THE SUM OF THEIR FEARS:

THE RELATIONSHIP BETWEEN THE JOINT TARGETING COORDINATION BOARD AND THE JOINT FORCE COMMANDER

BY

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ABSTRACT

In the past, doctrinal differences between the services over how best to use airpower in joint campaigns have led to disagreements over airpower mission and target priorities. During World War II, Korea, Vietnam, and Desert Storm, ground commanders demanded greater influence over airpower employment, while at the same time, the Air Force and the Navy disagreed over the most effective method for command and control of airpower throughout the theater. In all four cases, the Joint Force Commander set up a targeting board or an equivalent to address individual service concerns. This thesis follows the history of joint targeting boards since World War II to illustrate the foundations that have led to today's joint airpower targeting process. Having established the historical

background, the thesis explores the current solutions for determining airpower mission and target priorities. Joint doctrine has institutionalized the concept of targeting boards and recommends that a Joint Force Commander use a Joint Target Coordination Board (JTCB) to eliminate service disagreements over target priorities. In response to joint doctrine, the theater commanders have developed two contrasting models on how the JTCB interacts in the campaign planning process. One model integrates the board into the air component staff while the second model places the JTCB at the theater commander level, separated from component planning. Using the principles of war as a framework for analysis, the paper compares the relative advantages and disadvantages of each model to determine whether a targeting board is an effective tool for the JFC in future operations. In the end, the thesis finds a Joint Targeting Coordination Board integrated into the air component staff has the greatest potential for providing a future joint commander with an effective process for determining airpower mission priorities and selecting targets. Finally, organizational changes and recommendations are suggested to assure the targeting process overcomes individual service biases and remains focused on accomplishing the theater objectives.

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CHAPTER 1

INTRODUCTION

> A joint committee leads to weak and faltering decisions--or rather indecisions. Why, you may take the most gallant sailor, the most intrepid airman, or the most audacious soldier, put them at a table together--what do you get? *The sum of their fears.*
>
> Winston Churchill

Today, every branch of the United States Armed Forces recognizes the importance of effectively employing airpower in joint warfare. Airpower is unique among the instruments of military force because every service requires the combat application of airpower to accomplish its assigned missions and objectives. Airpower's flexibility and responsiveness make it essential for joint operations but at the same time creates the requirement to select and prioritize targets effectively.

In past conflicts, the large number of available aircraft meant commanders could often avoid hard targeting choices by just "hitting everything" or avoid decisions concerning "must do" missions because commanders could accomplish all of them simultaneously. However, future warfighters will face tough decisions, crucial to the success of joint campaigns, about mission priorities and target selection for the finite number of theater aircraft. There may be times when some components must do with less airpower while the Joint Force Commander (JFC) concentrates on more pressing objectives. Thus, control over targeting becomes a major issue for future campaign planning and execution.

During joint campaigns in World War II, Korea, Vietnam, and Desert Storm, ground commanders demanded greater influence over air targeting and air mission priorities. In all four cases, the JFC set up a targeting board or an equivalent, to address these concerns. Today, joint warfighting concepts of operations have continued to institutionalize the concept of joint targeting coordination boards. To rectify the

historical problems of determining airpower mission priorities and target selection, current joint publications discuss the option of convening a Joint Targeting Coordination Board (JTCB) to assist the JFC. Yet, establishment of a JTCB raises fundamental command and control questions for the JFC that current joint doctrine does not address. These questions include unity of command issues, problems of delegation of authority, as well as ambiguity of responsibility and accountability.

The purpose of this paper is to answer the question, "Is a JTCB an effective tool for the JFC during combat operations?" **The analysis finds that a JTCB integrated into the JFACC staff has the greatest potential for providing the JFC with an effective air targeting and allocation process.**

The requirement for a JTCB centers on fundamental disagreements between the services over how best to use airpower. The differing views of airpower employment between soldiers, sailors, and airman have also led to arguments over targeting priorities. This occurs because mission accomplishment inevitably led to the requirement for target selection. In every conflict since World War II, the inability of the services to resolve their doctrinal differences forced the overall theater commander to spend much of his time ironing out the targeting disagreements. In most conflicts, service differences forced the JFC to decide how to employ airpower in support of the campaign and how to establish measures for its effectiveness. In essence, the JFC acted as a referee between the components concerning airpower mission priorities and target selection.

Arguments over airpower targeting and mission priorities occurred most frequently when the theater campaign involved ground operations. Since airplanes first flew in combat, soldiers have argued that ground commanders should control their own aircraft because *ownership assures that airpower directly responds to their needs.* Direct control means there will always be sorties available to protect friendly troops from enemy aircraft or to shape the battlefield via targeting as required by the ground commander.

In contrast, airpower advocates argue that the soldier's view inhibits airpower's advantages of range and flexibility. Airmen believe centralized control assures the most effective employment of airpower because it has the "big theater picture" rather than tying command and control to a subordinate ground force commander who, by necessity, retains a tactical viewpoint. In support of their argument, air planners use historical precedent to show how ground commander control diluted the massed firepower provided by centrally controlled airpower.

In the past, theater commander's have agreed that centralized control provides the most effective employment of airpower across the spectrum of operations. During the Tunisian Campaign in 1943, Air Vice Marshall Sir Arthur Conningham developed the basic principles that would guide allied air operations for the rest of the war. He wrote, "The strength of air power lies in its flexibility and capacity for rapid concentration. It follows that control must be concentrated and air forces must be concentrated in use and not frittered away in penny packets."[1] General Dwight D. Eisenhower agreed that the Allies use this doctrine for the remainder of the campaign and reaffirmed his beliefs about centralized control of air after the war ended:

> Battle experience proved that control of the air, the prerequisite to the conduct of ground operations in any given area, was gained most economically by the employment of air forces operating under a single command. This assured a maximum of flexibility, providing a command structure under which all forms of available airpower could be concentrated as the situation demanded--in other words, it permitted the maximum concentration of combat airpower at the decisive point at the decisive time.[2]

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[1]Benjamin Franklin Cooling, ed., *Close Air Support* (Washington DC: Office of Air Force History, 1990), 174.

[2]Frank Futrell, *Ideas, Concepts, Doctrine* (Maxwell, Al: Air University Press, 1989), 176.

Air advocates also believed that airpower best serves the ground forces by achieving air superiority first, and then interdicting enemy materiel and forces throughout the theater, as far away from the battlefield as possible.

Besides the disagreements between the ground forces and air planners, the targeting process has also been a source of friction between the Air Force and U. S. Navy. This problem is due to fundamental differences between the two services about the best way to employ airpower, which leads to problems over how to control it. Just as airpower proponents argue against ground commander control of airpower, so naval planners maintain that, "Naval air assets must be under the command of the overall naval commander and not subordinated to a ground or air commander."[3]

The Air Force also argues that unity of effort requires a single air commander to centrally control and execute all aircraft, despite which service actually owns them. However, navy planners believe naval air operations are inseparable from general fleet operations. This belief leads to a different perception about the proper control of airpower. Since the first priority of naval air is support of the fleet mission, the fleet commander should always retain control of naval air aircraft even when they are released for other theater missions.

These differences over command, control, and mission priorities have often led to divided authority over airpower operations in war. In the past, to support the naval planner's preference for autonomous operations, JFC's have divided the theater into areas of responsibility (AOR) and assigned different AORs to the individual components. The "route pack" structure developed in Vietnam is a classic example of dividing airpower responsibility. In the future, assuming smaller number of aircraft available, any

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[3]James A. Winnefeld and Dana J. Johnson, *Joint Air Operations* (Annapolis, MD: Naval Institute Press, 1993), 8.

fragmentation may have a greater impact and could seriously dilute airpower's flexibility and limit its ability to respond anywhere in the theater.

Currently, joint doctrine recommends that the JFC use a Joint Targeting Coordination Board to eliminate service disagreements over target priorities but offers no insight about the advantages or disadvantages for using a JTCB. This paper uses comparative techniques and historical models to show whether the JTCB helps or hinders the JFC during the planning and execution of a campaign.

Chapter 2 provides the history of joint targeting since the end of World War II. The historical background on targeting boards from the last four major conflicts (World War II, Korea, Vietnam, and Desert Storm) defines the origins of doctrinal arguments between the services over airpower mission priorities, target selection, and command and control. This chapter also discusses the success or failure of targeting boards in the past and gives some historical examples that illustrate the advantages and disadvantages of using a targeting board.

Chapter 3 provides the current definition of the JTCB. The latest edition of Joint Publication 3-0 offers a broad definition and a spectrum of potential responsibilities and functions for the JTCB. Yet, because joint publications are not directive in nature, it is up to the JFC to decide whether to use a JTCB. If the JFC does decide to convene the JTCB, then he must define its specific tasks, functions and determine its organizational placement. To assist the JFC, each theater has a concept of operations that provides more specific guidance about the role of a JTCB and a recommendation of where it could function in the organization.

The theater concepts of operations offer two different viewpoints on where and how the JTCB affects overall campaign planning. This chapter examines these two models because they give contrasting views on how the JTCB interacts in the current campaign planning process. One model integrates the JTCB into the component staff and makes it accountable to the Joint Force Air Component Commander (JFACC). In the

second model, the JTCB operates at the JFC level, between the components and the JFC. In this model, the JTCB operates externally from the component planning function.

After building on the historical background in Chapter 2 and developing the current views on the JTCB in Chapter 3, Chapter 4 offers an analysis of the advantages and disadvantages of the JTCB. Using the two models described in Chapter 3, the paper evaluates how well the two models adhere to the principles of war as they relate to the joint force commander.

Although the principles of war are not immutable, there are two reasons why they provide an excellent framework for analysis. First, they are relatively unchanging, established in joint publications, and are available as guidelines to all the services. Second, using the principles of war to evaluate the JTCB's viability conforms to the methodology historically used by the services to measure the effectiveness of new organizations or processes.[4] Although determining which model adheres best to the principles of war will not predict campaign success, it does provide the JFC with an evaluation consistent with the traditional conceptual framework or initial point for developing strategy and theater objectives. Since determining mission priorities and the targeting process are usually an integral part of planning and conducting campaigns, the principles of war are a useful tool for analyzing the utility of the JTCB.

