

Managing Competing Influences: Risk Acceptance in Operation Rolling Thunder

A Monograph

by

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Abstract

Managing Competing Influences: Risk Acceptance in Operation Rolling Thunder, by Major Benjamin Williams, US Air Force, 42 pages.

What had the largest influence on General Momyer's decisions regarding the acceptance of risk-to-mission for Seventh Air Force during Operation Rolling Thunder?

During his time as Seventh Air Force Commander, General William Momyer oversaw US Air Force operations over North Vietnam, South Vietnam, and Laos. However, he operated within tight restraints placed upon Seventh Air Force by his political and military superiors. These restrictions were one of many influences he balanced while commanding operations. The primary influence was political: specifically, how to prevent his forces from causing the Vietnam War to escalate beyond what was politically acceptable.

This paper examines various definitions of risk and a few military frameworks for risk mitigation. The resources used to uncover the influences on General Momyer include annual Air Force after-action reports, and primary source and scholarly works about the history of the air war over North Vietnam. In light of General Momyer's experiences and the lack of doctrinal recommendations regarding times to accept risk, Joint doctrine should define and explain the concepts of risk-to-mission, risk-to-force, and risk judgment, and tactical level training missions should consider the impact of individual losses inside the theoretical scenario or notional air campaign.

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Acronyms

AFB	Air Force Base
AFI	Air Force Instruction
CHECO	Contemporary Historical Examination of Current Operations
CINCPAC	Commander-in-Chief Pacific Command
CJCSM	Chairman of the Joint Chiefs of Staff Manual
JCS	Joint Chiefs of Staff
JP	Joint Publication
MACV	Military Assistance Command Vietnam
NVA	North Vietnamese Army
ROE	Rules of Engagement
PACAF	Pacific Air Forces
PACFLT	Pacific Fleet
PACOM	Pacific Command
RAND	Research and Development
POW	Prisoners of War
SAM	Surface to Air Missile
SECDEF	Secretary of Defense
USA	United States Army
USAF	United States Air Force
USN	United States Navy

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Introduction

As December of 1966 was drawing to a close, General Williams W. Momyer, the Seventh Air Force commander, and his staff were debating the merits of a radical plan to counter North Vietnamese aircraft. General Momyer, a decorated fighter pilot and veteran of both World War II and the Korean War, was balancing the tentative plan of operations with the overall political and military context. The air campaign over North Vietnam, code named Operation Rolling Thunder, had been operating for nearly two years, but still had not achieved the goals that President Johnson and his staff had designated. However, public support for the Vietnam War remained strong and it appeared that the ground operations in South Vietnam were making progress. General Momyer was weighing the different means by which he could preserve his fighting force and protect his aircrew while still destroying the targets that his political and military superiors had assigned. Compounding the issue were the many restrictions placed upon his forces by higher echelons, restrictions on things like acceptable operating areas, acceptable targets, and acceptable aircraft to employ in the attacks.

The Seventh Air Force staff had previously noted the North Vietnamese tendency to be very aggressive following any American operational stand down because the enemy pilots had a chance to recuperate and train without the fear of attack.¹ Therefore, the staff predicted that the pattern would persist, and that friendly aircrew could expect ferocious attacks as operations over North Vietnam resumed. This meant that there was a high probability that Seventh Air Force would lose several of the less maneuverable fighter-bomber aircraft and have a reduced likelihood of achieving the tactical objectives and bombing the assigned targets. As the beginning of 1967

¹ William W. Momyer, *Airpower in Three Wars* (Washington, DC: Government Printing Office, 1978), 145.

approached and American forces prepared to resume operations, General Momyer had to determine whether to approve or deny the risky plan.

Carl von Clausewitz noted that war is “not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means” which implies, “the political objective is the goal, [and] war is the means of reaching it.”² American military leaders have always faced the challenge of conducting military operations under the political oversight of civilian leadership; however, the limitations given by the politicians forced General Momyer to determine the amount of risk-to-mission and risk-to-force he was willing to accept during Operation Rolling Thunder.

The central question to the preceding vignette is what had the largest influence on General Momyer’s decisions regarding the acceptance of risk-to-mission for Seventh Air Force during Operation Rolling Thunder? This monograph examines risk and risk acceptance for military operations. Additional areas of research include military definitions of risk, human biases in favor of, or opposed to, risk and risk acceptance, and the military framework for risk management. Underlying the central question are other areas worthy of discussion, including the amount of risk the Seventh Air Force commander was willing to assume, whether the acceptable level of risk applied to all mission types or aircraft equally, and the ways in which General Momyer mitigated the political risk. Additional research topics investigate whether General Momyer accepted a different amount of risk depending on the political or military significance of the targets, and the impact of public opinion on the conduct of Operation Rolling Thunder. The central hypothesis is that among all the considerations Seventh Air Force commander took into account, the political importance of the specific target or target sets was the most significant factor when determining the acceptable level of risk-to-mission during air operations. Principal research information comes from

² Carl von Clausewitz, *On War*, ed. and trans. Peter Paret and Michael Howard (Princeton: Princeton University Press, 1976), 87.

annual Air Force after-action reports, primary source responses including works authored by General Momyer, and scholarly works about the history of the air war over North Vietnam.

In the current environment, Air Force commanders still must balance the acceptable level of risk they assume against the constraints of the political environment. Unfortunately, there is not much information available that provides a framework for assessing and making decisions, but this monograph begins to assemble a framework over the span of five chapters. Chapter One defines the concept of military risk, examines human biases and the ways that individuals may be biased towards or against risk acceptance, and explains different military doctrines for risk management. Chapter Two explains the historical background of Operation Rolling Thunder within the context of air operations over North Vietnam, and describes the relationship between public opinion and the Vietnam War. Chapter Three portrays the military risks that General Momyer faced as the Seventh Air Force commander; including the risks of expanding the war, failing to accomplish the mission, or improperly allocating his forces. Chapter Four describes the impact of political risks on the conduct of Operation Rolling Thunder, including the effect of combat losses and the way that the target approval process limited military operations. Chapter Five provides an answer to the research question, identifies areas for future research, and offers doctrine and training recommendations based on the monograph's conclusions.

Chapter 1: Risk, Human Factors, and the Risk Management Process

Risk is not bad per se... The sin is not to take a risk, but to take a risk we don't understand and cannot manage.

— Dr. Jonathan Chocqueel-Mangan, *Risk-Based Performance Management: Integrating Strategy and Risk Management*

As a concept, risk is difficult to define in terms of military operations. The Chairman of the Joint Chiefs of Staff states that risk is “the probability and consequence of an event causing harm to something valued.”³ In a section detailing the Mission Analysis step of the Joint Operations Planning Process, Joint Publication 5-0, *Joint Operation Planning*, discusses risk as “as the probability and severity of loss linked to an obstacle or action.”⁴ The implication is that risk is a negative factor, something that organizations must identify and mitigate. Joint Publication 3-0, *Joint Operations*, also continues the refrain, stating, “risk is inherent in military operations.”⁵

In terms of risk, the Chairman of the Joint Chiefs of Staff Manual 3101.01, *Joint Risk Analysis*, identifies two subcategories under military risk; military risk is “the estimated probability and consequence of the Joint Force’s projected inability to achieve current or future military objectives (risk-to-mission), while providing and sustaining sufficient military resources (risk-to-force).”⁶ Generally, risk-to-force considerations occur at the national strategic level, ensuring each Service maintains the ability to conduct future operations. At the operational level, leaders like the Seventh Air Force Commander are often more interested in the role of risk-to-mission. The Air Force’s current definition of risk-to-mission is “the risk to the joint force commander’s ability to

³ Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3105.01, *Joint Risk Analysis* (Washington, DC: Government Printing Office, 2016), B-1.

⁴ Joint Publication (JP) 5-0, *Joint Operation Planning* (Washington, DC: Government Printing Office, 2011), IV-11.

⁵ Joint Publication 3-0, *Joint Operations* (Washington, DC: Government Printing Office, 2017), A-3.

⁶ CJCSM 3105.01, C-8.

execute his mission at acceptable capability, capacity, readiness, plans, and authorities.”⁷ Given this basic understanding, this chapter now examines human biases regarding risk and defines the concept of risk management in terms of military operations.

