopter, which the Marine Corps pioneered, first brought to Korea, and then first used in combat."¹⁵⁰ General Shepherd's experience with helicopter aviation in Korea was also noteworthy, as he understood the positive impact of helicopters on the Marine Corps and other services. While in the Pacific, he saw the first edition of the Army's helicopter doctrine. It was verbatim the same doctrine as the Marines' vertical envelopment concepts. General Shepherd recalled, "We had a lot of helicopters in Korea, and we would not let the Army use them, which irritated the hell out of them."¹⁵¹ Identifying the significance of the Marine Corps' development led General Shepherd to focus on aviation as he soon stepped into the role of Marine Corps Commandant.

On January 2, 1952, General Lemuel Shepherd addressed his fellow generals as he assumed the distinguished role of Commandant of the Marine Corps. In his communication, he articulated his vision for the Marine Corps over the ensuing four years, emphasizing several strategic priorities. A central theme in his guidance was the critical importance of aviation in modern military operations. He elaborated on how recent engagements in Korea had strongly reinforced his conviction about the nature of close air support. General Shepherd asserted that the seamless integration of air and ground forces was essential and paramount in ensuring that the Marine Corps remained a skillful and well-balanced fighting force. His insights reflected a deep understanding of the evolving battlefield dynamics and the necessity for cohesive operational strategies within the Marine Corps.¹⁵²

¹⁵⁰ Heintz, 587.

¹⁵¹ Lemuel C. Shepherd, Interview, 60, and Stanley S. McGowen, *Helicopter: An Illustrated History of Their Impact*, (Santa Barbara, Ca: ABC-CLIO, 2005), 61.

¹⁵² Remarks by the Commandant of the Marine Corps to Staff on January 2, 1952, Folder 18, Box 2, Lemuel C. Shepherd Papers, Collection 1113, Marine Corps Archives, Quantico, Virginia.

The Fight in Washington

During the defense unification fight from 1945 to 1947, General Carl Spaatz was one of the most outspoken critics of the Marine Corps. As the Commander of the Army Air Forces, before it became an independent Air Force, he argued for three branches of service: the Army, Navy, and Air Force.¹⁵³ Leaving the Marine Corps out of the equation, he also advocated for the Air Force to become responsible for all land-based aviation assets to ensure maximum air-power flexibility.¹⁵⁴ In 1950, and somewhat ironically, General Spaatz, who was then retired, called for the need for “two or three Marine Divisions.” Although he was a staunch supporter of the JCS 1478 papers, which severely restricted the Marine Corps, he emphasized the need for a quick strategic force to move into Korea.¹⁵⁵ The Marine Corps' current size had fallen below 80,000 troops. Using helicopter aviation, the Marine Corps' success in Korea would ensure that the active-duty force would never reach that number again. In the short year from 1950 to 1951, the total force grew to over 190,000 Marines, and over the following 70 years, the Marine Corps size fluctuated but never fell below 150,000.¹⁵⁶

¹⁵³ Jeffrey G. Barlow, *Revolt of the Admirals: The Fight for Naval Aviation, 1945-1950*, (Washington D.C.: Naval Historical Center, Dept. of the Navy, 1994), 33-34.

¹⁵⁴ Barlow, *Revolt of the Admirals*, 35.

¹⁵⁵ Keiser, *The US Marine Corps and Defense Unification 1944-47: The Politics of Survival*, 129.

¹⁵⁶ The size of the U.S. Marine Corps has fluctuated since 1950 based on historical events and military needs. In 1950, the Marine Corps rapidly expanded to meet wartime demands. It continued to grow during the Vietnam War, peaking at over 300,000 personnel in the late 1960s. Following the Vietnam War, troop numbers decreased during peacetime. Still, they rose again during major conflicts like the Gulf War in 1991 and the early years of the War on Terror, particularly during the wars in Afghanistan and Iraq. In 2022, the active-duty strength of the Marine Corps was around 177,000 personnel, slightly lower than its pre-pandemic levels, reflecting broader trends of declining military personnel across all U.S. armed forces, the yearly force totals can be found via the U.S. Department of Defense, <https://dwp.dmdc.osd.mil/dwp/app/dod-data-reports/workforce-reports>.

During the Marine Corps' heavy involvement in the Korean War, a simultaneous fight happened back in Washington.¹⁵⁷ According to General Cates, Congress supported the Marine Corps' actions in Korea, and the war helped sustain the Marine Corps' existence and helicopter aviation.¹⁵⁸ However, the Air Force had concerns with the Marine Corps and their role. As expressed in a memorandum to the Secretary of Defense, the Air Force claimed that the Marine Corps actions in Korea directly overlapped with the Army and Air Force functions. The claim was that the Marine Corps was a duplication of effort because it was oversized for its primary and intended functions.¹⁵⁹ The overarching arguments attacked how services used and employed their assets. Helicopters became a point of contention for the Air Force, which argued that they should fall under the purview and tactical control of the Air Force. Meanwhile, the Marine Corps continued to advocate for having service-allocated helicopters to support ground troops in various roles, including close air support, troop transport, reconnaissance, command and control, and medical evacuation.

The Marines' early focus on tactical helicopter utilization paved the way for their effective deployment, helping other branches acknowledge this technology's intrinsic value in combat and direct support of troops on the front lines. The Army's experience working alongside the Marines in Korea prompted a renewed emphasis on combat-focused missions for helicopters. In contrast, the Air Force prioritized strategic bombing with fixed-wing aircraft and showed little interest in providing aerial support for ground troops. The Air Force regarded helicopters as

¹⁵⁷ Clifton B. Cates, Interview by Benis M. Frank, Transcript, 1967 Quantico, Virginia, Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 236-237.

¹⁵⁸ Clifton B. Cates, Interview by Benis M. Frank, Transcript, 1967 Quantico, Virginia, Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 236.

¹⁵⁹ Memorandum for the Secretary of Defense, September 13, 1951, Box 9, Folder 4, Clifton B. Cates Collection, COLL/3157, Archives Branch, Marine Corps History Division, Quantico, VA.

impractical for combat operations. Their perspective on helicopter use mirrored that of the Coast Guard, centering on search and rescue (S&R) efforts and logistical supply missions.¹⁶⁰ The Navy primarily concentrated on safeguarding its vessels, employing helicopters for anti-submarine warfare. This difference in strategic approaches was particularly evident during the Korean War, where the Marine Corps capitalized on its advancements to strengthen its position.

By the end of the Korean War, over 10,000 helicopter operations had been conducted, and helicopter employment was successful and relied heavily upon HMX-1. Most helicopter operations conducted in Korea were first considered and tested by HMX-1 back in Quantico, Virginia.¹⁶¹ The actions in Korea proved the value of the helicopter as a military enhancement to tactical movement and command and control. Actions during the Korean War were proof of the Marine Corps' relevancy in the post-nuclear age. The Korean War helped Marine Corps tacticians understand the current limits and capabilities of the helicopter and the doctrine that HMX-1 had been testing since 1947. The after-action reports from Korea allowed for further research and testing. Without the real-world verification of helicopters in Korea, the fate of Marine Corps aviation and the Marine Corps would have been opened to additional scrutiny and reduction. The HMX-1 doctrine and pilots were given the credit deserved in Congress and solidified the Marine Corps' representation in future operations and partially on the Joint Chiefs of Staff.

In addition to the political attention in the United States, everyday Americans at home closely followed the Korean War through the newspapers and radio broadcasts. Citizens were curious about what was happening, and journalists responded to that curiosity.¹⁶² HMX-1 and the

¹⁶⁰ McGowen, *Helicopter: An Illustrated History of Their Impact*, 78-83.

¹⁶¹ Montross, 201.

¹⁶² Suhi Choi, "The Repertoire, Not the Archive: The 1950 'Life' and 'Time' Coverage of the Korean War," (Media, War & Conflict 8, no. 2 2015), 264–80, <https://doi.org/10.1177/1750635215584964>.

Marine Corps benefitted from the attention. Shortly after VMO-6 arrived in Korea, the *New York Times* caught wind of their performance. On December 3, 1950, they published an article titled, “New ‘Handyman’ of the Skies, the Unlovely but Versatile Helicopter Has Won Over Skeptics by Its Performance in Korea.”¹⁶³ The author described the multiple benefits of the “whirlybird” in combat and non-combat scenarios. He also described the helicopter's value to other non-military organizations for lifesaving and commercial use. The photographs in the article depicted the markings “U.S. Marines” and directly credited the Marine Corps’ ingenuity. Other articles read “Marine Force Lands by Helicopter and Korean Peak Is Under Control” and “Marines Revise Tactics: Use of Helicopter in Amphibious Attack Among Techniques Tested at Quantico.”¹⁶⁴ The public was interested in HMX-1’s advancements, and the helicopter's success in Korea bolstered the reputation of the Marine Corps. The news articles offer limited insight into the trends of this period, but the fascination with the Marine Corps and its advancements in helicopters was apparent.

Aside from the helicopters' tactical use, the general public was interested in the commercial capability that helicopters could bring back to the United States. In an article titled “Promising Future of the 'Flying Bus': As a unique means of transport, the helicopter may bring about great changes in living habits,” the author claimed that civilian application of the helicopter would be even more remarkable to Americans during peacetime living.¹⁶⁵ The three-page article outlined the impacts and advantages the helicopter would bring to commuters, as

¹⁶³ Frederich Graham, “New ‘Handyman’ of the Skies, the Unlovely but Versatile Helicopter Has Won Over Skeptics by Its Performance in Korea,” *New York Times*, December 3, 1950; ProQuest Historical Newspapers: *The New York Times* with Index, SM14.

¹⁶⁴ George Barrett, “Marine Force Lands by Helicopter and Korean Peak Is Under Control,” *New York Times*, September 21, 1951, 1; and Hanson W. Baldwin, “Marines Revise Tactics: Use of Helicopter in Amphibious Attack Among Techniques Tested at Quantico,” *New York Times*, May 28, 1951, 6.

¹⁶⁵ Frederich Graham, “Promising Future of the 'Flying Bus': As a unique means of transport, the helicopter may bring about great changes in living habits,” *New York Times*, August 17, 1952.

well as how it might reshape their ways of life. The aircraft did not change the way of life of the average citizen, but the credit given to the Marine Corps became well-established and added to their reputation. A favorable impression from such articles only helped the Marines fight for survival.