Chapter 5 offers the JFC a recommendation on how best to structure the targeting process. After evaluating both the models and using the information provided by the analysis, the paper offers three recommendations to the JFC. The paper concludes by suggesting the most effective way for the JFC to assure the targeting process overcomes

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[4]For example, joint publications concerning campaign planning and strategy describe the principles of war as the aspects of war that are universally true and relevant. Thus, the services debate the advantages and disadvantages of new concepts such as "Airland Battle" and the JFACC based on how well they adhere to the principles of war. See FM 100-5, *Operations,* June 1993, 2-4, and Captain Lawrence Osborn, "Joint Air Employment Doctrine and the Operational Art" (Research Paper for the Naval War College, Newport, Rhode Island, 20 May 1991), 9-15.

individual service biases and remains focused on accomplishing the overall theater objectives.

CHAPTER 2

THE HISTORY OF JOINT TARGETING SINCE WORLD WAR II

Airpower made a major contribution to the war fighting capability of the United States during World War II. However, as airpower's contributions increased, so did the disagreements over airpower mission priorities and the air targeting process. Each service had a different idea of how to use airpower and what targets to attack to best accomplish its individual mission. The broad differences over proper employment and control led to two specific sources of friction between the components. Historically, the disagreements have centered on Air Force versus Navy preferences for command and control as well as Air Force versus ground force disagreements on the best use of airpower to conduct air-ground force application. In an attempt to solve these differences, theater commanders formed a joint group during each conflict to ensure that all of the services had a voice in the air planning and targeting cycle.

World War II

The concept of a joint forum to address service differences over where the JFC should focus his efforts for air operations first appeared in late World War II. During the European campaign, combined civilian and military groups attempted to find the correct airpower mission and target priorities. When attention turned towards the Pacific theater, numerous agencies, both in Washington and in the Pacific, engaged in air target analysis for the pending offensive against Japan. By early 1944, planners required in-depth air target analysis because only a limited number of very long range bombers could reach the Japanese mainland. Thus, although airpower provided the means to strike virtually every element of the enemy's industrial and political strength, the limited number of aircraft available meant that airpower could actually attack only a relatively small number of targets.[1]

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[1]Six different agencies simultaneously performed Japanese target analysis and each developed a target list. There was no coordination between the agencies so the six lists were not deconflicted and the total number of targets continued to grow as information from Europe arrived in Washington. Initially, the JCS plan in August 1945 included only the small number of available very-long-range B-29 bombers, but eventually the plan included most heavy bombers and fighter aircraft as well.

Airpower's versatility made it especially valuable during the preparations for the invasion of Japan. General Douglas MacArthur wanted to use airpower for direct support of the troops as they came ashore, while the U. S. Army Air Force and the Navy wanted to continue the blockade and strategic bombing campaign. Initially, the small number of aircraft capable of reaching Japan from the recaptured islands limited attacks exclusively to targets that critically weakened Japanese ability to continue fighting but offered the smallest amount of wasted effort. Essentially, airpower missions had to provide the "most bang for the sortie." The Joint Chiefs of Staff believed the most effective method of air targeting was accomplished by, "competent personnel, in sufficient numbers, effectively organized and directed"[2]

Unfortunately, no single agency had the responsibility or authority to tie all the analysis conducted by the different services together. The principal agencies lacked access to all the available sources of intelligence and operational information. Also, most of the personnel in those agencies did not have adequate training in the techniques of target analysis and selection. The lack of a centralized analysis agency led to redundancy or left the potential for key information to slip between the different analysis organizations.

To centralize the planning process, the Joint Chiefs of Staff established the Joint Target Group (JTG) on August 2, 1944. The JCS organized the JTG because, "Duplication of effort and lack of integration between the various services concerned with Far Eastern target analysis is handicapping the work of planning agencies in Washington and of the operating forces in the field."[3] The JCS tasked the Joint Target Group to provide continuing target analysis and assure a high degree of integration and coordination between the services and various other organizations.

Located in Washington DC, the JTG worked directly for the Joint Chiefs of Staff although it gained inputs from the theater staffs. It provided General MacArthur with a priority list of targets as an aid for planning operations. Because it was outside General MacArthur's formal chain of command, every organization involved consistently emphasized that the JTG could only offer recommendations. The JCS

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[2]Memorandum, JCS 1020, subject: Joint Target Group, 24 August 1944, USAFHRA No K142.6601-1, 4.

[3]Ibid. 2.

made it clear that the "Joint Targeting Group is an advisory agency having no power to issue operational directives."[4] Therefore, the JTG provided its products and recommendations to General MacArthur, but he and his staff made the decision on what information to use, if any at all.

The war ended before the JTG could offer recommendations for target sets that would directly support the Army and Marine Corps troops as they came ashore on the Japanese mainland. Thus, there were no major disagreements between the services about the air target priorities established by the Joint Targeting Group.

Korean Conflict

At the beginning of the Korean Conflict, all of the services focused on stopping the North Korean advance and protecting U. S. ground forces. During the retreat, there were many complaints and accusations of poor performances between the ground and air components. Despite the mutual finger-pointing, no single service was to blame because superior enemy numbers simply overwhelmed the unprepared U. S. forces. The Air Force and the Navy clearly provided the ground troops with the best possible air support given the limited numbers of available aircraft. However, serious disagreements immediately surfaced once the Allied forces stopped their retreat and stabilized their lines around Pusan. A major point of contention between the services focused on the issue of air targeting.

Significant differences over targeting priorities centered on two perceived problems. The first major argument revolved around command and control problems between the Navy and the Air Force over how to integrate land and sea-based air into a coherent air striking force. The second problem involved a doctrinal difference between the Army and the Air Force about the correct amount of air effort to devote to close air support (CAS) for the ground forces.

Early in the war, the Far East Command (FEC) under General Douglas MacArthur did not have an air plan or even a list of targets to attack. Initially, the Air Force commander, Lieutenant General George E. Stratemeyer, focused on direct support for the retreating United Nations forces. Still, there were

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[4]Memorandum, JCS 1020, subject: "Joint Target Group Precis," 4 September 1944, USAFHRA #142.6601-4, 1.

problems with reaction times and selecting mission priorities for airpower. To solve the differences over airpower priorities and target selection, General MacArthur formed the GHQ Target Group (GHQTG) on 14 July 1950. The board consisted of four senior staff officers, two from the Army, one each from the Air Force and the Navy. General MacArthur tasked the GHQTG with four duties:

1) Advise on offensive airpower in conformance with the daily situation

2) Recommend selection and priorities of targets

3) Recommend measures to assure coordinated use of airpower

4) Maintain an analysis of target systems and priorities assigned.[5]

Unlike the Joint Target Group in World War II, the members of the Korean Target Group were in the chain of command; however, they were not experts in air target selection. This lack of expertise caused immediate problems because the Target Group was simply not capable of performing the required tasks. In three weeks, the Joint Target Group had angered all of the services with its inability to accomplish effective target selection. As an example of the problems, "During the period from 17 July through 2 August, out of 220 primary and secondary targets designated by the group, some 20 percent of the targets came from defective maps and did not physically exist."[6]

Due to the inadequacies of the GHQ Target Group, the Commander of the Far East Air Force (FEAF), General Stratemeyer, recommended to General MacArthur that a FEC Target Selection Committee, made up of senior officers from each service, take over the targeting task. Naval planners,

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[5]History, USAF Historical Study No. 71, *USAF Operations in the Korean Conflict, 25 June-1 November 1950*, 12. From the very beginning of the Target Group, its responsibilities changed almost daily. It took a week to determine which targets the GHQTG should control and their relative values. These targeting disputes over Navy or Air Force control led to a new term, "coordination control." The term had no clear definition and both services used it whenever it strengthened their targeting viewpoint.

[6]History, USAF Historical Study No 72, *USAF Operations in the Korean Conflict, 1 November 1950-30 June 1952*, 75. The Target Group used outdated maps in some cases and performed faulty map reading for others. The Group's lack of air target selection expertise also caused problems. Because the GHQTG used the wrong scale charts, it selected area targets that were far too large for the medium bombers but were optimum targets for the heavy bombers. Also, see: Study for FEAF Command Historical Report, subject: Selection of Air Targets by Improper Agency, November 1953, AFHRA #K720.02.

after adding targeting oversight restrictions to ensure their operations remained autonomous, reluctantly agreed and General MacArthur approved Stratemeyer's recommendation.

Many meetings were contentious, but the Target Group finally developed a viable interdiction campaign. General MacArthur accepted the FEC Target Committee's plan for an interdiction program designed to cut off the flow of supplies to communist forces in South Korea. Immediately after MacArthur's decision, the Navy stopped taking part in the FEC Target Group, citing poor target selection and multiple taskings as the major reasons for leaving. Eventually, the FEAF target section of General Stratemeyer's staff picked up the entire air targeting function. The FEAF Target Committee essentially "became the theater medium through which air campaigns were laid out against target systems in accordance with basic programs approved by General MacArthur and General Stratemeyer."[7]

Once General Stratemeyer's staff controlled the targeting function, coordination and deconfliction improved. However, the absence of naval participation in targeting and planning prevented the truly integrated and effective use of airpower. Navy leaders argued that they had greater responsibilities then just the Korean air campaign and needed to retain control of their aircraft to ensure sea control and protection of the sea lines of communication. Although the Navy did not describe the actual requirements and specific missions for naval airpower, General MacArthur allowed them to retain control of their aircraft. By the end of the conflict, the Navy had carved out an area of responsibility in the northwestern part of Korea (much like the Route Pack concept in the Vietnam Conflict).

The second major disagreement over FEAF targeting occurred between the Army and Air Force. Each service had a different view about the correct amount of air effort required to effectively support the ground troops. Throughout the war, this issue remained contentious between the two services. Army commanders felt Air Force leaders did not provide enough air support while air leaders felt the army did not appreciate or understand the ability of airpower to influence the battlefield in ways other than the close-in battle.

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[7]Ibid., 75.