Human Factors

Human beings are susceptible to certain biases when facing risky or uncertain propositions. One bias that humans tend to exhibit when reflecting on past actions is loss-aversion. Daniel Kahneman observes, “losses loom larger than gains.”⁸ The recency of losses also matters; recent losses tend to influence humans more than past losses, meaning a person may become particularly risk averse after a recent, painful loss. People will often choose a safe, conservative option instead of a better, but riskier, option in order to avoid the potential of future pain over loss. In addition, when people review past decisions, they magnify the times they chose the wrong option, meaning regret over those decisions tends to weigh more heavily than the satisfaction of the times they made the right choice.⁹ Attempting to avoid regret can lead humans to the sunk-cost bias, where they hold on to a position that is failing for as long as possible, hoping to avoid admitting that they chose the wrong option.

On the other side, however, risk does not always imply loss. In other fields such as business and economics, risk also includes an upside of potential opportunities. When weighing risk in terms of business operations, three components of risk are most important in the equation: the magnitude of the loss, the chance of loss, and the exposure to loss.¹⁰ Just because the risk level is high does not

⁷ Air Force Instruction (AFI) 10-2801, *Force Development Concerns* (Washington, DC: Government Printing Office, 2014), 14.

⁸ Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011), 284. In certain instances, losses can weigh about twice as much or more as potential gains. *Ibid.*, 349.

⁹ *Ibid.*, 346.

¹⁰ Kenneth R. MacCrimmon and Donald A. Wehrung, *Taking Risks: The Management of Uncertainty* (New York: Free Press, 1986), 10.

mean that the leader should not take action, because “even high risk endeavors may be undertaken when there is a well-founded basis to believe that the sum of the benefits exceeds the sum of the costs.”¹¹ Joint Publication 3-0 also agrees, identifying “prudent risk management, not undue caution” as the appropriate response to the presence of risk.”¹²

This can also lead to another human bias, the bias of risk denial that leads to overconfidence. Risk denial is when “individuals believe that they are less prone to risk or the outcomes of a risky choice, therefore denying the presence [or] effect of risk.”¹³ Risk denial can lead to overconfidence, which occurs when people assume that their personal resilience after loss is proof that they can continue taking wild risks, even though the laws of probability dictate that someone was bound to survive.¹⁴ Habitually accepting high levels of risk without consequences can make someone become complacent about the actual level of risk they face. Therefore, sustained operations with excessive risk aversion or risk acceptance can be dangerous for organizations. However, in their study of managers in a variety of business operations, Kenneth MacCrimmon and Donald Wehrung found no trend of consistent risk aversion or risk acceptance; managers accepted risk based on the situation and context.¹⁵ For decision makers, the question is how best to approach future decisions.

Leaders making decisions in the face of uncertainty must identify the possibility and magnitude of the potential loss and then make a decision, without the influence of previous successes or failures. Kahneman suggested viewing the list of choices as a stock trader might,

¹¹ AFI 90-802, 12.

¹² JP 3-0, A-3.

¹³ Damien J. Williams, “Risk and Decision Making” in *Decision Making in Complex Environments*, eds. Malcolm J. Cook, Janet M. Noyes, and Yvonne Masakowski (Aldershot, England: Ashgate, 2007) 50.

¹⁴ Nassim N. Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007), 115.

¹⁵ MacCrimmon and Wehrung, *Taking Risks*, 270.

weighing the odds of success or failure as part of a larger string of probabilities, without isolating the incident inside a single moment.¹⁶ This has the advantage of allowing the decision maker to reflect on the broader context of risks the organization may be assuming, without overemphasizing the magnitude of the current decision or overweighing the potential emotional reaction to losses. Military commanders cannot fixate on the risk inherent in one action only, but must ensure that they consider the broader context, recognizing how the cumulative effect of all operations may reduce the aggregate risk level. Military commanders must also be sensitive to the context of operations when considering risk tolerance.

Another key concept for organizational leaders is the idea of risk judgment; CJCSM 3105.01 defines risk judgment as “a qualitative effort aimed at determining a decision-maker’s degree of acceptable risk.”¹⁷ Risk judgment provides insights into the current operating environment and the amount of risk the organization or senior commander is willing to assume. Blindly accepting risks without considering the broader context of risk tolerance can lead subordinate organizations to diverge from higher headquarters authorization. The challenge for an organizational leader is to identify, weigh, and mitigate risk in an environment that is constantly changing; one way to capture future risks is through the process of risk management.

Risk Management

Clausewitz writes, “through the element of chance, guesswork and luck come to play a great part in war.”¹⁸ Risk management is a way to attempt to reduce the uncertainty of the future by predicting and then mitigating potential hazards. Joint Publication 3-0, *Joint Operations*, states, “risk management is the process to identify, assess, and control hazards arising from operational

¹⁶ Kahneman, *Thinking, Fast and Slow*, 339.

¹⁷ CJCSM 3105.01, B-4.

¹⁸ Clausewitz, *On War*, ed. and trans. Peter Paret and Michael Howard, 85.

factors and make decisions that balance risk cost with mission benefits.”¹⁹ These considerations combine to form the overall risk level of the hazard, which the leader then determines as being acceptable at the current level or in need of mitigation. The leader can then choose to accept, avoid, reduce, or transfer the risk.²⁰ The challenge for the military leader is to find ways to mitigate risks that the organization cannot avoid or transfer.

The risk management process is also a way to examine the consequences and opportunities embedded in a decision straightforwardly. Oftentimes leaders focus only on the bad event that may happen, using a “pure risk” perspective.²¹ However, by focusing only the chance of loss, leaders might become fearful and lose sight of the opportunities that may exist inside the circumstances. Military leaders must broaden their perspective beyond the chance of loss because the nation may require units to fight, even when the odds may not be in their favor. James Creelman and Andrew Smart describe some of the risk management principles that businesses can use when examining risk; one of their key arguments is that “risk management explicitly takes account of uncertainty, the nature of that uncertainty, and how it can be addressed, [and] is systematic, structured, and timely.”²²

Risk management is applicable at all levels of military operations. At the national strategic level, the Chairman of the Joint Chiefs of Staff prescribes a process of risk management that considers the broad risk-to-mission and risk-to-force for the nation. Within the Joint Operations Planning Process, Joint doctrine identifies the processes of Operational Art and Operational Design as ways in which commanders begin to reduce uncertainty in the operational environment, allowing

¹⁹ JP 3-0, III-19.

²⁰ CJCSM 3105.01, B-5.

²¹ J. Davidson Frame, *Managing Risk in Organizations: A Guide for Managers* (San Francisco: Jossey-Bass, 2003), 7.

²² James Creelman and Andrew Smart, *Risk-Based Performance Management: Integrating Strategy and Risk Management* (New York: Palgrave Macmillan, 2013), 77.

detailed planning.²³ Then, as part of the detailed planning process, the commander and staff examine possible risks and propose ways to mitigate the impact or severity of the risk. The Air Force mandates the process of Operational Risk Management to “maximize capabilities while limiting risks through application of a simple, systematic process appropriate for all personnel and functions in both on- and off-duty situations.”²⁴ The specific steps inside the Air Force’s Operational Risk Management process are tools to identify and mitigate risks; however, they apply primarily at the individual or tactical level.

In addition to Joint and Air Force doctrine regarding risk management, there are also other ways to identify and mitigate risks. Kahneman recommends one means of identifying risks is using Gary Klein’s ‘pre-mortem assessment’ to help prevent overconfidence.²⁵ The pre-mortem assessment is the process where, by assuming that the mission has already failed, members pinpoint the reasons for the failure and assess ways to prevent them. This allows the organization to predict areas that require risk mitigation measures.

One way to mitigate risk across the board is by retaining a portion of the force as a reserve; Clausewitz recognized the importance of the strategic reserve two centuries ago, stating, “an essential condition of strategic leadership that forces should be held in reserve according to the degree of strategic uncertainty.”²⁶ Joint Publication 5-0 recommends that the Joint Force Commander should “consider withholding some capability as an operational reserve.”²⁷ This is similar to Davidson Frame’s recommendation for businesses to provide two layers of contingency

²³ JP 5-0, x.

²⁴ AFI 90-802, 3. The five steps of the risk management process are to identify the hazards; assess the hazards; develop controls and make decisions; implement the controls; and then supervise and evaluate.

²⁵ Kahneman, *Thinking, Fast and Slow*, 264.

²⁶ Clausewitz, *On War*, ed. and trans. Peter Paret and Michael Howard, 210.

