

IMPERIAL JAPANESE NAVY CAMPAIGN PLANNING AND DESIGN OF THE ALEUTIAN-MIDWAY CAMPAIGN

A Monograph

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ABSTRACT

IMPERIAL JAPANESE NAVY CAMPAIGN PLANNING AND DESIGN OF THE ALEUTIAN-MIDWAY CAMPAIGN, by MAJ Jonathan J. Gross, 36 pages.

In May 1942, the Japanese found themselves in a favorable military situation. Previous successes had convinced Japanese naval planners that it was now possible to produce a strategic victory that could end the war through a negotiated peace. Employing the largest combined fleet of the war, the Aleutian-Midway campaign intended to satisfy that purpose. Merging the traditional battle fleet with battle proven aircraft carriers, the plan incorporated almost every major combat vessel in the Japanese Navy. Commitment of such a large force was intended to produce a high certainty for the successful accomplishment of three objectives: occupation of Midway Atoll, neutralization of the American threat from the Aleutians, and destruction of the American carrier task force. Thus, by securing the last remaining gaps in the Japanese defensive perimeter and destroying the only remaining surface threat to the Japanese homeland, the Japanese would, thereby, ensure a militarily favorable operating posture. Japanese victory in this operation conceivably would eliminate the American capability or desire to continue operations against Japan. With overwhelming combat power committed to this operation, success seemed certain. Since victory did not result from this operation, relative combat power was not the deciding factor in the battle.

A new examination of the Aleutian-Midway campaign provides fresh lessons about the challenges of operational planning both then and now. The insights provided by contemporary operational art and design were used to reinterpret the campaign. U.S. concepts dealing with operational art and operational design provide a list of planning factors that point to the errors the Japanese made during operational planning. The type of errors made along with the historical evidence of Japanese actions provided a basis for assessing the cultural, organizational, and leadership factors that prevented more effective planning and a more successful operation. Additionally, applying modern aspects of campaign planning led to fresh lessons about the challenges of planning both then and now. Providing a contemporary understanding of the compounding effects of such complexities help illuminate key aspects of operational art.

The Japanese Navy expended considerable energy to employ an experienced force in the massive Aleutian-Midway campaign of 1942. Yet, experience could not offset the shortcomings derived from planning only to meet the needs of a decisive battle. By focusing only on the final decisive battle, the Japanese ignored the critical parts of their plan that would allow the fleet to react when unforeseen events unfolded. The manner in which the Japanese planned, prepared and executed the Aleutian-Midway campaign sheds light on some important campaign design considerations that, if properly accounted for, produce a higher probability of reaching intended objectives. The Japanese Navy embarked in a drive to meet the enemy without properly addressing the necessary preparations for countering uncertainty. Japanese Naval leadership, to include Admiral Yamamoto, failed to form the fleet into a cohesive force by not communicating the necessary decisions required to adjust to the changing conditions they found upon contact with an unexpected enemy element. The failure of the Japanese during the Aleutian-Midway campaign was a result of traditional planning doctrine derived from the decisive battle concept. Emphasis on only the tactical aspects of the campaign during planning resulted in a myopic battle plan that could not satisfy operational objectives or produce the strategic victory that the Aleutian-Midway campaign was to achieve.

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TABLE OF CONTENTS

INTRODUCTION.....	1
STRATEGIC AIMS, OPERATIONAL ENDS.....	6
OPERATIONAL OBSTACLES AND OPPORTUNITIES.....	11
EMPLOYING NAVAL FORCES TO ACHIEVE OBJECTIVES	20
OUTCOMES OF AN OPERATIONAL APPROACH.....	26
CONCLUSION	33
BIBLIOGRAPHY	37

INTRODUCTION

The success or failure of our entire strategy in the Pacific will be determined by whether or not we succeed in destroying the United States Fleet, more particularly its carrier task forces.

Admiral Yamamoto Isoroku, Commander in Chief, Combined Fleet¹

In May 1942, the Japanese found themselves in a favorable military situation. Partial success in the attack on the American fleet at Pearl Harbor the previous December had set a precedent for Japanese naval operations to date. The operational standard for the Imperial Japanese Navy had become aggressive operations seeking decisive action. These operations often involved using complicated plans designed to maximize naval assets across the vast expanse of Japanese Pacific territory. The aircraft carrier had taken center stage in the Pacific as the premier fighting vessel. Repeated encounters with British and American warships had begun to convince the Japanese Navy that the striking power of the carrier was central to future success. The sinking of the Royal Navy battleship *Prince of Wales* and the battle cruiser *Repluse* on 10 December of the previous year, reinforced the concept that aircraft alone could sink capital ships even when the ships were alert, manned and under way.² Then in April 1942, two heavy cruisers met their fate in the Indian Ocean. This time the Japanese using only carrier aircraft sunk the British cruisers *Dorsetshire* and *Cornwall*.³ In May of the same year, the Battle of the Coral Sea had demonstrated the importance and striking potential of carrier based aircraft when Japanese carrier air sank the U.S. carrier *Lexington* and damaged *Yorktown*.⁴

The conquest of Southeast Asia, the first phase of the Japanese strategy for the Pacific War, was complete. The assault was executed with such a speed that even the Japanese were surprised.⁵ Now the

¹ Mitsuo Fuchida and Masatake Okumiya, *Midway: The Battle That Doomed Japan, The Japanese Navy's Story* (Annapolis: Naval Institute Press, 2001), 86.

² Martin Middlebrook and Patrick Mahoney, *Battleship: The Loss of the Prince of Whales and the Repluse* (London: Lane, 1977), presented in Craig L. Symonds, *The Battle of Midway* (New York: Oxford University Press, 2011), 43.

³ Craig L. Symonds, *The Battle of Midway* (New York: Oxford University Press, 2011), 95.

⁴ Ibid. 173.

⁵ David C. Evans and Mark R. Peattie, *KAIGUN: Strategy, Tactics, and Technology in the Imperial*

dominant power in the Pacific, the Imperial Japanese Navy needed to decide upon its next campaign and the future course of the war. The primary concern centered on how to exploit naval success to maintain the initiative against an enemy still mobilizing for war. Matching strategic interests with operational objectives required the Japanese to balance military capability with operational requirements necessary to preserve the future of Japanese holdings. Most of the Japanese fleet consisted of capital ships designed for direct ship-to-ship engagements, but the emerging requirements for this war centered on the agility of the aircraft carrier. Maintaining a large territory meant naval combat power was at a premium. The Japanese Navy could not afford to use their assets unwisely, especially their carrier fleet. Virtually every leader within the navy recognized the significance of how the next major campaign might determine the course of the war. Yet, a true assessment of the ability to sustain a force capable of prolonged operations appears to have eluded many of the admirals planning the next move. For a battle seasoned force, this lack of depth in planning and foresight lowered the probability that the new plans would meet Japanese expectations.

Previous successes had convinced Japanese naval planners that it was now possible to produce a strategic victory that could end the war through a negotiated peace. Employing the largest combined fleet of the war, the Aleutian-Midway campaign intended to satisfy that purpose. Merging the traditional battle fleet with battle proven aircraft carriers, the plan incorporated almost every major combat vessel in the Japanese Navy, more than 130 ships and approximately 380 carrier-borne aircraft.⁶ Commitment of such a large force was intended to produce a high certainty for the successful accomplishment of three objectives: occupation of Midway Atoll, neutralization of the American threat from the Aleutians, and destruction of the American carrier task force. Thus, by securing the last remaining gaps in the Japanese defensive perimeter and destroying the only remaining surface threat to the Japanese homeland, the

Japanese Navy, 1887-1941(Annapolis: Naval Institute Press, 1997), 489.

⁶ Dallas Isom, *Midway Inquest: Why the Japanese Lost the Battle of Midway* (Bloomington, IN: Indiana University Press, 2007), 95.

Japanese would, thereby ensure a militarily favorable operating posture. Japanese victory in this operation conceivably would eliminate the American capability or desire to continue operations against Japan. With overwhelming combat power committed to this operation, success seemed certain. Since victory did not result from this operation, relative combat power was not the deciding factor in the battle. Given the supposed Japanese superiority the question is, why did the Japanese Aleutian-Midway campaign fail?

The Japanese failure during the Aleutian-Midway campaign has been recounted numerous times since 1942. However, only recently have Japanese documentary sources become available through declassification and translation. These sources provide an account of the campaign distinctly different from the established works of Samuel Elliot Morrison and Mitsuo Fuchida. Additionally, U.S. joint operations planning doctrine dates only to the early 1990's and has found greater expression since the invasion of Iraq in 2003. Hence, it is now possible to examine a wider array of documents than before and use contemporary operational art and operational design to reinterpret the Aleutian-Midway Campaign.