Ground force commanders continually believed the Air Force was ignoring or stonewalling their airpower requests. Feeling ran so deep, that at one point, Marine General Gerald Thomas formally charged that his division had taken unnecessary casualties because its air support had not been adequate or timely.[8] General Edward M. Almond, Commanding General of X Corps, summed up Army feelings with his efforts to organize tactical air units so that there would be a minimum of one squadron (24 aircraft) for each infantry division. On the basis of his experience, Almond was convinced that the only way that field commanders would receive the required amount of air support was by ensuring, "field army or separate corps commanders had operational control over supporting tactical air units."[9]

In contrast, air leaders believed that ground commanders focused on parceling out airpower to win individual battles rather than on winning the overall theater campaign. General Earle Partridge, the Fifth Air Force Commander, was especially critical of the Army's ability to understand airpower. He felt the sole focus of ground commanders centered on the immediate enemy that threatened their troops. In 1951, he wrote, "The destruction of a dozen tanks prior to their entry into the combat area does not concern the Army Commander so much as the destruction of one tank directly in front of him, and it is for this reason that operational control of the air arm should not be delegated to the army commander."[10]

When the war ended, the targeting issues concerning the proper level of effort for ground support remained unresolved. The formation of a Joint Targeting Board did not eliminate interservice disagreements about air targeting. Although it provided a focal point for the services to air their differences, it took the intervention of the theater commander, whether Generals MacArthur, Matthew Ridgway, or Mark Clark, to make a decision. These two targeting problems, coordination between the Air Force and the Navy and disagreements about airpower priorities between the Air Force and the Army, would surface again during the conflict in Vietnam.

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[8]Robert F. Futrell, *The United States Air Force in Korea 1950-1953* (Washington DC: Office of Air Force History, 1983), 467.

[9]USAF Historical Study #72, 202. General Almond later proposed a system exactly as that used in the early part of World War II and that completely failed in North Africa.

[10]Ibid. 203.

Vietnam Conflict

The controversy over mission priorities and air targeting continued throughout the Vietnam War. President Johnson's fear of directly involving the Soviet Union or China should the U. S. attack North Vietnam, meant tight control of air targets and led to numerous iterations in the target selection process. Beyond the National Command Authority's political considerations, differences in targeting philosophy caused friction between all of the services. Once again, targeting problems centered on Air Force-Naval disagreements about command and control for the air strikes in North Vietnam. The argument between the ground commanders and the Air Force over the required weight of effort for close air support and the responsiveness needed to support U. S. ground operations in South Vietnam also reappeared.

Air Strikes Against North Vietnam

In 1964, the Johnson administration's major concern rested on preventing active intervention by the Chinese and the Soviet Union. Therefore, the President sought to keep the scope of the war as limited as possible. To avoid a direct ground confrontation, President Johnson called for the Joint Chiefs of Staff (JCS) to begin planning for possible air attacks against North Vietnam. He wanted to increase the pressure gradually on the North Vietnamese until they complied with U. S. demands. The JCS, in response to the President's wishes, began planning for the air effort.

Air Force Chief of Staff, General Curtis LeMay, in coordination with the Pacific Command Staff, developed an ambitious air plan designed to destroy North Vietnam's capability and will to resist. LeMay's plan consisted of attacks on "ninety-four targets that made up the essential components of the North's war-making capacity."[11] The proposed air attacks were too aggressive for the President and did not agree with his ideas about gradual escalation. As a result, the President rejected the 94 Target Plan, despite the protests of the Joint Chiefs. In February 1965, instead of an all-out effort, the White House approved limited attacks designed to put controlled pressure on the North Vietnamese. Eventually, this strategy evolved into the 1965 to 1968 interdiction campaign of Rolling Thunder.

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[11]JCS Briefing, "Air Operations Against North Vietnam and Laos," January 1967, AFHRA #K178.2-34.

Although the President was the final approval authority in the Rolling Thunder targeting process, there were military inputs on target selection from both the theater and the Joint Chiefs. The process began in the Pacific, with the Rolling Thunder Coordinating Committee (RTCC). The Commander of Forces in Vietnam, General William C. Westmoreland, in concert with Admiral U. S. Sharp, Commander Pacific Forces, established the RTCC in March 1965. The joint targeting team originally included the Air Force component, 2nd Air Division commanded by Lieutenant General Joseph Moore and the Naval component, Task Force 77 (TF-77) commanded by Rear Admiral Ralph W. Cousins. After the 7th Air Force was established in April of 1966, the 7th Air Force Commander, General William W. Momyer took over the coordination responsibilities from 2nd Air Division. The RTCC focused on "coordinating and/or resolving any items of mutual interest to 7AF/TF-77 for operations in the South East Asia area."[12] Key responsibilities for the Targeting Panel of the RTCC included coordinating the production of compatible target lists and target materials for each area of responsibility. It also published a proposed target list for 7AF/TF-77, concurrently, on a monthly basis. Admiral Sharp, Commander In Chief, Pacific Forces (CINCPAC) then used the monthly target list as a base-line for providing inputs directly to the Chairman of the Joint Chiefs of Staff, Army General Earle Wheeler.

Simultaneously, in March of 1965, General Wheeler established the Rolling Thunder Targeting Team (RTTT). Located in Washington DC, it was responsible for "preparing the proposals on bombing North Vietnam for the Chairman to present to the Secretary of Defense and the President."[13] Initially, the team included only a single Army and a single Navy officer from the J-3 Division in the Joint Staff.

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[12]Memorandum of Agreement between Headquarters 7th Air Force and Commander, Task Force 77, subject: *7thAF/TF 77 Rolling Thunder Coordinating Committee,* 15 December 1967, AFHRA #K740.151-7, 3.

[13]Colonel Henry H. Edelen, *Corona Harvest Oral History Interview #243,* Taped interview by Major Samuel E. Riddlebarger and Lt Colonel S. Bissell, 27 January 1970, AFHRA #K239.0512-243, 3. Colonel Edelen acted as the single Air Staff representative on the Rolling Thunder Team. The Rolling Thunder Target coordination process was extremely complex. General Wheeler received direction from the White House, as well as inputs from CINCPAC, and provided guidance to the RTTT. The Chairman also received weekly restraints and conditions that restricted targets and geographical locations from the State Department and personally from the Secretary of Defense, Robert McNamara.

However, the large workload, and a demand for Air Force participation by the Air Force Chief of Staff, eventually made it a joint group of seven people from each of the services.

Each week, General Wheeler provided the Targeting Team with PACOM's inputs as well as his specific guidance and rules of engagement. The team would then build the target list for General Wheeler. Although the Washington target list did not have to include the CINCPAC nominations, it usually incorporated his target requests. One main function of the RTTT was to request fixed targets just north of the current cleared area in an effort to try to lead the administration into expanding the air strikes. One of the members of the RTTT said, "Part of our intent was to propose targets that extended the armed recce area and to go as far as we could to get more important targets and targets that would open additional geographical areas."[14]

General Wheeler took the RTTT target list and presented it to the Secretary of Defense for the President's Tuesday Luncheon (After October 1967, Wheeler attended the Tuesday Luncheons and presented the target list himself). Once the President approved the target list, it went back to CINCPAC in Hawaii. The Rolling Thunder Coordinating Committee then divided the list into two parts for 7AF and TF-77, eliminated any problems, and distributed it for implementation. This targeting process for attacks on North Vietnam remained in-place until Rolling Thunder ended in March 1968.

If the targeting process were not already convoluted enough, Strategic Air Command (SAC) located in Omaha, retained control of the targeting for the B-52s operating in the theater. Autonomous B-52 operations created additional confusion for any efforts designed to integrate the targeting process. Coordination difficulties between the Rolling Thunder Targeting Team and the planning staff in Omaha meant, "sometimes the two air forces hit the same target while other targets went untended."[15] During the

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[14]Ibid. 32. Colonel Edelen discusses the frustration of building a campaign with numerous restrictions that often changed weekly. The RTTT attempted to expand the area of operations in order to conduct a full scale campaign, apparently with the passive approval of senior officers. When answering the question, "Did planning try and lead to expansion of the armed recce area," Edelen admits, "The answer to your question is affirmative. That was part of our intent and I think the intent was recognized by the JCS and by the other principles concerned." See also, Major General Robert N. Ginsburgh, *Corona Harvest Oral History Interview #477,* Taped interview by Colonel John E. VanDuyn, AFHRA #K239.0512-477, 38-49.

two Linebacker campaigns in 1972, the coordination problems remained because Omaha retained the planning process while 8th Air Force in Guam had the responsibility for flying the missions into 7th Air Force's area of operation. The lack of interface between SAC and the theater planners mirrored the command and control problems that occurred between the Air Force and the Navy.

In Vietnam, once again command and control differences between the services played a major role in how they set airpower priorities and struck targets. Naval Commanders refused to give up their aircraft to an Air Force commander during Rolling Thunder. Just as in Korea, they cited the numerous other duties required of naval airpower, in addition to interdiction attacks, as justification for continued air autonomy. In March 1965, the Commander-in-Chief of the Pacific Fleet (CINCPACFLT) contended that, "Naval airpower was an inherent part of the fleet, and its mission could not be separated."[16]

As CINCPAC, Admiral Sharp agreed with the fleet commander and his refusal to name a single air manager led to two decisions intended to resolve the dispute. First, to allow both the Air Force and the Navy relative autonomy for air strikes, Admiral Sharp divided North Vietnam into seven Route Packages and assigned primary responsibility for attacking targets in those zones to either the Air Force or the Navy.[17] Second, CINCPAC established the Rolling Thunder Coordinating Committee charged with the responsibility for resolving any coordination problems with the Route Pack system. It was also responsible for "developing procedures for area of responsibility cross operations to ensure conflict free employment of strike and supporting forces."[18] The Targeting Panel and its associated procedures and restrictions for

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[15]John Schlight, *The War in South Vietnam: The Years of the Offensive 1965-1968* (Washington D. C.: Office of Air Force History, 1988), 286.

[16]General William W. Momyer, *Airpower in Three Wars,* Department of the Air Force, 1978, 90. Just as in Korea, the Navy did not identify any specific missions for naval airpower. Once again, the term "coordinating authority" resurfaced and CINCPAC established the RTCC to work out the details that led to the route pack system.

[17]The Air Force had responsibility for Route Packages V and VIa while the Navy controlled zones II, III, IV, and VIb. General Westmoreland and his staff retained control of sorties flown in Route Pack I. See Mark Clodefelter's, *The Limits of Air Power* (New York: The Free Press, 1989), 129-130 or Momyer, *Air Power in Three Wars,* 91-99.

[18]Memorandum of Agreement between Headquarters 7th Air Force and Commander, Task Force 77, subject: *7thAF/TF 77 Rolling Thunder Coordinating Committee,* 15 December 1967, AFHRA #K740.151-7, A-1. The operational agreement was extensive and included, 1) Coordination of offensive strike

the Route Packs were a direct result of the philosophical differences over command and control for air attacks in North Vietnam.