²⁷ JP 5-0, IV-48.

reserves when calculating risk. The first layer, known as the operational reserve in military terms, helps to defeat the “known-unknowns,” areas where risk analysis predicts increased chance of loss but cannot identify the specific details. The second set of reserves, similar to strategic reserves, counters the “unknown-unknowns,” areas where risk analysis is unable to predict potential variations.²⁸

Although he did not use the terminology of risk-to-mission or risk-to-force, General Momyer faced the same issues as Seventh Air Force commander conducting operations over North Vietnam. He wrestled with the problem of sending his forces into action against well-defended targets, with extremely high odds that he would lose assets. He had to use risk management principles in order to balance the risks that he and his forces faced. The next few chapters explore Operation Rolling Thunder and the specific risks that General Momyer confronted as he led the air campaign.

²⁸ Frame, *Managing Risk in Organizations*, 144.

Chapter 2: Rolling Thunder in Context

The bombing campaign of North Vietnam, code named Operation Rolling Thunder, took place from February 1965 until November 1968. The overall purposes of Operation Rolling Thunder were to reduce the flow of men and supplies from North Vietnam, to make the North Vietnamese pay a price because of their support for the insurgency inside South Vietnam and Laos, and to demonstrate US resolve and raise the South Vietnamese morale.²⁹ General Momyer commanded Seventh Air Force during the pivotal two years, from July 1966 until July 1968.³⁰ This chapter begins by describing the background and conduct of Operation Rolling Thunder along with a general overview of the way it fit into the overarching history of the air war over North Vietnam.

Military History of Air Operations over North Vietnam

The air campaign versus North Vietnam was the result of the insistent demands by the American public for retaliation against North Vietnamese military confrontations, but it morphed into a three-and-a-half year long bombing campaign. The initial plan was for a short-term bombing operation that would signal to the North Vietnamese the resoluteness of America's commitment to the South Vietnamese.³¹ The first bombing attacks on North Vietnam, code-named Operation Flaming Dart, occurred in August 1964, after the attack on the American destroyers in the Tonkin Gulf. As the bombing attacks continued without an acceptable response from North Vietnam, the President decided to transition to a more deliberate, sustained operation with the intent of convincing North Vietnam that the United States would not let South Vietnam be taken by force.

²⁹ Momyer, *Airpower in Three Wars*, 173.

³⁰ *Ibid.*, 274.

³¹ John T. Smith, *Rolling Thunder: The American Strategic Bombing Campaign against North Vietnam, 1964-68* (Walton on Thames, Surrey, England: Air Research Publications, 1994), 42.

The expanded bombing campaign, renamed to Operation Rolling Thunder, began on 2 March 1965.³²

The air campaign ultimately consisted of fifty-five distinct operations, or phases, each of which was designed to send carefully crafted signals to the North Vietnamese. By slowly increasing the type and number of targets struck, the plan was to ratchet up pressure gradually and then provide a reprieve, thereby forcing the North Vietnamese to come to the negotiating table and accede to American demands. Air Force leaders opposed the prescribed strategy of slowly increasing pressure on the North Vietnamese, instead calling for a short, all-out bombing effort.³³ The original target list contained ninety-four strategic targets in total, with the President holding the authority to release specific targets for attack. Initially, the air campaign was restricted to targets south of the 19th parallel, but it expanded above the 20th parallel after two months. After that proved ineffective, the President relaxed the operating restrictions and allowed attacks throughout the majority of North Vietnam in July 1966.³⁴ Even as air attacks destroyed more and different strategic targets from the original target list, the United States was unable to force the North Vietnamese to negotiate in good faith. However, annual military reports remained enthusiastic, with every survey of the previous year's results ending optimistically about the next year's prospects. As 1968 began, few in the military believed that the events of the upcoming month would change the course of the Vietnam War.

The Tet Offensive began on 30 January 1968 and caused public support for the war to plunge because Americans saw televised images that contradicted the idea that the war was nearly finished. As public support plummeted, President Johnson admitted that Operation Rolling Thunder had failed to achieve his desired objectives and he ordered the termination of all operations above

³² Momyer, *Airpower in Three Wars*, 18.

³³ *Ibid.*, 13.

³⁴ Smith, *Rolling Thunder*, 47.

the 20th parallel, beginning on 1 April 1968.³⁵ The loss of public support also convinced President Johnson to announce that he would not run for another term in office. On 31 October 1968, in preparation for the upcoming presidential elections, President Johnson announced the termination of all bombing operations against North Vietnam in hopes that they would join in “de-escalating the war and moving seriously towards peace.”³⁶

However, the bombing halt and conclusion of Operation Rolling Thunder did not prompt the North Vietnamese to return to the negotiating table. Instead, the North Vietnamese used the time to upgrade their conventional military capabilities and repair key infrastructure. In addition, they also increased their support to the Viet Cong, and on 30 March 1972, they launched a full-scale military invasion of South Vietnam. The “Easter Offensive” surprised the allied forces and enraged President Nixon, who was in the process of drawing down American military forces as part of his “Vietnamization” policy. President Nixon retaliated by ordering B-52 bombers to conduct Operation Linebacker I in order to force the North Vietnamese to stop the offensive and negotiate an end the war. Linebacker II was the American response following the deadlock of the peace process, when President Nixon ordered the all-out air campaign against North Vietnam that the Air Force had been calling for since 1965. Linebacker II, known as the “Christmas bombings” forced the peace negotiations to conclude, and the Paris Accords ended the Vietnam War for the United States on 27 January 1973.

Public Opinion and the Vietnam War

In the beginning of the strikes against North Vietnam, the media reports of the bombing missions created popular support for President Johnson and his campaign. The American people

³⁵ Smith, *Rolling Thunder*, 162.

³⁶ *Ibid.*, 166.

desired a strong response to the North Vietnamese provocations.³⁷ Public approval for a continued air campaign continued to remain high after the transition into Operation Rolling Thunder; polling data in February 1967 showed 67% of the American population backed the President's policy.³⁸ However, high public support would not last.

Strong public support hid the fact that the American people did not understand the reasons for war or its objectives. Initially, as Denis Drew notes, air power provided a compromise between all-out war and continuing the current policy.³⁹ By 1967 though, the American public was conflicted. A June 1967 poll "revealed that half the American people said that they lacked a 'clear idea of what the war is about.'"⁴⁰ Yet, a July 1967 poll revealed 40% of people surveyed desired *an increase* in the scope of the air attacks.⁴¹ Part of the reasoning may have been that the American public wanted to end the Vietnam War and saw the air campaign as a means to end the war without incurring significant casualties.

As the war progressed, media reporting of the ground actions in South Vietnam began to erode public support for the Vietnam War in general, as the American people confronted the increasing number of casualties. A RAND Corporation study identified how the growing number of casualties, in both the Korean and Vietnam Wars, "became for the public, both a highly visible cost of US involvement and a painful symbol of frustration. For that reason, casualties were probably

³⁷ Smith, *Rolling Thunder*, 40.

³⁸ *Ibid.*, 121.

³⁹ Dennis M. Drew, *Rolling Thunder 1965: Anatomy of a Failure* (Maxwell Air Force Base, AL: Air University Press, 1986), 28.

⁴⁰ Chester Pach, "LBJ, the Progress Campaign, and the Vietnam War on Television" in *Selling War in a Media Age: The Presidency and Public Opinion in the American Century*, eds. Kenneth Osgood and Andrew Frank (Gainesville: University Press of Florida, 2011), 176.

⁴¹ Smith, *Rolling Thunder*, 133.

the single most important factor eroding public support.”⁴² As casualties increased, the common refrain became that the war may have reached a stalemate and become unwinnable. President Johnson recognize that he could not afford to lose public support for the war, and he ordered the Progress Campaign in August 1967 to support the administration’s narrative that the United States was accomplishing its objectives in Vietnam.⁴³

The Progress Campaign initially regained lost public support, as the President’s advisors made statements supporting the progress in Vietnam. By the end of 1967, “half of the American people thought that United States forces were making progress in Vietnam, an increase of 50 percent since the summer.”⁴⁴ However, the administration’s advancement was shattered when the North Vietnamese launched the Tet Offensive. The Tet Offensive in January 1968, despite being a military failure, was a strategic victory for the North Vietnamese. President Johnson and his staff immediately lost credibility and public support because the images of the North Vietnamese attacking contradicted the administration’s claims that the war was making headway. The American public felt betrayed and lied to because they had not been prepared psychologically to see the scope and scale of the North Vietnamese attacks.⁴⁵ After January, the populace no longer thought the United States was close to winning.⁴⁶ Worse yet, following the Tet Offensive, “substantial numbers of prominent and influential figures became convinced that the American people were no longer willing to pay the price in casualties and dollars for continuing war indefinitely in Vietnam.”⁴⁷

⁴² Mark A. Lorell, Charles Kelley, and Deborah R. Hensler, *Casualties, Public Opinion, and Presidential Policy during the Vietnam War* (Santa Monica, CA: RAND, 1985), vi.

