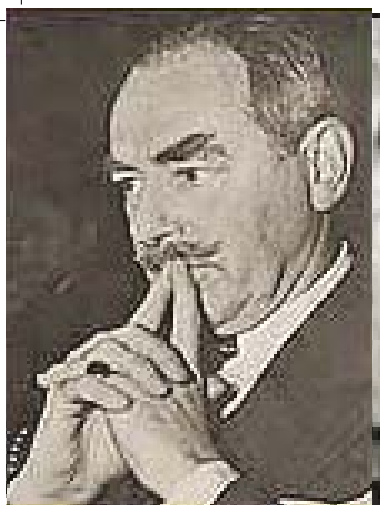
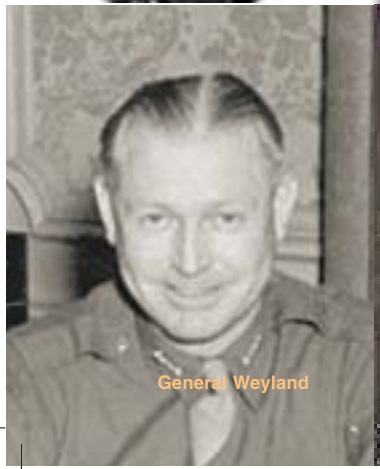


Secretary of Defense Marshall

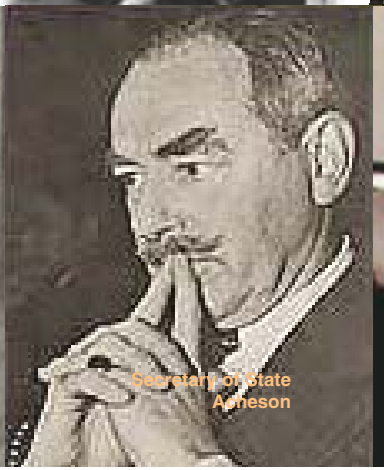
Admiral Radford

President Eisenhower

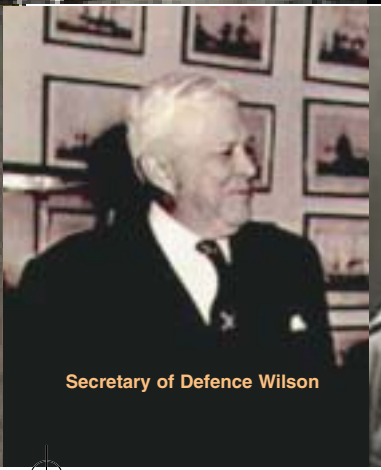
General LeMay



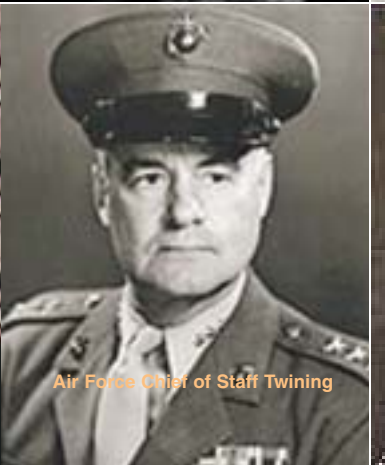
General Weyland



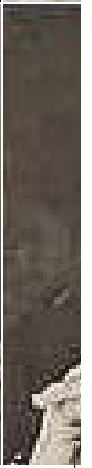
Secretary of State Acheson



Secretary of Defence Wilson



Air Force Chief of Staff Twining



Prejudicial Counsel, Part 2:

A Multidimensional Study of Tactical Air Power Between the Korean and Vietnam wars

By Major R L Banks, USAF

CHAPTER 5

MODEL III ANALYSIS: AIR FORCE LEADERSHIP DECISION-MAKING

The previous two chapters have shown how analyses at the systemic and organisational levels produced different conclusions for USAF tactical conventional airpower decision-making. We now look at the individual level of decision-making. Within every organisation, individuals influence programs and ultimately make decisions. Individuals, both inside and outside the Air Force, made decisions that affected conventional tactical airpower during the 1950s. Although their influence and decisions were affected by systemic and organisational factors, those factors can only explain a part of their motivation.

At the highest level, National Security Policy falls to the President. From 1953 to 1961, President Eisenhower was assisted by two advisory bodies: the National Security Council (NSC) and the Joint Chiefs of Staff (JCS).[1] Throughout this period (and since), readiness was paramount in the US military's agenda. The USAF Chief of Staff (as with the other service chiefs) was expected to provide advice on readiness and security based primarily on his experience and knowledge and not based on Air Force parochialism. Unfortunately, this was not always the case.

Between Korea and Vietnam, the USAF Chief of Staff and other senior Air Force leaders presented advice to both the President and Congress that may not have been in the best interest of the Air Force and the United States in general. Advice given and decisions made by Air Force leaders during the 1950s tended to be more a result of bureaucratic competition and personal motivations than pure military advice without parochial biases. Using Allison's Model III decision-making construct, I will show how various leaders within the Air Force influenced and directed USAF policy, directly affecting development and procurement decisions for tactical conventional airpower. This chapter begins with an overview of Allison's third decision-making model, then describes how the various individuals in key positions within the Air Force influenced tactical conventional airpower. Finally, there will be a summary and analysis.

MODEL III DECISION-MAKING

Allison's third decision-making model is based on the premise that governmental decisions are made by individuals in key positions who view the nation's problems from different perspectives and backgrounds. They possess extensive and distinct responsibilities and must fight for what they believe is right. Often, bureaucratic infighting results in decisions that may be vastly different from what any person or organisation intended. The moves in this chess game are a consequence not of rational choice or organisational routines, but rather of 'the power and skill of proponents and opponents of the action in question.'[2] Allison states that the actions and decisions of government are 'intranational political resultants' and further explains that the decisions are:

resultants *in the sense that what happens is not chosen as a solution to a problem but rather results from compromise, conflict, and confusion of officials with diverse interests and unequal influences;* political *in the sense that the activity from which decisions and actions emerge is best characterised as bargaining along regular channels among individual members of government* (emphasis in original).[3]

To completely comprehend this paradigm, Allison offers four questions that must first be answered: Who plays? What determines each player's stand? What determines each player's relative influence? How does the game combine players' stands, influence, and moves to yield governmental decisions and actions?

WHO PLAYS?

The players in a Model III paradigm are neither a unitary actor nor a group of organisations. The Model III framework states that individuals (people in key jobs) are the players in the national security game.[4] These individuals include the Chiefs, (the President, the Secretaries of State, Defense, and Treasury, and the Joint Chiefs of Staff); Staffers (the Chiefs' immediate staffs); Indians (the political appointees and permanent government officials within each organisation); and Ad Hoc Players (actors in the wider governmental game such as Congressmen, members of the press, and spokesmen for interest

groups).[5] Each player is defined by his position or job. The job, in turn, has certain advantages and restrictions that influence what the individual may and must do to fulfil his duties.

WHAT DETERMINES EACH PLAYER'S STAND?

Several factors influence where an individual player stands in relation to an issue that must be decided upon. The first factor is parochialism. This can be good or bad depending on how organisational prejudices affect decision-making. Key individuals within each organisation must be sensitive to the organisation's orientation, but not so sensitive that vital decisions adversely affect the unit overall.[6] This orientation leads to parochial priorities and perceptions that bias how the individual approaches possible problems and decisions. By understanding a person's position, one may better explain how or why that person decides the way he does. The second factor that affects decision-making is the individual's goals and interests. The goals and interests an individual may have include national security, organisational, domestic, and personal concerns. Each concern will have varying levels of emphasis and therefore weigh on the individual differently. The third factor that influences individual decision-making is stakes and stands. From the goals and interests, an individual will evaluate how each goal and interest overlaps and determines what is at stake with respect to a particular issue. Once the stakes are established, then the individual will determine what his stand should be. The fourth factor is deadlines and faces of the issues. Oftentimes, solutions to problems are not found through detailed analysis, but rather may be forced upon the individual as a result of a deadline. Additionally, the forum in which the issue was raised may impact how the individual decides a solution within a given deadline.[7]

WHAT DETERMINES EACH PLAYER'S IMPACT OR RESULT?

Power is the primary way individuals influence a decision or policy. Allison defines power as effective influence on government decisions and actions and consists of 'an elusive blend of at least three elements: bargaining advantages, skill and will in using bargaining advantages, and other players' perceptions of the first two.'[8] The advantages may be derived from formal authority and job responsibilities; aptitude and control of information that define the problem, identify options, and estimate feasibility; control of how decision may be implemented; the ability to be persuasive (personal charisma); and access to and persuasiveness with other players who have bargaining advantages listed above.[9] Over time, if power is wisely used, then a reputation for effectiveness is gained. Additionally, individuals tend to pick the issues which can be successfully influenced and avoid those which cannot in order to maintain a positive reputation. A positive reputation translates to increased power and a negative reputation does not.

WHAT IS THE GAME?

How are the individual's stands, influence, and moves linked to produce governmental decisions? Games that require individuals to bargain and compromise are neither random nor unintentional. The people with the stands and decisions of most influence, are the individuals whose positions link them to 'action-channels' (a regularised means of taking governmental action on a specific kind of issue).[10] In the Air Force, the Chief of Staff and the commanders of the major organisations are some of the individuals with the greatest influence due to the fact that they have the final say in decision-making.