A new examination of the Aleutian-Midway campaign provides fresh lessons about the challenges of operational planning both then and now. The insights provided by contemporary operational art and design were used to reinterpret the campaign. U.S. concepts dealing with operational art and operational design provide a list of planning factors that point to the errors the Japanese made during operational planning. The type of errors made along with the historical evidence of Japanese actions provided a basis for assessing the cultural, organizational, and leadership factors that prevented more effective planning and a more successful operation. Additionally, applying modern aspects of campaign planning led to fresh lessons about the challenges of planning both then and now. By interpreting Japanese doctrine and capabilities through the principles of campaign planning, it was possible to assess the underlying mechanics that influenced doctrinal, operational and tactical methods unique to the Imperial Japanese military. Providing a contemporary understanding of the compounding effects of such complexities help illuminate key aspects of operational art.

The Japanese Navy expended considerable energy to employ an experienced force in the massive Aleutian-Midway campaign. Yet, experience could not offset the shortcomings derived from planning

only to meet the needs of a decisive battle. The manner in which the Japanese planned, prepared and executed the Aleutian-Midway campaign sheds light on some important campaign design considerations that, if properly accounted for, produce a higher probability of reaching intended objectives. What was required to ensure success was a sound operational plan built upon a coherent naval strategy centered on balancing immediate needs to address the American carrier fleet and preserve the force for future action. Operational warfare at sea is the only means of orchestrating and tying together naval tactical actions within a larger design that directly contributes to the objectives set by strategy.⁷ Emphasis on only the tactical aspects of the campaign during planning resulted in a myopic battle plan that could not satisfy operational objectives or produce the strategic victory that the Aleutian-Midway campaign was to achieve.

The events as they unfolded during the battle demonstrate that the Japanese Navy did not possess an operational framework. The primary goal of the invasion of the Midway Atoll was to draw the enemy fleet into the open ocean so it could be defeated in a decisive battle. The Americans, alerted to the Japanese plan, chose to commit their fleet to counter the invasion. The Japanese fleet was suddenly in a position of vulnerability. Even though the majority of their carrier air power was concentrated within an area to deal with the new situation, the plan did not call for such action to take place before capturing Midway Atoll. By focusing only on the final decisive battle, the Japanese ignored the critical parts of their plan that would allow the fleet to react when unforeseen events unfolded. The failure of the Japanese during the Aleutian-Midway campaign was a result of traditional planning doctrine derived from the decisive battle concept. By only considering actions required to fulfill the final purpose of the operation, the Japanese Navy embarked in a drive to meet the enemy without properly addressing the necessary preparations for countering uncertainty. This mindset left considerable gaps in the plan; gaps that did not become apparent until well into execution. When the enemy did not perform as expected, the Japanese fleet was not postured to react.

⁷ Milan Vego, *Operational Warfare at Sea: Theory and Practice* (New York: Routledge, 2009), 20.

A decisive battle mindset generated a campaign plan destined to fail in three ways. First, the Japanese Navy did not understand requirements derived from the strategic aim of the war in relation to capabilities the Japanese Navy possessed to satisfy operational ends of the Japanese plan for the Aleutian-Midway campaign. Fighting an offensive war with a defensive doctrine built upon the decisive battle concept produced unique problems for the employment of forces far from the home islands. Emphasis on tactical outcomes in campaign planning resulted in a fleet that did not possess the necessary resources to support a strategy of fighting a prolonged offensive war. Only by understanding the various strategic factors that influence operations is it possible to appreciate how Japanese doctrine ignored the strategic aim. The strategic situation of the Japanese Navy during the planning for the Aleutian-Midway campaign created numerous difficulties for preparing the fleet and sustaining operations. These difficulties entailed issues concerning force posture, logistical resources, and requirements arising from competing Army goals and the strategic goals following the campaign. By considering how the Japanese did not account for these difficulties, both physical and cognitive, it is possible to reveal why planning for and executing this major operation resulted in failure.

Second, Japanese naval doctrine produced inconsistencies that did not allow tactical actions to support the underlying mechanics which produce cognitive tension in a military operation.⁸ By creating a plan focusing on only the tactical actions necessary to achieve intermediate objectives, simple concepts such as unity of effort and unity of command could not bind the actions of the Japanese fleet to achieve a strategic victory. Further, fragmentation of the force and strict adherence to the concept of surprise prevented the ability of the Japanese to provide mutual support among the various task forces. Timing and sequencing the movement of naval assets are critical aspects of naval planning because combat power must assemble at the right place for tactical action. Force deployment directly influences not only the

⁸ Simon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory* (Portland: Frank Cass Publishers, 1997), 7.

accomplishment of the next operational objective but also the subsequent decisions made in combat.⁹

Therefore, every aspect of the plan influences the outcome of an operation from the moment the fleet sails from home station. The Aleutian-Midway plan did not account for this critical factor. For these reasons, key aspects in the Japanese plan left Japanese naval leaders unprepared to understand or adapt to tactical realities. These particular shortfalls expose the shortcomings of Japanese naval doctrine.

Third, mismanagement of Japanese weaponry and fighting capability prevented the Japanese from maintaining tactical superiority and the initiative during the battle. Traditional design concepts bound the fleet to a decisive battle concept. This produced a force that could not respond to the requirements that arose while fighting a rapidly changing offensive war. Failing to integrate carrier operations with the rest of the battle fleet during the Aleutian-Midway campaign prevented synchronization of the tactical assets. Inconsequently, only a small portion of the fleet, principally the carrier task force, actually participated in the battle. The role of the battleship and other traditional combat vessels in this campaign remained undefined. Additionally, the plan contained numerous intermediate objectives the pursuit of which prevented massing combat power on a single target at a specific time. The competing intermediate objectives produced confusion among Japanese leaders. As a result, tactical commanders had to use their own judgment to fix gaps in unity of effort created by a battle plan that did not account for the possibility of having to pursue multiple objectives with the same resources. Without well-defined priorities, indecision results, tactical action becomes ineffective, and the battle is lost.

STRATEGIC AIMS, OPERATIONAL ENDS

As the U.S. Navy were preparing to counter future Japanese action, the U.S. Navy's leadership in the Pacific observed a lull in Japanese military activity, a lull brought about by Japan's transition between the first and second phases of the war. The lack of action indicated something different was about to happen. Japanese efforts to dominate their enemy had resulted in the Japanese Navy employing combat

⁹ Vego, *Operational Warfare at Sea*, 19.

vessels almost continuously throughout the Southwest Pacific from December 1941 until early May 1942. Not only did a lull in combat action signal changes in strategy for the Japanese, it also indicated that Japan did not possess the naval resources to sustain more than one large naval operation.

When the war with the United States and Britain started, Japan faced serious shortages in war related resources. The United States and its allies had embargoed sales of oil, iron ore, and scrap metal to Japan in opposition to Japan's war in China. The embargoes were taking their toll on the Japanese economy and the Japanese ability to sustain a major military action.¹⁰ Limited resources directly influenced Japan's capacity to produce ships to augment their pre-war fleet. Further, future planning had to account for finite capabilities within the fleet and manage those assets to carry the Japanese Navy throughout the remainder of the war. To preserve combat assets and to support operations in the next phase-required organizing operations in carefully controlled stages. The immediate goal was to cripple Allied forces in the Pacific to create general balance between the two sides that might serve as the basis for a negotiated peace.¹¹ It is not surprising then, that the plan for the Aleutian-Midway campaign envisioned using a major portion of the Japanese fleet in a naval surface action intended to satisfy strategic objectives by hastening an end to the war.

The Japanese Navy had to consider much more than the raw numbers of combat vessels available to them when designing the Aleutian-Midway campaign. In order to meet strategic military objectives a thorough understanding of how available resources could work together in multiple tactical engagements was required. In most major operations, resources are likely to be limited; a more important aspect for campaign planning is what can be accomplished with existing resources and what will require additional resources over time.¹² For the Japanese Navy, resources within the fleet were not suited to support

¹⁰ Jonathan Parshall and Anthony Tully, *Shattered Sword: The Untold Story of the Battle of Midway* (Dulles, VA: Potomac Books, 2007), 76.

¹¹ Evans and Peattie, *KAIGUN*, 493.

¹² Office of the Deputy Assistant Secretary of Defense for Plans, *Theater Campaign Planning: Planner's Handbook* (Washington D.C: U.S. Department of the Army, February 2012), 2.

operations centered on carrier operations. This was a result of friction created by the reversal of roles in Japanese doctrine between the battleship and the aircraft carrier as the primary element in naval combat operations. Most of the fleet consisted of battleships and other surface vessels designed for direct action. Yet, carrier operations require fleets to maneuver in a manner distinctly different from fleets organized to employ large cannons.¹³ An aircraft carrier cannot simply replace the battleship in the formation. Therefore, a new doctrinal approach was required to organize the fleet in a way that permitted traditional capital vessels to support carrier operations.