In-Country Ground Support

When American ground troops began to become heavily involved in South Vietnam in March 1965, Air Force support for ground operations in-country became a major issue. The lack of clear-cut battle lines created new problems for air to ground coordination. Almost immediately, ground commanders voiced their concerns about the Air Force's lack of responsiveness for ground support. The Air Force worked to solve the problems with a combination of preplanned sorties to support army target requests and dedicated alert sorties for quick response should any units require unplanned air attacks.

One major cause of the lack of responsiveness was the convoluted system for request and response. The unit needing close air support (CAS) called in its request to the Direct Air Support Center (DASC). The DASC then coordinated through the system and requested permission of the area ground commander because he controlled the in-country interdiction and harassment program. Thus, the ground commander approved all requests for air support. In an emergency, the ground commander deleted many of the steps, but the official system was too cumbersome and needed streamlining.[19]

Although the Air Force never completely revamped the request system, changes including improved communications and a simplified request network did make it more responsive for ground support, decreasing the average response time from ninety to twenty minutes. Despite the Air Force changes, ground commanders still lacked confidence in the ability of airpower to deliver ordnance in a

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operations, 2) Procedures for combined air and naval surface operations, 3) Air defense, 4) Tactical air control systems integration, 5) Radar, photographic, ELINT and IR intelligence collection and dissemination, and 6) Active electronic warfare. However, target development in assigned areas continued separately. Essentially, 7AF and TF 77 built separate target lists for their areas of responsibility and almost exclusively struck targets in their assigned Route Pack.

[19]For a discussion of the problems between the two components and how the Air Force tried to respond see: Lt Colonel Carl Pacharzina, "Southeast Asia Trip Report, 25 June- 1 September 1966," AFHRA #K740.132. Even as late as 1968, an internal memorandum between the USMACV J-5, Major General Royal Baker and Major General Robert Worley, Vice Commander 7thAF discussed how the interdiction restrictions slowed airpower responsiveness. See Maj General Robert F. Worley, Vice Commander 7th AF, letter, subject: CAS: Concepts and Doctrine, 3 April 1968, 4-7, AFHRA #K740.132.3.

timely manner. A twenty minute response was still too slow since "one third of the firefights lasted less than fifteen minutes, half less than twenty minutes."[20] The army "solved" the perceived problem by requesting preplanned missions against generic targets and then holding them overhead, essentially "using pre-planned CAS as combat air cover in an effort to provide constant coverage during ground operations."[21]

In April 1965, CINCPAC made CAS the primary air mission in South Vietnam. This corresponded with the decision to commit U. S. ground forces to combat. The Air Force responded with an increase in sorties from 2000 in January 1965 to 13,000 by December 1965. Still, problems remained due to the many independent air operations going on simultaneously, all under different commanders. Although there were numerous sorties overall, it was an uneven flow of support. Often, too many aircraft answered requests for ground support while at other times, there were critical no-shows. One after-action report illustrated the problems when it concluded "unwieldy numbers of strike sorties were simultaneously directed to provide CAS to ground forces in small geographical areas. As a result, FACs could not employ all the airpower provided."[22]

In March 1968, General William Westmoreland attempted to solve the problem by appointing the 7th Air Force Commander, General William W. Momyer, as the Single Air Manager for in-country operations. Momyer believed that centralized control made a major difference in the effectiveness and timeliness of CAS. He said, "The centralized system could provide sustained and massive or brief and

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[20]Schlight, *The War in South Vietnam: The Years of the Offensive 1965-1968,* 293.

[21]Project Corona Harvest, *Command and Control of Southeast Asia Operations, 1 January 1965-31 March 1968,* January 1973, AFHRA #K239.035-4, 27. To solve this problem, the Corona Harvest recommendation included, "A requirement for a semiautomated processing and display system to handle the large amounts of information available. In addition, a reliable, secure means of communication to insure timely receipt of planning and execution." This sounds much like the Tactical Operations Center (TOC) and the JSTARS that we have today.

[22]Project Corona Harvest, *USAF Operations In Defense of South Vietnam, 1 July 1971-30 June 1972,* 5. The Report added, "There is a tendency in a tense ground situation to request and get approved more air support than is required. The airman is reluctant to deny such a weight of effort on the basis that if a contact turns sour he won't be blamed because there was insufficient air support. On the other hand, the soldier makes sure he won't be blamed if things don't work out because sufficient airpower wasn't requested."

highly selective support."[23] Although the single air manager concept did provide additional support during the siege of Khe Sanh, the most important factor for keeping the ground commanders satisfied was the large amount of aircraft and sorties available to handle their requests. Sorties were so plentiful that ground commanders requested air support "even if they had a two-round sniper contact."[24] Thus, Vietnam left ground commanders with the belief that good air support meant dedicated sorties overhead, ready to attack targets immediately upon request.

Just as in Korea, the key issues in Vietnam concerning air targeting remained unresolved. In the next major conflict, the appointment of a Joint Force Air Component Commander and the centralized control of airpower during Desert Storm changed the nature of the problems and new conflicts emerged over the air targeting process.

Desert Storm

Desert Storm was unique in U. S. military history because, for the first time a single manager for air or a Joint Force Air Component Commander (JFACC) controlled all of the theater aircraft--including naval air. General Schwarzkopf designated Air Force General Charles Horner as the JFACC, responsible for all air operations in support of Operation Desert Storm. Schwarzkopf was emphatic about who was in charge of the air campaign saying, "There's only going to be one guy in charge of the air: Horner. If you want to fight your interservice battles do it after the war."[25] The designation of a JFACC and the support of the CINC solved most of the traditional AF versus Navy command and control problems, but there was still some differences over the lack of naval input into the air targeting process.

During Desert Storm, Naval planners had two major disagreements with the targeting process. First, they believed that the JFACC had erected a command and control system that was too rigid to take advantage of the flexibility of naval aviation. Carrier planners had become accustomed to independent,

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[23]Quoted in Benjamin Franklin Cooling, *Close Air Support* (Washington D. C.: Office of Air Force History, 1990), 462.

[24]Ibid. 470.

[25]Rick Atkinson, *Crusade* (Boston: Houghton Mifflin Company, 1993), 217.

autonomous operations and chafed under the restrictions of General Horner's control and his taskings designed to separate missions and prevent fratricide.[26] The Navy resisted the concept of centralized control because it had not "adequately developed or trained for the coordination and control of theater air operations at the operational level"[27]

These deficiencies led to the decision by the Navy to limit representation in the planning and targeting process. Although all of the theater planning occurred in Riyadh, the Commander, U. S. Navy Central Command (COMUSNAVCENT), Vice Admiral H. Mauz remained at sea and did not sufficiently augment the JFACC staff.[28] Instead, the Navy wanted direct approval authority for all targets selected for naval air strikes. The proposed process took too long, so eventually the small NAVCENT staff at Riyadh took over the targeting responsibility and coordination for Navy air. Unfortunately, the disagreements over the targeting process "created friction and distrust between the COMUSNAVCENT main staff and the JFACC throughout the campaign."[29]

Despite the differences during the air-only portion of the campaign, the Air Force and the Navy eventually overcame most major targeting disagreements. However, as the opening of the ground war neared, the Army and Marine Ground Commanders, especially Army General Fred Franks, VII Corps Commander and the Marine Commander, General Walter Boomer, protested what they perceived as a very low level of support by the Air Force for preparation and shaping of the battlefield. The ground force

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[26]Naval complaints centered on the Air Tasking Order (ATO) used by the JFACC staff. The ATO provides specific tasking to each air unit and includes individual mission details, route information, air refueling requirements as well as tactical information (such as communication frequencies, search and rescue details) all the way down to naming the unit's individual aircraft call signs. To understand how the process worked in Desert Storm, see: Colonel Samuel J. Baptiste, "Reflections on Combat Planning and the Air Tasking Order Process" (Air War College Research Paper, Maxwell AFB, Ala, May 1993).

[27]Commander John D. Lobdell, "Is the Navy Ready to Conduct an Air/Land Campaign Through the JFACC Concept?" (Naval War College Research Paper, 19 June 1992), 23.

[28]In August of 1990, the Naval staff in Riyadh numbered ten people. Rear Admiral Wright headed the group, and although it eventually grew to include over 80 personnel, he remained the only Naval flag officer in Riyadh for the entire war. In comparison, there were 20 Air Force flag officers in January 1991 and a staff that numbered around 800 Air Force officers in Riyadh when the air campaign began.

[29]Lobdell, 14.

commanders felt the Air Force was spending the majority of it efforts concentrating attacks on strategic targets and not allocating enough air support to assure successful ground operations.

Initially, the ground support targeting process was relatively simple and straightforward. The lower echelon ground commanders submitted their proposed target list to the Army Forces, Central Command (ARCENT) staff or to the Marine Corps Forces, Central Command (MARCENT) staff, who built separate target lists and then nominated targets to General Horner. However, the corps commanders did not like the process because of the perceived lack of air support from the JFACC. In mid-January, the Corps Commanders' protests reached a fevered pitch when they found that the JFACC had placed less than half their requested targets on the Air Tasking Order. Now, "The number of corps-nominated targets actually flown became the litmus test for air support."[30]

There were three reasons why the JFACC targeted only approximately one third of the ground nominated targets. *First, many of the targets nominated had either already been attacked or did not exist.* Intelligence support at the corps level lagged the actual Iraqi order of battle and this time-lag forced the corps targeteers to use outdated and inaccurate reports for target nominations. For example, "out of 42 targets submitted by one corps, 14 were old targets awaiting Bomb Damage Assessment (BDA), 13 were outdated Surface to Air Missile (SAM)/Anti-Aircraft Artillery (AAA) sites, and 9 were infantry. Six targets remained and were attacked."[31]

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[30]Brigadier General Robert H. Scales, *Certain Victory,* United States Army in the Gulf War (Washington D. C.: Office of the Chief of Staff, U. S. Army, 1993), 180. The disagreement goes to the heart of the problem of how air should be used and who should control it. The JFACC had theater responsibilities and JFC taskings while the corps commanders focused on their individual areas of responsibility. The study notes that, "Having lost their ability to designate battlefield air interdiction (BAI) targets, the corps commanders still expected to influence the general interdiction effort to conform with corps plans to shape the battlefield." The Air Force's Gulf War Air Power Study (GWAPS) agrees with the assessment over differing perspectives. GWAPS (page 128) adds, "Schwarzkopf's priorities, adhered to by Horner, were not always shared by the corps commanders, who were more concerned about the forces immediately to their front. Not realizing it was Schwarzkopf's apportionment, some ground commander's blamed Horner instead."