Governmental decisions arise not from simple choice of a unified group, or as result of a commander's predilection. Rather, decisions are made in light of shared power and separate judgements

Action-channels shape the game by determining who the major players are and how they will participate. Advantages and disadvantages based upon job position will vary the potential influence each individual may have on the decision. Typically, action is taken within established channels.

The Constitution, laws, regulations, and even culture govern the rules of the game. Some rules are restrictive, while others are lenient. In either case, the rules define positions within the game and the manner in which individuals gain access to it. Likewise, the rules 'constrict the range of governmental decisions and actions that are acceptable.'[11] Governmental decisions arise not from simple choice of a unified group, or as result of a commander's predilection. Rather, decisions are made in light of shared power and separate judgements. 'Each player pulls and hauls with the power at his discretion for outcomes that will advance his conception of national, organisational, group, and personal interests.'[12]

Model III's explanatory power stems from the ability to define the game by the key positions, the individuals concerned, the action-channel used, and the pulling and hauling (jockeying for power) involved to make the decision. The dynamic variable of human interaction by key individuals constitutes the third level of analysis that completes this examination of governmental decision-making.

TACTICAL CONVENTIONAL AIRPOWER MODEL III DECISION-MAKING DURING THE NEW LOOK

In July 1953, President Eisenhower directed members of the Joint Chiefs of Staff to meet with top civilian and military officials. Their mandate was to 'make a completely new, fresh survey of our military capabilities, in the light of our global commitments.'[13] At a meeting on 24 July, Secretary of Defense Wilson indicated to the group his confidence in nuclear weapons to deter any nation from attacking the United States, reflecting a general feeling throughout the defense community. The Chairman of the Joint Chiefs of Staff, Admiral Radford, subsequently asked the National Security Council for guidance as to the nature of war that the United States was likely to fight in the near future, adding that the preparations to contend with 'every kind of war would be unnecessarily costly and that no mobilization planning would be realistic or useful unless it was founded on a proper strategic outlook.'[14]

In response, the NSC issued a paper designated NSC-162, which indicated that the Soviet Union was the primary threat and nuclear weapons delivered by strategic airpower should provide for America's first (and last) line of defense. Furthermore, NSC-162 recommended that the JCS should be authorised to use these new weapons when and where feasible.[15] President Eisenhower approved the paper and envisioned a defense establishment that could meet a 'twofold requirement—preparedness for the essential initial tasks in case a general war should be forced upon us, and maintenance of the capability to cope with lesser hostile actions—and aimed to satisfy this requirement with less drain on our manpower and financial resources.'[16]

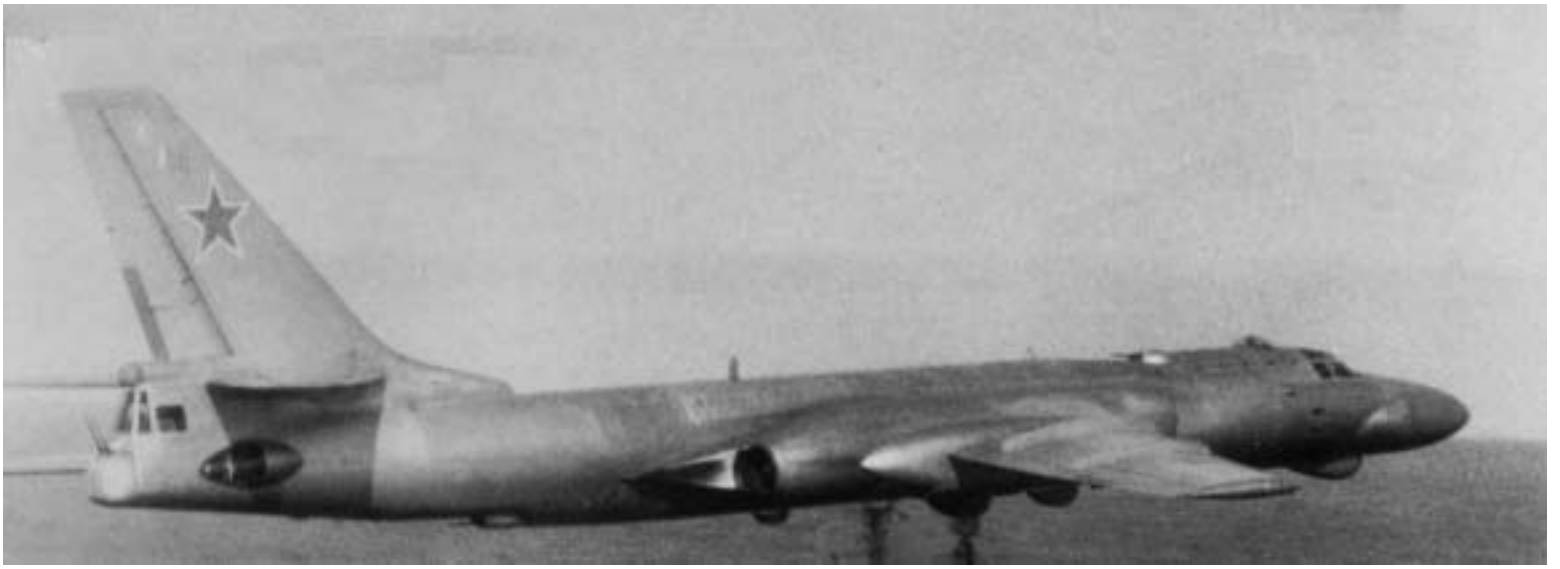
The Chairman established an ad hoc committee led by Air Force Lt Gen Everest, including senior representatives from each service, to make recommendations to the Joint Staff on force structure. Each service was not only to construct their respective force structure recommendations, but was to

comment on the other services' plan. The Air Force's plan was already arranged. Earlier in July of 1953, Air Force Chief of Staff Twining reported to Congress that the USAF was seeking a force structure goal of 143 wings.[17] The Everest Committee, however, recommended goals of 127 wings for the fiscal year of 1956 and 136 by the end of fiscal year 1957. These reduced goals were in part due to the expected high costs of nuclear weapons and other service force structure requests.[18] The committee could not agree to an overall force structure strategy and subsequently presented four different views to the Joint Staff.

The action channel in this decision framework flowed from the President down to the JCS, who in turn requested guidance from the NSC. After receiving NSC direction (with presidential approval), the action-channel flowed down to an ad hoc committee. Furthermore, when the military service chiefs briefed Congress (who controlled the purse strings), another group of individuals became involved. Every individual had his/her own set of issues, of which military force structure was just one of many. Additionally, each individual had different levels of power to influence the decision, and alternative motives. The net result (which continues today) was a series of hauling and pulling (often called 'logrolling') in order to find a compromise for a final solution. The final force structure strategy would directly relate to the distribution of the DoD budget, which every chief was especially concerned with. The greater the share of the budget each chief received, the greater the power base he had.

During the 1950s, the actual budget process constituted a major action-channel that kept power within each service and not in a central agency such as the JCS. Every year, the Department of Defense programmed budgets and forecasted expenditures for the upcoming year. The Joint Chiefs of Staff as a body did not take part; rather, the Secretary of Defense gave each service the responsibility to formulate its own budget independently.[19] Although the JCS was expected to provide advice on budgetary matters to Congress, they were not directly part of the formulation process. The JCS did have a long-range planning tool, titled the Joint Strategic Objectives Plan (JSOP),[20] designed to provide guidance for the development of forces needed in the years ahead. The JSOP, unfortunately, did not achieve its intended purpose during the 1950s, primarily because of an 'inability of the service Chiefs to agree on the best combination of forces supportable by the financial outlays, which the Secretary of Defense considered feasible for planning.'[21] Consequently, each service was able to stipulate how its share of the budget was programmed for force structure, which in turn gave the service chiefs enormous power—more so than the JCS. As the central co-ordinating body for national defense issues, the JCS did not co-ordinate the JSOP and budgetary issues.

The Joint Chiefs of Staff were also required to provide national military strategy guidance to the President, which would directly affect how the military should structure itself for war. NSC-162, which Admiral Radford had asked for, was based on the 1950 quintessential national security policy—NSC-68 (discussed in Chapter Two). A Model III examination of the development of NSC-68 reveals a process that was developed by only a few State and Defense individuals. According to Clarfield and Wiecek, four individuals (Secretary of State Acheson, Nitze from State, General Landon, and Major General Burns from Defense) managed to create a policy (NSC-68) that showed the Soviet threat to be greater than it actually was.[22] They postulated Soviet intention to be world domination and therefore destruction of the United States. Furthermore, NSC-68 advocated the use of nuclear weapons to deter this 'grotesquely oversimplified caricature of Soviet purposes.'[23] Moreover, the authors of NSC-68 were able to convince the chiefs of staff of the validity of this policy while bypassing Secretary of Defense Marshall, who Secretary Acheson knew was opposed to such a policy.[24] Acheson and the others were not interested in engaging in a discussion of the true nature of Soviet Communism. Rather, NSC-68 was solely intended to vindicate a rearmament policy that emphasised nuclear weapons. Consequently, the policy, which launched the New Look and NSC-162, was based on data contrived by a select few to advocate American political and nuclear supremacy.