Since the Aleutian-Midway campaign hinged on the employment of Japanese carrier assets, but most of the fleet still consisted of traditional capital ships, Japanese naval planners needed to carefully consider how these differing assets would work together to achieve campaign goals. Such thinking is the essence of modern design concepts. "Design provides an organized way to think through the conceptual framework of a plan and its subsequent execution. This logical approach to thinking through the campaign or operation is not so much a process as a reasoned approach."¹⁴

For the Japanese, designing a reasoned approach required the creation of a logical military end state to operations. Japanese naval leadership needed to identify the objectives of the Aleutian-Midway campaign first. However, naval commanders did not agree on the objectives or the tasks required to achieve them. The two primary headquarters within the Japanese Navy disagreed on how to proceed. This disagreement undermined the development of the campaign.

The organizational structure of the Japanese Navy exacerbated the disagreement over the campaign. The Japanese Navy's planning effort suffered from the diverging approaches of the two competing headquarters, the Naval General Staff under Admiral Nagano and the Combined Fleet Staff under Admiral Yamamoto. In the formal organizational hierarchy of the Japanese Navy, the Combined

¹³ Parshall and Tully, *Shattered Sword*, 414.

¹⁴ Army War College, *Campaign Planning Handbook: Academic Year 2013* (Carlisle Barracks, PN: U.S. Army War College, 2013), 21.

Fleet was subordinate to Naval General Staff. Yet the Combined Fleet had a substantial trump card when dealing with the General Staff; namely, Admiral Yamamoto. As before, during the planning of the attack on Pearl Harbor, Admiral Yamamoto considered his operational concepts and plans superior to those of the Naval General Staff Headquarters. The Naval General Staff Headquarters was concerned with using the fleet to support larger strategic concepts throughout the Japanese held Pacific. The Naval General Staff considered committing the majority of naval combat power to a single decisive operation, like the Midway plan, an unwise and risky use of diminishing resources.¹⁵ The General Staff argued for a broader approach to countering the American threat, just as the Japanese Navy had done in the first phase of the war. The approach reflected a more logical and reasoned assessment of the current environment and resources available.

As an example, the central idea behind one of the Naval General Staff's proposals was to initiate a fleet action to prevent the U.S. Navy from using Australia as a jumping-off point for sustained operations against Japanese occupied territory. However, the staff realized that the invasion and occupation of Australia itself was infeasible due to the sheer number of forces an occupation would require. Thus, the staff began concentrating their efforts on less ambitious plans to isolate Australia and cut off the flow of American war material by gradually extending Japanese control over eastern New Guinea, the Solomons, and the New Caledonia-Fiji Islands area.¹⁶ The plan focused on the efficient use of military resources over a prolonged period, gradually reducing American freedom of navigation. Therefore, the Naval General Staff's focus was on long-term preservation of the Empire, not on a quick win that might result in considerable losses.

However, Admiral Yamamoto's influence in shaping the decisions of the Naval General Staff was incredible. He clearly demonstrated this influence when he forced the Naval General Headquarters to

¹⁵ H. P. Willmott, *The Barrier and the Javelin: Japanese and Allied Pacific Strategies February to June 1942* (Annapolis: Naval Institute Press), 66.

¹⁶ Fuchida and Okumiya, *Midway*, 81.

either accept the Pearl Harbor plan or accept his resignation.¹⁷ Now, given that precedent he continued his push for the Midway campaign. The greatest advantage of Yamamoto's plan was that Yamamoto was for it; almost no one would stand up against him.¹⁸ There was one exception. Admiral Nagano was willing to support the Midway operation but only if Yamamoto agreed to conduct the Aleutian campaign at the same time.¹⁹ Yamamoto's concept for the Midway campaign focused on engaging in a decisive battle near Midway. Incorporating Nagano's objectives into that concept required adding objectives in the Aleutian island chain. Adding objectives in the Aleutians increased the need to integrate tactical actions with strategic objectives through operational planning. Although military objectives increased in number, no additional combat power was available to augment the fleet. Therefore, it was necessary to disperse the fleet, which thereby reduced combat power at any single objective. Additionally, a dispersed fleet created a greater demand for resources, which introduced the Japanese Army into planning for the campaign.

The Japanese Navy was not solely responsible for planning because the army needed to approve the allocation of resources. The Japanese Army was focused on the war with China. Naval operations in distant areas of the Pacific did not interest them and was a tough sell for the navy. Of course the army understood the importance of the navy to its own and national survival. Nevertheless, the value of a major naval operation far from home was not obvious. The army was not prone to squander resources on operations with no significant effect on operations against a much nearer Nationalist Chinese Army. Since the army had the final say in defining national military strategic objectives, army leaders needed to be convinced of the importance of the campaign. Initially, the army opposed the plan, because the Aleutian-Midway campaign seemed like a massive undertaking to eliminate a threat where none existed. However,

¹⁷ Symonds, *The Battle of Midway*, 107,108.

¹⁸ Walter Lord, *Incredible Victory: The Battle of Midway* (New York: Harper & Row, 1967), 5.

¹⁹ Parshall and Tully, *Shattered Sword*, 37.

because the army was not tasked to provide major forces in support of the operation, the army did not strongly resist approving the operation.²⁰

The Doolittle raid in April changed the Japanese situation. It helped to soften resistance and lent validity to naval efforts to engage American carriers in a fleet action. The army could no longer argue that these carriers did not pose a threat to the Japanese homeland.²¹ The raid also helped to solidify some common and generic strategic aims for the Japanese. In 1942, the Japanese naval command had two strategic concerns. First, Japan wanted to preserve the territories gained thus far in the war and second, to protect the Japanese homeland from direct enemy attack. Japanese naval commander differed on how to achieve those two goals.

Since the army and navy had their own idea of how to consume resources to preserve Japanese holdings, each formulated their plans for future operations independently. For the navy this meant destruction of the American carrier forces; for the army, a continued occupation of islands in the Western Pacific and sustained offensives in China.²² The only real collaboration between the two services seemed to occur only when they had no other choice. Otherwise, the Japanese army and navy operated independently in pursuit of tactical objectives that had no connection to mutually supporting strategic goals. Thus, the Japanese Navy continued to employ the force in a resource-constrained environment. To meet resource constraints and build a cohesive plan of action, Japanese planners needed to understand the current condition of their force and the environment in order to establish a plan that met the demands created by the multiple objectives.

OPERATIONAL OBSTACLES AND OPPORTUNITIES

In modern campaign design, understanding the current conditions and visualizing desired future conditions is labeled framing the operational environment. Framing the operational environment involves

²⁰ Willmott, *The Barrier and the Javelin*, 75.

²¹ Isom, *Midway Inquest*, 79.

²² Willmott, *The Barrier and the Javelin*, 36.

building mental models to understand situations and respond to events. This contextual understanding of an operational environment serves as a frame of reference for developing a perspective from which commanders and staff can understand and act on a problem.²³ To act on a problem, planners need to know what resources are available. Knowing the types and quantities of available resources should inform, but not constrain, mission analysis and campaign planning.²⁴ Additionally, planners draw from their previous experience, both successful and unsuccessful operations, during plan development. The Japanese naval planners needed to assess the operational environment differently. A reassessment was required because the Midway-Aleutian operation placed demands on the fleet that they had not previously experienced. In particular, they needed to consider how to maximize available combat power because the two objectives were thousands of miles and several days sailing apart. To account for these requirements, Japanese naval planners had to build a plan that adjusted previous experience to meet the unique circumstances of an unfamiliar maritime environment.

The Japanese Navy had used aircraft carriers to conduct raids throughout the Pacific. Task Force sized elements moved under the cover of land-based reconnaissance and fighter support to briefly meet and cause the most damage possible to the enemy before rapidly retiring to safety.²⁵ The geographic location of both Midway Atoll and the Aleutians required the Japanese fleet to operate in over three million square miles of enemy waters without the benefit of land-based air cover. Nevertheless, their previous experiences unconsciously shaped the planners' estimate of the Midway campaign conditions; the fleet was accustomed to operate in certain ways. Further, once at the objective, the plan required the First Carrier Strike Group under Admiral Nagumo to remain in close proximity and within aerial reach of an enemy base until the landing party was in possession of the Midway Atoll. Requiring the Midway carrier force to provide prolonged support for an operation in enemy territory, unsupported by land-based

²³ Army Doctrine Reference Publication (ADRP) 5-0 *The Operations Process* (Washington D.C: Department of the Army, May 2012), 2-5.