The attention garnered from using helicopters during the Korean War further supported legislative assistance in legally strengthening Marine Corps survival. On January 25, 1951, Senator Paul H. Douglas introduced S.677, a bill that would allow the creation of four Marine Divisions and four Marine air wings and add the Marines to the JCS.¹⁶⁶ In May 1951, the Marine Corps was yet again testifying for statutory levels of personnel and inclusion in the Joint Chiefs of Staff. The participation of HMX-1 pilots in Korea provided ample evidence of the role of helicopter aviation in combat. The trials and tribulations over a short 31-month period proved vital in the fight for survival by confirming the Marines' worth. HMX-1 provided power in military lobbying to support the Marine Corps air-ground team and tangible evidence in critical operations during the Korean War. The amphibious landing at Inchon demonstrated that Marine amphibious operations were still relevant in modern warfare.¹⁶⁷ The advent of the helicopter resulted in a greater appreciation for the combat efficiency that the Marines brought to the

¹⁶⁶CMC meetings with JCS, January 25, 1951, Box 9, Folder 2, Clifton B. Cates Collection, COLL/3157, Archives Branch, Marine Corps History Division, Quantico, VA, Senator Douglas was a Marine during WWII, and he stated during the hearing, "The reasons for this situation are obvious to all. While the Joint Chiefs of Staff are men of fine character and are sincere patriots, most are fundamentally opposed to the Marine Corps as a combatant organization. Notwithstanding their many expressions of goodwill toward the Marine Corps, they have tried to destroy its capability to function on any appreciable scale in combat. In the past, we have attempted to provide for this combatant Marine Corps by expressing congressional intent. We must have direct Congressional action in the form of law," United States, Congress, House Committee on Armed Services, *Full Committee Hearings on S. 677, to Fix the Personnel Strength of the United States Marine Corps, and to Establish the Relationship of the Commandant of the Marine Corps to the Joint Chiefs of Staff*, (Washington: U.S. Government publishing agency, 1951), 7.

¹⁶⁷ Korean War Diary July 2 to December 7, 1950, Box 1, Lemuel C. Shepherd Papers, Collection 1113, Marine Corps Archives, Quantico, Virginia.

battlefield. Combining these actions with the Marine Corps' top leadership advocacy resulted in the signing of the Marine Corps Bill, which ensured proper representation and ultimately gave the USMC a seat at the table.

Marine Corps aviation was directly underscored during the legislative process for Marine Corps strength and addition to the JCS. During the House committee hearings on the Armed Services Senate bill 677, the Honorable Mike Mansfield, a congressional representative from Montana and former Marine, urged including the Marine Corps in the Joint Chiefs of Staff. In his statement, he outlined the Marine Corps' need for stability in size and strength and emphasized the role that aviation, specifically helicopter aviation, had in maintaining its relevancy. He stated, "There is no question, I am sure, in anybody's mind on this committee that the Marine Corps close tactical air support is without a peer in the world today. It did not just get that way. It took years of hard professional struggle to produce that wonderful coordination between ground and air in the Marine Corps. Let me remind the committee that the Marine aviation arm originated dive bombing. The Marine aviation arm developed the use of the helicopter from a tactical standpoint. We firmly believe that the Marine Corps ground troops should be supported by their own tactical air support."¹⁶⁸ Representative Mansfield's views faced opposition, particularly from the Navy, which opposed the Marine Corps' seeking to increase its strength and representation.

Despite facing considerable opposition to the bill, Representative Mansfield and his colleagues presented compelling evidence to the committee to include and strengthen the Marine

¹⁶⁸ United States, Congress, House Committee on Armed Services, *Full Committee Hearings on S. 677, to Fix the Personnel Strength of the United States Marine Corps, and to Establish the Relationship of the Commandant of the Marine Corps to the Joint Chiefs of Staff*, (Washington: U.S. Government publishing agency, 1951) 782-783.

Corps. He highlighted not only their aviation expertise but also the notable absence of Marine involvement in amphibious operations conducted by the Army during the latter stages of World War II. Mansfield's argument centered on the Marine Corps' unique contributions to support these operations. The expertise of the Marines was once again leveraged to affirm the value of the Marine Corps. Amphibious operations and Marine Corps aviation were contingent upon successfully utilizing helicopter aviation and HMX-1. Mansfield's arguments would be less convincing if the helicopters had performed poorly in the Korean War.

In 1952, Congress passed the "Marine Corps Bill," which granted the then Marine Corps Commandant General Lemuel C. Shepherd, Jr. a position on the JCS. The bill established the requirement to maintain three Marine Divisions and three Air Wings at a steady operational level. However, its passage met resistance from Department of Defense officials, the current JCS, and President Truman. A notable critic of the "Marine Corps Bill" was Chief of Naval Operations (CNO) Admiral Forrest Sherman. He argued that the Marine Corps was a part of the Navy and, therefore, should be under overall command of the Navy.¹⁶⁹

Fortunately for the Marine Corps, Admiral Sherman and the others had no final say. Adding the Marine Corps to the JCS improved their chances of survival. The caveat, however, was that the Marine Corps did not get full membership in all national defense decisions. Instead, they were only authorized to be involved in situations directly related to the Marine Corps. The limited membership hindered the Marine Corps' ability to advocate for its capabilities. Under this arrangement, another service chief needed to request assistance from the Marine Corps before they could participate in discussions. Consequently, the seat designated for the Marine Corps

¹⁶⁹ Keiser, 129.

Commandant would remain unoccupied unless other services deemed the Marine Corps capable of making a contribution. In a survival scenario, no one is inclined to seek help unless it is a last resort or something that no other service is willing to do. This prevented the Marine Corps Commandant from positioning himself in situations where the other service chiefs might not offer the most effective solutions. The fight for adequate representation and survival continued into the next Presidency after the Korean War.

Chapter 3: The Presidential Mission

President Eisenhower's first flight in a Marine Corps helicopter was in September 1957 while he was vacationing in Newport, Rhode Island. During the vacation, his presidential responsibilities demanded three flights back to Washington.¹⁷⁰ The journey from his summer White House on the east side of Narragansett Bay to the air station on the west side typically took two hours by car or forty minutes by boat. However, this trip took only seven minutes by helicopter, so the president chose to travel using the quickest option.

While a member of HMX-1, I often heard this story about the inaugural presidential flight.¹⁷¹ The story suggested that it served as an emergency response for President Dwight Eisenhower in 1957. However, upon further investigation, I discovered that the plan to transport President Eisenhower via a Marine Corps helicopter had been developing for several months. In February of 1957, the *New York Times* published an article titled "Copter Trips to Save Time for Eisenhower." The article read, "To save Presidential time, the White House plans to use a helicopter instead of a limousine to take the President from the White House to Washington National Airport. The Air Force figures it can fly the President to and from the airport in three to four minutes; the trip by car takes ten to twenty. According to sources, the Air Force also believes flying is safer than driving."¹⁷²

The following sections will demonstrate that HMX-1's significance in the Marine Corps increased when it began conducting flight operations for the President of the United States.

¹⁷⁰ Marks, 42.

¹⁷¹ The Author is a Marine and former squadron member of HMX-1 from 2021-2023.

¹⁷² Special to *The New York Times*, "Copter Trips to Save Time for Eisenhower," *New York Times*, February 20, 1957, <https://www.proquest.com/newspapers/copter-trips-save-time-eisenhower/docview/114248183/se-2>.

Dwight D. Eisenhower, the former Supreme Allied Commander, was one of the most vocal critics of the Marine Corps' size and role in national defense. During discussions on military unification in the 1940s, he expressed a desire to keep the Marine Corps small and its functions limited.¹⁷³ After Truman signed the National Security Act of 1947, Eisenhower advocated for continued improvements to ensure efficiency and streamlined civilian control of the national defense structure. During his presidential campaign, Eisenhower furthered his ideas on efficiency and expressed the need for balanced budgets by prioritizing the desire to eliminate excess waste and spending.¹⁷⁴ When President Eisenhower took office in 1953, he advocated for "security and solvency and a new look at defense policy."¹⁷⁵ Eisenhower took his ideas and went to work, but not without opposition in Congress and the military. The Army and the Air Force agreed that change was needed, but all services were against a radical change.

The Marine Corps was the most nervous and "greatly concerned" for the future and their survival during the process.¹⁷⁶ Defense reorganization meant reduced budgets and spending for the Marine Corps and HMX-1. For the entire Department of Defense, it meant competition and rivalry to fund service-prioritized programs. After the Korean War, the Marine Corps focused on

¹⁷³ Caraley, *The Politics of Military Unification*, 133.

¹⁷⁴ Dwight D. Eisenhower, The President's News Conference Online by Gerhard Peters and John T. Woolley, The American Presidency Project <https://www.presidency.ucsb.edu/node/232016>.

¹⁷⁵ John C Ries, *The Management of Defense: Organization and Control of the U.S. Armed Services*, (Baltimore: Johns Hopkins Press, 1964), 167.

¹⁷⁶ Brian R Duchin, "The Most Spectacular Legislative Battle of That Year: President Eisenhower and the 1958 Reorganization of the Department of Defense," (Presidential Studies Quarterly 24, no. 2 (1994): 243–62), <http://www.jstor.org/stable/27551239>, 250. According to Historian Brian Dutcher, the push back that Eisenhower received against defense reorganization made it fitting to change his slogan to "Modernization" rather than "reorganization" would be the new catchphrase. "In modern times," he observed, "there is no such thing as a separate ground, air, or sea war." The military had to work as an "integrated team," within the traditional outlines of the three services, with the Secretary of Defense providing the "centralized authority. In Eisenhower's eyes, the primary goal for military reorganization was to modernize U.S. Military Defense.

continued development as a “force in readiness.”¹⁷⁷ The war in Korea brought new ideas for helicopter development and solidified the Marine Corps' focus on helicopters as a primary tool for the future. HMX-1 remained a birthing point of ideas, training, and technology while new helicopter squadrons began to set up across the United States. The Marine Corps established three helicopter transport squadrons per infantry division, which increased the number of helicopter squadrons from two in 1950 to 15 by 1953.¹⁷⁸ Alongside the helicopter squadrons, the need for maintenance and command and control headquarters units introduced further requirements when creating transport units. These additional needs called for the establishment of an additional nine units. The Marine Corps was focusing its limited budget on prioritizing helicopters as the means for national defense relevancy and survival.

The Marine Corps' focus on helicopter aviation, combined with the success of HMX-1 and helicopter operations in Korea, positioned the Corps to capitalize on the concept and further develop it. By 1953, the Marine Corps had procured 202 helicopters and planned to continue expanding its fleet.¹⁷⁹ They continued to refine and test ideas in Quantico during the late 1950s and 1960s. In 1953, an article in *The New York Times* titled “Copter of Marines, Fastest, Largest: General Shepherd Declares New Craft Corps' Answer to the Atomic Bomb.”¹⁸⁰ By 1956, HMX-1 was testing a new helicopter, the HR2S-1, which could carry 26 Marines. This represented an increase in capacity compared to the helicopters used during the Korean War. The Marines of HMX-1 continued to refine and demonstrate this capability during joint civilian

¹⁷⁷ Allan Reed Millett, *Semper Fidelis: The History of the United States Marine Corps*, (New York: Free Press, 1991), 518.