[31]Lieutenant Colonel Richard B. Lewis, "Desert Storm--JFACC Problems Associated With Battlefield Preparation" (Research Paper for U. S. Army War College, Carlisle Barracks, PA, 15 April 1993), 31. During Desert Storm Lt. Colonel Lewis worked as Special Assistant to the CENTAF Director of Campaign Plans and had a unique opportunity to see the differences in service perspectives over the application of airpower.

Second, unknown to the corps commanders, General Schwarzkopf's primary concern lay with decreasing Republican Guard strength. Therefore, he prohibited the JFACC from attacking other enemy units determined to be below 50% of their combat strength. Since many of the Iraqi units directly in front of the ground forces were already at less than 50% strength, if the corps nominated them as targets, they were not attacked by air. Instead the JFACC directed air strikes against the operational reserves of the Republican Guard. The corps commanders did not know that General Horner was only following the CINC's orders and they blamed him for being unresponsive to their requests. The result was "tension between the ground commanders who felt their need were not being met and the JFACC and his staff who were responding to the CINC's direction."[32]

Finally, because General Schwarzkopf acted as the Land Component Commander (LCC) as well as the CINC, he interacted directly with General Horner. The lack of a separate LCC meant the corps commanders did not have a component commander equivalent to General Horner, whom they could go to with their target requests. Instead, last minute orders to strike higher priority targets by Schwarzkopf redirected aircraft away from the corps nominated targets. These last-minute decisions "resulted at ARCENT and below in frustration, particularly among targeteers forced to come up with new targets based on old data that often proved wrong."[33]

Eventually, the CINC stepped in and made a decision that would "end" the targeting controversy. On 9 February, Schwarzkopf named the Deputy CINC, Army Lieutenant General Calvin Waller, as the head of the Joint Targeting Coordination Board (JTCB). To direct animosity away from General Horner, Schwarzkopf set up the JTCB so "Waller would adjudicate target nominations from the ground commanders so they can't blame you [JFACC staff] for it."[34] Waller was responsible for reviewing the targets nominated by the ground commanders and apportioning aircraft in support of the battlefield

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[32]United States Air Force, "Gulf War Air Power Survey (GWAPS) Summary," 29 March 1993, 128.

[33]*Certain Victory,* 181.

[34]Atkinson, 220.

preparation plan. JTCB decisions kept the ground commanders happy because it "allocated sorties equally between them so that each felt they got their fair share."[35]

Unfortunately, equal allocation caused problems because the Iraqi units were not spread equitably in terms of combat power in front of each ground commander's area of responsibility (AOR). Thus, in late February, General Boomer's forces found that the stronger Iraqi units in their AOR remained almost at full strength while the enemy units facing directly in front of the U. S. Army forces were below the required 50% of combat effectiveness. The unequal distribution of enemy combat strength forced the JFACC to reallocate sorties to reduce the Iraqi units in the Marine's AOR to less than 50% by D-day.

At the successful conclusion of Operation Desert Storm, each of the services began to build on the lessons learned during combat operations. However, the targeting process and the utility of the Joint Targeting Coordination Board remained an unresolved issue. From World War II through Desert Storm, the old problems of command and control remained a source of contention between the Navy and the Air Force. Also, the correct targeting and the level of emphasis for airpower missions that support ground forces had not yet been totally solved despite the success of the campaign against Iraq.

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[35]Lewis, 11.

CHAPTER 3

THE JTCB TODAY

After Desert Storm, each component evaluated its individual performance and developed "lessons learned" from the conflict. Each service also emphasized improved capabilities to increase future joint warfighting effectiveness. However, because of the unresolved disagreements over airpower mission and target priorities, the targeting process remained a contentious issue. Independent assessments also stressed the disagreements over the joint targeting process. They questioned whether a formal targeting board in the future could effectively, "serve as a lightning rod to defuse service concerns and targeting disagreements."[1]

All of the services, except the Air Force, supported the formalization of the Joint Targeting Coordination Board (JTCB) as a tool for future Joint Commanders. Most recommendations focused on how the JTCB, rather than any single component, needed to assume greater control over the planning, apportionment, and allocation process for airpower employment. The Army, Navy and Marine Corps argued that because airpower is a shared resource, they should equally share the responsibility for target selection as well. Thus, the JTCB focused on the JFACC and air targeting since a targeting board assured shared responsibility. To provide a joint forum for the air targeting process, the services attempted to institutionalize the JTCB concept. They worked to update joint publications and developed a targeting board framework for each of the warfighting CINC's staffs.

CURRENT DEFINITION

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[1]James A. Winnefeld and Dana J. Johnson, *Joint Air Operations* (Annapolis MD: Naval Institute Press, 1993), 164. Although the authors support a JFC-level Targeting Board, they do not discuss how to separate responsibility between the JTCB and the JFACC during planning and execution nor do they offer any evaluation on how to hold a "board" accountable for command actions.

To preserve the JFC's ability to adapt the planning process to a specific theater, joint doctrine only provides recommendations for the campaign planning and execution process. Joint publications are deliberately vague about the responsibilities and makeup of the JTCB and they leave it up to the individual JFC to define the specific role of the Joint Targeting Coordination Board. To maintain the JFC's flexibility during the campaign planning process, the JTCB's objective and duties can be different for every warfighting CINC. Yet one warfighting concept remains consistent in every theater: *The designation of a JTCB is not mandatory. It is always up to the individual JFC to decide whether to convene a JTCB or to delegate targeting oversight responsibility to a subordinate commander.*

However, should the JFC decide to use a JTCB, Joint Publication 3-0 provides broad guidance about the makeup, role, and potential responsibilities of the JTCB. The board can:

> Be an integrating center or a JFC review mechanism that; reviews target information, develops targeting guidance and priorities, and may prepare and refine joint target lists. The JTCB should also maintain a complete list of restricted targets and areas where SOF are operating to avoid endangering current or future operations.[2]

Thus, Joint Pub 3-0 defines only the scope of potential responsibilities for the JTCB. It does not prescribe what specific duties may be most appropriate because the JFC determines the actual role and responsibilities for the JTCB. Also, joint publications do not provide any caveats to the JFC about the advantages and disadvantages of using a targeting board. Again, they leave it up to the JFC to decide whether a JTCB can be an effective tool for campaign planning and execution.

WHERE THE JTCB FITS INTO THE PLANNING PROCESS

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[2]Joint Pub 3-0, *Doctrine for Joint Operations,* 9 September 1993, III-36.

Just as the joint publications remain deliberately vague on the exact duties and functions of the JTCB, they also do not offer any guidance on where the JTCB best fits into the organization or into the planning process. Joint doctrine is non-directive and only offers a broad overview of where a JTCB could fit into an organization. Joint Pub 3-0 recommends that "targeting mechanisms should exist at multiple levels. JFCs may establish and task an organization within their staffs or may delegate the responsibility to a subordinate commander."[3]

Currently, there are two schools of thought about the extent of the JTCB's role and where it best fits organizationally to assist the JFC. One group believes that the JTCB should be subordinate to the JFACC and integrated into the air component planning process. The second school believes the JTCB can be most effective as an "honest broker" for all the services by operating at the JFC level, separated from the individual component commanders. In this model, the Director of the JTCB, who is not required to be an airman, works directly for the JFC and has the authority to align requirements and resources.

The different Theater CINCs have developed concepts of operations that reflect these two models. For example, European Command (EUCOM) and Combined Forces Command, Korea (CFC) placed the responsibility for developing air mission priorities and target selection within the specific component staffs. Both EUCOM and CFC established a joint targeting forum within the JFACC staff. This organization ensures that there is a formal mechanism for incorporating every component's air targeting concerns into the JFACC's portion of the JFC's campaign plan. In contrast, the U.S. Pacific Command (PACOM) and U.S. Atlantic Command (LANTCOM) concept of operations places the JTCB at the JFC level and makes the component commanders subordinate to the decisions of the JTCB.

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[3]Ibid. III-36

The placement of the JTCB in the organization also affects how it interacts in the planning process. There are key differences between the two ideas, depending on whether the JFC decides to integrate targeting responsibility into component planning or tasks a JTCB directly. The EUCOM/CFC and the PACOM/LANTCOM models show how a JTCB affects the process differently depending on where it interacts in the planning cycle.

MODEL A: THE EUCOM/CFC MODEL

In the EUCOM/CFC model, determining airpower priorities and targets is an integral part of each component's internal planning cycle and the component commanders themselves or the JFC resolves any final differences. Figure 1 illustrates where the JTCB fits into the JFC organization.

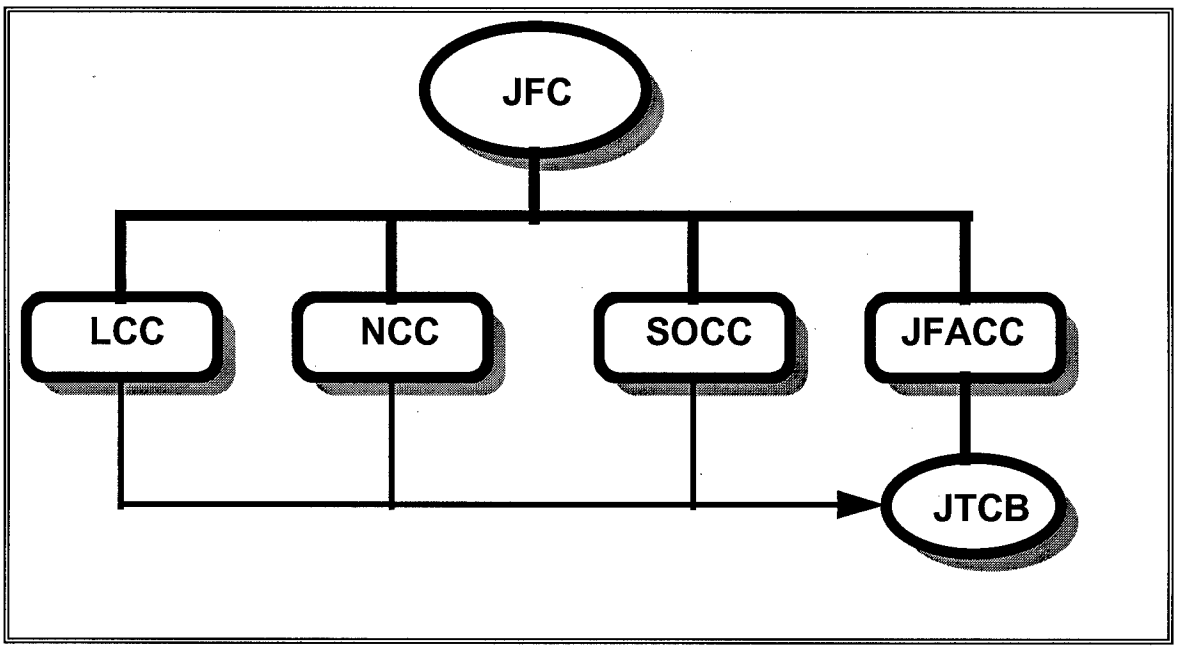

FIGURE 1
EUCOM/CFC MODEL

This organizational placement ensures JTCB integration into the JFACC planning process. The process starts when the JFC provides the CINC guidance, objectives, and

priorities. The JFC constantly updates his guidance and provides it directly to the component commanders in a responsive manner. To promulgate the JFC guidance, "The best mechanism to accomplish this is a regular, if not nightly, JFC/component commanders' coordination."[4]