²⁴ Office of the Deputy Assistant Secretary of Defense for Plans, *Theater Campaign Planning*, 10.

²⁵ Parshall and Tully, *Shattered Sword*, 34.

aircraft, was an unfamiliar and unpracticed mission. Past operations had succeeded in part because the fleet could rapidly move a carrier into striking distance, deliver an attack on a specified target, then move to a location that reduced exposure to enemy reprisal. Not only did land-based aircraft protect carriers on the move, they also provided reconnaissance for the fleet.²⁶ A stay of longer duration increased the probability that the enemy might locate and damage the carrier fleet. The Japanese had no experience protecting an aircraft carrier from prolonged enemy attacks. Without land-based air cover to provide protection and reconnaissance, Japanese planners ought to have developed means to account for greater uncertainty and enhance force protection.

Due to the larger time frame and scope involved in naval campaigns, campaign planning estimates generated from planning assumptions inherently involve greater uncertainty. More planning assumptions are required for major naval operations because there are a greater number of factors to contend with in the operating environment. Initial actions at the beginning of a campaign may change the nature of the environment, making it necessary to modify the plan later on. Thus, assumptions in planning for a campaign can have a major impact during execution.²⁷ Admiral Yamamoto accepted existing assumptions as fact while visualizing how to fight in the Aleutian-Midway campaign. First Japanese planners assumed that American forces would act according to Japanese expectations during the campaign. Japanese naval planners inferred that the U.S. would respond in a particular way. The Japanese planners thought the U.S. Navy would respond to the invasion of Midway only after the landings had taken place. The U.S. task force would take slow and deliberate actions to counter Japanese action at both Midway and the Aleutians. The U.S. Navy's approach would allow the Japanese fleet to predict where and when the U.S. would strike then identify the appropriate forces to counter them. Essentially, The Japanese idea of how the U.S. would operate was almost an identical copy of the Japanese plan. The Japanese were projecting their own beliefs on the U.S. Navy, which indicates that their assessment of their enemy was

²⁶ Evans and Peattie, *KAIGUN*, 469.

²⁷ Vego, *Operational Warfare at Sea*, 60.

fundamentally flawed.²⁸ The U.S. Navy operated their carrier fleet very differently than the Japanese. As the only remaining means available to counter Japanese action, the U.S. Navy employed their carrier assets to strike at every opportunity.²⁹ Consequently, Japanese planning efforts overlooked the unpredictability and uncertainty of military operations conducted by an enemy with a distinctly different mindset on how to execute a naval engagement.

The second planning assumption concluded Japanese aircraft carriers would survive an aggressive offensive action against the enemy without significant losses. During war-gaming, damage to Japanese carriers were overlooked or reversed so that carriers could continue to operate.³⁰ A war game often provides insight to vulnerabilities that may have been overlooked during course of action development.³¹ Such vulnerabilities may originate from assumptions during planning. Improper war gaming allows for actions based on assumptions to remain. By taking an unrealistic approach in assessing the survivability of the carriers during war gaming, Japanese planners never addressed how the fleet would adjust to carrier losses.

The Japanese Navy could not afford to make assumptions about the survivability of aircraft carriers. At this point in the war, losing an aircraft carrier not only changed the immediate tactical calculus at Midway, but also the calculus for future campaigns. The limited shipbuilding capacity within Japan meant that the fleet would have to operate with only the ships available at the start of the war. The Japanese Navy only had four shipyards that tailored their production to a specific type of ship. To augment ship production, the navy turned to commercial shipyards that accounted for 41 percent of warship production at the beginning of the war.³² By using commercial shipyards, warships directly

²⁸ Parshall and Tully, *Shattered Sword*, 51.

²⁹ Symonds, *The Battle of Midway*, 65.

³⁰ Willmott, *The Barrier and the Javelin*, 111.

³¹ Joint Publication (JP) 5-0 *Joint Operation Planning* (Washington D.C: The Joint Staff, 11 August 2011), IV-35.

³² Evans and Peattie, *KAIGUN*, 361-362.

competed against the maritime fleet to maintain both fleets during the war. The maritime fleet became just as vital to the sustaining the war effort because they provide the resources desperately required to sustain the military. Thus, Japanese war plans contained no provisions to replace or augment the six attack carriers that were operational in 1941.³³ Losing a carrier had strategic implications. Modern doctrine highlights the importance of preserving a force's fighting potential as a function of protection.³⁴ For the Japanese Navy to preserve the fighting potential of the aircraft carrier, doctrinal methods should balance offensive and defensive measures without degrading the probability of success in operations. Therefore, force protection should have been a critical element of the campaign plan.

Because of the importance of carriers to the overall strategic effort, the admirals of the Japanese Navy needed to determine how the aircraft carrier would operate within the navy's doctrinal framework. Modern planning doctrine outlines specific considerations that are required when incorporating assets into a campaign plan. These considerations include identification of the sequence of actions most likely to achieve objectives and the end state, the resources required to accomplish that sequence of actions, and the likely chance of failure or unacceptable results in performing that sequence of actions.³⁵ However, Japanese naval leadership did not consider the impacts of assigning aircraft carriers to perform a sequence of actions that might lead to unacceptable loss. No other asset in the Japanese Navy could satisfy the strike capability of an aircraft carrier. Employing the carrier just like a capital ship in the decisive battle concept, as the Japanese Navy intended to do at Midway, compromised a valuable commodity necessary to sustain the war effort. The inherent value of the aircraft carrier existed at every level of warfare, but the greatest impact the carrier provided was the role it served in pursuit of strategic goals. The aircraft carrier, as the central power projection platform for the navy, was the most expensive and least expendable

³³ Isom, *Midway Inquest*, 167.

³⁴ Joint Publication (JP) 3-0 *Joint Operations* (Washington D.C: The Joint Staff, 11 August 2011), III-30.

³⁵ *Ibid.* II-4.

component for the nation.³⁶ Thus, the aircraft carrier was more valuable as a platform to advance national interests through the projection of combat power, than to serve exclusively as a tactical weapon in decisive battle.

Therefore, preservation of the carrier fleet for future action should have been the core concept in meeting the strategic aim. By fixating on the final causes, that of the decisive battle, little consideration was given to how the fleet was to be postured before and after that single battle. Operational planning constitutes the entire whole of combat actions governed by an identical concept, and directed towards attainment of the same aim.³⁷ Without bridging the operational ends to the strategic aim, post Midway operations would have significantly less combat power to fulfill subsequent requirements. A single battle in a campaign cannot alone provide resolution to a conflict; only by combining the cumulative effects of every battle within a campaign can tactical actions support campaign objectives. The operational commander's intention and the tactical commander's adherence to his mission generate cognitive tension.³⁸ Cognitive tension ensures tactical actions meet operational requirements. Therefore, every tactical action involving an aircraft carrier had to be associated with the strategic aim. Otherwise, the Japanese Navy would fall short in meeting strategic requirements, as no other asset within the navy could provide the same capability. Yamamoto was a great tactical thinker, but his plans rarely satisfied any constructive attempt at operational thinking, a symptom that existed throughout the Japanese Navy, but also throughout the entire Japanese military.

The main characteristics of operational warfare at sea, as compared with tactical actions, are larger dimensions of forces, time, and space. The principal reason for these differences is the scale of an operational or strategic objective compared to a tactical objective.³⁹ Operational warfare at sea has two

³⁶ Parshall and Tully, *Shattered Sword* 418.

³⁷ Naveh, *In Pursuit of Military Excellence*, 9.

³⁸ *Ibid.* 15.

³⁹ Vego, *Operational Warfare at Sea*, 18.

distinctive aspects that heavily influence the effectiveness in combat. The first is timing, covering vast distances with multiple surface, subsurface, and aircraft assets to influence combat action in a relatively small area is an extremely difficult task. The massing of naval combat power to employ the combined effects of each asset requires incorporation of timing into the plan. The purpose of mass is to concentrate the effects of combat power at the most advantageous place and time to produce decisive results.⁴⁰ If one element is not at the right place at the right time, then it is of no value to the operation. This is where many of the challenges in the operational plan for Midway reside. Japanese naval doctrine called for fleets to travel in multiple task force sized elements at safe but mutually supporting intervals, then mass at the appropriate time to encounter the enemy. This doctrine served the Japanese well in the early months of the war, when well-planned operations encountered expected enemy action. However, repeated use of this method made Japanese fleet actions predictable. If the enemy interdicted task force elements prior to massing, then they could only depend on the combat power available within each task force. This method of employment did not create an ideal situation at Midway, where the separate elements did not have the ability to provide mutual support.