¹⁷⁸ Montross, 204 and 234-236.

¹⁷⁹ Rawlins, 57.

¹⁸⁰ “Copter Of Marines Fastest, Largest: General Shepherd Declares New Craft Corps' Answer to The Atomic Bomb,” *New York Times*, September 10, 1953, <https://www.proquest.com/newspapers/copter-marines-fastest-largest/docview/112586747/se-2>.

orientation conferences and the fleet introduction program.¹⁸¹ Both of these events were designed to lobby for support from politicians and other senior service members.

In what became known as the Hogaboom Board 1956, Marine Major General Robert E. Hogaboom and 15 other senior Marine officers studied the best way to reorganize the Marine Corps moving forward. The helicopter was the driving factor behind such changes, and the Marine Corps sought to rapidly adapt and incorporate it into the broader Marine Corps fleet. The study determined that reorganization and continued advancement of helicopters were necessary to balance Marine Corps forces, ensuring that helicopter assets could support Marine missions everywhere. The study recommended an overall increase in helicopters, highlighting their value and the advancements HMX-1 made on Marine Corps priorities.

The following pages pivot away from the Korean War and open with HMX-1's expanded role in the United States. Gaining the presidential support mission that still exists today, and further expanding technological capabilities for the next conflict in Vietnam. In addition to the domestic support of the President, this chapter will highlight two noteworthy overseas missions in support of the President, which not only expand U.S. confidence in the Marine Corps, but also impress foreign diplomats and military officers. Next, the domestic impact on American citizens will also open another dimension to the Marine Corps value to the United States. Lastly, making HMX-1 the sole helicopter provider supporting the President of the United States solidifies

¹⁸¹ Major Wesley R. Marks Jr, (USMC), "A History of HMX-1: The Marine Corps' First Helicopter Squadron," Unpublished Research Paper, Command and Staff College, Marine Corps University Archives, Quantico, VA, 1981-82, "On January 11, 1957, four HR2S-1's were delivered to HMX-1. With the arrival of the first four production aircraft, HMX began the Fleet Introduction Program. Eleven pilots and thirty-four enlisted Marines arrived at Quantico to train on the aircraft in preparation for forming a new unit, Marine Transport Helicopter Squadron (Medium) 461. Simultaneously, U. S. Army personnel trained and prepared for the acceptance of the H-37A, the Army's version of the aircraft. The first HR2S-1's were flown non-stop from the Sikorsky factory (Connecticut) to Quantico by Major G. R. Hunter, Captain W. J. White, Master Sergeant W. E. Costlow, and Staff Sergeant F. E. Milcoinozjak," 39.

Marine Corps survival. This chapter concludes with the Marine Corps gaining full membership on the JCS. This membership ensures Marine Corps survival and involvement in future conflict and national defense decision-making.

This chapter outlines the most prominent HMX-1 mission. While Chapter 2 covered the consolidation of HMX-1 and the helicopter as a valuable tool in combat situations, Chapter 3 refocuses on HMX-1 domestically and in direct support of the national government. The first discussion covers the changes in the United States and the expanding ideas of what helicopters can do in support of national government. This is where HMX-1 earns a shared role in supporting the office of the president. Next, I will show that HMX-1 flew ahead of its competition during overseas support, which further emphasized their reliability. As conflict breaks out in Vietnam, the role of HMX-1 continued to research and advance helicopter capabilities. Vietnam was dominated by helicopters, and HMX-1 again served as a major contributor in the operations. During and after Vietnam, HMX-1 maintained a domestic presence in the United States. The role of search and rescue and medical evacuations showcased another side of the Marine Corps' capabilities and became top news stories. The domestic media coverage helped to further establish positive sentiment for HMX-1 and the Marine Corps. In combination, all of these actions came together to help HMX-1 earn the role as sole transporter of the President of the United States, and shortly after the Marine Corps to gain full membership to the JCS.

The establishment of HMX-1 as a presidential transportation service became the unit's most enduring and beneficial mission. Earning such notoriety was impressive, but earning it while President Eisenhower was in the Oval Office was more remarkable. While President Eisenhower was not an outright rival of the United States Marine Corps, his previous push for a

reduced Marine presence during his tenure as a General in the Army raised significant concerns among Marine leaders.¹⁸² They were apprehensive that his commitment to government efficiency could lead to further cuts and limitations for the Marine Corps. This tension caused a fear of Eisenhower's military philosophy, which might undermine their size and budget, directly affecting future capabilities and operational readiness. I argue that HMX-1 transcends its role as a mere mode of presidential transportation. The unit symbolizes military involvement in support of U.S. government operations, both in routine circumstances and during crises.

The Marine Corps competed with the other services for the role of presidential transport. The Air Force and the Army had proximity to the office and manpower advantages over the Marine Corps to earn the spot as primary transport. The Air Force was the first service to fly the president in a helicopter. However, HMX-1 offered their own advantages in service to the president that were not ignored. The speed, flexibility, and reliability of the Marine unit were on full display during the times it mattered most. HMX-1's ability to earn and maintain the presidential mission underscores the Marine Corps' trusted capability in protecting national leadership, ensuring governmental continuity, and showcasing American strength through mobility, technology, and operational readiness. The presidential transport mission emphasizes an interplay between politics and military strategy in modern government and contributes to the Marine Corps' persistence and survival.

Helicopters on the Homefront

No U.S. President had ever flown in a helicopter while in office until 1957. On March 4, the White House announced that the four-passenger Bell 47J Ranger helicopter had been selected

¹⁸² Caraley, *The Politics of Military Unification*, 133.

for Presidential use. Press secretary James C. Hagerty explained that the helicopter's mission was to allow the President to "avoid traffic jams" between the White House and the Military Air Transport Service at the National Airport and denied rumors that Eisenhower would use the "whirlybirds" for transportation to a Golf Club in Maryland.¹⁸³ More ominously, the White House also explained an effort to formulate "a new plan of evacuation that would entail the use of helicopters."¹⁸⁴ For the first time in U.S. history, the government found it necessary to implement a strategic defense plan to safeguard the President and the nation against a potential attack.¹⁸⁵ Two helicopters were delivered to the Air Force for presidential missions on April 6, and in June, helicopters were added to the Operation ALERT exercise for the first time.¹⁸⁶

A month before the drill, HMX-1 helicopters transported Secretary of State John Foster Dulles and others from the USS *Saratoga* to Naval Air Station Mayport, Florida. Shortly after that event, a White House memo from Navy Captain Evan Aurand, Eisenhower's Naval Aide, to the Commandant of the Marine Corps, dated June 13, 1957, said The President praises Major Olson and HMX-1 for their professionalism and expertise flying.¹⁸⁷ Major Virgil D. Olson was a torpedo bomber pilot in World War II and was the Commanding Officer of HMX-1. The ongoing

¹⁸³ *New York Times*, March 5, 1957.

¹⁸⁴ W.H. Lawrence, Special to *The New York Times*, "President Leaves Capital: President Evacuated from Capital by Helicopter before Mock Attack Helicopter Evacuates President to Secret Air Defense Center," *New York Times*, July 13, 1957, <https://www.proquest.com/newspapers/president-leaves-capital/docview/114189878/se-2>.

¹⁸⁵ "Evan P. Aurand Oral History," Interviewed by John T. Mason, Jr. May 1, 1967, the Oral History Research Office. Columbia University, 1971, 12.

¹⁸⁶ From 1954 through 1961, civil defense drills took place each summer nationwide. During this period, the American public participated annually in Cold War preparedness exercises called "Operation ALERT." Citizens in specified cities were required to take cover for a stated period, and federal officials in Washington, including the President of the United States, practiced evacuating the city for alternate sites, W.H. Lawrence, Special to *The New York Times*, "President Leaves Capital: President Evacuated from Capital by Helicopter before Mock Attack Helicopter Evacuates President to Secret Air Defense Center," *New York Times*, July 13, 1957.

¹⁸⁷ Butler, 25, from Virgil Olson's Personal collection.

praise for Marine helicopters pleased the Commandant and strengthened the Marine Corps' position.

Marine helicopters continued their superior capabilities during the third annual civil defense exercise, which began in July 1957. Eight helicopters, including some from the Air Force and the Army, as well as two from HMX-1, were used during the event. The Air Force flew President Eisenhower and James J. Rowley, head of the White House Secret Service detail, from the South Lawn to an undisclosed command post. The Marine Corps' job was to fly White House staff personnel to the designated relocation site. The lead pilot for the Marine Corps was again Major Olson. During the exercise, the Marine Corps aircraft exhibited its capability. The Marine Corps pilots arrived at the relocation site before any other aircraft, and when Eisenhower got there, he was upset that his staff had arrived before him. Furthermore, he was soaked in sweat from the ride.¹⁸⁸ Upon observing his staff, who was dry and comfortable, Eisenhower recognized the substantial advantages of the Marine Corps helicopter capabilities. Their aircraft showcased superior speed and maintained cooler internal temperatures compared to the Air Force's Bell 47J model. The Bell 47J's bubble-shaped design created a greenhouse effect, resulting in uncomfortable conditions for both the crew and passengers. Although he landed last, President Eisenhower was outwardly gracious about the capability of helicopters. "That was very nice," he said as he stepped out of the helicopter.¹⁸⁹ Eisenhower's appreciation for helicopters would only increase when he required regular transportation while on vacation.

¹⁸⁸ Butler, 25, The Author, Major Butler, conducted an in-person interview with Virgil D. Olson in 2002 before his passing.

¹⁸⁹ W.H. Lawrence, Special to *The New York Times*, "President Leaves Capital: President Evacuated from Capital by Helicopter before Mock Attack Helicopter Evacuates President to Secret Air Defense Center," *New York Times*, July 13, 1957.

Soon after the civil defense drill, the Marine Corps completed a study to research the best helicopter for presidential use. The Sikorsky S-58 was selected, but only after some convincing from the Secret Service.¹⁹⁰ The Secret Service was concerned about the safety of helicopters for multiple reasons. The most prominent concern was that the helicopters in early development had only a single engine. Captain Aurand said the Secret Service worried about the President using any "unusual forms" of transportation. He negotiated with the Secret Service and explained that the commercial Sikorsky S-58 helicopters, used in New York and Chicago for airfield and downtown operations, happened to be the same aircraft as those operated by HMX-1.¹⁹¹ The safer and more reliable twin-powered engines did not arrive until 1959. Even though the HUS aircraft operated by the Marines were also single-engine, HMX-1's reputation and their larger, more capable helicopters made the Marine Corps an easy choice.