⁴³ Pach, “LBJ,” 5.

⁴⁴ *Ibid.*, 188.

⁴⁵ Lorell, Kelley, and Hensler, *Casualties*, 62.

⁴⁶ Smith, *Rolling Thunder*, 156.

⁴⁷ Lorell, Kelley, and Hensler, *Casualties*, 60.

General Momyer had to balance fluctuating public support against the backdrop of the overarching purpose of Operation Rolling Thunder, which was to demonstrate US resolve and convince the North Vietnamese to end their support for the various insurgencies. His duties as Seventh Air Force commander included overseeing interdiction operations to slow the flow of supplies to the insurgencies, strategic attack operations to coerce the North Vietnamese to the negotiating table, and counter-air operations to protect friendly operations throughout Vietnam.. Within the air campaign he directed, General Momyer had to consider the risks to both military operations and political policies and determine ways to mitigate the risks that he had to accept. The next chapter will detail some of the military risks he experienced during Operation Rolling Thunder.

Chapter 3: Military Risks and Mitigation Measures

Throughout Operation Rolling Thunder, General Momyer balanced many competing influences on the conduct of his air campaign. At times, he felt pressured to restrict operations in order to reduce the overall risk to the entire Vietnam War. At the same time, he also felt the pressure to achieve the overall aims of the air operation given to him by the politicians. This chapter examines the influences General Momyer faced regarding the conduct of Operation Rolling Thunder, specifically the risks that he could mitigate at his level. In his role as commander of Seventh Air Force, General Momyer faced the risks of inadvertently expanding the Vietnam War, not accomplishing the mission, and improperly allocating the forces under his control.

Military Risk of Involving Other Major Powers

The first and gravest pressure that General Momyer faced was preventing Operation Rolling Thunder from expanding the Vietnam War. At the national strategic level, actions by Seventh Air Force aircrew could have derailed the entire war effort in Southeast Asia by drawing other geopolitical powers into the fight. The two countries that caused the most concern for the President and his staff were China and the Soviet Union. Should the Soviet Union have entered the conflict, then it would have been likely that war would have spread to the European continent, and worse, that it could have escalated into nuclear war. At the same time, the potential consequences of the Chinese entry into the Vietnam War also weighed heavily on President Johnson's mind, because the last time the Chinese entered a war with the United States, it led to the stalemate on the Korean peninsula.⁴⁸

The President and his staff were worried that attacks against foreign personnel might have triggered direct conflict with that nation. The continuous flow of foreign material and support into North Vietnam meant that there was a high potential for an errant weapon or wayward attack to

⁴⁸ Smith, *Rolling Thunder*, 34.

strike foreign personnel or equipment, especially around port areas. In addition, accidental or intentional crossing of the Chinese border could have triggered a Chinese reaction and potentially constituted a cause for war.⁴⁹ A prime example of the concern over drawing the Chinese was when the Secretary of Defense prevented General Momyer and the Seventh Air Force from attacking a North Vietnamese airfield in August 1965 because the attack could have increased the risk of a confrontation or brought “the Chinese in to assume the air defense mission in North Vietnam.”⁵⁰ Another example was the prohibition from attacking surface-to-air missile (SAM) sites during the beginning of the air war because intelligence analysis suggested the potential that Russian advisers could be manning the sites in order to train the North Vietnamese how to use them.⁵¹

Even without a direct attack against foreign personnel, the President was still worried that China or the Soviet Union could view US military actions as escalating the war. Political concerns prevented General Momyer from using B-52 aircraft in the Rolling Thunder campaign because there was fear that the Chinese or the Soviets could view the use of B-52s against targets in North Vietnam as an escalation of the war.⁵² Therefore, B-52s only struck targets in support of Military Assistance Command Vietnam (MACV) in South Vietnam, and it was not until the Linebacker I air campaign that the president removed the restrictions, allowing B-52s to operate over North Vietnam. In order to prevent the war from expanding, General Momyer maintained strict control over the aircrew involved in Operation Rolling Thunder.

The primary way that General Momyer mitigated the risk that the Soviets or Chinese would enter the war was by enforcing the Rules of Engagement (ROE) that the Commander-in-Chief

⁴⁹ Smith, *Rolling Thunder*, 337. In fact, the Chinese Air Force shot down two Air Force aircraft on 21 August 1967, after they crossed the border.

⁵⁰ Momyer, *Airpower in Three Wars*, 22.

⁵¹ Smith, *Rolling Thunder*, 68.

⁵² Momyer, *Airpower in Three Wars*, 182.

Pacific Command (CINCPAC) published. The ROE prescribed the level of risk that was acceptable to the President and his staff for various mission types and operations over North Vietnam. The limitations of the ROE required General Momyer to maintain tight control over Seventh Air Force aircrew during operations. The ROE required that aircraft avoid politically sensitive areas, such as around Hanoi and along the Chinese border, in order to reduce the possibility of creating an international incident. The ROE prevented the aircrew from attacking targets that could hold foreign personnel, while also specifying acceptable primary and backup targets in order to minimize the chance of expanding the war. The ROE also required pilots to have positive visual identification of the target before releasing weapons in order to reduce collateral damage.⁵³ Although the ROE allowed the President to keep Operation Rolling Thunder within politically acceptable limits, the restrictions created frustration and anger among those conducting the war.

As the number of aviators killed or captured increased, the pilots chafed at the ROE because they perceived restrictions as preventing the full employment of airpower.⁵⁴ It was not only the pilots who grew exasperated; General Momyer recognized that by forbidding American aircraft from crossing the Chinese border, the politicians created a refuge for North Vietnamese aircraft who were fleeing from American fighters.⁵⁵ General Momyer also expressed frustration as the losses mounted from enemy SAM systems and enemy fighters. He argued that prohibitions against attacks on the North Vietnamese airfields and SAM systems compromised his forces, stating that the United States must destroy the North Vietnamese air defenses or “continue to lose pilots and planes unnecessarily.”⁵⁶ In addition, the prohibitions against operations around Hanoi and Haiphong Harbor provided continual frustration to General Momyer. In July 1966, he made a

⁵³ Momyer, *Airpower in Three Wars*, 176.

⁵⁴ Smith, *Rolling Thunder*, 93.

⁵⁵ Momyer, *Airpower in Three Wars*, 141.

⁵⁶ Momyer, *Airpower in Three Wars*, 26.

request to “obtain relief from current operating restrictions.... The net effect of these recommendations will enable our strike forces greater freedom of action and protection... they should also result in dispersion of enemy defense.”⁵⁷ General Momyer also argued forcefully for the ability to attack North Vietnamese airfields to protect valuable aircraft and aircrew, but it was not until late 1967 that President Johnson relented.⁵⁸

Military Risk of Failing to Accomplish the Mission

The second influence that General Momyer managed during Operation Rolling Thunder was risk-to-mission. As mentioned previously, the Chairman of the Joint Chiefs of Staff defines risk-to-mission as the inability to achieve current or future military objectives.⁵⁹ General Momyer’s risk-to-mission encompassed the entire Seventh Air Force, and the air operations within his assigned areas of operation. In his essay, Chester Pach tells of President Johnson recounting to journalists in August 1967 regarding Operation Rolling Thunder that he was “approving raids on a few more targets [in North Vietnam], but only with blunt warnings to the generals that if anything went wrong, ‘it’s going to be your [posterior].”⁶⁰ General Momyer no doubt received the warning and was aware of the enormous weight placed upon the air effort. However, the reactionary nature of the discussions at the national political level hamstrung General Momyer’s campaign planning because, as General John W. Vogt explained, the debate centered on ways to offset the most recent

⁵⁷ Message from Momyer to Harris, 0553Z, 8 Jul 1966, K740.162-5, US Air Force Historical Research Agency, quoted in Case A. Cunningham, “William W. Momyer: A Biography of an Airpower Mind” (PhD diss., US Air Force School of Advanced Air and Space Studies, 2013), 227, accessed December 15, 2016, www.dtic.mil/dtic/tr/fulltext/u2/a615066.pdf.