The second distinctive aspect of naval operations is importance of sequencing naval assets in space to meet the objectives outlined in the plan. "A tactical concept for the employment of one's maritime forces cannot lead to victory if it not an integral part of a broader operational concept. Sound sequencing and synchronization of all military assets are necessary to accomplish strategic or operational objectives in a given maritime theater through planning and execution of maritime campaigns and major naval operations."⁴¹ Ideally, the simultaneous massing of combat power on the objective is desirable, but within the environment of the open ocean, some sequencing must occur to maximize opportunity when multiple objectives are involved. In sequencing their major assets between operations that were simultaneously in motion, the Japanese assumed that they would not encounter any major enemy

⁴⁰ JP 3-0, A-2.

⁴¹ Vego, *Operational Warfare at Sea*, 20.

resistance or sustain major losses from both sea and air battles.⁴² With the large number of vessels that typically constitute a naval operation, movement in one single mass to the objective has its disadvantages. By grouping all vessels into one formation, the enemy can easily decipher and track the intended destination, allowing them greater time to counter the force before it arrives at the objective.

Additionally, by moving vessels in numerous task forces on different approaches, a naval force can confuse or deceive the enemy of its true intentions. This allows the force a greater chance of surprise. Surprise allows a force to strike at a time or place or in a manner for which the enemy is unprepared.⁴³ Movement in dispersed task forces also increases the attacking force chances of avoiding interception by the enemy. As with Midway, the U.S. Navy's focus on a single (admittedly important) portion of the force, the Japanese carriers, did allow some opportunity for elements not yet engaged to exploit the enemy's inattention to them.

As the force builds into a cohesive element in time and space, the relation to the aim begins to take shape. As Shimon Naveh explains, "by possessing the qualities of continuity, sequentiality, consistency and flexibility, the operational maneuver bridges over the dichotomy which is inherent in the combination of the holistic nature of the aim and the existential compulsion to translate it into concrete missions".⁴⁴ Movement in multiple task forces gave the Japanese fleet an opportunity to adjust operational aspects of the plan to meet changing circumstances. The problem was the task forces were too far apart to provide mutual support and steaming under radio listening silence meant the various commanders could not communicate with each other. The overall purpose of the operation suffered in a sense that operations required independent execution without the benefit of other task force elements. Therefore, each task force element did not know how the other was supporting the aim through their tactical actions.

⁴² Willmott, *The Barrier and the Javelin*, 99.

⁴³ JP 3-0, A-3.

⁴⁴ Naveh, *In Pursuit of Military Excellence*, 20.

A solution to this lack of mutual support is contained in the concept of unity of command. Achieving unity of command means having a single commander control all the forces assigned to a particular mission, ensuring that guidance and orders flow from the established authority, dividing responsibility throughout subordinates to achieve unity of effort.⁴⁵ Admiral Yamamoto's location with the Main Body between the First Carrier Striking Force at Midway and the Second Carrier Striking Force in the Aleutians seems prudent for a naval commander. His central position allowed him the freedom to direct the Main Body assets to either Midway or the Aleutians, and to provide command emphasis to other elements as they began to pursue their objectives. The problem was that Yamamoto, while executing unity of command was, nevertheless, unable to achieve unity of effort because of radio silence procedures. For a naval commander such as Yamamoto to be effective during combat action, he must be readily available to make timely decisions and communicate them to subordinates. The act of exercising command consists of making decisions and ordering their execution. The highest art of a naval commander at any level of command is making timely and sound decisions.⁴⁶ In his desire to be at sea with the fleet under radio silence, Admiral Yamamoto was unable to interact with the various task force commanders. It was the first time in the war that the commander in chief of the Combined Fleet commanded from the deck of a ship participating in an operation.⁴⁷ The information he received was so minimal that an accurate picture of the developing battle was impossible. It is unreasonable to expect Admiral Yamamoto would to provide direct guidance at every turn of the battle to Admiral Nagumo or any other of his task force commanders. Yet key decisions to position and align forces in concert among task force elements fell exclusively to Admiral Yamamoto. Absent the ability to reposition forces according to changing circumstances, Yamamoto could not promote unity of effort. Therefore, unity of effort was essential for coordinating decisions on the tasks necessary to maximize the desired effects from

⁴⁵ Vego, *Operational Warfare at Sea*, 72.

⁴⁶ Martin Blumenson, "Essence of Command: Competence, Iron Soul", *Army* 3 (March 1993), 42.

⁴⁷ Symonds, *The Battle of Midway*, 105.

achieving objectives.⁴⁸ These key decisions include anticipating where and when massing combat power could effectively counter enemy operations.

From his position aboard the battleship *Yamato*, some three hundred miles away from Admiral Nagumo, Admiral Yamamoto was in no position to bind the actions of the fleet into an operational concept. Continual assessments in the operational environment are essential for a commander to determine how a plan will need to change in terms of ends, ways, means, or some combination thereof.⁴⁹ Limited radio communication produced a cryptic and untimely portrayal of Admiral Nagumo's encounter with American forces near Midway. Yamamoto's understanding of the situation did not allow him to decipher how the operational plan was unfolding. He was unable to command from this position. A gap existed between the tactical situation Admiral Nagumo found himself in, and the operational perspective Admiral Yamamoto may have been able to provide in respect to general aims outlined within the fragile strategic vision. For Yamamoto to have a clear idea where obstacles and potential opportunities existed, he required measurable information from subordinate commanders on their progress toward reaching objectives.⁵⁰ Tactical missions should correspond to the general aim. Since these objectives require defining at the strategic level, and the mechanical performance is the domain of tactics, the acute importance of the operational level becomes clear. Only on this level are the abstract and mechanical extremes fused into a functional formula, through the maintenance of cognitive tension.⁵¹ The focus, therefore, falls on the operational level to bind the actions of the fleet into an operational concept within the emerging operational environment.

EMPLOYING NAVAL FORCES TO ACHIEVE OBJECTIVES

⁴⁸ Joint Publication (JP) 5-0 *Joint Operation Planning* (Washington D.C: The Joint Staff, 11 August 2011), III-20.

⁴⁹ Office of the Deputy Assistant Secretary of Defense for Plans, *Theater Campaign Planning*, 32.

⁵⁰ *Ibid.* 34.

⁵¹ Naveh, *In Pursuit of Military Excellence*, 7.

As the commander of the Combined Fleet and author of the Midway campaign concept, Yamamoto was responsible for filling the role of both commander and strategic thinker. Carrying out his command responsibilities required a clear and logical explanation of how subordinate commanders would use the means available to achieve the end state.⁵² Current U.S. Joint planning doctrine observes that establishing a well-defined military end state promotes unity of effort, facilitates synchronization, and helps to clarify the risk associated with the operation. After the commander defines the military end state, he must next establish termination criteria. Termination criteria describe the conditions that must exist before the conclusion of military operations. Then operational design continues with development of strategic and operational military objectives. Objectives and their supporting effects provide the basis for identifying necessary tasks. However, identifying objectives does not identify the ways or means, only what must be achieved through the execution of tactical tasks to reach the military end state.⁵³ In order to identify and align objectives to the end-state the Japanese required something lacking within their military community – consensus on the right military actions to serve the future of Japanese interests.

Everything the aims entailed required too much from the military. Preservation of the Empire called for dispersion of military assets throughout the far reaches of the Pacific. However, defeating American naval power in a single decisive battle required concentration of forces in a single location at a specific time. Priority had to fall somewhere, and that was in preserving the gains already made throughout the Pacific. Even though the possibility of a direct threat now existed against the Japanese homeland, the primary purpose for military action was to defend the Empire. Purpose helps to create an understanding of the nature or meaning of the situation in relation to overarching goals.⁵⁴ Although Japanese planning efforts centered on a perceived immediate threat to the heart of Japan, a much wider

⁵² Office of the Deputy Assistant Secretary of Defense for Plans, *Theater Campaign Planning*, 17.

⁵³ JP 5-0, 18-20.

⁵⁴ Department of the Army Training and Doctrine Command Pamphlet (TRADOC Pam) 525-5-500. *Commander's Appreciation and Campaign Design* (Washington D.C: U.S. Department of the Army, 28 January 2008), 20.

focus was necessary to accommodate the requirements for preserving a Japanese foothold within the far reaches of the Pacific. For most of the Japanese military leadership, the greater threat to the continued existence of Japan was a break in the defensive perimeter maintaining the territory gained thus far in the war. Prudence ought to have dictated that the preponderance of naval forces would be assigned to the defense of the perimeter. Hence, the real problem for Japanese naval planners was to plan military action to support defense of the perimeter.