A Russian Tu-16 BADGER reconnaissance aircraft operational during the Cold War

Whatever the Soviets' true intentions were, the net result of the Korean War and NSC-68 was the escalation of the Cold War

Prior to the start of the Korean War, support among the chiefs of staff for NSC-68 began to fade, but the commencement of the war changed everything. Opposition to rearmament vanished and funding increased dramatically for combat operations. There was now a reason to justify nuclear arms development. America was at war again and needed military strength. Despite the non-nuclear flavour of the Korean War, senior Air Force leaders were worried about general war. Nuclear advocates looked to Europe and intimated that Korea was just a diversion—the Soviets were likely to start a general war in Europe at any time. Whatever the Soviets' true intentions were, the net result of the Korean War and NSC-68 was the escalation of the Cold War.

In 1953, President Eisenhower asked the Joint Chiefs of Staff for advice not only on military issues, but also domestic and international ones. Senior Air Force leaders demurred, providing instead only professional military counsel that tended to favor Air Force interests.[25] The first of those interests was the continued build-up of the Air Force to the 143-wing goal within budgetary and security constraints. But to achieve this goal, the Air Force Chief of Staff would have to contend with interservice rivalries. Air Force Vice-Chief of Staff from 1953 to 1957 (and later Chief of Staff 1957 – 1961) General White later recalled, 'Strategic planning was not done well because of interservice rivalry.'[26] In fact, interservice rivalry at the Chief of Staff level was a significant hurdle not only for strategic planning within the Department of Defense during the 1950s, but also for providing unified advice to the National Security Council.

Since World War Two, and indeed before it, strategic bombing was the principal method the Air Force used to employ airpower and validate its independence as a service. The New Look and the ascendancy of nuclear weapons were the catalysts for primacy of the Air Force within DoD. In fact, nuclear weapons became so important that at a senior Air Force planning meeting conventional air weapons were considered for elimination,[27] a proposal successfully opposed by General Weyland because of his reputation as a respected war leader and position as TAC commander.

The perceived Soviet threat was such that only nuclear weapons were financially prudent to deter and, if necessary, win a general war. Senior Air Force leaders stated that all efforts within the United States military should be devoted to ensuring the survival of America from Soviet aggression. SAC Commander General Curtis LeMay stated, 'Offensive air power must now be aimed at preventing the launching of weapons of mass destruction against the United States or its Allies. This transcends all other considerations because the price of failure may be paid with national survival.'[28] Most individuals in the Defense and State Departments did not disagree with the necessity of building a nuclear force to provide for US national security, but to focus solely on them at the exclusion of conventional forces was a matter of serious contention among senior US defense and policy-making members.

Contentious debate at the highest military levels revolved around the likelihood of general war and whether or not nuclear weapons could deter both general and limited war. As for general war, NSC-68 and the New Look described the enormous (inflated) Soviet forces positioned in Eastern Europe and postulated the potential for an invasion there. No matter how inflated the intelligence reports were, the potential remained and as such had to be considered. Moreover, communist aggression in Korea, Lebanon, Formosa, Egypt (the Suez Canal Crisis in 1956), and Vietnam in the 1950s provided general war advocates with the impression that conflict on a massive scale was likely.

Those same hot spots indicated to the limited war advocates that general war was less likely. TAC Commander General Weyland, stated that growing nuclear parity with Soviet Union 'would neutralise the utility of general war' and 'permit, indeed encourage, 'brushfire' or limited wars.'[29] US Army Chief of Staffs General Ridgway in 1954 and General Taylor in 1956 both argued that limited war was more probable than general war. General Ridgway postulated that Massive Retaliation might trap the United States into using nuclear weapons to prove that America was not bluffing. 'Consequently', he concluded, the Soviets would attempt to fight a level below nuclear war.'[30] Similarly, General Taylor stated that the future would likely witness more conflict on the periphery and not a general war with the Soviet Union. Additionally, the fact that the United States threatened but did not use nuclear weapons in Korea, Vietnam (in 1954), and Egypt, indicated that political considerations might prevent both the use of nuclear weapons in limited conflicts and the escalation of those conflicts into general nuclear war.[31]

The US Navy leadership could envision either general or limited war, but thought the latter more likely. In 1953, Admiral Burke (who would become Chief of Naval Operations in 1955) intimated that the Defense Department needed a strategic concept for the 'preparation for vast retaliatory and counteroffensive blows of global war and of the preparations for the more likely lesser military actions short of global war.'[32]

We can assume that each senior military individual believed in his view as to the proper strategic national security policy direction. Further analysis, however, reveals that each had different motivations and biases that led him to believe and advocate what he did. For the US Army, General Taylor discussed his motivations in his book, Uncertain Trumpet. Taylor mentioned his concern for proposed manning cuts for the Army in the fiscal year 1956 and 1957 budgets. Furthermore, in the mid-1950s, the Army had only minimal nuclear forces and was relegated to second string in the eyes of the Air Force, since the next war was likely to be general nuclear war.[33]

Only a foolhardy nation would ever base its power strategy upon the doubtful assumption that what started as a localised conflict would remain localised

For the Navy, Admiral Burke's motivation can be understood by an increase in aircraft carriers and overall strength of the US Navy. Following the crisis in Formosa in 1954, where Navy carriers were sent to provide assistance, the Joints Chiefs of Staff decided to raise the number of aircraft carriers from 14 to 15.[34] Moreover, the Navy was attempting to procure forces that could support both general and limited war, and was presumably content to talk of both types since there was no threat to naval funding.

For the Air Force, Generals Twining and White's motivations may be grounded in their belief that air power was best employed against strategic targets and that nuclear weapons provided a realisation that strategic airpower could have greater effects beyond any World War Two or Korean War airpower results. Furthermore, given the level of emphasis of strategic nuclear missions within DoD, the Air Force rose to the top of fiscal year funding (see chapter 3) and primacy with regards to employment in war plans. Repeatedly, SAC Commander General LeMay went before Congress to argue for greater funding for bombers and nuclear weapons and usually received what he asked for. For several years (beginning in the Korean War), SAC grew and modernised to become the most destructive force in human history.

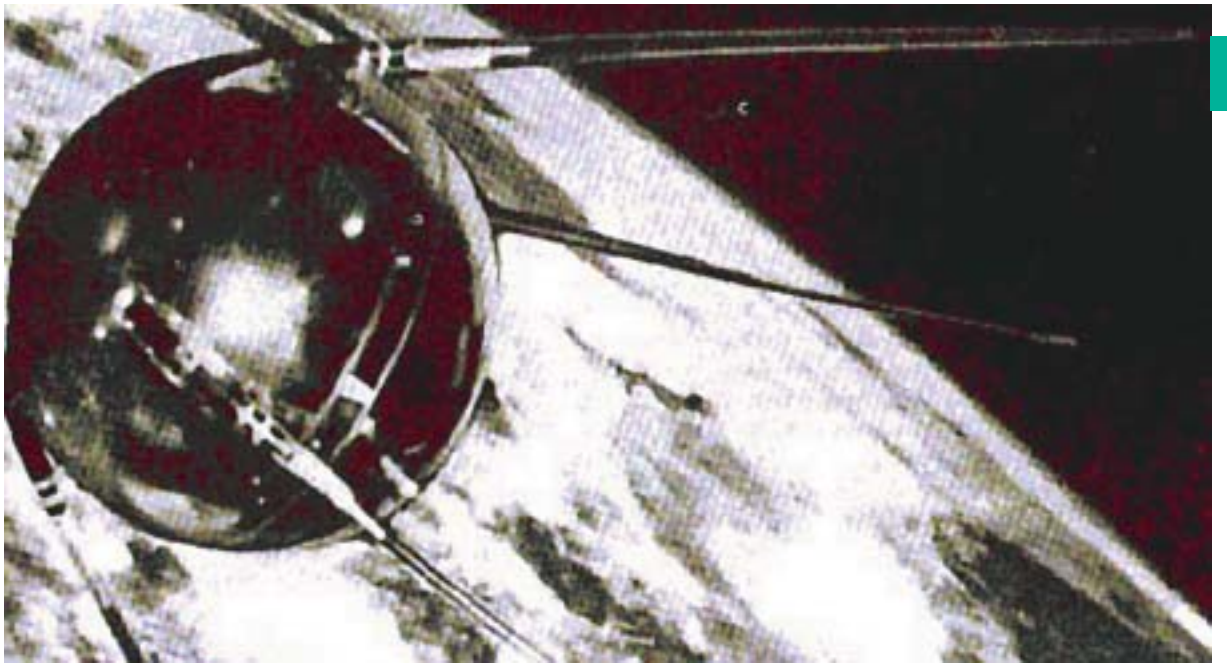
General LeMay grew in stature and power both within the Air Force and throughout the JCS. His influence and reputation allowed him to determine operational limits and strategy.[35] The net result for the Air Force was additional funding and prestige that insured its primacy. Additionally, LeMay was convinced that Strategic Air Command's (and his own) growing power would not only deter general war with the Soviet Union (or any other state), but also deter aggression at levels of war lower than general war.[36] Many military leaders put their arguments in print so that both political leaders and the public were aware of the issues, and in 1956 General LeMay stated his beliefs on deterring both general and limited war in an article:

Only a foolhardy nation would ever base its power strategy upon the doubtful assumption that what started as a localised conflict would remain localised. The only condition under which this assumption could apply would be for one nation to be absolutely and positively guaranteed that the other lacked either resolution or intelligence. For if a nation is determined to survive and preserve its way of life, it must avoid risk of extinction, regardless of how that extinction might be brought about and if a nation is intelligent, it must realise that the objectives can be won just as surely in piecemeal advances and by one all-out blow. Therefore, combine both intelligence and resolution in a nation, and you have a nation against whom you dare not instigate limited actions unless you are ready to accept the possible consequences of all-out war.[37]

In a co-authored book, he further elaborated:

It is my belief that our strategy and forces for limited war should not be separated from our over-all strategy and force structure. The artificial distinction of limited war forces for this *war and general war forces for* that *war destroys the interacting strength of our military stance that will provide superiority and continued deterrence at any level of conflict* (Emphasis in original).[38]

Air Force Chief of Staff, General Twining, echoed LeMay's opinions. Not only did he state that nuclear force could deter both levels of war, but he indicated that strategic nuclear forces could win both. In his book, *Neither Liberty Nor Safety*, he thought nuclear war was winnable[39] by employing them in limited quantities and yields. He considered the introduction of nuclear weapons a controllable process. In 1957, General Twining was promoted to Chairman of the JCS, while Air Force Vice-Chief of Staff White



The launching of Sputnik forced the United States to realise that the Soviets were ahead in rocket technology, meaning they had a capability to deliver a payload (e.g. nuclear warhead) to the United States without the military being able to defend against this threat or duplicate it

was promoted to Chief. General White also favored the view of Generals Twining and LeMay. In an interview, White stated the importance of not taking away resources from the capability to wage general war in order to increase the Air Force's conventional war-making capability.[40] He did not wish to see the Air Force's strategic nuclear bomber mission reduced at any cost.

When General White became Chief of Staff, he selected LeMay to be his vice. White understood how much power LeMay had with both the JCS and Congress and needed that influence to aid Air Force policy decisions.[41] Even after becoming Vice-Chief of Staff, LeMay continued to promote SAC's mission. In a 1957 speech, LeMay told the major commanders that America 'could no longer afford the luxury of devoting a substantial portion of our Air Force to support ground forces.'[42] In fact, the new Vice-Chief was so enamoured with the strategic nuclear mission that he mandated the vast preponderance of Air Force research and development funding be directed towards strategic airpower projects in order to further Strategic Air Command. Similarly, he promoted a far larger proportion of SAC officers to the rank of general over the officers of TAC (or any other command).[43]

General LeMay's influence reached as high as the Secretary of Defense (if not higher). Although required to advise his superiors, LeMay only recommended advancements to the strategic nuclear missions. That advice was mirrored in a 1957 speech given by Secretary Wilson who stated that the free world had to rely upon the strength of its allies 'not only to beat back any local aggression but to deter the aggressor from broadening the conflict into global war…the problem of deterring small wars cannot be considered separately from the problem of deterring war generally…the capability to deter large wars also serves to deter small wars.'[44] Secretary Wilson fully endorsed LeMay's views. From a

Model III perspective, LeMay's influence on both the Air Force and the Department of Defense demonstrated his power. His personal and organisational biases and priorities influenced decisions during the 1950s. Given that the stakes in the national security game were extremely high, LeMay, through the development and procurement of nuclear weapons and their delivery systems, was placed within the key action-channel for airpower development. Moreover, LeMay possessed a strong personality and desire to use his position, which made him extremely influential.

THE EFFECT OF THE LAUNCH OF SPUTNIK

The Soviet's launch of Sputnik in 1957 was seen as an increased threat to America's survival. The launching of Sputnik forced the United States to realise that the Soviets were ahead in rocket technology, meaning they had a capability to deliver a payload (e.g. nuclear warhead) to the United States without the military being able to defend against this threat or duplicate it. The result was an increase in effort of the US Space program to match the Soviets' progress. US rockets were developed to respond in kind to the Soviet missile threat. For the Air Force, its missiles became part of SAC. The necessary funding for missile development further advanced SAC over the other Air Force commands. Tactical airpower suffered as a result.

General LeMay was again influential in gaining additional funding for strategic missions. Not only did the Air Force reluctantly create an Intercontinental Ballistic Missile (ICBM) fleet, but LeMay and his SAC successor (General Thomas Power) were able to increase the number of bombers procured during the latter half of the 1950s. Despite increased interest in ICBMs, LeMay and his generals were still unsure of their capabilities. In any event, Generals White and LeMay did place too much emphasis upon the fledgling ICBM force and continued to promote strategic bombers over any other weapon system.[45] Senior Air Force leaders wanted those portions of airpower not associated with or overlapping the strategic mission to be eliminated or reduced. In 1958, General Twining reported to Congress that the missions of SAC and TAC overlapped in some capabilities to deliver firepower. Senator Symington asked if TAC could be cut in the interests of the taxpayers. General Twining replied 'We are cutting some. We cut several wings out this year, and it may go down further.'[46] Senior Air Force leaders favoured one aspect of airpower (strategic bombers) to the detriment of others; tactical airpower did not contribute to their interpretation of contending with the perceived threat. In an effort to gain more power, LeMay went so far as to suggest that SAC absorb TAC. It is uncertain whether this suggestion would have contributed to the advancement of SAC, but TAC leaders may have viewed the suggestion as a threat to tactical airpower. Commenting on General LeMay, General Weyland stated:

Well, old Curt LeMay…He's a pretty strong character in his own right. So he's got this outfit shortly, and discovered to his pleasant surprise, perhaps, or perhaps not, that he had most of the chips. So he wasn't satisfied with having most of them; he wanted all of them. I'm telling you, he worked like a beaver and was pretty successful in many areas. I was just fighting to preserve a force structure in the tactical air forces.[47]

Even within the Air Force, it is evident that conflict between the key decision-makers was present. Those with the greatest power had the largest influence. The key players mentioned above were four-star generals, but they all did not carry the same weight or impact the decision-making process with the same effect. A combination of personality, charisma, and position factored significantly into airpower procurement policies and national security.

THE INTRODUCTION OF FLEXIBLE RESPONSE

Army Chief of Staff General Taylor first presented the concept of Flexible Response at a Joint Chiefs of Staff conference in Puerto Rico in March 1956. He posited how inflexible Massive Retaliation was because it focused solely on general nuclear war and ignored limited, non-nuclear contingencies.[48] The other chiefs read Taylor's paper and politely disregarded it. The decision was made to continue with the status quo.

On 9 July 1956, the Chiefs met with then Chairman of the JCS, Admiral Radford, to discuss the future procurement of each service's weapon systems. Once again, General Taylor offered his ideas on Flexible Response.[49] The other chiefs responded to his presentation with total silence, and even the Secretary of Defense did not offer a reply. Consequently, nothing happened. Later that year Secretary Wilson presented to the services a plan to reduce the upcoming DoD budget. Two billion dollars and ten percent of the overall manpower level were to be cut by the next fiscal year, causing concern for each service chief.

The issue came to a head in a National Security Council meeting with the President in attendance on 25 July 1957. After a presentation of the overall trend in military manpower and spending, each service chief spoke of his plan for the near future. Once again General Taylor proposed a change in national security strategy. He outlined the earlier threats and warnings that the Soviets had made concerning NATO issues related to Norway, Denmark, Greece, and Iceland. Taylor then elaborated on the increased likelihood of limited conflict with USSR. He recommended that each force be restructured to contend with both the possibility of general nuclear war and conflicts below nuclear war.[50] Each of the other service chiefs briefed their plans. At this meeting, no consensus could be reached and no decision was made. Consequently, the status quo remained.

General LeMay voiced his opinion on the subject of Massive Retaliation and superiority over the Soviet Union. He later wrote about his military philosophy and war-fighting doctrine during this time:

Of course, military superiority is itself subject to a great deal of judgement. How do we determine what superiority really means? We must first judge how a war is likely to be fought and, more important, how can we win that war. Then we can make valid judgements on superiority itself.

In this connection, I lean toward certain doctrines of warfare because my experience and study have taught me their validity. One such doctrine is that of the offensive. Victory far more often smiles on the side that attacks.

When the issue is joined there are five fighting doctrines I would suggest. First, take the war seriously. No business-as-usual attitude is worthy of a country willing to expend the lives of drafted young men. Second, fight to win as quickly as possible. Third, be as rough as necessary in order to win. Immaculate war is an impracticable dream. Fourth, be prepared to escalate to a general war. If not, stay out of limited war. A final overriding principle is that we must devote our major resources and attention to the most serious threat. To do otherwise is to gamble with our national and social existence.[51]

General LeMay believed he had America's best interests at heart, but his rationality was based on his parochial perceptions of when the United States would engage in armed conflict and how nuclear weapons would be employed by the political masters. LeMay was correct to place the highest emphasis on survival of the nation and to take that job seriously. However, he could not envision

America entering a conflict where there would be less than survival issues at stake for the United States and consequently, he could not comprehend a war where political leadership might have very little inclination to use nuclear weapons to resolve the conflict. By not advocating for forces other than strategic nuclear airpower, LeMay was gambling with those same young men he spoke of.