⁵⁸ In response to the argument that US losses would be disproportionate to the damage inflicted on the North Vietnamese, General Momyer noted that the aircrew were, “already penetrating in the areas where the airfields were located, and there were no major changes in the defenses the enemy could have employed that would have made our losses greater than they already were against other targets in the area.” Momyer, *Airpower in Three Wars*, 140.

⁵⁹ CJCSM 3105.01, C-8.

⁶⁰ Pach, “LBJ,” 171.

North Vietnamese actions instead of preparing an overall strategy that would guide United States actions in the war.⁶¹

In the Rolling Thunder plans that he approved, General Momyer focused on increasing individual mission success as a way to mitigate the risk of overall mission failure. He recognized that the administration could withdraw the authorization to strike particular targets on a whim, without warning or explanation, which meant that he must maximize the probability of success against the targets authorized for strike. In 1967, General Momyer ordered all strike aircraft to carry bombs as a way to increase the probability of success of individual missions and the operation as a whole.⁶² Another way that General Momyer ensured mission success was by confirming his aircrew had the potential to be successful before he authorized the mission.

As the air campaign continued and President Johnson and his staff continued their unpredictable target authorization, General Momyer resisted the urge to strike a target immediately after approval. He recognized the foolhardiness of attacking a target simply because the Joint Chiefs of Staff released it, without ensuring accomplishment of proper pre-mission planning and required reconnaissance.⁶³ He also identified that the majority of the targets that the politicians approved were immovable, meaning that Seventh Air Force forces would have another opportunity to attack it later.⁶⁴ For these targets, General Momyer typically would not accept the increased risk of attacking without the proper supporting aircraft or suitable weather conditions. At

⁶¹ Richard H. Kohn and Joseph P. Harahan eds., *Air Interdiction in World War II, Korea, and Vietnam: An Interview with Earle E. Partridge, Jacob E. Smart, and John W. Vogt, Jr.* (Washington, DC: Government Printing Office, 1986), 58.

⁶² Momyer, *Airpower in Three Wars*, 144.

⁶³ “Reconnaissance was essential to establish the condition of [the strategic target], for it wasn’t prudent to run a strike into a high threat area, even when cleared by the JCS, until we knew the strike would have a worthwhile target.” Momyer, *Airpower in Three Wars*, 187.

⁶⁴ William W. Momyer, “*End of Tour Report: Observations of the Vietnam War, July 1966 – July 1968* (Maxwell AFB, AL: US Air Force Historical Research Agency archives, 1970), 2.

the same time however, he was willing to risk losing aircrew and aircraft if the strategic value of the target warranted it. In the aftermath of attacks against some of the highest priority targets in North Vietnam, his command informed the pilots involved that they would return to the same location until the primary targets were destroyed.⁶⁵ In his report about his time in command, General Momyer noted that he “considered losses more important than the withdrawal of targets.” He mitigated risk-to-mission for individual missions by striking the difficult balance between the risks faced by the aircrew with the strategic importance of the target.

General Momyer mitigated the risk of combat losses by incorporating new capabilities into his air operations. He advocated bringing the Combat Search and Rescue capability into the theater to recover downed aircrew and increase the morale of the pilots who faced the possibility of being shot down on every mission. As US technology advanced, General Momyer was persistent in using the capabilities to protect his flyers and enhance the accuracy of the weapons. In his position as Seventh Air Force commander, he brought the new F-111 all-weather fighter-bomber into combat on an expedited schedule to solve the limitations that poor weather imposed on the bombing missions.⁶⁶ He also insisted that all F-105 aircraft carry electronic countermeasure pods to help defeat enemy surface-to-air missile systems, and he ordered air-to-air capable aircraft to carry air-to-air missiles at all times to counter enemy aircraft.

In addition to the preceding innovations, the most important capabilities that General Momyer brought into theater were the anti-radiation Shrike missile and associated suppression of enemy air defenses tactics. The effect of the new technology and tactics used by Seventh Air Force aircrew had an immediate impact on Operation Rolling Thunder. The first aircraft lost to a SAM was in July 1965, and after General Momyer took command, he was instrumental in developing a

⁶⁵ Kenneth H. Bell, *100 Missions North: A Fighter Pilot's Story of the Vietnam War* (Washington, DC: Brassey's, 1993), 131.

⁶⁶ Momyer, *Airpower in Three Wars*, 181.

capability and mission to counter the enemy's new technology.⁶⁷ The development of the "wild weasel" tactics over the course of the air war forced enemy surface-to-air missile systems to terminate operations prematurely, thus protecting the bombers. The jets accomplishing suppression of enemy air defenses missions, code-named as "Iron Hand" missions, entered the target areas about five minutes prior to the rest of the strike package and would bait the SAM systems to turn on and radiate. Then, the Iron Hand jets would identify the threat's location and either fire a Shrike anti-radiation missile at it or pass the location back to the bombers so that they could avoid it. The wild weasel tactics were successful and were one of many ways that General Momyer mitigated risk-to-mission in Operation Rolling Thunder.⁶⁸

Military Risk of Improperly Allocating Forces

The third influence that General Momyer felt as he led Operation Rolling Thunder was the challenge of allocating forces properly among the different operating areas that he controlled. General Momyer had a different superior for each area where his forces operated, which stemmed from the lack of a clearly defined campaign plan for operations in Southeast Asia. This meant that there were multiple competing interests regarding the use of Seventh Air Force resources.

The convoluted chain of command depicted in Figure 1 was an outgrowth of the slow expansion of military assistance to South Vietnam, and it was never resolved neatly throughout the war.⁶⁹ General Momyer was the Deputy Commander for Air for the MACV, and thus his direct commander for air operations in South Vietnam was General William Westmoreland. However, for

⁶⁷ Smith, *Rolling Thunder*, 68.

⁶⁸ "In 1967, the loss rate to surface to air missiles was one aircraft for fifty-five missiles fired. This eventually went up to one aircraft lost for a hundred missiles fired." Momyer, *Airpower in Three Wars*, 136.

⁶⁹ In fact, the previous Air Force commander in Vietnam may have been in a more precarious position than General Momyer because the chain of command was even more convoluted. General Momyer notes, "Thirteenth Air Force [based in Thailand] and Military Assistance Command Vietnam often presented him with conflicting demands." Momyer, *Ibid.*, 80.

Air Force operations over North Vietnam, General Momyer reported to the Pacific Air Forces Commander (PACAF), General Hunter Harris. General Momyer did not have any control over the supporting tanker aircraft or B-52s operating over South Vietnam; instead, he had to coordinate all actions through the commander of Strategic Air Command, General John Ryan.

The confusing chain of command also included countries other than Vietnam. For air operations over Laos, General Momyer reported to the Ambassador of Laos, Ambassador William Sullivan.⁷⁰ Conversely, General Momyer could direct all Air Force operations in Thailand, but the units based in Thailand were not under his command. Instead, they fell under the direct command of the Thirteenth Air Force commander, headquartered in the Philippines.⁷¹ Even though operations in Thailand intersected with other operations in Southeast Asia, any requests for assistance between the areas hinged upon the interpersonal relationship skills of the two commanders, and only the PACAF commander could resolve any deadlock.⁷²

⁷⁰ The Seventh Air Force commander had operational control of all airpower assets in Laos, regardless of branch or service. However, “the Ambassador never felt that enough airpower was being devoted to the war in Laos, and he raised the issue through diplomatic and military channels on several occasions.” Momyer, *Airpower in Three Wars*, 87.

⁷¹ Momyer, *Ibid.*, 67. However, both organizations had the same deputy commander, which helped improve communications between the commands. PACAF refused to put the forces in Thailand under General Momyer’s command because PACAF wanted to retain control of operations in Thailand and North Vietnam. If Seventh Air Force had command of the units, then MACV, as the direct superior would have commanded the assets, which was something PACAF did not want.

⁷² Momyer, *End of Tour Report*, 5.