HMX-1's first flight in support of the President secured another milestone in the survival of the Marine Corps. On August 30, 1957, Major Olson and ten others received orders to proceed to Naval Air Station (NAS) Quonset Point, Rhode Island, for temporary duty for 30 days on a classified mission."¹⁹² In September 1957, President Eisenhower flew HMX-1 helicopters as the primary mode of travel from Rhode Island across the Narragansett River.¹⁹³ The President's decision to fly aboard the HMX-1 helicopter was not made at the last minute. Instead, President Eisenhower knew he would need to return to Washington a few times before his vacation in Newport, Rhode Island, would come to an end. The trip from the summer White House on the

¹⁹⁰ Marks, 42.

¹⁹¹ "Evan P. Aurand Oral History," Interviewed by John T. Mason, Jr., May 1, 1967, the Oral History Research Office, Columbia University, 1971, 10. By unusual, he explained that the secret service said if the general public cannot buy a ticket on it, you should look hard before you use it.

¹⁹² Butler, 26, from Virgil Olson's Personal collection.

¹⁹³ Marks, 41.

east side of Narragansett Bay to the air station on the west side required two hours by car, forty minutes by boat, but only seven minutes by helicopter. The President chose the quickest option, having previously recognized the capabilities of the Marine Corps. The HMX-1 helicopter, piloted by Major Olson, flew President Eisenhower across the bay and landed beside the Presidential airplane "Columbine." When the President returned from Washington, he took a few steps from Columbine to the HMX-1 helicopter and flew back to Newport. He made three round trips using HMX-1 each time. This experience convinced the President of the value of the helicopter and added a recurring responsibility to HMX-1's mission.¹⁹⁴

In early October, the Naval Aide again sent a memorandum to the Marine Commandant praising HMX-1's performance. "The President has asked me to convey his sincere thanks for the services of Marine Helicopter Squadron One during his stay at the Naval Base, Newport, Rhode Island. He particularly appreciated Major Olson's piloting skills and the smooth ride on the helicopter while on board."¹⁹⁵ The members of the White House Staff using the HMX-1 helicopter lifts were also pleased by the quick transportation. The helicopter facilitated quick action for White House office business.¹⁹⁶ While the President appreciated the Marines' abilities in their new mission, Eisenhower's Army Aide, Colonel Robert L. Schulz, was less than keen on the Marines gaining an advantage over the Army. Colonel Schulz served as the President's aide in Europe during his tenure as Supreme Allied Commander in World War II and maintained a close personal relationship with Eisenhower. He advocated for an equal role for the Army in the new helicopter mission, resulting in the establishment of an Army Executive Flight Detachment

¹⁹⁴ Marks, 42.

¹⁹⁵ Butler, 27-28.

¹⁹⁶ Butler, 28.

at Fort Belvoir, Virginia.¹⁹⁷ Colonel Shulz, similar to other high-ranking leaders, recognized that having direct access to the President not only provided political backing but also influence over policies affecting the military services.¹⁹⁸

Equal responsibilities and procedures for presidential support were established to allow collaboration between the Marines and soldiers on the executive lift task. The Marines retained exclusive ownership of the emergency evacuation mission. When Marine One flew as the primary, an Army helicopter with the Secret Service crew on board flew adjacent, and when Army One was flying the President, an HMX-1 helicopter flew in support.¹⁹⁹ On trips outside Washington, D.C., the Army and Marines divided the role, using the Mississippi River as the dividing line, with an even allocation of priority across the east and west sides.²⁰⁰ For the next 18 years, HMX-1 distinguished itself by consistently outperforming the Army lift detachment, building an impressive reputation for exceptional service to the President. In addition to domestic support, HMX-1's overseas missions showcased its abilities and solidified the Marines' reputation.

Operations Overseas

On July 17, 1959, Lieutenant Colonel (LtCol) Victor A. Armstrong replaced Virgil Olson as Commanding Officer of HMX-1. LtCol Armstrong had been with the squadron before joining VMO-6 for service in Korea, where he received numerous decorations for valor. After returning to Quantico and serving as HMX-1's Executive Officer, LtCol Olson chose Armstrong to become

¹⁹⁷ Butler, 28.

¹⁹⁸ Paul Y. Hammond, *Organizing for Defense: The American Military Establishment in the 20th Century*, (Princeton University Press, 1961), 195.

¹⁹⁹ The designation "Marine One" or "Army One" is the helicopter's call sign with the President on board. When not on board, other call signs are used. HMX-1 call signs outside of presidential missions are "nighthawks."

²⁰⁰ Marks, 43.

the next Presidential Helicopter pilot. LtCol Armstrong led HMX-1 through continued growth and transition. Part of the growth of HMX-1 was its role in overseas support for presidential travel.

Within seven months of assuming command, LtCol Armstrong oversaw HMX-1's first historic outside the Continental United States. HMX-1 played a role in South America in support of President Eisenhower's "Goodwill Tour, which aimed to show a commitment to creative friendship and collective responsibility in the name of the long-misunderstood Colossus of the North."²⁰¹ The Naval Aide to the President directed HMX-1 on January 6, 1960, to "be prepared to support Presidential flights in four South American Countries from February 24, 1960, to March 3, 1960."²⁰² During this trip, HMX-1 flew the President and political delegates from four countries: Brazil, Argentina, Chile, and Uruguay. This first major OCONUS trip added to HMX-1's legacy as an aid to diplomacy and continued the Marine Corps' success in operations outside of war.

In Argentina, the journalists wrote about President Eisenhower's warm reception. While awaiting the President's arrival, HMX-1 Marines flew multiple test flights. Argentinian military officers were given demonstration flights and were impressed by the helicopter's capability.²⁰³ In Brazil, acting Foreign Minister Fernando Ramos de Alencar compared Eisenhower's visit to being visited by Santa Claus. In Chile, President Jorge Alessandri applauded Eisenhower, stating,

²⁰¹ "THE PRESIDENCY: Operation Amigo", *Time Magazine*, March 14, 1960, <https://time.com/archive/6809168/the-presidency-operation-amigo/>.

²⁰² Report of HMX-1's Participation in "Operation Amigo," Pres. Eisenhower's Goodwill Tour to S. America February 24 - March 3, 1960, Operational and Historical Records of Aviation Commands and Units, 1950 – 1960, Records of the U.S. Marine Corps Record Group 127, From National Archives at College Park, College Park, MD.

²⁰³ "OPERATION AMIGO," 1960 PRESIDENT EISENHOWER LATIN AMERICA TRIP USMC MARINE CORPS FILM XD97685," (YouTube: Periscope Film, February 27, 2024), 4:50, <https://www.youtube.com/watch?v=J6iP31NqZZ0>.

“You have won our hearts.” In Uruguay, the soon-to-be President Eduardo Victor Haedo commended Eisenhower for correcting past mistakes and establishing confidence in the Uruguayan people.²⁰⁴

Operation Amigo was a success for HMX-1 and the United States. The squadron carried out the transport operations, ensuring that all 15 helicopters were consistently ready for flight, which was an accomplishment in its own right. Not only did they complete 14 incident-free airlifts and transport the President for nearly 4 hours, but they also showcased the unwavering commitment of the United States to the South American nations. Not only was this the first time a U.S. President flew on a helicopter in South America, but it also marked the first instance of a helicopter crossing over the Andes mountains, reaching 13,500 feet.²⁰⁵ With the direct support of helicopters in South America, President Eisenhower completed a diplomatic mission that further strengthened confidence and cohesive foreign policy with the leaders and people of each country.

²⁰⁴ “THE PRESIDENCY: Operation Amigo”, *Time Magazine*, March 14, 1960.

²⁰⁵ HMX-1 helicopters crossed over the Andes mountains two times during this trip; Report of HMX-1's Participation in "Operation Amigo," Pres. Eisenhower's Goodwill Tour to S. America February 24 - March 3, 1960, Operational and Historical Records of Aviation Commands and Units, 1950 – 1960, Records of the U.S. Marine Corps Record Group 127, From National Archives at College Park, College Park, MD.



Figure 4: Cover page of HMX-1 Operation Amigo Summary of events. Report of HMX-1's Participation in "Operation Amigo," Pres. Eisenhower's Goodwill Tour to S. America February 24 - March 3, 1960, Records of the U.S. Marine Corps Record Group 127, From National Archives at College Park, College Park, MD.

HMX-1 achieved a breakthrough during overseas support in Japan in another noteworthy mission. The unit was vital in assisting the President during "Operation COSMOS," encompassing trips from Hawaii to the Far East. This operation showcased HMX-1's capabilities and marked the first activation of the emergency evacuation plan, underscoring HMX-1's role in national security. On June 10, 1960, Presidential Press Secretary James Hagerty and other White House officials were evacuated from the Tokyo airport by an HMX-1 helicopter after thousands of demonstrators surrounded their motorcade and created a threat to their safety. The pilot in charge of the HMX-1 detachment was Major Donald H. Foss. His actions that day were captured in his award citation. It noted that despite his helicopter being struck by stones and

compromising the aircraft's exterior, he skillfully maneuvered the helicopter to land amid the rowdy demonstrators and conduct the rescue.²⁰⁶ The event underscored the impressive capabilities of the Marine Corps and HMX-1. The squadron and its dedicated Marines again demonstrated their commitment to safety and security. This performance not only garnered political favor but also reinforced the strength and reputation of the Marine Corps. HMX-1's pilots continued to display their abilities throughout the Vietnam War.

HMX-1 the 1960s

By 1962, the Marine Corps had 341 helicopters, a substantial increase from the five in 1948 and a 69 percent increase from the 202 in 1953.²⁰⁷ The Marine Corps continued its push for helicopters as a critical part of its amphibious operations mission. In addition to gaining the presidential mission between the Korean and Vietnam wars, HMX-1 worked to upgrade the helicopter. In the 1950s, HMX-1 tested the attachment of rocket launchers and other guns to helicopters for an offensive capability.²⁰⁸ These experiments resulted in the Marine Corps acquiring the UH-1E "Huey," used for the first time in Vietnam.

Marines headed to Vietnam with their first deployment of helicopters as part of Operation SHUFLY in April 1962. At this point, the Army and the Air Force were well aware of the helicopter's capabilities and air mobility. However, there were ongoing debates and disputes

²⁰⁶ "As the pilot of a Marine helicopter assigned to Marine Helicopter Squadron One, Major Foss faced a substantial risk of injury due to a potential crash. Despite the helicopter being struck by stones that shattered the windshield and windows, compromised the aircraft's exterior, and severely dented all rotor blades, he skillfully maneuvered the helicopter to land amid the rowdy demonstrators...he played a pivotal role in the successful execution of the rescue", Butler, 33.