In October 1957, Secretary of State Dulles wrote in Foreign Affairs suggesting the inadequacies of the policy he had announced to the world only a few years earlier. He lamented the inflexibility of Massive Retaliation, suggesting that it was only suitable as a means of last resort. Finally, he posited 'In the future it may thus be feasible to place less reliance upon deterrence of vast retaliatory power.'[52] Dulles's words forced several key players to re-evaluate their views regarding national security.

In February 1959, General Weyland spoke to the USAF Air War College about Flexible Response. In his opinion, total war represented the greatest danger to the United States, but was extremely unlikely. Rather, it was his opinion that limited war in areas of the world where the United States was least prepared was the most probable.[53] Weyland went on to describe the flexibility of tactical airpower to contend with limited wars. Furthermore, he postulated that only tactical airpower could deter limited war and that the 'forces of Strategic Air Command are dedicated to a single and inflexible purpose—the prosecution of an All-Out War. Their people and their equipment simply are not capable of or familiar with the many contingencies which arise short of that general conflict.'[54]

Despite Weyland's position, TAC forces diminished throughout 1958 and 1959. In a letter to Chief of Staff General White, Weyland indicated that 'we must continue to maintain a capability for the use of conventional weapons, thus rounding out our ability to deal with any contingency which might arise…'[55] Furthermore, Weyland dissented from a recent Air Force Cold War Conference and wrote to White that:

If he were willing to think solely as an Air Force officer he could not join a policy of replacing conventional weapons with nuclear weapons because it would make the Air Force job so much easier, but as an individual charged with upholding national policy Weyland could not accept a course of action that could eventually undermine national policy.[56]

On retirement in 1959, Weyland stated that TAC could no longer support its missions. He also warned 'that the Pentagon's preoccupation with strategic bombing and long-range missiles may soon leave us unprepared to fight a limited war.'[57] General Weyland's power had dropped substantially and he could no longer influence decisions related to tactical airpower procurement.

By the spring of 1958, both the Navy and Marine Corps leadership shifted their security policy position to that of Generals Taylor and Weyland. Navy leadership agreed in principle to Taylor's premise, but was reluctant to commit. US admirals had seen great potential in nuclear-powered submarines and underwater-launched nuclear missiles.[58] Notwithstanding this, the three services agreed to the national policy change that reflected nuclear parity with the Soviets and established finite limits on nuclear power. According to Taylor, the Air Force still rejected the idea and clung to the policy of Massive Retaliation.[59] The ensuing debates were again elevated first to the Secretary of Defense and then the National Security Council. Again, General Taylor presented his views in both meetings, this time with the support of the Navy and Marine Corps. Generals Twining and White supplied the Air Force position. The Air Force point of view remained the status quo as far national security was concerned. Secretary of State Dulles did not provide the strong support that Taylor thought was likely.[60] The final decision was no change in the national security strategy. The 1960 budget was to be based on the same strategy as the previous years. The Air Force and strategic nuclear primacy prevailed as the dominant force until the end of the Eisenhower Administration. In 1961, General LeMay became Chief of Staff of the Air Force. By October, LeMay had replaced the last of the fighter

general commanders with bomber advocates such as General Everest (TAC) and General Smith Jr. (USAFE). The outcome was an Air Force whose operational commanders and most of the key Air Staff were 'ardent bomber generals.'[61] Consequently, tactical airpower saw no increase in funding or emphasis until the Kennedy Administration took office.

MODEL III ANALYSIS

A Model III analysis reveals that the key decisions related to the development and procurement of airpower (tactical or otherwise) were significantly affected by prominent individuals whose jobs placed them in critical action-channels. Those four-star generals with duties directly related to the current national security strategy of Massive Retaliation had the greatest influence. Furthermore, a strong personality, combined with wartime experience and assertiveness, produced substantial results for General LeMay. Although General Weyland possessed both wartime experience and a strong personality, he was not in a position to significantly influence decision-making that corresponded to the strategy of Massive Retaliation.

The strong parochial biases and perceptions of an institution that emphasised strategic bombing also favored SAC and LeMay. Tactical airpower, although an important contributor to both World War Two and the Korean War, did not neatly fit into current airpower theory. Moreover, given the stakes of national security, it is easy to understand why Air Force leadership was principally concerned with deterring the worst-case threat to America. It is less easy to comprehend, however, why Generals Twining, White, and LeMay continued to support a force structure of predominantly strategic nuclear assets vice a balanced force structure as President Eisenhower had requested. There was plenty of evidence to show that Massive Retaliation had failed to provide credible deterrence for war below general nuclear war. Furthermore, the Air Force Chiefs of Staff stood alone against the other services in their view as to the correct course for American defense strategy. One plausible Model III explanation can be found in the central premise of Allison's third construct—power to control not only the action-channels, but also the key issues that flowed along those channels matter the most. To acquiesce on the policy of Massive Retaliation meant that the chiefs had to relinquish a portion of their strategic nuclear power for more conventional tactical power. The Army generals and Navy admirals stood to gain from a change in policy. By permitting a policy change, the chiefs of staff would be saying that forces other than strategic airpower were essential for deterrence. This change would then entail a reduction in money and emphasis for strategic airpower resulting in a decrease of power and influence. Moreover, to give up power would also result in questioning the rise to power and the independence that the post-World War Two Air Force leadership had propagated so vigorously. Too, the rise of Soviet nuclear power had much to do with these changes.

Finally, although President Eisenhower possessed the ultimate responsibility for ensuring the survival of the United States, he relied upon his service chiefs to provide advice for national security issues. He had a twofold requirement for the Defense Department—preparedness for general war and lesser hostile actions. He also strongly desired a balanced budget. The Air Force chiefs of staff focused solely on general war and presumed that strategic nuclear airpower could also contend with limited wars. By dogmatically following the strategy of Massive Retaliation and denying the strategy of Flexible Response during the later half of the 1950s, the Air Force chiefs largely disregarded conventional tactical airpower, which would become so vital in the Vietnam War. In spite of strong counter-arguments from TAC and the other services, the USAF chiefs of staff maintained their position and therefore their power to the detriment of conventional tactical airpower.

One can speculate that had senior Air Force leaders advocated a more balanced approach for developing and procuring airpower (strategic and tactical), a more comprehensive deterrence and

war-fighting strategy might have evolved during the 1950s. Furthermore, had the Air Force (and the other services) approached strategy making with the premise of equality among the services, there may have been less of a desire to be the dominant service. In General Weyland's words: 'All fighting services are essential in a theatre of operations. No one service exists solely for the support of another. Rather each force—air, ground or sea—contributes its optimum and specialised capabilities toward achieving the over-all mission of the theatre commander.'[62] If one accepts the mandate that the Air Force Chiefs of Staff (Generals Twining, White, and LeMay) should have provided the best possible advice to national command authorities, then the parochial advice (or with-holding of balanced advice) that the Chiefs provided can only be considered at best prejudicial counsel. Balanced guidance would have meant developing forces that could contend with a broader spectrum of conflict, which would have translated into a more credible deterrent and war-fighting capability similar to that procured by the Air Force after 1965. By not providing balanced guidance from 1953 to 1961, senior Air Force leadership restricted the development of conventional tactical airpower, which proved lacking during the initial stages of the Vietnam War and consequently resulted in unnecessary loss of life and resources.

CHAPTER 6

CONCLUSIONS

The question of whether or not and to what extent the United States Air Force neglected tactical airpower between the Korean and Vietnam Wars has been examined from three different analytical perspectives. While each chapter alone does not complete the answer, each provides supportive evidence as to the reasons that contribute to an overall answer. In an attempt to explain why a decision occurred during the 1950s, each of Allison's three models offer alternative methods of investigation or points of view. Each construct consists of a set of assumptions and categories that influence the approach to an answer. Three levels of examination produce varying conclusions, which combined furnish a more comprehensive answer than any one framework taken individually.

The Model I analysis offered conclusions based on choices made at the grand and strategic levels. The decision-making process of the 1950s caused the United States to accumulate alternative courses of action and rank them according to their value or consequence. America's rational choice consisted of simply choosing the best-perceived alternative and that choice was nuclear deterrence. Only the strategy of Massive Retaliation could provide viable deterrence against communist aggression while minimising the overall price to the United States, which contributed to President Eisenhower's stated policy. In such a national security strategy, a Model I answer postulates that conventional tactical airpower was too expensive and not likely to contribute substantially to the national policy. Therefore, tactical airpower was given lower priority than the dominant strategic airpower weapon systems.

Allison's second model provided substantially different conclusions from the first. In spite of the strategic emphasis on Massive Retaliation, a plethora of organisations positively (albeit minimally) influenced tactical airpower as a result of their standard operating procedures. Organisations such as TAC, the NACA, and the ARDC offered several improvements to tactical conventional airpower. During the 1950s, aircraft and weapons were developed and produced that contributed to the tactical missions. The Model II examination also showed how many of the Air Force organisations also tended to satisfice or compromise on their decisions regarding tactical aircraft and weapons, which resulted in the production of weapon systems that may not have contributed best. Although the F-105 and AIM-4 Falcon (as with others) were marginally successful, they were not designed for conventional warfare.