Next, based on the JFC guidance, the individual component commanders list targets in priority order based on how they support the campaign. The components provide their lists of recommended targets to the JTCB. The JTCB, made up of members of the air component staff and responsible to the JFACC, accomplishes the targeting function. A General Officer chairs the board that includes senior representatives from each component assigned permanently to the JFACC staff as well as representatives from supporting commands.

The board "evaluates, modifies, and approves the list. It then provides the JFACC with a recommended list of prioritized targets."[5] The JFACC is ultimately responsible, so he also ensures the target list is consistent with the JFC's guidance. After final approval, the JFACC gives it to the other components as part of the feedback cycle. If the component commanders cannot resolve the remaining conflicts, the JFC makes the final decision. Figure 2 shows the targeting process for this model.

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[4]Headquarters United States European Command, *Joint Force Air Component Commander Concept of Operations,* 21 October 1993, 7.

[5]ROK/US Combined Forces Command, *Deep Battle Synchronization Doctrine -- Korea,* 1 April 1991, 6-7.

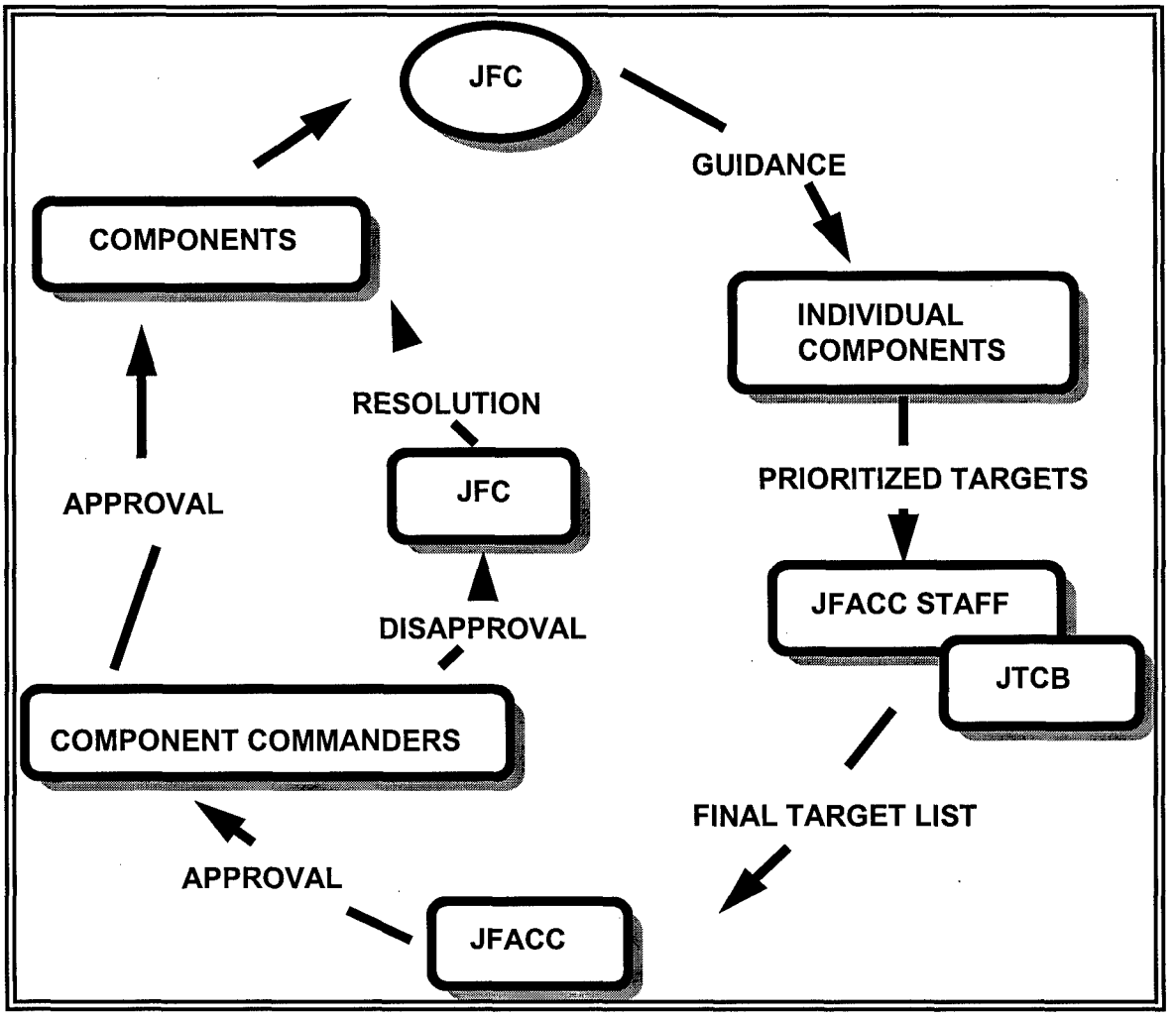

FIGURE 2
EUCOM/CFC TARGETING PROCESS

MODEL B: THE PACOM/LANTCOM MODEL

The PACOM/LANTCOM model places the JTCB outside the component planning process. In this model, the JTCB interacts between the JFC and the component commanders and ensures joint targeting responsibility is external from any individual component. Removing the JTCB from the components theoretically allows it to be unbiased and assures it addresses all of the component concerns on an equal basis. The Deputy JFC chairs the JTCB, while key JFC staff members and a senior member from

each warfighting component comprise the rest of the board.[6] The JTCB also requires a dedicated staff, located at the JFC level and separated from the components, that "maintains a macro-level view of the battlefield and balances conflicting component priorities with the JFC's guidance and intent."[7] Figure 3 illustrates the PACOM/LANTCOM model's organization.

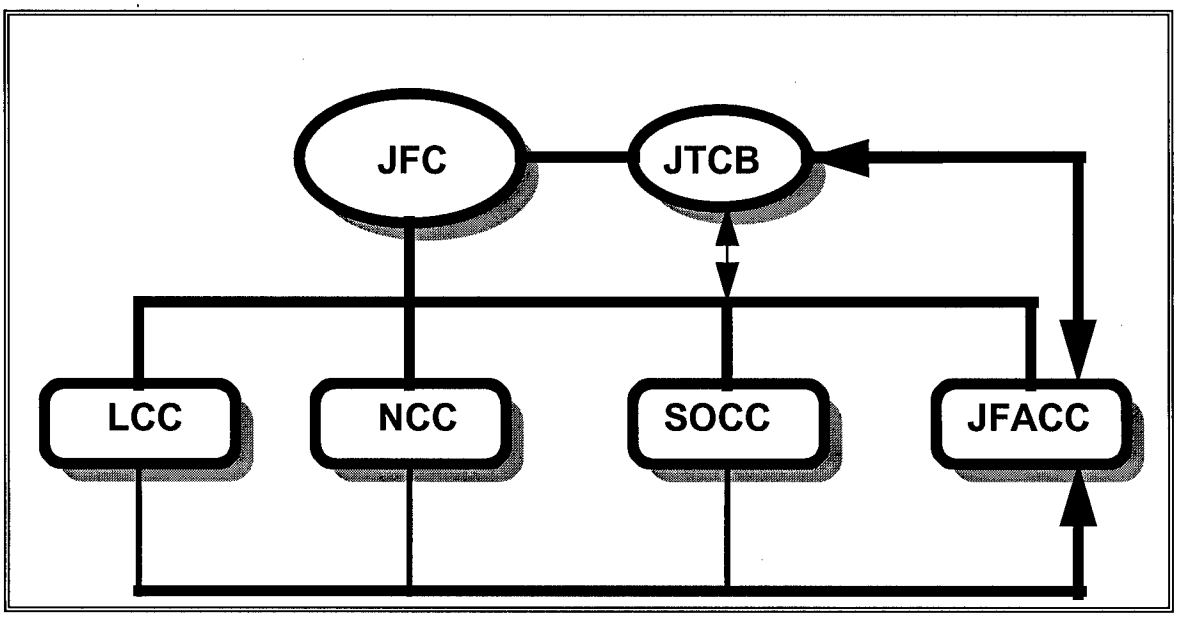

FIGURE 3
PACOM/LANTCOM MODEL

In the EUCOM/CFC model, the final approval authority for the target list is the JFACC. However, in the PACOM/LANTCOM model, no single commander is responsible for the target list. Instead, the JTCB assumes the JFACC role and the board

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[6]In addition to the U.S. Atlantic Command, U.S. Pacific Command, *Joint Force Air Component Commander Concept of Operations*, see: "JFACC Training," Briefing slides, Headquarters, Pacific Command, Camp Smith, Hi, December 1993, 22-27.

[7]U.S. Atlantic Command, U.S. Pacific Command, *Joint Force Air Component Commander Concept of Operations,* 7 January 1993, 4.

has final approval authority. Thus, the planning process is also different from the EUCOM/CFC model.