²⁰⁷ LtCol William R. Fails, *Marines and Helicopters 1962-1973*, (Washington DC: History and Museums Division, HQMC, 1 May 1978), 2; and Rawlins, 57.

²⁰⁸ Marks, 19.

between the services regarding their roles, missions, and aviation employment.²⁰⁹ The Air Force still wanted complete control over all aviation assets, and they would not concede to the importance of air assets in support of ground troop movement. The Air Force maintained and relied on their early doctrine of strategic bombing as the best way to exploit aviation.²¹⁰ Operation SHUFLY became the Marine Corps' first demonstration of the helicopter's tactical role in close air support and offensive actions.²¹¹

A small group of Marine Officers and enlisted men planned the operation. Colonel John F. Carey, the second commander of HMX-1 from 1949 to 1950 and the 18th designated helicopter pilot in the Marine Corps, was the commander of the overall operation.²¹² In addition to Colonel Carey's leadership, Lieutenant Colonel Archie Clapp, an HMX-1 member from 1951, commanded one of the two squadrons tasked with conducting SHUFLY. As the Commander of Marine Heavy Helicopter Squadron 362 (HMM-362), LtCol Clapp conducted combat operations in Vietnam and used his HMX-1 experience to make on-the-spot upgrades to his aircraft. The helicopters lacked additional armor plating in vulnerable areas, and he was able to identify them and add protection to the engine and oil lines.²¹³ This information was sent back to Quantico for analysis and further development, with HMX-1 continuing to lead the process.

During the early years of the Vietnam War, HMX-1 continued to develop gun and rocket mounts for helicopters. The first system was the TK-1 (Temporary Kit-1), which was only minimally successful because of its placement on the aircraft. Development continued, and TK-

²⁰⁹ Ian Horwood, *Interservice Rivalry and Airpower in the Vietnam War*, (Fort Leavenworth, Kansas: Combat Studies Institute Press, 2006), 94.

²¹⁰ Horwood, 161-167.

²¹¹ Peter Mersky, *U.S. Marine Corps Aviation: 1912 to the Present*, (Baltimore, Md: Nautical & Aviation Publishing, 1998), 209.

²¹² Fails, 29.

²¹³ Mersky, 210.

2, consisting of four large machine guns and two rockets, debuted in 1965.²¹⁴ In addition to advancement in technical aspects, HMX-1 also shipped additional helicopters to aid in Vietnam after an attack by the Vietcong destroyed and damaged over 50 helicopters.²¹⁵ Vietnam's experiences prompted the Marine Corps to refine and advance the helicopter. The Marine Corps continued to invest in larger aircraft with greater lift capacity and enhanced offensive capabilities. There was no turning back, and HMX-1 worked on developing helicopters for combat while increasing political influence through presidential support. While helicopter pilots in Vietnam continued to use the older HUS helicopters for some time, the Presidential H-34s were approaching the end of their service life. In January 1962, HMX-1 operated four HUS-1Z helicopters, but the new Sikorsky S-61 was coming.²¹⁶

HMX-1 and the Domestic Role

Shortly after the new mission to support the President of the United States was established in 1959, HMX-1's mission statement became: "Provide helicopter support to the Marine Corps Schools for the development of helicopter tactics, techniques, and equipment for landing force operations and for student demonstration and indoctrination as directed. Provide special helicopter lift support as required by the Secretary of Defense and the White House."²¹⁷ The official mission of HMX-1 did not mention domestic search and rescue as a requirement.

²¹⁴ Mersky, 210.

²¹⁵ Fails, 96.

²¹⁶ Butler, 34-35. Although the aircraft (VH-34 and HUS-1Z) are the same mechanically, they were designated as VH-34s. The "V" stands for VIP, and these aircraft have a more elegant interior than the typical military aircraft. Comfortable seats, carpeting, and covered mechanical instruments are not standard in regular military planes.

²¹⁷ As cited by Butler, 37; AMSgt Walter Stewart, "Hotline to the White House," *Leatherneck, Magazine of the Marines*, March 1959, 29.

However, search and rescue and medical evacuations became standard missions in the following decades.

In the 1950s, HMX-1 assisted in many domestic rescues along the East Coast. In 1955, floods in Pennsylvania and Connecticut spurred HMX-1 to action to help with S&R. On another occasion, while traveling across the country, HMX-1 stopped in Arizona to refuel their aircraft. During this stop, they learned of a hunter trapped for nearly a day. Although the helicopter did not have a pulley system for a rescue, the Marines of HMX-1 creatively improvised with a rope and successfully carried out the rescue.²¹⁸ HMX-1 also performed other lifesaving actions, such as rescuing a sinking ship in Maryland in 1958 and rescuing another man after a plane crash around Charlottesville, VA, in 1960.²¹⁹ The press captured these rescues and others, showcasing the value of HMX-1 and the Marine Corps.

Despite advancements in technology and the production of more capable aircraft, concerns about the safety of the President with single-engine planes persisted, particularly regarding potential malfunctions. In June 1961, Rear Admiral Paul D. Stoops, the Bureau of Naval Weapons Chief, requested approval to purchase twin-engine helicopters.²²⁰ In August 1961, the HMX-1 Marines quickly validated the new helicopters for the Presidential mission. On May 26, 1962, President Kennedy was the first President to fly in the newest Marine VH-3.²²¹ “Before this historic flight, on May 1, 1962, the Helicopter Association of America had presented JFK with a Resolution commemorating his "extensive use of helicopters as a routine method of

²¹⁸ Marks, 44.

²¹⁹ Butler, 30-31.

²²⁰ *White House Memorandum dated April 24*", 1961, signed by Air Force Aide to the President Colonel Godfrey T. McHugh, JFK Library, Boston, MA, Archives, W.H. Central Staff Files, McHugh Papers, Box 19, Folder 5.

²²¹ The VH-3 is still used as a Presidential platform and is the most iconic Marine One aircraft. Until 2024, it was the only helicopter authorized to land on the White House lawn.

transportation," which declared that his "day-to-day use of helicopters gives more than ample testimony to the inherent value of the helicopter as a superior means of executive transportation."²²² With HMX-1's support at the highest levels of government, these milestones continued to ensure funding and relevancy for the Marine Corps as an institution.

In 1963, the praise for HMX-1 and the Marine Corps continued. "President Kennedy sent a letter to the Commandant of the Marine Corps, General David M. Shoup; the letter commended HMX-1 Commanding Officer Lieutenant Colonel Edwin O. Reed for the many miles flown by his helicopters: The performance of this squadron over the past two years has been outstanding in every respect. Not only has the squadron performed unheralded service by standing by in the event of a national emergency, but it has also performed valuable logistics services to the office of the Presidency and me. During this period, Colonel Reed has flown me to every section of this country, including Costa Rica, Colombia, and Venezuela."²²³ The success of HMX-1 and the helicopter helped the Marine Corps grow and advance. By early 1965, the Marine Corps had established 20 helicopter squadrons and had acquired nearly 400 helicopters. Even more critical was that Vietnam was progressively becoming primarily a helicopter war. The advances made by the Marine Corps paved the way for all the services to find use in the equipment.

HMX-1 upheld its role in domestic support into the 1970s. On June 6, 1970, husband and wife David and Donna Urey were traveling home to McLean, VA, when they got into a severe traffic collision in Petersburg, West Virginia. Donna Urey was four months pregnant and critically injured in the accident. The doctors said she needed neurosurgery and needed to get to Washington, D.C., but they did not believe she would survive an ambulance drive to get there.

²²² Airplanes/Helicopters, Folder 14-1, Box 1010, W.H. Central Files, JFK Library, Boston, MA.

²²³ As cited by Butler, 36-37; Airplanes/Helicopters, Folder 14-1, Box 1010, W.H. Central Files, JFK Library, Boston, MA.

David Urey tried multiple options to get transport for his wife without success. As a last resort, he called the White House and spoke to one of President Nixon's military aides, Brigadier James Hughes. General Hughes coordinated an HMX-1 helicopter to pick up and transport the Ureys to the hospital. Donna spent two months recovering in the hospital, and a few months after that, a newspaper headline covering the event read, "Happy Ending."²²⁴ The HMX-1 pilots and equipment saved the day, and baby Darby Urey was born. This event was just another of many medical rescues conducted by HMX-1 in support of the American public.

HMX-1 and President Ford

The records of HMX-1's actions from 1970 to 1976 show numerous instances of local support, including transporting burn and vehicle collision victims and searching for lost canoeists and hikers. Newspaper articles recounting the heroic actions of the Marines and HMX-1 were significant because they reinforced the public's recognition and support.²²⁵ The hundreds of search and rescue missions, coupled with the primary missions of presidential support and helicopter advancement, added more value to the Marine Corps. It is unclear when HMX-1 ceased domestic search and rescue and medical evacuation missions, but one likely reason relates to its uptick in Presidential support and a change in priorities.

During the early 1970s, many Western countries faced a severe recession that ended the economic growth seen after World War II. The recession was marked by stagflation, which resulted in high unemployment and rising prices. Several factors contributed to this problem,

²²⁴ HMX-1 Command Chronology, 1970, Series: Command Chronologies and Related Documentation, Records of the U.S. Marine Corps Record Group 127, From National Archives at College Park, College Park, MD.

²²⁵ HMX-1 Command Chronology, 1970, Series: Command Chronologies and Related Documentation, Records of the U.S. Marine Corps Record Group 127, From National Archives at College Park, College Park, MD.

including the oil crisis of 1973 and the increasing costs of the Vietnam War under President Lyndon B. Johnson. Additionally, competition from newly industrialized countries put pressure on the metal industry, leading to a steel crisis that required changes in North America's and Europe's industrial areas.²²⁶ The impact of the 1973–1974 stock market crash intensified the recession. Although the recession officially ended in March 1975, unemployment continued to rise for several months, reaching its peak rate of 9 percent in May 1975.²²⁷ These issues caused concern among citizens of the United States.