More importantly, the standard operating procedures that were in place or created during the period in question led to the ability to rapidly shift emphasis to these weapons systems and produce more viable systems witnessed in the latter 1960s and 1970s. Tactical training (although tailored toward a European conflict) increased in frequency and enabled tactical airpower to achieve noteworthy advances during the 1950s and early 1960s. Despite interservice rivalries at the organisational level, the Air Force's routines helped ensure that conventional combat power was equal to if not better than any other air force at the tactical level. A Model II inquiry indicated that at the organisational level, tactical conventional airpower was not entirely neglected.

A Model III analysis suggested yet a third conclusion, unlike the first two. This examination showed that the key decisions related to the development and procurement of airpower were significantly influenced by the prominent individuals whose job positions placed them in the critical action-channels. Of the four-star generals discussed, those who had duties directly related to the current national security strategy of Massive Retaliation had the greatest influence. Furthermore, a strong personality combined with wartime experience and the willingness to use his power produced substantial results for General LeMay. The strong parochial biases and perceptions of an institution that emphasised strategic bombing as the proper application of airpower also favoured SAC and LeMay. General LeMay and the other USAF chiefs of staff during the period in question were able to maintain their power despite credible alternatives proposed by the other service chiefs and TAC Commander General Weyland. Power to control not only the action-channels, but also the prevalent issues and funding that flowed along those channels matter most. Despite President Eisenhower's twofold objective on possessing forces to contend with general nuclear war and conflicts below general war, the Air Force leadership primarily promoted strategic airpower to handle the worst-case scenario. In an effort not to diminish their power, the Air Force chiefs of staff during the 1950, and early 1960s presented prejudiced counsel to the National Command Authorities and Congress. That biased advice resulted in airpower decisions, which overwhelmingly favoured strategic missions and led to the decline of not only tactical airpower, but also the leaders who advocated tactical conventional airpower.

From the above summary of the three levels of analysis, one can safely conclude that tactical conventional airpower was impeded between the Korean and Vietnam Wars. At the systemic level, national security policy and constrained fiscal expenditures prevented conventional tactical airpower from maintaining its past position of importance within the Air Force composition. Even at the organisational level, emphasis on strategic nuclear weapons drew much-needed specialists and funding away from conventional tactical airpower programs (tactical airpower received from two to four percent of the Air Force budget between 1955 to 1958). Of the weapon systems that did support tactical conventional missions, many sub-organisations tended to compromise on their final products, resulting in systems which nominally advanced conventional tactical airpower. Moreover, the tactical training, which was TAC's finest accomplishment, did not occur often enough nor adequately emphasised conventional weapons, resulting in only marginal advances for tactical airpower employment. Finally, at the individual level, the parochial biases on the three USAF chiefs of staff led to the slanted counsel offered to the national command authorities and Congress. Despite the fact that Eisenhower requested forces to contend with both general war and limited war, the Air Force generals (with the exception of Weyland) were deficient in their duties to sufficiently advise the NCA on the proper Air Force structure, which should contend with the entire spectrum of conflict. Unfortunately, this biased advice repressed tactical conventional airpower in order to promote strategic nuclear missions. From 1953 to 1961, tactical conventional airpower was placed a distant second behind the strategic nuclear missions of the day. However, more than any other factor, senior Air Force leadership bears the responsibility for the impedance of tactical conventional airpower, which resulted in a greater than necessary loss of lives and resources during the opening months of the air war in Vietnam.

IMPLICATIONS FOR THE FUTURE

Current military strategists and leaders oftentimes do not possess the necessary experience or vision to accurately plan for future contingencies or war. Therefore, these individuals must study the past in order to learn history's 'lessons' within the context of the time studied. By studying historical lessons, current students of the military art may gain a portion of the experience that is necessary for planning and avoid the pitfalls of the past. This thesis offers several (but not all) of the lessons from the period in question, which have implications for the future. The 1950s offer valuable insights into the development and procurement of airpower, which provide lessons for future policy planning.

First, policy decisions constructed in peacetime have significant impact on procurement outcomes, which in turn affect wartime operations. With the growing perception that future conflict will tend to be short (weeks or months versus years), there may not be time during war to obtain weapon systems needed for that war. Therefore, Air Force weapon systems should be procured so as to be able to contend with the broadest spectrum of conflict within the fiscal constraints of the DoD budget. Invariably, military fiscal desires will be greater than the Congressionally mandated financial outlays. Consequently, Air Force strategists should ensure that peacetime procurement decisions are crafted to balance war-fighting capabilities within the limits of airpower. Air Force capabilities should be structured to deter and win military contingencies from general war to limited or small-scale conflicts.

Second (and related to the first implication), Air Force policy should not be based upon only one weapon system or concept of war. During the period of Massive Retaliation, the Air Force solely relied upon that policy to guide its decision-making for war; its senior leaders postulating that nuclear forces were all that were necessary to contend not only with general war, but also anything less than general war. The lack of emphasis on tactical conventional airpower caused deficiencies in fighter aircraft designs, inadequacies in conventional munitions, and sub-optimal tactical training. These deficiencies resulted in a greater than necessary loss of life and resources. Future strategists should not base overall procurement policy on weapon systems that restrict future airpower employment options, which in turn constrain airpower's contribution to national security strategy. For example, if future Air Force procurement decisions include exclusive investments in stealth technologies and weapon systems at the expense of non-stealth alternatives, then those decisions risk possibly constraining airpower's capabilities in war when a counter to stealth is developed. Similarly, investing predominantly in unmanned combat aerial vehicles (UCAVs) as the sole replacement for manned aircraft may also risk limiting the future application of airpower in some portions of the spectrum of conflict.

Third, parochial priorities can hinder strategic operations that are designed to achieve national security objectives. There should not be a desire to place the Air Force (or any service) above the rest in order to ensure funding priority. Rather, each service should work jointly to ensure the Department of Defense as a whole can meet the objectives of National Command Authorities. The JCS should be the primary agent responsible for overall DoD strategic procurement policy, which should be divorced from parochial service biases. There are areas where one service may have an expertise over the other services (e.g. air superiority, amphibious employment, or underwater operations), but that expertise is only one aspect of warfare. To ensure the preparation forthe broadest spectrum of warfare, each service should contribute to the total spectrum in various, specialised ways.

Fourth, and most important, the individual (such as LeMay) remains the vital element in the Air Force war-making capability. In this case, Model III explanations appear to be the key factors affecting tactical conventional airpower decision-making during the 1950s. At the highest levels, USAF generals determine the policy of the service and therefore the weapon systems developed and procured. These

individuals should base their decisions on past combat experience, future capabilities, and the needs of the nation. At lower levels, individuals should continue to exhaustively research the possible improvements to current systems. Standard operating procedures are great for ensuring complex processes are conducted on a routine basis, but that is the minimum effort required. All means should be sought to improve current capabilities. At the lowest level, every individual who contributes to the war-fighting ability of the Air Force should practice and train in the most realistic manner feasible. In each war during the twentieth century, training (not technology) set American airpower above its rivals. Reduced realistic training opportunities as a result of extended operations in 'no-fly zones' or diminished funding for exercises decreases American airpower's raison d'être. Often, realistic training ensures US airpower remains far above any potential rival.

If the United States Air Force is committed as an institution to continued excellence, then we should study our history and learn both the commendable and unsound aspects of our past in order to succeed in the future. War is a contest of extreme importance; the survival of the nation may be at stake. At the minimum, valuable lives and resources may be lost. Preparation for war in peacetime is equally momentous. The weapon systems developed and procured will influence the outcome of future wars. The achievement of nationally directed military objectives deserve the most balanced advice and approach for successful accomplishment. The individual remains the critical link in the long chain of developing and employing complex weapon systems. Victory depends on exceptional people, technology, and concepts. Humans are not perfect. Combat provides the best school for learning—and without combat, history endures as the first step toward gaining that experience. Every military strategist should study history so those past mistakes do not become repeated in future conflicts.

BIBLIOGRAPHY

'A Resume of the History and Mission of the United States Air Force Scientific Advisory Board.' Washington D.C.: Department of the Air Force, 1 January 1963. Located Air Force Historical Research Agency, Maxwell AFB, ALA: call number K168.151.

'A Study of Aviation Responsibilities: Air Force – Army, June 1962.' Department of Defense document located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K143.043-5.

Allison, Graham T. Essence of Decision: Explaining the Cuban Missile Crisis. 2d Ed. New York: Longman Publishing, 1999.

Anderson, David. Republic F-105 Thunderchief. Osceola, WIS: Motorbooks International, Inc., 1983.

'Annual Message to Congress on the State of the Union, February 2, 1953.' Public Papers of the President of the United States: Dwight D. Eisenhower, 1960 – 1961. Washington D.C.: Office of the Federal Registrar, National Archives and Records Service, 1961.

Barlow, Jeffrey G. Revolt of the Admirals: the Fight for Naval Aviation, 1945-1950. Washington D.C.: U.S. Government Printing Office, 1994.

Borowski, Harry. A Hollow Threat: Strategic Air Power and Containment Before Korea. Westwood, CT: Greenhouse Press, 1982.

'Carrier Off—Sullivan Quits.' Aviation Week. May 1949.