Yet, Japanese naval planners had to satisfy Yamamoto's desire to focus the fleet on the perceived immediate threat. His intentions added complexity to the planning process. This complexity, and the unique situations found within the Japanese fleet required Yamamoto to make changes to key aspects of the plan he envisioned. War is unpredictable and any decisions made at the various levels of war must consider this. Operational plans and orders, guided by a doctrinal framework, must account for the fog and chaos of war that makes even the simplest application of military force difficult.⁵⁵ Yamamoto alone possessed the skill and knowledge to bridge his operational concept with the tactical actions unfolding, ensuring that every effort progressed toward supporting the aim of the operation. Years of skill and knowledge helps an operational commander develop intellectual creativity, a mode of thinking necessary to link the effects of tactical action to the end state.⁵⁶ Intellectual creativity, combined with courage and self-confidence, produces a commander who can make bold decisions during combat action. Yamamoto possessed this requisite characteristic, as Mitsuo Fuchida explains:

For in war, the fate of a nation may be staked upon the outcome of a single battle, and in turn victory or defeat in battle hinges largely on the character and ability of a single individual, the Commander in Chief. This is necessarily so because only by concentrating the power of decision can unified action be assured, and without unified action victory is impossible. It is so also because moves in battle cannot be debated around the conference table and decided by majority rule; they must be decided swiftly by the commander on the basis of his own judgment

⁵⁵ Clayton Newell, *Framework of Operational Warfare* (New York: Routledge, 1991), 94.

⁵⁶ Naveh, *In Pursuit of Military Excellence*, 7.

and with full realization that each move, once made, is irrevocable. To make such decisions requires extraordinary courage and self-confidence. Yamamoto had both.⁵⁷

Fuchida later indicates that such qualities were not common among Japanese naval leaders. However, his statement also demonstrates the Japanese fixation with the decisive battle concept. By creating an operational plan that coordinated all action toward the final battle at Midway, the Japanese fleet was unprepared to operate in the dynamic situation that grew out of the emergence of the American carrier fleet. Without a viable purpose and direction from the commander, regardless of his personal capabilities, the fleet suffered from disunity and fragmented efforts. Therefore, gaining an appreciation for what the emerging situation demands and creating solutions for the problem presented to Yamamoto required a comprehensive understanding of the situation in which subordinates would operate. By learning about the nature of the problem as the operation unfolds, commander's can adjust the actions of the force within the context of the operational environment. Then, communicating an adaptive solution based on changing circumstances allows the force to operate in unison. Without communication, the tension that arises from tactical actions supporting the aim of the operation evaporates, making the battle just a conflict supporting no other purpose than self-preservation.

Milan Vego explains the impact of failing to look beyond tactical action, “poor application of operational art can lead to tactical defeats, which, in turn, may have not only operational but also strategic consequences.”⁵⁸ Vego associates this idea with the Battle of Midway. The flawed Japanese operational plan focused solely on the means available to satisfy tactical objectives which ultimately led to their decisive defeat. Linking the tactical outcomes to the operational plan proves to be problematic at the Battle of Midway. For a link to exist between tactical outcomes and an operational plan there must be some form of operational thinking. Operational thinking was a concept foreign to Japanese commanders, since it requires agile and adaptive methods to change plans to meet changing circumstances.

⁵⁷ Fuchida and Okumiya, *Midway*, 103.

⁵⁸ Vego, *Operational Warfare at Sea*, 17.

Operational thinking on the part of the Japanese ceased during the battle on 4 June immediately following the identification of the American carrier task forces. By fixating on the tactical outcomes of the immediate engagement, Admiral Nagumo did not have the ability to rely on operational aspects as formulated in the plan. Nothing in the plan properly accounted for the introduction of uncertainty when events unfolded in an unexpected way. He was forced to rely on the means readily available to him and had to employ them in a manner he felt most appropriate.⁵⁹ He lacked any operational insight into the relative significance of his current situation to the outcome of the operation. Operational insight allows a commander to determine the best arrangement of tactical engagements to achieve the strategic aim.⁶⁰ As the commander of the First Carrier Striking Force, Admiral Nagumo was responsible for arranging tactical actions against the enemy. In the absence of a coherent plan Admiral Nagumo was unable to link the immediate tactical needs of the First Carrier Striking Force to any larger operational concept. He had to respond to the U.S. carrier threat in the absence of any prescribed plan of action, and his superiors could not assist him. Any help from outside the First Carrier Striking Force was days away. Harnessing combat power from outside of his own force would have required additional consultation with his superior, Admiral Yamamoto. Thus, absent guidance from Yamamoto, Admiral Nagumo was on his own to make appropriate decisions to employ the means he had available.

Naval operational commanders make fewer decisions, but the impact of those decisions is much greater than that made at the tactical level.⁶¹ Additionally, operational commanders concern themselves primarily with moving their assigned tactical forces into position to fight and then focus on supporting those forces.⁶² It was necessary for Admiral Nagumo to focus on the tactical fight at hand, giving him the freedom to address the American threat as necessary, but that freedom did not relieve him of the

⁵⁹ Isom, *Midway Inquest*, 267.

⁶⁰ Naveh, *In Pursuit of Military Excellence*, 9.

⁶¹ Milan Vego, *Future Warfare at Sea: Decline of Human Decision-making In Naval Operations*, (naval forces), 10.

⁶² Newell, *Framework of Operational Warfare*, 83.

requirement to keep Yamamoto informed. With the vast distances between the various task forces bound for Midway Atoll, very little coordination was possible. Yamamoto could not provide immediate support to Admiral Nagumo during the frequent attacks from the American forces on the first day of battle. That is where the value of operational thinking would have come into play.

Yamamoto recognized early in the planning process that by assigning Nagumo the intermediate mission to soften up Midway for the invasion and to cover the landing, he had left unclear what priority Nagumo was to place on the destruction of the American carrier force.⁶³ Intermediate objectives set favorable conditions to achieve the end-state by aligning resources to requirements. For an intermediate objective to have value, it must constitute a positive and substantial step toward achieving an end state.⁶⁴ If the occupation of Midway Atoll was to serve as an intermediate objective to set the conditions to ambush the American fleet when they responded, then that objective certainly was of less value than the primary objective it supported. Since the occupation of Midway Atoll was subordinate to actually destroying the U.S. fleet, this mission would have been better suited for other elements of the Japanese fleet, freeing the carrier task force to focus on only the primary objective. Nagumo, Yamamoto and the Japanese Navy as a whole failed to allocate forces to meet mission requirements. Arranging forces to missions is a key concept in modern doctrine. Arrangement of forces through a combination of simultaneous and sequential operations is how commanders reduce the amount of combat power necessary to reach the end state.⁶⁵ Thus, arranging forces provides opportunities to maximize combat power against multiple objectives.

To mitigate the problem presented by multiple objectives, Yamamoto might have considered the composition of each task force element in close comparison with the assigned mission of each task force. A new arrangement of forces could produce task forces capable of prosecuting multiple objectives

⁶³ Symonds, *The Battle of Midway*, 105.

⁶⁴ Office of the Deputy Assistant Secretary of Defense for Plans, *Theater Campaign Planning*, 11.

⁶⁵ JP 3-0, III-35.

simultaneously. Yet, Yamamoto's habitual desire to focus on tactical actions stood at odds with the operational and strategic requirements of the Aleutian-Midway plan. Task force elements built for the campaign reflected the decisive battle concept that dominated prewar thinking. As H.P. Willmott notes: "the division of forces with submarines in the advanced reconnaissance and strike roles, carriers leading the battle force to incapacitate the enemy, battleships held back with carriers and midget submarines—this was the hallmark of prewar tactical thought."⁶⁶ This formation was suitable for focusing combat power on a single target, not for conducting a campaign with multiple objectives spanning more than 2,500 miles of ocean. By choosing to rely upon a tactical doctrinal approach to build task force elements, Yamamoto neglected to tailor the force to satisfy strategic aims.

OUTCOMES OF AN OPERATIONAL APPROACH

The process of defining actions to reach a desired end state is defined in modern doctrine as developing an operational approach. The operational approach is a conceptualization of the actions that will produce the conditions that define the desired end state.⁶⁷ This is, in essence, how the commander synchronizes assets and activities to link the current environmental conditions to the desired conditions. The synchronization of assets and activities to achieve the strategic end state is operational art. Operational art assists commanders to develop a sound knowledge of their environment. Operational art provides a framework to synchronize tactical assets and activities in time and space to achieve a strategic end state.⁶⁸ Thus, operational art is useful for developing an operational approach. When formulating the plan for the Midway operation, Japanese naval planners considered a great number of actions needed to achieve success. As the Battle of the Corral Sea concluded in early May, Japanese planners had little time to address the numerous preparations required for a major naval operation. Because time was against

⁶⁶ Willmott, *The Barrier and the Javelin*, 110.