In response to the economic disaster, letters were pouring into the White House concerning government spending. An article in the *Observer-Dispatch* dated December 3, 1974, sparked political disappointment by voters that President Gerald Ford ordered 80 ashtrays at \$50 each for Air Force 1.²²⁸ Another article appeared a few months later in the *San Francisco Chronicle*, “President Ford, upon signing the new tax bill: “This is as far as we dare to go. I will resist every attempt to add another dollar to this deficit with new spending programs. I will make no exceptions.” Armand Kerin found that inspiring until he ran across this squib in the latest ASH (Action on Smoking Health) newsletter; “The Naval Research Lab is filling a Presidential order of 80 ashtrays for Air Force One and its backup plane. Each cast aluminum tray costs \$50 (Total \$4000).”²²⁹

²²⁶Andrés, Solimano, *A History of Big Recessions in the Long Twentieth Century*, (Cambridge: Cambridge University Press, 2020).

²²⁷ Michael A, Urquhart, and Marillyn A Hewson, “Unemployment Continued to Rise in 1982 as Recession Deepened.” *Monthly Labor Review* 106, no. 2 (1983): 3–12.

²²⁸ W.H. 11-1: Airplanes-Helicopters, Box 10, White House central files, Gerald Ford Library, Ann Arbor, MI.

²²⁹ Article dated Friday, April 4, 1975, W.H. 11-1: Airplanes-Helicopters, White House central files, Box 10, Gerald Ford Library, Ann Arbor, MI.

The escalation in government spending raised considerable concern among officials and the general public, mirroring the economic conditions observed in the aftermath of World War II. This spending reached unprecedented levels and prompted discussions about its implications for fiscal policy and economic stability. This fear was particularly pressing given the recent Watergate scandal, which led to Richard Nixon's resignation. Gerald Ford, who assumed the Presidency, was determined to restore confidence in the American people during this challenging time. Warren Gulley, a retired Marine Corps veteran of World War II and Korea and the first White House Military Office civilian Chief, addressed these concerns by assuring voters of fiscal responsibility. In a letter dated April 10, 1975, Gulley clarified that the Republican National Committee covered the ashtrays' expenses, not the government or the American taxpayer.²³⁰ Other concerns regarding the President's political campaign travel were important to American taxpayers and elected officials. Letters from constituents and members of Congress were sent in to see who paid for the trips and what fuel costs it took to fly a helicopter to Camp David.²³¹ Whether it was the barrage of letters disappointed in government spending or simply the realization that two detachments of Presidential helicopters by two different branches of military services were expensive to maintain and cumbersome to the Department of Defense's overarching mission, competition in military services sparked again.

President Ford approved downsizing to a single consolidated helicopter unit to support the Office of the President in 1976. On May 27, the Marine Corps Executive Flight Detachment of HMX-1 became the sole provider of the presidential mission. As of July 1, 1976, the Army

²³⁰ W.H. 11-1: Airplanes-Helicopters, White House central files, Box 10, Gerald Ford Library, Ann Arbor, MI.

²³¹ W.H. 11-1: Airplanes-Helicopters, White House central files, Box 10, Gerald Ford Library, Ann Arbor, MI

executive detachment was officially disbanded and recognized for its service.²³² President Ford's decision resulted from a Department of Defense study analyzing the equipment, workforce, and costs associated with the White House's helicopter support. The four-page document outlined the support of the Army and the Marine Corps over the last six years (1969-1975). It explained the differences in each unit regarding composition and mission. The HMX-1 mission involved supporting nearby Marine Corps schools for troop movement during training, while the Army detachment focused exclusively on Presidential support.

Cost saving was the primary factor in deciding in favor of HMX-1. In the report, HMX-1 leadership indicated that they could assume the entirety of the White House mission with a mere \$75,000 in additional travel expenses and an increase in unit size by five Officers and 22 Enlisted personnel.²³³ Another factor leading to HMX-1 winning the job was the well-established pilots and mechanics for the VH-3D aircraft, the primary aircraft for presidential travel. The analysis identified cost savings and the reallocation of Army assets to return to regular service of Army-specific requirements. The versatility of HMX-1 in the Marine Corps had already been demonstrated through split support, leading to a unanimous agreement communicated from the Marine Corps to the White House for implementation. HMX-1's ability to support the President, operational testing and evaluations, and MCS troop transport, all while keeping costs low, was the answer that President Ford needed in a time of tightening budgets.

Army helicopters continued to support the Vice President's office; however, losing their role in directly supporting the President during budget-tightening defense spending raised

²³² W.H. 11-1: Airplanes-Helicopters, White House central files, Box 10, Gerald Ford Library, Ann Arbor, MI.

²³³ W.H. 11-1: Airplanes-Helicopters, White House central files, Box 10, Gerald Ford Library, Ann Arbor, MI.

concerns. At this time, HMX-1 was the largest helicopter squadron in the Marine Corps, comprising approximately 500 Marines and civilians, as well as nearly 30 helicopters. This number has continued to grow, and in the 21st century, HMX-1 has become one of the largest squadrons in any branch of service, with nearly 800 personnel. The direct correlation between White House priorities and the elite role that HMX-1 plays in supporting the nation's top office has likely contributed to such growth. Marine Corps helicopter aviation has evolved significantly from the iconic "flying banana" to the VH-3 "Sea King." The work of HMX-1 in Quantico has played a crucial role in advancing Marine Corps aviation. The unit has established a tradition of excellence by testing cutting-edge ideas and receiving unwavering support from the President of the United States. Its role in training pilots, testing, and evaluating doctrine and equipment has surpassed that of the other services.

Conclusion

From the 1950s to 1978, HMX-1 remained vital to the Marine Corps. Early in the Korean War, the helicopter's initial development and accompanying doctrine enabled its effective employment. HMX-1's personnel represented the best and the brightest in helicopter aviation. In a 1967 interview, General Cates shared his experiences as Commandant and identified the most noteworthy change he observed during his tenure. He stated, "The biggest change was the development of the helicopter. Because there is no question about it, the Marines were responsible for developing the helicopter. The Army was lukewarm to it, and the Navy did not want any part."²³⁴ The gamble that the Marine Corps made on helicopters through its creation of HMX-1 paid off. It established the Marine Corps' dominance in tactical aviation and fueled

²³⁴ Clifton B. Cates, Interview by Benis M. Frank, Transcript, 1967 Quantico, Virginia, Oral Histories Collection, Marine Corps Archives, History Division, Quantico, Virginia, 213-214.

expansive strategic ideas across the services. HMX-1 also earned the Marine Corps friends in Congress and the public through its continued success, demonstrated through advancements in capability. HMX-1 assumed the role of the sole helicopter transport for the President of the United States, thereby establishing direct access to the highest office. Just two years later, on October 20, 1978, the Marine Corps achieved full membership in the JCS. This milestone is immensely significant, as it illustrates the Corps' critical role in national defense and highlights the political influence and advancements in helicopter technology that HMX-1 bolstered. This accomplishment underscores the importance of collaboration and progress within our military forces.

The shift in the Marine Corps' involvement at the highest levels can be attributed in part to the contributions of HMX-1 in advancing helicopter technology and showcasing its effectiveness in combat. HMX-1 provided helicopter support for Congress and the President while conducting hundreds of local support missions that attracted public attention and acclaim. The squadron influenced the Army's helicopter tactics and enhanced the Marine Corps' amphibious operational capabilities. HMX-1 fostered considerable support and positive perceptions of the Marine Corps' role within the defense establishment. Achieving full membership in the JCS granted the Marine Corps a voice in all future military decisions, safeguarding its position by ensuring representation at the highest levels of the military hierarchy.

Today, helicopters comprise over 50 percent of the Marine Corps' aviation, underscoring their critical importance. With HMX-1 assuming all helicopter support for the Office of the President, the Marine Corps consistently remained at the forefront of the minds of political leaders. HMX-1's influence has not waned since 1978; its impact in contemporary times is also

noteworthy as it continues to adapt to meet the evolving needs of the Marine Corps, the White House, and the United States.

Epilogue

On a warm night in Quantico, Virginia, two HMX-1 security Marines were stationed at one of the primary vehicle control points, overseeing access to the air facility.²³⁵ To pass the time during the early morning hours, the two chatted about their plans for the next day and the new PlayStation 2 they had finally saved enough money to purchase. On this particular shift, their conversation shifted to sports as one Marine threw rocks toward the other, who had found a suitable stick to use as a makeshift baseball bat to hit the stones into the empty street. Like many of their night shifts, it was uneventful.

As their shift ended around 0600 hours, both Marines decided to squeeze in a quick workout before heading to the chow hall for breakfast. They then planned to retreat to their barracks room for some sleep before reporting for their following shift that evening. After finishing their workout and enjoying breakfast, they got to their rooms and closed their eyes around 0730 a.m. While these events were typical of their post-shift routine, this day would prove anything but ordinary. On September 11, 2001, about an hour after they fell asleep, a loud banging rang through the entire barracks, accompanied by urgent shouts for everyone to wake up, get out, and assemble. At 0846 a.m., the north tower of the World Trade Center was struck by a plane.²³⁶

In the immediate aftermath, information was limited, but the young Marines quickly recognized that the ensuing hours at HMX-1 would mark another turning point. The Marines at

²³⁵ This vignette is provided by Major William Keller, who, at the time, served as a Lance Corporal security marine at HMX-1. He was one of the two Marines mentioned in the account. Twenty years later, Keller returned to HMX-1 and assumed the role of security company commander, Interview conducted by Bradley Worthan on January 24, 2025.

²³⁶ Amy Tikkanen, "Timeline of the September 11 Attacks," *Encyclopedia Britannica*, July 6, 2018, <https://www.britannica.com/list/timeline-of-the-september-11-attacks>.

HMX-1 were assigned various tasks and placed on heightened security alert. Like many military units across the United States, HMX-1 underwent profound changes following September 11, 2001. The focus of HMX-1 shifted almost entirely to supporting the President, as Marine Corps leadership prioritized security and direct assistance to the White House over technological advancements. They understood the importance of providing direct support to the White House and the benefits it brought to the organization.

In 2003, the Marine Corps aviation unit VMX-22 in Yuma, AZ, assumed most operational evaluation and testing responsibilities. This transition facilitated technological advancement while allowing HMX-1 to maintain its high-profile role. Despite this shift, HMX-1 continued to support local Marine Corps Systems Command operations by transporting Marines around Quantico. It retained its authority over all Presidential helicopter platforms' testing and evaluation processes. The primary emphasis remained on the presidential mission, a critical revenue source and recognition for the Marine Corps.