Cave Brown, Anthony, ed. Dropshot: The U.S. Plan for War with the Soviet Union in 1957. New York: Dial Press, 1978.

Clarfield, Gerald H. and Wiecek, William M. Nuclear America: Military and Civilian Nuclear Power in the United States 1940 – 1980. New York: Harper and Row, Publishers, 1980.

Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton, N.J.: Princeton University Press, 1976.

Clodfelter, Mark. The Limits of Air Power: The American Bombing of North Vietnam. New York: The Free Press, 1989.

Department of Defense. Department of Defense Appropriations For 1953: Hearings of the *3d Congress. Washington D.C.: U.S. Government Printing Office, 1953. Will also use the years 1954 through 1963.

Department of Defense. Department of Defense Fact Book: 1947 – 1978. Washington D.C.: US Government Printing Office, 1978.

Department of Defense. 'Semiannual Report of the Secretary of the Air Force' in The Semiannual Report of the Secretary of Defense: Jan – Jun 1957. Washington D.C.: US Government Printing Office, 1958.

Department of State. Public Papers of the President: Dwight D. Eisenhower 1953. Washington D.C.: U.S. Government Printing Office, 1953. Will also use the years 1954 through 1961.

Department of State. Public Papers of the President: John F. Kennedy 1963. Washington D.C.: U.S. Government Printing Office, 1953.

Doig, Leroy. Historian for Naval Weapons Center. Interview conduct on 20 February by author.

Dulles, John F. 'Challenge and Response in United States Policy' in Foreign Affairs. October, 1957.

Eisenhower, Dwight D. The White House Years: Mandate for Chang, 1953 – 1956. Garden City, N.Y.: Doubleday, 1965.

English, John A. Marching Through Chaos: The Descent of Armies in Theory and Practice. Westport, CT: Praeger Publishers, 1996.

Enthoven, Alvin C. and K. Wayne Smith, How Much Is Enough? Shaping the Defense Program, 1961 – 1969. New York: Harper and Row, 1971.

Finletter, Thomas K. Power and Policy. New York: Harcourt, Brace, 1954.

Futrell, Robert F. Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1907 – 1960 Vol. I. Maxwell AFB, ALA: Air University Press, 1989.

————. 'The Influence of the Air Power Concept on Air Force Planning', 1945-1962 in Lt Col Harry R. Borowski, ed., Military Planning in the Twentieth Century: Proceeding of the Eleventh Military History Symposium, 10-12 October 1984. Washington D.C.: U.S. Government Printing Office, 1988.

————. The United States Air Force in Korea. Washington D.C.: U.S. Government Printing Office, 1983.

Goldberg, Alfred, ed. A History of the United States Air Force, 1907 – 1957. Princeton, N.J.: D. Van Nostrand, 1957.

Halperin, Morton H. Limited War in the Nuclear Age. New York: John Wiley, 1963.

Hallion, Dr. Richard P. 'The USAF and NATO: From the Berlin Airlift to the Balkans.' Washington D.C., 15 April 1999. Found on line at http://www.airforcehistory.hq.af.mil/Hallionpapers?usafandnato.htm.

History. '3525 Combat Crew Training (Fighter), 18 May 1957.' Located Air Force Historical Research Agency, Maxwell AFB, ALA: call number K289.80-35.

History. 'Tactical Air Command, July – December 1955.' Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K417.01 v.1.

History. 'USAF Tactical Air Warfare Center, 1 Nov 1963 - 30 Jun 1964.' Eglin AFB, FL, 1964. Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K417.0732.

'History of the USAF Weapons School.' USAF Weapons School. United States Air Force, n.p. On-line. Internet, 22 November 2000. Available from http://www.nellis.af.mil/usafws/wshistory.htm.

Holley, I. B. Jr. 'A Retrospect on Close Air Support' in Benjamin Franklin Cooling ed., Case Studies in the Development of Close Air Support. Washington D.C: U.S. Government Printing Office, 1990.

Hone, Thomas C. 'Korea' in Benjamin F. Franklin, ed., Case Studies in the Achievement of Air Superiority Washington D.C.: US Government Printing Office, 1994.

'Joint Air-Ground Operations (TACM 55-3).' Langley AFB, VA: HQ Tactical Air Command, Sept 1950 and 1957. Located Air Force Historical Research Agency, Maxwell AFB, ALA: call number K417.549-3.

Klocko, Richard P. Col. 'Air Power in Limited Military Actions.' Air War College Study Group thesis no. 7. Maxwell AFB, ALA: Air War College, 1954.

Kinzey, Bert. F-100 Super Sabre. Blue Ridge Summit, PA: Tab Books, Inc., 1989.

Knaack, Marcelle S. The United States Air Force Reference Series: Post-World War Two Fighters, 1945 – 1973. Washington D.C.: US Government Printing Office, 1986.

Lambeth, Benjamin S. The Transformation of American Air Power. Ithaca, N.Y.: Cornell University Press, 2000.

LeMay, Curtis E. Gen. 'Address to Major USAF Commander's Conference, 28 – 30 June 1957.' History, Strategic Air Command, July – December 1957, Vol. 2. Located Air Force Historical Research Agency, Maxwell AFB, ALA.

LeMay, Curtis E. Gen. and Smith, Dale O. Maj Gen. America is in Danger. New York: Funk and Wagnalls Publishing, 1968.

Lichman, J. J. History of Continental Air Command Maxwell AFB, AL: Air University, n.d.

Mark, Eduard. Aerial Interdiction in Three Wars. Washington D.C.: U.S. Government Printing Office, 1994.

Martin, Jerome Vernon. 'Reforging the Sword: United States Air Force Tactical Air Forces, Air Power Doctrine and National Security Policy, 1945 – 1956.' An unpublished doctoral dissertation presented to the Ohio State University, 1988.

Meilinger, Phillip S. Hoyt S. Vandenberg: The Life of a General. Bloomington, IN: Indiana University Press, 1989.

Mets, David R. Checking Six is not Enough: The Evolution and Future of Air Superiority Armament. Maxwell AFB, AL: Air University Press, April 1992.

————. Nonnuclear Aircraft Armament: The Falcon vs. the Snapping Turtle-A Case Study in the Struggle Between Firepower and Armor: The United States Air Force, The Aim-130, and the Hypervelocity Missile. Eglin AFB, FL: Office of History, Armament Division, Air Force Systems Command, 1988.

————. The Orphan of Air Research and Development? The Evolution of Non-nuclear Aircraft Bombs. Maxwell AFB, AL: School of Advanced Airpower Studies, 10 April 1992.

Millett, Allan R. 'Korea, 1950 – 1953' in Benjamin Franklin Cooling ed., Case Studies in the Development of Close Air Support. Washington D.C: U.S. Government Printing Office, 1990.

Mrozek, Donald J. Air Power and the Ground War in Vietnam. Maxwell AFB, AL: Air University Press, January 1988.

Moody, Walton S. Building a Strategic Air Force. Washington D.C.: Office of Air Force History and Museums, 1996.
'NASA Facts: Research Airplane Program.' Found on line, December 2000, located at http://dfrc.nasa.gov/PAO/PAIS/HTML/FS-031-DFRC.html.

Office of Air Force History. U.S. Air Force Oral History Interview: Hon James H. Douglas, by Mr. Hugh N. Anmann, June 1979, Simpson Historical Research Center Air University. Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.0512-1126 C.1.

Office of Air Force History. U.S. Air Force Oral History Interview: Gen Frank F. Everest, Maxwell AFB, AL: Albert F. Simpson Historical Research Center Air University. Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.0512-957 C.1.

Office of Air Force History. U.S. Air Force Oral History Interview: Gen O. P Weyland, by Dr. James C. Hasdorff and Brig Gen Hoel F. Parrish. Maxwell AFB, AL: Albert F. Simpson Historical Research Center Air University, 19 November 1974.

Office of Air Force History. U.S. Air Force Oral History Interview: Gen Thomas D. White, by Joseph W. Angell, Jr. and Dr. Alfred Goldberg, Simpson Historical Research Center Air University, January 1961. Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.0512-606.

Perret, Geoffrey. Eisenhower. New York: Random House Publishing, 1999.

Project Vista: Interim Report 1 – Tactical Air – Some Recommendations. California Institute of Technology, 1950. Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K146.003-137.

RAND Corporation. 'Operation Sage Brush.' February 1956. Located Air Force Historical Research Agency, Maxwell AFB, ALA: call number K146.003-201.

Reed, Arthur. F-104 Starfighter. New York: Charles Scribner's Sons Publishing, 1981.

'Report of the Scientific Advisory Board at L. G. Hanscom Field, MA.' Washington D.C.: Office of the Chief of Staff Air Force, Oct 1960. Located Air Force Historical Research Agency, Maxwell AFB, ALA: call number K168.1510.

Richards, Leverett G. TAC: The History if Tactical Air Command. New York: The John Day Company, 1961.

Sbrega, John J. 'Southeast Asia.' Edited by Benjamin F. Cooling. Case Studies in the Development of Close Air Support. Washington D.C.: US Government Printing Office, 1990.

Simpson, Dr. 'Presentation to the Air War College on 5 March 1953 concerning the historical development of tactical air.' Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.716253-65.