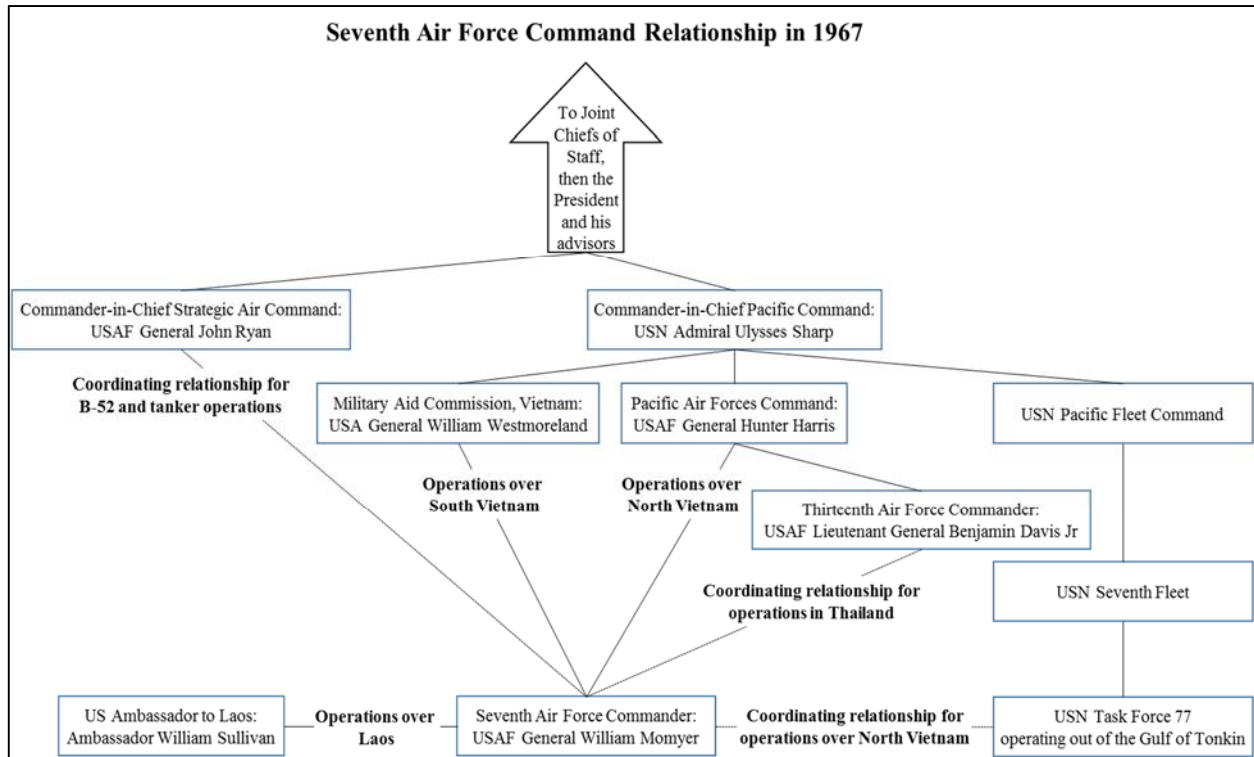


Figure 1: Seventh Air Force Chain of Command in 1967, compiled by author from William W. Momyer, *Airpower in Three Wars* (Washington, DC: Government Printing Office, 1978), 95.

The competing chains of command led to competing interests and multiple demands for General Momyer’s resources, meaning that General Momyer had to manage the conflicting interests in the application of airpower over North Vietnam. Pacific Command (PACOM) divided the airspace above North Vietnam into six compartments, known as route packages, in order to prevent collisions and fratricide over North Vietnam; the Air Force and the Navy each owned three of the compartments.⁷³ The practical impact of the separation was to inhibit cross-zone operations and, for the most part, each service operated independently within their specific route packages. As the President released targets for prosecution, PACOM allocated them between the Air Force and the Navy based on which service owned the airspace.⁷⁴ This division of targets created problems

⁷³ Momyer, *Airpower in Three Wars*, 90. General Momyer was a strong opponent of the route package system, stating “dividing North Vietnam into route packages compartmentalized our airpower and reduced its capabilities.” *Ibid.*, 95.

⁷⁴ *Ibid.*, 90.

because General Momyer had only a coordinating relationship with the commander of Naval Task Force 77, operating in the Gulf of Tonkin; this meant that only Admiral Ulysses S.G. Sharp, the CINCPAC, several echelons above each operational commander, could resolve any discrepancies regarding various target priorities. General Momyer saw the competing interests of the two services as being harmful to the overall conduct of the war, because “any arrangement arbitrarily assigning air forces to exclusive areas of operation...significantly [reduces] airpowers unique ability to quickly concentrate overwhelming firepower wherever it is needed most.”⁷⁵

In addition to the tensions that General Momyer experienced regarding operations over North Vietnam, he also experienced pressure concerning operations over Laos. As the Seventh Air Force commander, he had operational control over all assets flying over Northern Laos, regardless of service or mission type. However, the Ambassador to Laos continuously felt that operations in his country were under resourced, and he raised his concerns on several occasions through both political and military channels. As General Momyer notes, “each time [a Seventh Air Force commander] decided to reassign air support from one area to another, we provoked an energetic response from the losing activity.”⁷⁶

The various competing influences and multiple chains of command led to the pressure for General Momyer to distribute airpower equitably across the theaters of operation. Because of the lack of unity of command, each higher-echelon regional headquarters scrutinized General Momyer’s daily and weekly plans of action for more allocation of forces, making it difficult for him to maintain a coherent, coordinated, and flexible air campaign.⁷⁷ In addition, “the CINCPAC considered the war in North Vietnam a priority commitment; COMUSMACV considered his mission in South Vietnam dominant; [and] the Ambassador in Laos was convinced the preservation

⁷⁵ Ibid., 96.

⁷⁶ Ibid., 87.

⁷⁷ Momyer, *End of Tour Report*, 3.

of the status quo in Laos derived extensive firepower.”⁷⁸ The primary way that General Momyer mitigated the risk of improperly allocating his forces was by considering the specific situation and circumstances. When allocating his forces, he weighed his available forces against the overall requests for force. He also remained flexible and he was willing to divert his forces between theaters to control threats that were more serious.⁷⁹

The military risks that General Momyer had to manage directly affected Seventh Air Force, but also contained the potential to escalate the entire Vietnam War. Any ROE violation, whether intentionally or unintentionally, could have triggered a broader war or drawn in other geopolitical powers, both possibilities that the President and his staff wanted to avoid. In addition, President Johnson made clear the professional risk that General Momyer faced, as commander of Operation Rolling Thunder. Despite the personal risk and military risks inherent in the air campaign, General Momyer was willing to order his forces to reattack targets of strategic value in order to ensure mission success. In order to mitigate the risk-to-mission and the risk-to-force that he faced, General Momyer relentlessly pushed to bring new capabilities and innovative tactics into the war to protect his aircrew. However, the convoluted chain of command and competing interests hindered his ability to prosecute the war fully. Although the military risks that General Momyer faced dealt primarily with risk-to-mission, he also was aware that the actions of his forces in the Southeast Asian theater could affect the politicians and political actors in the United States.

⁷⁸ Momyer, *Airpower in Three Wars*, 87.

⁷⁹ *Ibid.*

Chapter 4: Political Risks and Mitigation Measures

The Vietnam War is probably one of the most difficult we have ever fought... In many respects it appears that our political objectives may have been incompatible with the capabilities of the forces to produce the desired effects.

— General William Momyer, *Observations of the Vietnam War, July 1966-July 1968*

The conduct of the Vietnam War, although a military action, was fraught with risks to the President and his policies. Military actions could, and did, have an effect on the political future of those involved with the war. President Johnson recognized the political risks; therefore, he established strict limitations on the forces conducting the Vietnam War in order to restrict his political liabilities. The two ways that military actions could have created risk for the politicians were either by causing the public to stop supporting the war effort or by attacking targets that were too politically sensitive.