The Patriot

The primary helicopters utilized by HMX-1 include the VH-3D and VH-60N, which have been in service since 1978 and 1987, respectively. Both aircraft are highly capable and designed for longevity; however, they have exceeded their intended operational lifespan. Recognizing the need for a new helicopter platform, HMX-1 partnered with Sikorsky manufacturing and engineers to demonstrate innovation and versatility once again. Research and development for the VH-92A, commonly referred to as the Patriot, began in 2002. In 2005, the Naval Air Systems Command awarded Lockheed Martin a contract for 28 VH-71 Kestrels for the presidential helicopter mission. However, President Obama ultimately canceled this program in 2009 due to cost overruns stemming from unforeseen development expenses. In 2012, President Obama

revived the replacement initiative, and Sikorsky won the contract without competition in 2014.²³⁷ The total program cost for 23 aircraft is approximately \$5 billion.²³⁸

According to analyst Norman Polmar, “The VH-3D and VH-60N underwent periodic improvements in electronics, navigation, communications, and other features...The extra weight, coupled with the desire to provide more protection for passengers following the 9/11 terrorist attacks, led the Department of Defense to accelerate the effort to field replacement helicopters. The new aircraft would have ballistic armor, radar jamming, deception systems to deter anti-aircraft missiles, hardened electronics against a nuclear electromagnetic pulse, and encrypted telecommunication and videoconferencing systems.”²³⁹ These additional requirements represent advancement into the 21st century, highlighting Marine One as the leading edge of executive transport, with the Marine Corps at the forefront of this initiative.

The VH-92 was planned to surpass the performance of its predecessors, incorporating advanced crew coordination systems, enhanced communication capabilities, increased availability, simplified maintenance, and an extended flight range. Initially, the Marine Corps projected that the VH-92 would entirely replace the VH-3D and VH-60N by 2022, with limited operational deployment expected to commence in 2020. However, two issues emerged during the development, preventing timely completion. The foremost concern involved the mission communication system, which is essential for the aircraft's encrypted telecommunications and

²³⁷ “Final VH-92A Presidential Helicopter Delivered: Navair,” Meet the Leaders of NAVAIR, accessed January 31, 2025, <https://www.navair.navy.mil/news/Final-VH-92A-presidential-helicopter-delivered/Mon-08192024-1049>.

²³⁸ Aamer Madhani and Zeke Miller, “Biden Takes Inaugural Flight in Long-Delayed New ‘marine One’ Helicopter,” AP News, August 19, 2024, <https://apnews.com/article/biden-presidential-helicopter-convention-marine-one-d260ca6dc141979003670189eaebe53b>.

²³⁹ Norman Polmar, “The Presidential Helicopters,” U.S. Naval Institute, December 31, 2023, <https://www.usni.org/magazines/naval-history-magazine/2024/february/presidential-helicopters>.

videoconferencing capabilities.²⁴⁰ As one of its crucial features, this communication system enables continuous connectivity to secure and non-secure networks, allowing the President and high-ranking officials to conduct their work mid-flight. Although resolving this issue required additional time, it was effectively addressed.

Initial design considerations for the helicopter prioritized cost, performance, safety, and security, but an unexpected challenge arose concerning unintended consequences. Testing of the VH-92 for White House landings revealed a problem: the angle of the exhaust and its proximity to the meticulously maintained lawn resulted in burn marks approximately the size of sewer hole covers.²⁴¹ The combination of exhaust heat and the short distance to the ground scorched large grass areas at the landing site, presenting an unforeseen issue for both the Marine Corps and Sikorsky. In response, they returned to the drawing board to devise a practical solution, demonstrating the innovation, adaptability, and determination characteristic of the Marine Corps. Despite these initial obstacles, the VH-92A considerably advances security, performance, and reliability, ensuring safe and efficient transport for presidential duties, and would soon take to the skies in direct support of the White House.

²⁴⁰ Thomas Newdick, “VH-92 Helicopter Has Finally Flown Its First ‘marine One’ Mission (Updated),” *The War Zone*, August 19, 2024, <https://www.twz.com/air/vh-92-helicopter-has-finally-flown-its-first-marine-one-mission>.

²⁴¹ Aamer Madhani and Zeke Miller, “Biden Takes Inaugural Flight in Long-Delayed New ‘marine One’ Helicopter,” and Thomas Newdick, “VH-92 Helicopter Has Finally Flown Its First ‘marine One’ Mission (Updated).”



Figure 5: Marine Helicopter Squadron One (HMX-1) runs test flights of the new VH-92A over the south lawn of the White House in 2018. U.S. Marine Corps photo by Sgt. Hunter Helis

On August 19, 2024, President Joe Biden and First Lady Jill Biden arrived at Soldier Field in Chicago for the 2024 Democratic National Convention (Figure 6 below). While the President has traveled extensively during his time in office, this occasion held particular significance. Although he had flown on Marine One before, this flight was his first aboard the new VH-92A Patriot, marking the introduction of the first new presidential platform since the 1960s. This milestone followed years of research, coordination, and training involving stakeholders from the White House Military Office, Sikorsky headquarters, and the pilots and staff of HMX-1. Introducing this new aircraft not only signifies progress for Marine One but also reinforces the Marine Corps' crucial role as an integral and influential component of the

government. It charts a clear path towards independence and highlights the importance of maintaining this squadron amidst discussions concerning potential reductions or disbandment.



Figure 6: US President Joe Biden and First Lady Jill Biden step off of Marine One on August 19, 2024. President Biden delivers the keynote address at the Democratic National Convention opening night. Photo by BRENDAN SMIALOWSKI/AFP via Getty Images.

MV-22 Osprey

A lesser-known yet widely recognized aircraft in the distinguished fleet of HMX-1 is the MV-22 Osprey. Unlike the standard drab grey commonly seen on Marine Corps aircraft, the HMX-1 Osprey is vividly wrapped in the same unique presidential green paint scheme that not only identifies them as different but, more importantly, projects elegance and authority.²⁴² This

²⁴² Joseph Trevithick, “This Marine One VH-60N Had Its Iconic Paint Job Blotted Out for Historic Afghanistan Trip,” (TWZ: The War Zone, February 2021), <https://www.twz.com/39263/this-marine-one-vh-60n-had-its-iconic-paint-job-blotted-out-for-historic-afghanistan-trip>.

aircraft is outfitted with a VIP package with seat covers featuring the distinctive HMX-1 patch. Beyond its appearance, the Osprey has roles carrying out support missions for the White House and executing essential presidential tasks. Additionally, it maintains the Marine Corps' longstanding commitment to educational support, a pivotal aspect of its mission since the unit's formation. One of the most significant educational endeavors supported by the HMX-1 is "The Basic School," where newly commissioned Marine Corps officers undergo their first military training. Each Marine officer experiences a flight aboard an HMX-1 Osprey, offering an introduction to Marine Corps aviation and building upon the legacy of the first Marine Corps helicopter squadron.

Recent discussions have raised concerns about the safety of the Osprey. In early 2024, Vice Adm. Carl Chebi, the U.S. Naval Air Systems Command commander overseeing the V-22 program, informed lawmakers during an oversight hearing about recent crashes. He stated that completing all the safety and performance assessments for the Osprey will take at least six months. "Throughout the program's lifespan, Chebi noted that 64 service members have lost their lives in air and ground incidents, and 93 others have sustained injuries."²⁴³

In the past two years, four separate crashes resulted in the deaths of 20 service members. Notably, two of these incidents were linked to unprecedented material or mechanical failures within the program. Following a crash in November 2023 off the coast of Japan, which resulted in the deaths of eight service members, the fleet of MV-22s was grounded for several months. Although the Ospreys were cleared for flight in March 2024, their operations remained considerably restricted, preventing them from conducting their full range of missions, including

²⁴³ Tara Copp, "Watch: Safety Assessment of V-22 Ospreys Will Take Several More Months, Program Head Tells House Hearing," PBS, June 12, 2024, <https://www.pbs.org/newshour/politics/watch-live-house-oversight-panel-explores-v-22-osprey-safety-concerns>.

aircraft carrier operations for which the aircraft was initially designed. Despite being operational since 2007, the Osprey's distinctive design has drawn considerable criticism, with some attributing its unexpected failures to systemic flaws. A factor contributing to these ongoing limitations on flight operations is the continuous effort to resolve a clutch failure identified as a primary cause in a June 2022 crash, which resulted in the loss of five Marines in California.

HMX-1 adopted the Osprey into its fleet in 2013 and began supporting Presidential missions later that year. Although not immune to maintenance issues, HMX-1 has operated its fleet of 10 MV-22s without major incidents since its inception into the unit. In the role of primary support to the Presidential mission, the Osprey does not fly POTUS but instead transports primary staff, Secret Service, and members of the press corps. Another important passenger is the United States Vice President (VPOTUS). Following the service-wide grounding of MV-22 aircraft and their subsequent clearance to fly, concerns regarding the safety and reliability of these aircraft lingered. The recent flight in August 2024, during which Vice President Kamala Harris traveled on the HMX-1 Osprey to the Democratic National Convention amidst Congressional safety hearings, underscores the trust and confidence placed in the Marine Corps and, in particular, HMX-1 (depicted below in Figure 7).²⁴⁴

²⁴⁴ Tyler Rogoway, Joseph Trevithick, "MV-22 Ospreys Have Actually Been Flying the Vice President for Years," *The War Zone*, August 23, 2024, <https://www.twz.com/air/mv-22-ospreys-have-actually-been-flying-the-vice-president-for-years>.



Figure 7: Vice President Harris arrives at the Democratic National Convention on an HMX-1 V-22 Osprey. This is from an article titled MV-22 Ospreys Have Actually Been Flying The Vice President For Years. KEVIN LAMARQUE/POOL/AFP via Getty Images, Aug 24, 2024.

As this thesis has shown, the HMX-1 legacy and tradition of supporting the highest office in the United States lend credibility to the Marine Corps as a service with no end in sight. The study highlighted the critical role of HMX-1 in establishing the Corps' continued relevance through helicopter innovation, both in combat and non-combat roles, particularly in amphibious warfare and presidential transport. Amid interservice rivalries and political resistance, HMX-1 symbolized the Marine Corps' adaptability and strategic importance. The political dynamics, technological advancements, and lobbying efforts enabled the Marine Corps to preserve its unique identity and operational significance. HMX-1 was instrumental in shaping the Corps' enduring role in national defense.

Further research and exploration

Like many projects and research endeavors, this one has opportunities for further exploration. There were limitations due to restricted access to materials that could have deepened

the project's insights (though I doubt it would have altered any conclusions). One promising area for future research lies in the representation of Marine One in media and film. Following the successful release of the movie *Air Force One*, which starred Harrison Ford, numerous multimedia formats have featured or included the Marine One helicopter.²⁴⁵ It stands to reason that the prominence of such appearances presents an intriguing case study regarding how American culture perceives and interprets the power and mobility symbolized by the green helicopter.