Although the PACOM Concept of Operations uses the term "Joint Targeting Coordination Board," the JTCB's responsibilities extend far beyond the targeting process. The JTCB also provides a recommendation on the amount of airpower effort the JFACC should devote to various air operations for a given amount of time (apportionment). The JTCB also offers guidance to the JFACC about rules of engagement and campaign phasing.

At the beginning of the campaign planning process, the components nominate broad target categories directly to the JTCB. Next, the board reviews and rank orders all target nominations external from the component planning process. The JTCB then provides the Joint Integrated Prioritized Target List (JIPTL), which covers only broad target categories, to the JFACC to develop the joint air effort. Once the component commanders receive the categories arranged in priority order "components will coordinate specific target requirements directly with the JFACC."[8]

In the PACOM/LANTCOM model, the JFACC recommends apportionment and allocation, but the JTCB makes the final decision. Any component having concerns with JFACC apportionment or responsiveness can raise disagreements three ways: "Directly between the component and the JFC, between the component commander and the JFACC, or *by the component's representative on the JTCB."*[9]

However, JTCB oversight does not end with the apportionment decision. Once the JFACC prepares to begin actual planning, the JTCB provides "courses of action in the

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[8]Ibid. 7.

[9]Ibid. 2. The concept of operations does not explain how the feedback mechanism works if the a service chooses an option that does not include the JFACC. In any case, the JFACC receives the apportionment decision from the JFC.

form of broad targeting guidance to the JFACC."[10] The JFACC then develops the air plan to support the JFC's guidance and priorities. Once the components execute the plan, the process begins again and the JTCB provides updates as the situation requires during the campaign. Thus, the JTCB, acting at a level above the separate components, offers guidance to the JFACC in each of the planning, apportionment, and execution stages. Figure 4 shows the Organizational Model B process.

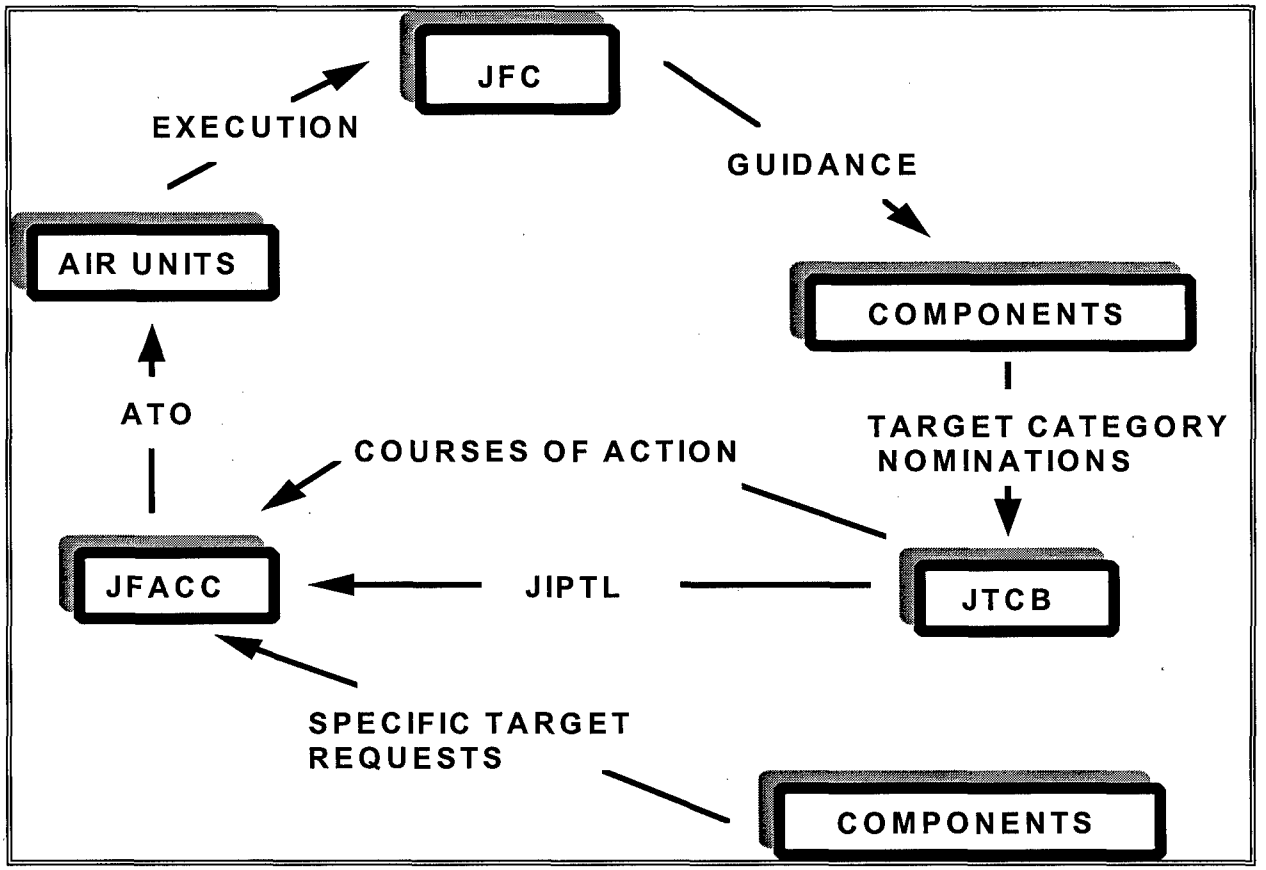

FIGURE 4
PACOM/LANTCOM TARGETING PROCESS

SUMMARY

The application of joint airpower may be the key to campaign success and the target process is fundamental to combat air operations. However, air targeting remains a

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[10]Ibid. 13.

contentious issue between the services. Current joint doctrine offers broad guidance but because each theater is unique, it does not offer solutions or recommendations to the JFC. Joint publications do discuss the potential roles and functions of the JTCB, but the JFC can adapt the organization or the doctrine to the situation.

In the event a JFC elects to use a JTCB, each theater has developed a specific concept of operations that includes broad functions and responsibilities assigned to the targeting board. Despite slight differences in each theater, the JTCB's duties remain closely tied to the broad definition provided by Joint Pub 3-0. JTCB functions range from one to all of the following: reviewing target information, developing targeting guidance and priorities, preparing joint target lists, and maintaining the restricted target list.[11]

In addition to the different functions of the JTCB, the theater concepts of operations also offer two contrasting models on the JTCB organizational placement. One model incorporates the JTCB into the JFACC staff, while the second model places it at the JFC level, above the component commanders. In both models, the JFC can task the JTCB to act merely as a review authority or as a full-fledged integration center for campaign target planning. Unfortunately, the relatively large scope of responsibilities keeps the door open for the JTCB to disrupt the joint campaign planning process. The potential for disruption increases when the JFC does not specify the JTCB's level of authority and responsibility to the JFACC. Also, there is no current method for the JFC to evaluate the effectiveness of the JTCB or to hold it accountable for its responsibilities. The next chapter offers a framework for analysis and measures the two models against the framework to determine the value of the JTCB to the joint commander.

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[11]The Restricted Target List is a combined list of specific targets that are "off limits" and cannot be attacked at any time. There are numerous reasons why a target may be restricted, some of the most common include: Prisoners are being held there, political or cultural sensitivity, special forces are operating nearby, or for humanitarian reasons.

CHAPTER 4

THE JTCB'S FUTURE EFFECTIVENESS

To plan effectively for the next conflict, historical examples or joint doctrine may not offer the Joint Force Commander the best answer about the Joint Targeting Coordination Board's utility to theater campaigns. To discuss the usefulness of the JTCB in future conflicts, the currently recognized joint principles of war may be a more valuable tool for analysis.

Why use the principles of war as a framework for analysis? There are two advantages for using them as the mechanism for evaluating the two JTCB models. *First, the Army, Navy and Marine Corps have traditionally used the principles of war to evaluate the effectiveness of organizational and doctrinal changes or improvements.* Thus, an analysis based on the principles of war remains consistent with the methodology established by the services for evaluating new concepts. In the past, the Army and the Navy have used the principles of war to evaluate the primacy of the infantry and the importance of unity of command for retaining the strategic value of the fleet.[1]

Even today, the senior services continue to use the principles of war as a benchmark for measuring new ideas or doctrine. For example, the Army and Navy evaluated the pros and cons of the JFACC concept based on how it impacted the principles of war.[2] The U.S. Army's keystone doctrinal

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[1]For example, to understand the importance of retaining the principle of *unity of command* for achieving naval superiority see, Captain William F. Halsey, "The Relationship in War of Naval Strategy, Tactics, and Command" (Thesis, Naval War College, 16 May 1933). Also, the title of a 1934 *Command and General Staff Quarterly* article defines the importance the principles have had on Army doctrinal development. The article was reprinted in June of 1983 in response to a renewed emphasis on the principles of war by the Army leadership. The reprint includes an introduction that discusses why today's Army relies on the principles of war to govern operations in peace and war. The article also covers the history of the principles and offers insights into naval beliefs as well. See "Principles of War: The American Genesis" (Army War College Art of War Colloquium, June 1983).

[2]Both the Army and the Navy recently evaluated the JFACC concept based on the principles of war. See Army Fact Sheet, "Joint Airpower Application," ATDO-J, 19 November 1993 and Captain Lawrence E. Osborn "Joint Air Employment Doctrine and the Operational Art" (Research Paper, Naval War College, 20 May 1991) 9-15. As recently as 1992, writers still argue over the best way to apply airpower to assure it adheres to the principles of war. See Commander David Nichols, "Airpower: Do the Principles Apply?" (Research Paper, Naval War College, 19 June 1992).

manual, FM 100-5, *Operations,* describes the relationship between the principles of war and how the Army organizes and prepares for combat: "U.S. Army doctrine applies the principles of war and combat power dynamics to contemporary and anticipated battlefields."[3] Currently, there is some debate within the Marine Corps over how much their foundation doctrinal document, FMFM 1, *Warfighting,* should emphasize the principles of war for future employment planning.[4] Thus, using the principles of war as a framework for analysis is beneficial because it is consistent with the criteria the Army, Navy, and Marine Corps use to evaluate new organizational concepts or doctrinal changes.

The second advantage to using the principles of war is that they are mutually agreed upon and consistent among all the services and within joint doctrine. Theoretically, they form the cornerstone for current operational level military planning. Although not immutable, Joint Pub 3-0 calls them, "The enduring bedrock of U.S. military doctrine."[5] Also, the principles of war are the only doctrinal beliefs that appear in all of the services and joint warfighting doctrine manuals.[6] Thus, a JFC from any service should be familiar with the principles of war because most of the current joint warfighting publications discuss how theater commanders can use them for broad guidance in the application of military force.