Slessor, Sir John. Presentation to the Air War College on 25 November 1953 concerning 'An Air View of War.' Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.716253-80.

————. 'Has the H-Bomb Abolished Total War?' Air Force Magazine. January 1958.

Schwartz, David D. NATO's Nuclear Dilemmas. Washington D.C.: The Brookings Institute, 1983.

'Special Message to the Congress Transmitting Reorganization Plan 6 of 1953 Concerning the Department of Defense.' Public Papers of the President of the United States: Dwight D. Eisenhower, 1960 – 1961. Washington D.C.: Office of the Federal Registrar, National Archives and Records Service, 1961.

Stueck, William. The Korean War: An International History

'Tactical Air Command Fact Sheet.' Langley AFB, VA: Office of Information, HQ Tactical Air Command. Located Air Force Historical Research Agency, Maxwell AFB, ALA: call number K417.309-5.

'Tactical Air Command Fact Sheet: Tactical Air Command Aircraft' Langley AFB, VA: Office of Information, HQ Tactical Air Command. Located at the Air Force Historical Research Agency, Maxwell AFB, ALA: call number K417.309-7.

Taylor, Maxwell D. The Uncertain Trumpet. New York: Harper and Brothers Publishing, 1959.

Tilford, Earl H. Jr. Setup: What the Air Force Did in Vietnam and Why. Maxwell AFB, AL: Air University Press, June 1991.

'The Tools: Weapons.' Air Force Magazine. Arlington VA: Air Force Association, August 1957.

Thompson, Wayne. To Hanoi and Back. Washington D.C.: Smithsonian Institute Press, 2000.

United States Air Force. 'Project Corona Harvest: USAF Activities in Southeast Asia, 1954 – 64.' Located at the Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.034-1.

United States Air Force. 'The Air Force and National Security.' Maxwell AFB, AL: Air War College Air University, April 1954. Located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.0429-2.

USAF Fighter Weapons School. 'Air Combat Tactics Evaluation: F-100, F-104, F-105, F-4C versus MiG-15/17 Type Aircraft (F-86H).' May 1965. Located at Air Combat Command History Center, Langley AFB, VA.

US House of Representatives. Department of Defense Appropriations for 1959: Hearings before the Subcommittee of the Committee on Appropriations, Overall Policy Statements. 85th Congress, 2d Session, 1958.

US House of Representatives. Hearing before the House of Representatives Committee on Armed Services. 81st Congress, October 1949.

US Senate. Department of Defense Appropriations for 1960, Hearings, 84th Congress. Washington D.C.: US Government Printing Office, 1960.

Vandenberg, Hoyt S. 'The National Defense Program - Unification and Strategy,' Statements from the Chief of Staff to the House of Representatives: Committee on Armed Services, Washington D.C.: October 19 1949. Located at the Air Force Historical Research Agency, call number K419.952-24.

Weyland, O. P. General. Presentation to the Air War College on 18 February 1959 concerning tactical airpower, located at Air Force Historical Research Agency, Maxwell AFB, ALA: call number K239.716259-19.

————. 'Tactical Airpower Worldwide' in Air Force Magazine. July 1957.

Worden, Mike. Col. Rise of Fighter Generals: The Problem of Air Force Leadership 1945 – 1982. Maxwell AFB, ALA: Air University Press, 1998.

Ziemke, Caroline Frieda. 'In the Shadow of the Giant: USAF Tactical Air Command in the Era of Strategic Bombing.' An unpublished doctoral dissertation presented to the Ohio State University, 1989.

NOTES

1 The NSC consisted during the 1950s of the President, Vice President, the Secretaries of State, Defense, and Treasury, the Directors of the Office of Civil and Defense Mobilization and the Bureau of the Budget. The Chairman of the JCS is normally the only military member to attend NSC meetings. The JCS is comprised of a Chairman, and the Chiefs of Staff of each respective Service. Maxwell D. Taylor, General, US Army, The Uncertain Trumpet (New York: Harper and Brothers, Publishers, 1959), 80.
2 Graham T. Allison, The Essence of Decision: Explaining the Cuban Missile Crisis (New York: Harper Collins Publishing, 1971), 145.
3 Ibid., 162.
4 Ibid., 164.
5 Ibid.
6 Ibid., 166.
7 Ibid., 168.
8 Ibid.
9 Ibid., 169.
10 Ibid.
11 Ibid., 170.
12 Ibid., 171.
13 As quoted in Futrell, Ideas, 424.
14 Ibid., 425.
15 Ibid.
16 Department of Defense, Semiannual Report of the Secretary of Defense, January to June 1954 (Washington D.C.: United States Government Printing Office, 1954), 6.
17 Senate, DoD Appropriation Hearing for 1954, Part 2 (Washington D.C.: United States Government Printing Office, 1954), 1890-94.
18 The 137-wing goal was based on 7 heavy bomber, 28 medium bomber, 4 heavy reconnaissance, 5 medium reconnaissance, 2 fighter reconnaissance, and 8 strategic fighter wings in the strategic air forces; 34 fighter-interceptor wings in the air-defense forces; and 2 tactical bomber, 4 light bomber, 21 fighter-bomber, 6 day-fighter, 5 tactical reconnaissance, 4 heavy troop carrier, and 7 medium troop carrier wings in the tactical air forces. Futrell, Ideas, 426.
19 Maxwell D. Taylor, The Uncertain Trumpet (New York: Harper & Brothers, Publishers, 1959), 69.
20 Ibid., 85.
21 Ibid., 86-7.
22 According to the authors, Acheson and Nitze were the principal creators of NSC-68. Gerard H.Clarfield and William M. Wiecek, Nuclear America: Military and Civilian Nuclear Power in the United States 1940 – 1980 (New York: Harper & Row, Publishers, 1980), 139 – 40.
23 Ibid.
24 Ibid., 137.
25 Mike Worden, Col, USAF, Rise of the Fighter Generals: The Problem of Air Force Leadership 1945 – 1982 (Maxwell AFB, Ala: Air University Press, 1998), 67.
26 History, Interview with Gen. Thomas D. White on 27 June 1961 by Joseph W. Angell, Jr. and Alfred Goldberg, 1, located at the United States Air Force Historical Research Agency, Maxwell AFB, Ala, call number, K239.0512-606.
27 History, Interview with Gen. O. P. Weyland by Dr. James C. Hasdorff and Brig Gen Noel F. Parrish on 19 November 1974, 255 – 6, located at the United States Air Force Historical Research Agency, Maxwell AFB, Ala, call number, K239.0512-813.
28 Gen Curtis E. LeMay, address to Major USAF Commanders' Conference, 28 – 30 June 1957, in History, Strategic Air Command, July – December 1957, vol. 2, chap. 1, doc. 2, located at the United States Air Force Historical Research Agency, Maxwell AFB, Ala.
29 Futrell, Ideas, 448; Worden, 76.
30 Worden, 74.
31 Taylor, 23 – 6.
32 As quoted in Futrell, Ideas, 448.
33 Taylor, 48 – 55.
34 Futrell, Ideas, 448.
35 Walton S. Moody, Building a Strategic Force (Washington D.C.: Air Force History and Museums Program, 1996), 365; Worden, 79.
36 General Curtis E. LeMay and Major General Dale O. Smith, America Is In Danger (New York: Funk and Wagnalls Publishing, 1968), 157; Futrell, Ideas, 464.
37 Futrell, Ideas, 451.
38 LeMay and Smith, 157.
39 Nathan F. Twining, Neither Liberty Nor Safety (New York: Holt, Rinehart and Wilson, 1966), 112.
40 History, Interview with Gen. Thomas D. White on 27 June 1961 by Joseph W. Angell, Jr. and Alfred Goldberg, 7, located at the United States Air Force Historical Research Agency, Maxwell AFB, Ala, call number, K239.0512-606.
41 Worden, 81.

42 Futrell, Ideas, 398.
43 Worden, 81.
44 House, Department of Defense Appropriations for 1957, Hearings, 84th Congress (Washington D.C.: United States Government Printing Office, 1957), 120 – 21.
45 Worden, 84.
46 Senate, Department of Defense Appropriations for 1958, Hearings, 84th Congress (Washington D.C.: United States Government Printing Office, 1957), 341.
47 History, Interview with Gen. O. P. Weyland by Dr. James C. Hasdorff and Brig Gen Noel F. Parrish on 19 November 1974, 100, located at the United States Air Force Historical Research Agency, Maxwell AFB, Ala, call number, K239.0512-813.
48 Futrell, Ideas, 455.
49 Taylor, 41.
50 Ibid., 48 – 51.
51 LeMay and Smith, 313 – 14.
52 John F. Dulles, "Challenge and Response in United States Policy" in Foreign Affairs, October 1957, 24.
53 General O. P. Weyland, "Air War College Presentation" given on 18 February 1959, text located at the United States Air Force Historical Research Agency, Maxwell AFB, Ala, call number, K239.716259-19.
54 Ibid.
55 As quoted in Futrell, Ideas, 461.
56 Ibid., 461 – 2.
57 As quoted in Worden, 85.
58 Taylor, 58.
59 Ibid.
60 Ibid., 65.
61 Worden, 89.
62 General O. P. Weyland, "Tactical Airpower Worldwide" in Air Force Magazine, July 1955, 38.