The distinctive appearance and role of Marine One have become ingrained in American cultural iconography. Its frequent depiction in movies, television shows, and news media underscores its symbolic significance as a representation of the U.S. presidency and its global presence. Notable films that include Marine One are *White House Down* and *Olympus Has Fallen*.²⁴⁶ In these films, Marine One is often depicted as a crucial element in presidential evacuations and rescue operations or as a backdrop for presidential travel and security scenarios. These portrayals enhance its iconic status and reinforce its symbolic connection to presidential authority and national security.

In addition to major films, television shows that feature the President of the United States, such as *The West Wing*, *Designated Survivor*, *House of Cards*, *The Diplomat*, and *24*, also depict Marine One in various episodes that explore presidential operations and security.²⁴⁷ These examples demonstrate that Marine One has appeared in numerous TV shows that revolve around

²⁴⁵ *Air Force One*, directed by Wolfgang Petersen, (Sony Pictures, 1997).

²⁴⁶ *White House Down*, directed by Roland Emmerich, (Sony Pictures, 2013), and *Olympus has Fallen*, directed by Antoine Fuqua, (Millenium Media Films, 2013).

²⁴⁷ *The West Wing*, created by Aaron Sorkin, (NBC, 1999-2006), *Designated Survivor*, created by David Guggenheim, (ABC, 2016-2018, and Netflix, 2019), *House of Cards*, created by Beau Willimon, (Netflix, 2013-2018), *The Diplomat*, created by Debora Cahn, (Netflix, 2023), and *24*, created by Joe Surnow and Robert Cochran, (20th Century Fox, 2001-2010, and 2014).

presidential themes, government operations, and national security. Its appearance in these shows further contributes to its cultural and symbolic significance as an emblem of presidential authority and security protocols. Figure 8 below depicts a scene featuring the President of the United States, who visits the United Kingdom to discuss politics with his ambassador. In this particular scene, the British claim that Iran bombed one of their ships.²⁴⁸ The President's arrival in a helicopter to help resolve the dilemma is both a sign of the United States' mobility and its ability to address problems on the international stage.



Figure 8: In the television series *The Diplomat*, *The President* arrives in the United Kingdom to handle a claim that Iran bombed a British ship—the *Diplomat*, created by Debora Cahn, (Netflix, 2023).

Finally, another important role of HMX-1 helicopters was in civilian research and development (R&D), which contributed to the early survival and transition of helicopters into

²⁴⁸ Rachel Chang, *What Happens in 'The Diplomat' Episode 3? War and peace — all in a 70-minute presidential visit*, (Tudum: April 20, 2023), <https://www.netflix.com/tudum/articles/the-diplomat-episode-3-recap>.

civilian applications. The significance of helicopter use in civilian settings cannot be overstated, as military innovations were crucial in driving the development of this technology. Viewed from a different perspective, the Marine Corps' involvement in helicopter advancement encouraged companies to explore and pursue civilian applications that we see today. This aspect of HMX-1 undoubtedly enhances the Marine Corps' influence beyond the military framework. While there are certainly more questions to consider and much more to explore, it is clear that HMX-1 has played a role in advancing helicopter technology and safeguarding the Marine Corps' relevance.

Legacy

On a warm summer day in 2022, HMX-1 proudly celebrated its 75th-year reunion. This momentous occasion drew past and present squadron members together to reflect on the rich appeal of the squadron's illustrious history.²⁴⁹ Known as “Nighthawks,” these dedicated individuals share a bond that transcends time, a cherished tradition seen throughout aviation squadrons. The event buzzed with excitement as hundreds of Nighthawks, alongside their families, came together in vibrant camaraderie, reminiscing about their unique experiences and heartfelt memories of serving various Presidents over the decades. The atmosphere was filled with laughter, storytelling, and nostalgia, which only a long and storied history can evoke. Few military units can boast of an enduring legacy as impressive as HMX-1, and even fewer have the privilege of hosting a reunion that draws such a vast gathering of former and current members. Nighthawks traveled from all corners of the country, united by their service and a profound sense of belonging to something greater than themselves. They were eager to relive their shared journey and honor the extraordinary path of their squadron.

²⁴⁹ The author was personally at this event as a member of HMX-1 at the time. As the security operations officer, I was in charge of setting up security and maintaining the protection of the helicopters during the event.

Although HMX-1 operates the most photographed helicopters in the world, this squadron is not as widely recognized outside military circles. Many people know it primarily as Marine One, the helicopter used by the president, or simply as the “White-top.” What is even less understood is how this squadron became the exclusive helicopter transport for the President of the United States and how its representation on both national and international stages reflects the power projection of the United States as a nation and the Marine Corps as a military service.

The history of HMX-1 and the Marine Corps, particularly during periods of defense unification, the Korean War, and into the 21st century, provides valuable insights into the politics surrounding interservice rivalries. A closer examination reveals that these rivalries often foster constructive dialogue, resulting in the development of competing ideas and initiatives. Without the challenges faced by the Marine Corps and HMX-1, progress in helicopter technology, tactics, and doctrine would have been stifled. Interservice competition enhances the flexibility of force application and the adaptation of survival strategies. For example, the Air Force's strategic deployment of air assets and bombing operations markedly contrasts with the Marine Corps' focus on close air support and the integration of ground forces. While both approaches have their limitations, these differing perspectives enrich the overall spectrum of military options, allowing for tailored responses to a range of conflicts, situations, and requirements as they emerge.

According to the RAND National Defense Research Institute, “A skeptic might note that the Marine Corps’ air force is outgrowing the Navy’s...in the FY (Fiscal Year) 2017 budget request, DoD requested for the Marine Corps Marine aviation more than triple the amount requested for Marine ground forces.”²⁵⁰ As of 2024, the Marine Corps alone is the seventh largest

²⁵⁰ Rebecca S. Zimmerman, Kimberly Jackson, Natasha Lander, Colin Roberts, Dan Madden, Rebeca Orrie, *Movement and Maneuver: Culture and the Competition for Influence among the U.S. Military Services*, (Santa Monica, Calif: RAND Corporation, 2019), 177.

air force behind its sister services, the Air Force, Army, and Navy, and only three countries: Russia, China, and India.²⁵¹ After World War I, aviation in the Marine Corps grew to 340 aircraft. No helicopter was in the mix, but today, at nearly 1300 aircraft, the Marine Corps helicopter inventory sits at around 700. At virtually 60% of all USMC aircraft, the helicopter has become a staple of Marine Corps operations, training, and recognition. The Marine One aircraft quickly became a prominent symbol since its inception in 1947. As the most recognized and photographed aircraft of the Marine Corps, it not only embodies the strength of the Marine Corps but also stands as a poignant reminder of the profound influence that this unit has had and continues to have on the Marine Corps' existence. The historical significance of Marine One serves as a compelling testament to the enduring legacy of the United States Marine Corps and its crucial role in the nation's defense.

As he prepared to leave the presidency in 2016, President Obama said he would miss Marine One more than any other privilege he experienced in office. He described the luxurious, quiet, and robust helicopter that lands in the White House's backyard, providing mobility and convenient transportation.²⁵² With few exceptions, HMX-1 represents the Marine Corps at the White House. The squadron has maintained a political relationship well into the 21st century on

²⁵¹ The source for this information comes from purely aircraft numbers. Largest Air Forces in the World 2024 (worldpopulationreview.com). It is important to recognize that not all military ships are equal, and similarly, certain aircraft are more effective than others. There is a considerable difference between a modern fighter jet and an unarmed training helicopter, even though both are classified as aircraft. The total amount of aircraft a country possesses provides only a partial view of that nation's aerial military strength. To offer a more nuanced and accurate assessment, the World Directory of Modern Military Aircraft (WDMMA) developed the True Value Rating (TVR). This metric takes into account not just the number of aircraft in an armed force, but also their types, capabilities, ages, conditions, and readiness levels. When evaluated using the TVR, the rankings shift markedly, elevating the Marine Corps Air Force to the 5th position globally, placing it just behind the various branches of the US military. (Air Force, Army, Navy) and Russia.

²⁵² Joe Mahshie, "An Insider's Guide to Marine One: The President's Helicopter," The Points Guy, June 23, 2017, <https://thepointsguy.com/news/marine-one-presidential-helicopter/>.

behalf of the Marine Corps. As the face of the President's helicopter squadron, HMX-1 has successfully established a public relations presence through media engagement and ongoing demonstrations, helping the Marine Corps uphold its standing established in 1978. Additionally, HMX-1 has played a crucial role in promoting strategic pluralism, showcasing the advantages of distinct military branches, and encouraging a competitive exchange of ideas.

The survival and effectiveness of the Marine Corps cannot be attributed to any single unit. However, the profound impact of HMX-1 on the Corps' spirit of innovation, adaptability, and unwavering persistence is considerable. The Marine Corps functions as a cohesive air-ground team, defined by its readiness to deploy rapidly and respond to any challenge. The seamless coordination of air and ground operations owes much to the critical role played by HMX-1, which is at the forefront of these efforts. HMX-1's relentless pursuit of innovation and its ability to adapt swiftly to changing circumstances have enhanced the overall capabilities of the Marine Corps, transforming its operational effectiveness. Much like the iconic raising of the American flag on Iwo Jima, a powerful symbol of Marine Corps strength and resilience, the Marine One aircraft represents the power and mobility of the United States. The deep symbolic significance of the HMX-1 white-top aircraft, emblematic of the Marine Corps, should not be underestimated. These aircraft epitomize the unwavering commitment and core values of the Marines, serving as a reminder of their essential role in maintaining national security and addressing both domestic and international crises.

Varying strategic perspectives and doctrines across military services, influenced in part by unique operational environments, ensure that each branch will have its own views on roles and missions. While this interservice competition can present challenges, rivalries often lead to positive outcomes that benefit the nation's defense and the citizens they swear to protect.

According to Susanna Blume, a senior fellow and director of the defense program at the Center for a New American Security, “A healthy competition between the services, incentivized by funding, could be the next step toward effectively addressing the challenges inherent in implementing the National Defense Strategy.”²⁵³ In the post-World War II era, the advancement of helicopter technology and a focus on survival have spurred considerable progress in tactical and strategic thinking, motivating the various branches to pursue innovation. As political scientist Samuel Huntington observed, a high level of military professionalism encourages the development of diverse forces and weaponry to meet various security challenges.²⁵⁴ Through HMX-1, the Marine Corps has embraced a professional and pluralistic approach, utilizing it to survive and thrive.

²⁵³ Susanna V. Blume and Molly Parrish, “Interservice Rivalries: A Force for Good,” *Defense News*, August 18, 2022, <https://www.defensenews.com/opinion/commentary/2020/01/21/interservice-rivalries-a-force-for-good/>.

²⁵⁴ Huntington, *The Soldier and the State*, 418.

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