⁶⁷ADRP 5-0, 2-10.

⁶⁸ Army Doctrine Publication (ADP) 3-0 *Unified Land Operations* (Washington D.C: Department of the Army, October 2011), 10.

them, Japanese planners took many aspects of the plan for granted. As a result, Japanese planners developed an incomplete operational approach for the Midway operation. A faulty analysis of how objectives would satisfy the end state created shortcomings during execution. Planners discounted secondary and supporting elements of the operation. Therefore, synchronization of assets to activities did not support the broader operational concept.

For a plan to be operationally sound, the initial objectives must be logical, realistic and attainable from the very beginning.⁶⁹ The Japanese plan for the occupation of Sand and Eastern Islands demonstrates how logical inconsistencies in the plan affected execution. One important perspective offered about the plan was provided by the plan's critic Commander Tatsukichi Miyo. Representing the Naval General Staff, Commander Miyo highlighted several shortcomings, directly related to the feasibility of long-term occupation of Midway Atoll. Midway's proximity to Hawaii meant Japanese forces on the island would be within striking distance of American bases. Since Midway was American soil, U.S. forces stationed there would be determined to defend the island. Due to the great distance of Midway from existing Japanese outposts, Japanese forces would be operating without land-based air support. Finally, the two islands that made up Midway Atoll were too small to support large scale air operations.⁷⁰ In the plan, the occupation of Midway Island served two purposes. First, Midway Island was to become one of the outermost outposts in the Japanese defensive perimeter. Second, and immediate, the landing was to draw the American fleet into the open ocean where it would be met and destroyed. Translating these purposes into meaningful action can only take place following the consideration and analysis of operational approaches. In order to satisfy Commander Miyo's concerns, Japanese naval planners should have considered possible combinations of actions to reach the desired end state.

The opening action in the Japanese operational approach was the air attack on Midway to soften the island defenses and neutralize the airfield. All other actions were predicated on completing that task.

⁶⁹ Naveh, *In Pursuit of Military Excellence*, 15.

⁷⁰ Fuchida and Okumiya, *Midway*, 83, 84.

The Japanese, however, did not develop a detailed estimate of the requirements for that air strike. Such an analysis would have been useful for assessing the adequacy of that approach. Japanese naval air had been effective against ships at sea, but Midway was not a ship. The Japanese designed bombs to penetrate deep into the interior of a ship or detonate on the deck. A single 250-kilogram bomb does not have the same effectiveness on land.⁷¹ Furthermore, the amount of bombs required to damage airfields and fortifications had not been properly estimated by Japanese planners. Determining how much damage an air strike could bring to island defenses and the runway should have been an essential first step in preparing the attack. Knowing the number of bombs required to obtain a specified level of damage is an essential planning factor that is needed to determine the number of planes needed in a strike or the number of sorties required to achieve success. Tactical means must support the aim of the operation. The air attack on Midway Atoll was to neutralize the enemy air threat. With the limited number of planes available for the attack, the true requirements in terms of necessary combat power to destroy targets on Midway Atoll were improperly addressed. With the number of attack aircraft reduced to half due to the requirement to maintain a reserve to deal with any unexpected threats afloat, the Midway strike force did not possess the required combat power to achieve the desired results. Even though the islands were small and military targets were in relatively close proximity to each other, the plan did not allocate sufficient forces to neutralize defenses on Midway Atoll with carrier aircraft.

Japanese planners planned the air strike on Midway Atoll to soften the defenses and reduce resistance to the invasion. The planners did not analyze whether Midway actually presented a threat to the carrier force. Because there was only the small amount of usable land on the two proper islands at Midway, the actual threat to the Japanese fleet could have been determined by considering two factors: the number of aircraft the island could support; and the potential effectiveness of those aircraft. The primary purpose for Midway Island was that of an advanced outpost to provide warning of an attack on Honolulu. Given that purpose, the island airfield normally supported reconnaissance aircraft and a small

⁷¹ Parshall and Tully, *Shattered Sword*, 482.

number of fighters. Only when the threat to Midway Atoll was discovered was a robust American fighter and bomber element sent to Midway Island.

It is difficult to argue that Midway Atoll could serve usefully as an outpost to defend the outer reaches of Japanese territory. Midway's close proximity (within range of American aircraft) to the Hawaiian Islands made it unlikely that it could be sustained as a permanent outpost. Even with substantial land-based support aircraft stationed there, constant pressure from enemy aircraft flying from more robust bases within the Hawaiian island chain would make the atoll difficult to defend. This idea leads to a more important question. What price was Japan willing to pay to hold Midway? Even with the destruction of the American fleet it would have been only a matter of time before the Americans would assemble the combat power needed to retake the islands. Additionally, once the major operations were concluded, many of the capital ships (including the carriers) would be assigned to subsequent operations elsewhere. Their support to the invasion would have ended in a matter of days, rapidly diminishing their relevance to the future defense of the island. Once the bulk of the Japanese fleet departed, logistic shipments to sustain life on the island would need to sail great distances through dangerous unprotected waters.⁷² Thus, Japanese occupation forces would have had a considerable challenge ahead of them. First, the mere distance between Midway Island and any other Japanese support facility meant additional troops and resources would be long in coming. Considering the close proximity to enemy controlled waters, the survivability of support vessels would be seriously threaten and, thus, would require diverting elements of the Japanese fleet to keep the lines of communication open. It is also unlikely the American resolve to recapture the island would weaken. The idea of an enemy presence within 1,100 miles of American cities would have been enough to focus considerable effort to retake the island. Thus, Japanese possession of Midway Atoll would become a burden on Japan.

With these issues in mind, it becomes difficult to understand the logic behind Midway Island as a permanent outpost in the Japanese outer defense network, overextending viable resources to sustain it.

⁷² Symonds, *The Battle of Midway*, 107.

The Japanese had already realized that any future invasion of the Hawaiian Islands was unsupportable.⁷³ The same reasoning stands true for Midway Atoll. The Japanese Navy could not afford to lose any more assets in supporting a long-term presence on a distant outpost with questionable strategic value. Admiral Yamamoto, in his desire to convince the Naval General Staff to support his plan, never considered the impacts of conducting an invasion prior to engaging the U.S. carrier fleet. Additionally, Yamamoto did not realize the true implications of not having land-based aircraft to support the operation. This is substantial because Midway was the first instance since the beginning of the war where such an asset was not available to Japanese naval forces, a major shortcoming overlooked in the operational approach.⁷⁴ The risk to the fleet while conducting operations without land-based aircraft was not addressed in the plan. The capability to launch floatplanes from combat vessels could not match the coverage provided by land-based aircraft. Additionally, Japanese naval leaders considered using combat aircraft for reconnaissance a waste of strike assets. The doctrinal requirement to maximize strike capability required the planners to consider only other options not involving carrier combat aircraft.⁷⁵ In an attempt to mitigate the risk to the fleet and satisfy the reconnaissance role normally performed by land-based aircraft, Japanese naval planners included a submarine screen in the Midway plan to detect any advancing enemy fleet. However, the submarine was inferior to land-based aircraft in performing reconnaissance missions.

Although Japanese naval planners tasked their submarine fleet to conduct a reconnaissance mission at Midway, submarines were not capable of performing this mission effectively. The Japanese Navy understood the capabilities and limitations of their submarine fleet. Japanese submarine designs were directly tied to the missions they were destined to conduct. Tasks assigned to the submarine force included extended surveillance of the enemy battle fleet in harbor, pursuit and shadowing the enemy fleet during movement, and finally ambush of the enemy fleet just before the decisive encounter with the

⁷³ Parshall and Tully, *Shattered Sword*, 28.

⁷⁴ Willmott, *The Barrier and the Javelin*, 85-88.

⁷⁵ Fuchida and Okumiya, *Midway*, 180.

Japanese surface fleet.⁷⁶ Trials at sea and participation in war games gave the Japanese a good idea of how effective submarines were at those missions. In the actual war, Japanese submarines could just barely maintain contact with a surface fleet, let alone rush ahead of it to assume firing positions.⁷⁷ What did the Japanese leadership learn from such exercises?