Political Risk of Loss of Public Support

The bombing campaign of North Vietnam came with the risk of causing the American public to lose support for the entire Vietnam War. Although the primary factor in the loss of public support was the increasing number of ground force casualties, General Momyer's forces could potentially have forced the Vietnam War to end prematurely due to excessive combat losses in Operation Rolling Thunder. Significant losses of aircrew and airplanes were a concern, both because of the potential for excessive casualties to weary the American public or affect the Air Force's overall force strength. However, the greatest concern at the national political level was the increasing numbers of prisoners of war (POW) as the campaign continued. The North Vietnamese quickly recognized the potential effect that the captured American flyers could have on the American public, and so they paraded the prisoners as a bargaining chip to influence American public opinion. President Johnson's staff stated the POW presence inside North Vietnam did not influence the conduct of the air campaign over North Vietnam as much as it did the conduct of the negotiations. The RAND report notes, "prisoners of war began to represent an important domestic

political issue as early as 1965, and became a very serious problem once open negotiations commenced with North Vietnam in 1968.”⁸⁰

General Momyer recognized the effect of combat losses on the overall conduct of the Vietnam War and attempted to protect his forces as much as possible. As discussed in the previous chapter, he judiciously used supporting assets to protect the less maneuverable airplanes, like the bomber and reconnaissance aircraft. In addition, by protecting his aircrew, he also conserved his combat capability. In his post-command report, he noted that “day to day losses had to be closely controlled so as to maintain the morale of the force and preserve adequate levels of aircraft to sustain the effort.”⁸¹

Political Risks of Unacceptable Targeting

Operation Rolling Thunder could also have negatively influenced public opinion by creating international outrage over the destruction of non-military targets or high civilian casualties. At the beginning of Operation Rolling Thunder, President Johnson and his staff maintained tight control over the target selection and approval process in order to ensure that aircrew struck only politically acceptable targets. That careful scrutiny remained in place throughout the air campaign. Although the meticulous political oversight decreased the overall political risk, it affected General Momyer’s air campaign because it made the targeting process lethargic and overly rigid.

The first way that the target selection process affected the air campaign was through the inefficient target routing process. Operation Rolling Thunder’s target selection process began at Seventh Air Force headquarters, which proposed the list of upcoming targets inside North Vietnam to Pacific Air Forces (PACAF) headquarters. PACAF then forwarded the target nomination list to the headquarters of the CINCPAC, which merged the Air Force and Navy requests. Then, the Joint

⁸⁰ Lorell, Kelley, and Hensler, *Casualties*, 82.

⁸¹ Momyer, *End of Tour Report*, 2.

Chiefs of Staff (JCS) evaluated the approved targets, before forwarding them to the Secretary of Defense (SECDEF) who presented them to President Johnson and his National Security Staff for final approval. For operations requested by MACV inside South Vietnam, target requests went direct to CINCPAC, then the JCS, and then the SECDEF who coordinated the target list with the Secretary of State before presenting it to the President.⁸² After he nominated targets for destruction, General Momyer had no control of the approval process, meaning that he was unable to act until the President and his staff provided authorization to strike the targets. The parallel routing chains and numerous requirements for coordination and approval meant that General Momyer's air campaign was slow to respond to emerging targets and battlefield changes.

Along with adding many inefficiencies in the target approval process, political oversight also restricted the natural flow of the air campaign and prescribed the tactics used on individual missions. At the national political level, "every single target was weighed for the impact on the press, public opinion, collateral damage, numbers of civilian casualties, and not on whether the mission would help us win the war."⁸³ In an interview conducted towards the end of the Vietnam War, General John Vogt, a subsequent Seventh Air Force commander, reflected on his experiences in the Pentagon during Operation Rolling Thunder, stating, "the policymakers concern for public reaction was a dramatic restraint on our planning a sensible campaign for Vietnam."⁸⁴ As the President and his staff made their determinations during the final stage, they would also specify such minutia as the ordinance and fusing to use, the number and type of aircraft to send, and the direction and timing of the attacks.⁸⁵ Top-down direction of tactical level decisions, while

⁸² Momyer, *Airpower in Three Wars*, 99.

⁸³ Kohn and Harahan, *Air Interdiction*, 67. General Vogt served as the head of the Policy Planning Staff for the JCS during Operation Rolling Thunder.

⁸⁴ *Ibid.*, 59

⁸⁵ Smith, *Rolling Thunder*, 58.

potentially shielding the politicians from excessive risks, prevented the tactical experts from maximizing the effectiveness and success of the mission. Excessive oversight artificially hamstrung those fighting the war and severely restricted operations, since General Momyer and his staff had to comply with higher echelon's requirements, without regard to the efficacy of the stipulations.

After the administration approved a target list, Seventh Air Force aircrew could bomb only the specific targets approved by the political leaders, regardless of the particular weather effects over the target area.⁸⁶ This, combined with the concern over losses, created a quandary for General Momyer and his staff. General Momyer noted, "the dilemma was complete – if we lost too many aircraft on a target it was withdrawn and if we didn't hit the target in a given period of time, it was subject to withdrawal."⁸⁷ The target approval process prevented General Momyer from maximizing the effectiveness of his air campaign because he did not control the decisions regarding which high-value targets to attack, or the timing for when to attack targets of strategic value. Although the number of targets available for attack continued to increase, President Johnson still maintained close watch over each increment in order to prevent negative consequences. In one case General Momyer was specifically told, "it was imperative for Seventh Air Force to make a superior showing since [the] targets represented a new order of magnitude in both the political and military realm."⁸⁸

General Momyer mitigated the risk of unacceptable targeting through his target recommendation process and his investigation of ROE violations. General Momyer attempted to identify targets that were critical to the North Vietnamese and their support of the Viet Cong rebels. He also understood the overall nature of the war was one of attrition or exhaustion, where the stringent political objectives forced the "design and articulation of the air campaign to continually

⁸⁶ Kohn and Harahan, *Air Interdiction*, 66.

⁸⁷ Momyer, *End of Tour Report*, 2.

⁸⁸ US Department of the Air Force, *Project CHECO Southeast Asia Report: Rolling Thunder, July 1965-December 1966* (Hickam AFB, HI: Headquarters Pacific Air Forces, CHECO Division, 1967), 62.

wear the enemy down to the point he gave up by exhaustion.”⁸⁹ The other way that he mitigated the risk of unacceptable targeting was through his investigation of ROE violations. In 1967, one of his pilots strafed a Soviet ship that was operating along the coast of North Vietnam. Once he concluded his investigation of the incident, he sent a stern message to each of his subordinate commanders reiterating the current ROEs and increasing the restrictions over areas where foreign ships were likely to be operating.⁹⁰

Seventh Air Force actions over North Vietnam carried inherent risks for President Johnson and his administration, risks that extended beyond the military risk-to-force. General Momyer’s risk mitigation measures of increasing support assets and constructive target recommendations ultimately shielded the President from losing political support. However, Rolling Thunder was unsuccessful in coercing the North Vietnamese to negotiate an acceptable end to the Vietnam War. Even though it was the Tet Offensive and actions in South Vietnam which destroyed public confidence in the Vietnam War, General Momyer and Seventh Air Force failed. Despite severe political restraints on actions during war, the final responsibility of winning rests on the shoulders of those in leadership positions. The following chapter will explore the overall findings and provide recommendations regarding risk acceptance in future wars.

⁸⁹ Momyer, *End of Tour Report*, 1.

⁹⁰ US Department of the Air Force, *Project CHECO Rules of Engagement Report: 1 January 1966-1 November 1969* (Hickam AFB, HI: Headquarters Pacific Air Forces, CHECO Division, 1969), 9.

Chapter 5: Findings and Implications

Perhaps one of the most salient characteristics of military organizations is that they belong to the realm of politics.

— Joseph Soeters, Paul C. van Fenema, and Robert Beeres, *Managing Military Organizations: Theory and Practice*

In the context of the modern battlefield, many of the considerations that General Momyer faced are still applicable today. The primary objectives of Operation Rolling Thunder were to demonstrate US resolve and to convince the North Vietnamese to end their support for the insurgency forces. However, the accumulation of experiences from the Vietnam War to present has taught politicians that they must minimize the length and cost of war in order to make it palatable to the American people. The problem with the Vietnam War was, as Martin Shaw notes, “the war had not been successfully isolated as a military struggle. Instead, it had permeated politics and society, with profound, destabilizing consequences.”⁹¹ This means two things for the military: to be acceptable, future wars must be short and planned to minimize the risk of casualties. This chapter outlines the ways that the research findings answer the overarching research question, and then describes the implications of those findings for future wars, proposes areas for future study, and provides overall recommendations for change.

Findings

Based on the preceding research, General Momyer experienced many outside influences concerning the conduct of Operation Rolling Thunder. Some of the influences pushed him to focus on being successful, but the majority of the pressure focused on restraining his operations and the conduct of the war. With respect to the answer to the central research question concerning pressures on General Momyer, the primary influence was political: specifically, how to prevent his forces

⁹¹ Martin Shaw, *The New Western Way of War: Risk-Transfer War and Its Crisis in Iraq* (Cambridge: Polity, 2005), 73.

from causing the Vietnam War to escalate. Escalation could have come in the form of the war expanding to other regions of the world, or it could have come in the form of attacks against targets that President Johnson and his staff could not accept politically. Either way, it is clear that General Momyer had in mind the consideration of preventing the war from escalating while determining which risks he would accept and which he would not.

There is significant evidence that General Momyer was willing to accept risk-to-mission and risk-to-force when the nature of the target warranted it. When Seventh Air Force finally received permission to attack targets with strategic value, General Momyer prioritized destruction of the target over the possible loss of aircraft and aircrew. However, he recognized that the majority of the targets that President Johnson and his staff approved were static and immovable, meaning that Seventh Air Force forces would have other opportunities for attack. For these targets, General Momyer typically would not accept the increased risk of attacking without the proper supporting aircraft or suitable weather conditions. It is also clear that General Momyer varied the level of risk he accepted based on the type of aircraft involved. As aircraft losses began to mount, he prioritized the strike aircraft over other aircraft by increasing the numbers of support aircraft that accompanied the fighter-bomber aircraft to the target area.

General Momyer could not control the target selection process nor the length of the time available for striking the chosen targets, both ways that he could have broadly lowered the amount of risk. He could however, mitigate the risks that Seventh Air Force faced during Operation Rolling Thunder. In order to reduce the risk-to-force, he increased the number and capabilities of support aircraft undertaking a mission, and for risk-to-mission, General Momyer ensured that his aircrew complied with the published Rules of Engagement in order to prevent a political catastrophe. Both of these mitigation strategies made sense in light of the high level of political oversight that he experienced in nearly every aspect of the campaign.

Implications

Just as General Momyer experienced severe restrictions on the use of forces under his command, future commanders can expect to experience restrictions on their operations. Since war is inextricably bound to the political objectives that preceded and prompted the war, the military can expect politicians to restrict military operations to minimize their own political hazards. The limitations imposed on war may take the form of broad directions regarding acceptable and unacceptable weapons the military can use, or as detailed as specifying bases or assets that can support the war. The problem with limited war is that it creates confusion among the American public regarding the purposes and costs of the war. In their research regarding the role of public opinion in limiting Vietnam War, the researchers at RAND Corporation recognized that the public has trouble weighing the cost in terms of human and material sacrifices against the ways in which the military conducts limited war.⁹²

Current battlefields have greater connectivity than in previous years, as both combatants and non-combatants are connected and have the ability to transmit images to a global audience. One errant bomb or perceived violation can be recorded and transmitted instantaneously, leaving friendly forces with little ability to counter the information. Now, more than ever, as Yee-Kuang Heng states, “an ostensibly ‘tactical’ risk such as incurring friendly or civilian casualties...could have ‘strategic’ impact if policy-makers lose public support.”⁹³ Therefore, commanders at every echelon have even more responsibility to ensure their forces act in accordance with the political restraints in order to mitigate the loss of public opinion. This is especially important in countries with a strong Western liberal democratic tradition. As Shaw identifies, “Western states are

⁹² Lorell, Kelley, and Hensler, *Casualties*, 9-10.

⁹³ Yee-Kuang Heng, *War as Risk Management: Strategy and Conflict in an Age of Globalised Risks* (London: Routledge, 2006), 47.

particularly vulnerable in war to adverse media coverage, and have to work harder than most to manage it successfully.”⁹⁴

Further Research

This monograph specifically examined the influences on one commander, from one service, and for one air campaign within the context of a broader war. This leaves several other areas available for further research. The other service conducting air operations over North Vietnam during the same period was the Navy, and although they operated under a different operational chain of command, many of the same influences General Momyer experienced would have applied to the Seventh Fleet commander. Further research should compare and contrast the influences that the Seventh Fleet commander and General Momyer experienced, along with the different risk mitigation measures that each commander used. Simultaneous to Operation Rolling Thunder was the air operation over South Vietnam, supporting MACV with close air support for the ground forces and interdicting the movement of insurgents. General Momyer explicitly controlled Air Force operations as the MACV Deputy Commander for Air, and later gained operational control over US Marine Corps air operations. Future research should examine the impact of the additional inter-service interests on the overall air effort. Finally, Operation Flaming Dart, Operation Linebacker I, and Operation Linebacker II were other Air Force air campaigns over North Vietnam within the overall Vietnam War. Additional research could consider the differing political influences and restrictions on each campaign, along with the ways that the different Air Force commanders conducted operations.

⁹⁴ Shaw, *New Western Way*, 59.

Recommendations

The first recommendation relates to Joint and Air Force doctrine. Current Joint doctrine adequately explains the concept of operational risk, along with the areas where operational risk should surface in the Joint Operations Planning Process. However, doctrine does not describe processes for weighing or balancing risks, leaving it up to the specific commander to use intuition and communication with higher echelons to determine the acceptability of the risks. In addition, Joint Publication 3-0 describes the basics of Operational Risk Management, which examines individual risks in isolation, but does not address the concept of aggregate risk, where risks accumulate or decrease based on mitigation measures. Joint doctrine should discuss the differences between risk-to-mission and risk-to-force, similar to the discussion in the CJCSM 3105.01, *Joint Risk Analysis*. Another concept absent from Joint doctrine is an examination about risk judgment akin to the one in CJCSM 3105.1; Joint doctrine should provide a framework and considerations for when it is appropriate to accept high levels of risk. In terms of Air Force doctrine, the process of Operational Risk Management does not lend itself well to operations about the individual or tactical level. Accordingly, although Air Force doctrine addresses the concepts of risk-to-mission and risk-to-force, it should expand to include a discussion regarding appropriate times to accept risk.

The second recommendation relates to current training operations at the tactical level. Current training practices may not always prepare aircrew for the realities of future combat because they do not always discuss the impact of political risk. At times, the discussion about risk during pre-mission planning should explore the impact of individual combat losses within the context of the overarching, notional air campaign. Just like in Operation Rolling Thunder, the air campaign may be able to support isolated combat losses, but the loss of multiple combat assets may prove fatal to the broader mission. The pre-mission risk assessment should also explore the potential ripple effect of simulated losses beyond the immediate training mission, and consider how the loss of one or two aircraft could disrupt future operations. As it is, current training missions may not

adequately prepare Air Force members for the future wars they might fight, causing aircrew to accept extremely risky situations in pursuit of short-term tactical success.

Conclusion

After weighing the radical plan presented to him by the Seventh Air Force staff, General Momyer approved Operation Bolo as a deception operation to occur once Operation Rolling Thunder resumed in 1967. The plan for Operation Bolo was to use nimble fighters disguised as heavily laden fighter-bomber aircraft to lure the North Vietnamese fighters to attack. The friendly aircraft would fly the same routes that bombers normally used, along with the same procedures and call signs that the less maneuverable aircraft normally employed, in order to draw out the enemy fighters. The plan was risky, putting a significant portion of Seventh Air Force fighter aircraft aloft at the same time, and even moderate combat losses could have greatly affected future operations. However, Seventh Air Force was able to maintain secrecy and the operation caught the North Vietnamese off guard. The North Vietnamese fighter pilots launched, expecting to attack sluggish bomber aircraft, but encountered friendly fighters ready for action. In one day, US forces shot down seven enemy fighter aircraft, the largest single fighter battle of the Vietnam War.⁹⁵

The overall picture that emerges of General Momyer, especially from his end-of-tour report, is of a commander trapped between the political limitations placed on action and the requirement to achieve success, an item that eluded definition. As General Momyer noted in his end of tour report, “it appears that our political objectives may have been incompatible with the capabilities of the forces to produce the desired effects.”⁹⁶ However, this statement stands opposed to Carl von Clausewitz’s assertion regarding the relationship between the political objective and military capabilities, that “the political objective—the original motive for the war—will thus

⁹⁵ Momyer, *Airpower in Three Wars*, 146.

⁹⁶ Momyer, *End of Tour Report*, 1.

determine both the military objective to be reached and the amount of effort it requires.”⁹⁷

Therefore, although General Momyer recognized that Seventh Air Force’s actions did not lead to successful peace negotiations, his responsibility as commander was to achieve success within the restraints placed on him by his political and military superiors.

⁹⁷ Clausewitz, *On War*, ed. and trans. Peter Paret and Michael Howard, 81.

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