First, the ability of a Japanese submarine to detect an enemy vessel without exposing themselves to enemy detection was extremely remote. The Japanese Navy set opposing requirements for the submarines: defensiveness and aggressiveness. To survive the submarine had to maintain stealth. However, to adhere to the Japanese submarine doctrine that directed attacks with the close-in-shot, they had to be aggressive.⁷⁸ Japanese submarine commanders had to be extremely cautious while maneuvering to prevent detection from the enemy. That required them to operate farther from enemy vessels and travel submerged. Both of these requirements significantly reduced the ability of the Japanese submarine to detect or track an enemy vessel. Japanese submarine doctrine called for successive strikes on enemy forces, which required submarines to operate in close proximity to the enemy and to move ahead of convoys. Both actions were counter to the actual capabilities of the submarines.⁷⁹ Second, Japanese submarines did not possess the speed needed to track enemy ships. Once an enemy vessel was detected, the submarine could not continue to track its course, leaving only a snapshot of position and speed to decipher where the enemy vessel was headed. Third, Japanese submarines could not detect enemy vessels in periods of limited visibility. During the night, submarines were ineffective in tracking enemy movement. Fog significantly reduced their detection ranges, a phenomenon that was frequent in the Pacific Ocean. Fourth, Japanese doctrine did not allow individual submarines to operate in concert with other subs. The Japanese Navy never developed the idea of submarines conducting a concerted attack.

⁷⁶ Evans and Peattie, *KAIGUN*, 428.

⁷⁷ *Ibid.* 429.

⁷⁸ *Ibid.* 433.

⁷⁹ Willmott, *The Barrier and the Javelin*, 25.

Further, command of submarine forces traditionally originated from a shore command.⁸⁰ Communications between submarines were not normal. Commanders communicated primarily through their shore based command elements. During ambush or picket line operations, once on station, submarines generally moved only by orders from ashore.⁸¹ Although individual submarines could listen to the traffic between another submarine and the command, coordination for tracking and future attacks against enemy vessels required coordination through a command element and not directly between submarines. Thus, the Japanese plan to use submarines to substitute for land-based aircraft clearly was an unwise decision. Assigning the submarine as the only line of early detection demonstrates the level of inattention Yamamoto invested in synchronizing supporting efforts within the operational plan.

Given all of the limitations of the Japanese submarines, any real expectation that a submarine screen could detect an enemy task force was remote at best. The result was a submarine force hobbled by conservative doctrine and aimed at the destruction of naval targets.⁸² The value in the submarine came from their ability to maneuver on an enemy task force after contact. Additionally, reconnaissance of a static target such as the Midway Atoll was fruitful, as long as the enemy harbor and coastal defenses were not robust. Finally, submarine reconnaissance is useful only if the information finds its way back to the commander.

Given the submarine's shortcomings, it becomes evident the Japanese were foolish to rely on this force to conduct the screen cordon at Midway. Considering the importance of detecting any enemy surface task force headed toward Midway, planning for the submarine screen warranted greater planning attention. Yet, the submarine cordon became a secondary and peripheral concern when the battle plan was formulated. The planners probably assumed that by giving to the submarine fleet vague guidance to establish a cordon at specific coordinates, an effective screen and early detection would result. As other

⁸⁰ Evans and Peattie, *KAIGUN*, 430.

⁸¹ *Ibid.* 430.

⁸² *Ibid.* 433.

reconnaissance efforts such as Operation K became untenable, the submarine cordon was the only remaining early detection asset available to the Japanese Navy. The fundamental reason for the failure of the Japanese submarine forces during the war was that those who made the basic decisions on submarine tactics—staff officers in the Combine Fleet and on the Navy General Staff—were ignorant of both the capabilities and the limitations of submarines.⁸³

Ultimately, Japanese naval commanders and their planners devised an operational approach built upon an inadequate understanding of how to employ tactical assets to meet operational objectives. As a result, each objective could not collectively contribute to the end state of the campaign. Adhering to a traditional doctrinal framework fragmented combat power and produced ineffective results when countering the enemy. A traditional mindset also prevented the Japanese Navy from exploiting opportunities derived from deploying a much larger force than the enemy. Thus, not adapting plans to meet emerging circumstances resulted in an ineffective operational approach.

CONCLUSION

Historical accounts emphasize the spectacular and devastating events that unfolded during the battle of Midway. Those accounts distract attention from the factors involved in setting the stage for the battle itself. The outcome of the battle of Midway was not just a result of the tactical actions taken by the Japanese Carrier Striking Force. It was the result of the Japanese Navy's poor understanding of how to employ the means available to satisfy objectives. By not understanding the current environment, the Japanese naval leadership formulated a campaign plan that did not account for the strategic implications of employing the bulk of their force to achieve tactical objectives. By employing the aircraft carrier to satisfy tactical needs in accordance with the decisive battle concept, the strategic value of the aircraft carrier in the defense of the empire was lost. This directly resulted from the inability of Japanese naval

⁸³Evans and Peattie, *KAIGUN*, 434.

leaders to recognize the value of critical or operational thinking to resolve the challenges derived from complexity.

Operational thinking, as an integral part of design, exposes inadequate concepts and challenges pre-conceived notions to reveal the true nature of the problem.⁸⁴ The primary issue that prevented leaders such as Admiral Yamamoto from visualizing the environment and developing a sound operational approach was the lack of strategic clarity within the navy. The Japanese Navy found itself without a coherent strategic policy for how to proceed in the remaining months of 1942. Plans generated by various headquarters within the Japanese Navy provided a variety of options. The primary strategic goal for the employment of combat power was to inflict a decisive defeat on the enemy forces and, thereby, bring them to negotiate an end to hostilities.⁸⁵ Yet, the strategic goal had to account for larger concepts beyond a single decisive battle. The same fleet involved in the Aleutian-Midway campaign also needed to fulfill naval requirements throughout the Pacific. These two requirements were at odds with the assets needed to satisfy them, as the fleet could not meet the needs of both simultaneously. Without a coherent strategic aim, the Japanese Navy assigned the fleet missions with more requirements than the Japanese military capabilities could satisfy. As a result, the Japanese Navy did not understand the maritime environment in relation to their capabilities and those of the enemy. In understanding their enemy, the Japanese failed to identify assumptions and work to turn assumptions into facts that identified opportunities for defeating the enemy.

At Midway, the fleet was incapable of reacting to any unexpected events because there was no provision in the decisive battle doctrine for the fleet to be agile and adaptive. By not communicating the necessary decisions required to adjust to the changing conditions they found upon contact with an unexpected enemy element Japanese naval leadership, to include Admiral Yamamoto, failed to form the

⁸⁴ Jashmid Gharajedagi, *Systems Thinking: Managing Chaos and Complexity* (Oxford, UK: Elsevier, 2006), 25.

⁸⁵ Parshall and Tully, *Shattered Sword*, 33.

fleet into a cohesive force. Faced with an uncertain situation, the Admiralty could not fall back on the operational plan drafted for the Midway operation. The plan did not account for unexpected changes in the operational environment, leaving no other course than to revert to aggressive tactical actions common to the decisive battle construct. A plan such as this, in an area where the Japanese were not familiar and lacked some of their key supporting mechanisms such as land-based air cover, reduced the chance for a successful outcome.

Japan had no previous presence in this area of the Pacific. They were embarking on a massive naval operation with virtually no information about what was waiting for them. Planning with minimal information led to virtually no understanding of what was actually required to accomplish the tactical tasks required by the Midway operation. Setting a plan in motion with multiple objectives put the fleet in a position of vulnerability, as the Japanese fleet found themselves dealing with three different objectives simultaneously, Midway Atoll, the Aleutians, and the American carrier task force. None of these objectives had a clearly defined military end state or termination criteria. Thus, unity of effort did not exist throughout the force.

In addition, Japanese failure to appreciate the limitations of their fleet assets such as submarines cost the Japanese Navy dearly when their use was most critical. Complete reliance on the submarine to execute a task that they were incapable of properly executing became problematic for the Japanese. Employing the submarine cordon with the expectation that they would readily discover an enemy presence amounted to no more than wishful thinking. To employ such an asset, Japanese naval leadership and planners needed to thoroughly understand the capabilities and limitations of their submarine fleet. Any asset, not properly employed, is useless. By not emphasizing the planning and employment of secondary fleet elements within the plan, the force could not achieve their objectives.

Ultimately, the Japanese Navy's inability to adapt to the new operational environment and their focus on the decisive battle caused their failure at Midway. Details in the method of employment, true capabilities of the assets employed, and the ancillary aspects of moving a fleet without consideration for unexpected enemy contact cost the Japanese greatly. The very same combat assets employed for the

operation at Midway may have found success in a more thoughtful and better-planned operation. The Japanese had an advantage in setting the terms of where and when to fight. Due to the vast expanse of Japanese territory, wherever the Japanese projected power the Americans had to follow. Drawing the American carriers into waters within Japanese territory and supported by land-based aircraft was a concept better suited for a favorable Japanese outcome.

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