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[3]FM 100-5, *Operations,* June 1993, 2-0.

[4]FMFM 1, *Warfighting,* published in 1989 as the "foundation document that would set a new direction for Marine Corps doctrine." Well received, but with some potential shortcomings, the manual deliberately moved away from the historical Marine Corps emphasis on the principles of war. The debate continues and arguments appear periodically in the Marine Corps Gazette. See, Major Phillip Knobel, "Revise FMFM 1, Warfighting," Major Robert Trout, "Dysfunctional Doctrine: The Marine Corps and FMFM 1, Warfighting" *Marine Corps Gazette,* October 1993, 31-35, and Colonel Michael Wyly, "At the Forefront of Tactical Thought" *Marine Corps Gazette,* January 1994, 45-46. In any case, the principles of war remain a seminal factor for evaluating organizational health for both the Army and Marine Corps.

[5]Joint Pub 3-0, *Doctrine For Joint Operations,* 9 September 1993, A-1. Joint Pub 3-0 discusses how the Principles of War "fit into" joint doctrine. Joint doctrine is built on a "strong base of warfighting theory and practical experience. It applies the principles of war and the fundamentals of joint warfare and other concepts consistent with the policies of our government." General Colin Powell's message at the beginning of 3-0 states, "To better achieve maximum combat potential, military commanders must integrate the concepts in this document and the *principles of war* into their operations." When applying joint doctrine, a JFC uses the principles of war as one tool in his campaign planning tool kit.

[6]See Army FM 100-5, *Operations,* AFM 1-1, *Basic Aerospace Doctrine of the United States Air Force,* Marine Corps FMFM 1, *Warfighting,* Marine Corps FMFM 1-1, *Campaigning,* Joint Pub 1, *Joint Warfare of the US Armed Forces,* and Joint Pub 3-0, *Joint Doctrine.*

Although demonstrating how each JTCB model affects the principles of war does not provide the JFC with any measurement of the potential for campaign success, it does provide a comparative analysis of each model's organizational merit based on a traditional method of evaluation. It is ultimately up to the JFC to decide which model provides him with the most effective airpower planning and targeting process.

ASSUMPTIONS

Across the spectrum of conflict, the JTCB's future applicability to the JFC and the JTCB's effect on the planning process will be situational. The flexibility of joint doctrine provides one reason for this range of effect. As discussed earlier, to retain the JFC's options to react to the situation, joint doctrine allows for the JFC to task the JTCB with a wide range of roles and functions. The size of the required commitment is the second reason for the situational applicability of the JTCB. Some conflicts will be small enough that the JFC may have enough aircraft to "do everything" required to accomplish his objectives. In these cases, it will not matter whether the JFC uses a JTCB or where it interacts in the process because sheer numbers can overcome problems of poor airpower mission priorities or target selection.

Historically, the JFC has had sufficient airpower available to attack almost every potential target category simultaneously.[7] A large number of aircraft allowed the JFC to overcome service differences over air target priorities by attacking all of the requested targets at once. During Desert Storm, General Schwarzkopf had enough airpower to attack strategic targets and at the same time prepare the battlefield for the land forces. In contrast, a smaller force structure may cause a future JFC to choose between critical target sets and objectives.

During World War II, General Eisenhower faced the problem of limited resources and numerous targets in North Africa. His solution imposed a command structure that allowed his air commander General Spaatz, instead of the corps commanders, to set priorities and allocate resources. Yet, "later in the

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[7]In the past, JFC's have usually had the luxury of overwhelming numbers of aircraft in most conflicts--with some notable exceptions. Aircraft shortages have usually occurred early in a campaign. In 1942-early 1943, there were critical shortages of B-17s in Europe and immediately after the North Korean invasion, there was a shortage of aircraft in-theater. Later in World War II and the North Korean conflict as well as throughout the Vietnam war and Desert Storm, the JFC had enough available aircraft to allow for the relative freedom to attack a broad range of targets.

war such a question would not have arisen because the overwhelming number of aircraft made it possible to supply simultaneously the needs of ground commanders for battle-line support and the need of air commanders for counterair and interdiction strikes."[8]

A smaller force means the U.S. must fight more effectively and future JFCs could face tough choices for determining airpower priorities and target selection. In the next theater conflict, operational success may directly depend on an effective targeting process. If campaign success rests on how well the JFC uses his airpower, he must decide whether a JTCB can make the crucial decisions about targeting that optimizes the capability of the available aircraft. In the future, the JTCB should have the greatest impact on the planning and execution process when a limited number of aircraft requires precise target selection and apportionment to accomplish the theater objectives.

The analysis used in this chapter makes four assumptions:

1. U.S. forces will shrink below current levels, and aircraft totals will also decrease commensurably.[9]

2. Due to limited theater airpower, the JFC will require correct air mission priorities and targeting decisions to accomplish the theater objectives.

3. In Model A, *the JFACC* takes the JFC's objectives and weight of effort guidance and translates them into targeting and apportionment guidance. To support the JFACC and component commanders, the JTCB provides a forum for component targeting inputs. It also determines targeting and mission priorities as well as develops the target list that supports the JFC's objectives.

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[8]Richard G. Davis, *Spaatz and the Air War in Europe* (Washington DC: Center for Air Force History, 1993), 183. The Casablanca Conference formally provided an air structure that separated command of air units from the ground commanders. However, it did not give the air commanders the responsibility for setting priorities. Davis adds, "This formal structure would have meant little if Eisenhower had continued to allow his ground commanders to set priorities. *He who sets priorities controls the allocation of resources."*(emphasis mine).

[9]Current RAND studies assume U. S. force levels will decrease, although modernization will continue. Rand's current airpower projections include an Air Force force made up of roughly 20 fighter wings (4 wings of air superiority fighters, 11 multirole wings, and 5 wings of other (SEAD, recce) and 10-12 carriers with an equal number of carrier wings. See RAND Issue Paper, Russell Shaver, Edward Harshberger, and Natalie Crawford, *Modernizing Airpower Projection Capabilities,* September 1993, 2.

4. In Model B, *the JTCB* translates the JFC's objectives into targeting and apportionment guidance and then provides a rank ordered target list to the JFACC for implementation.

METHODOLOGY

The methodology uses the nine principles of war, as described in Joint Publication O-1, *Basic National Defense Doctrine.* The analysis evaluates the models against the principles of war to provide the JFC with a comparison of the advantages and disadvantages of the two models. The principles of war currently used by the U.S. Armed Forces are **objective, offensive, mass, economy of force, maneuver, unity of command, security, surprise, and simplicity.**[10]

To provide the JFC with an evaluation of the two models, the comparison process involves four steps. First, the paper defines and describes the specific principle. Next, it determines how attempting to achieve this principle affects campaign planning and air targeting. Finally, it compares the advantages and disadvantages of using each model based on the proposed functions, responsibilities, and organizational placement of the JTCB. When possible, the final step provides a historical or hypothetical example to demonstrate the JTCB's compatibility with the description of the principle of war.

To do his job effectively, the JFC focuses on the best way to exercise the operational art at the theater level. Although not prescriptive, the principles of war serve as the current foundation for strategy development at the operational level. Thus, each of the two targeting process models must answer the question: How well does the JTCB in each model adhere to the principles of war?

ANALYSIS

Objective

The objective directs every military operation toward a clearly defined, decisive, and attainable objective

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[10]The principles are discussed in Joint Pub 0-1, *Basic National Defense Doctrine,* and are reprinted in Joint Pub 3-0, Appendix A. Unless specifically noted, the paper uses the definition for each principle of war from pages A-1 through A-4 in Joint Pub 3-0.

The renowned nineteenth century strategist Baron Henri De Jomini believed, "The choice of an objective is by far the most important thing in a plan of operations."[11] At the theater or operational level, the JFC defines his objectives to accomplish the strategic aim and political objectives. The JFC bases the theater objectives on the "overall mission of the command, the commander's assigned mission, the means available, characteristics of the enemy, and the military characteristics of the operational area."[12]

Once the JFC determines the theater objectives, he must clearly articulate his intent and the objectives for the operation to his subordinate commanders. This communication is critical because, "Every *commander* in the chain must understand the overall mission of the higher command, his own mission, and the tasks he must perform. He must communicate the intent of the operation to his subordinate commanders."[13] Thus, an effective organizational structure must assure ease of communication between the JFC and his component commanders. The JFC requires a clear line of communication to focus the entire organization towards accomplishing the theater objective.

Model A

Model A retains the traditional method for translating the JFC's objectives to his subordinate commanders. The JFC communicates his intent to the component commanders and they plan and execute their assigned missions to achieve the required objectives. In this model, there are no filters between the commander and his subordinates. The JFC and individual component commanders work directly with each other to eliminate any ambiguity or misunderstanding concerning the relative priority of theater objectives.

Because the model integrates the JTCB into the JFACC's staff, there is the potential for subordinating the JFC's objectives to accomplish a specific component's needs. During Desert Storm, land force commanders believed the JFACC had a parochial Air Force viewpoint, rather than focusing on the JFC's objectives. The Corps Commanders felt the JFACC's first priority of strategic attack precluded him

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[11]Baron Henri De Jomini, *The Art of War,* trans. Captain G. H. Mendell and Lieutenant W. P. Craighill (Westport: Greenwood Press, 1971), 330.

[12]AFM 1-1, *Basic Aerospace Doctrine of the United States Air Force Volume II,* March 1992, 10.

[13]FM 100-5, *Operations,* June 1993, 173.

from "devoting enough effort to targets that shape the battlefield."[14] This perception was not true, because the JFC had directed the JFACC to attack higher priority targets. However, without a dedicated Land Component Commander, the Corps Commanders did not receive feedback about priorities from the JFC or the JFACC. In Desert Storm, the individual components did not have a designated forum for discussion and a formal feedback mechanism that answered *why* some nominated targets did not make the final target list.

In contrast to Desert Storm, the JTCB in Model A provides a formal process that protects against subordinating the JFC's objectives to accomplish a specific component's mission. Model A provides a forum beginning at the lowest echelon of the organization to ensure all components can influence the target selection process. This model provides three opportunities to address concerns about air target priorities and offers feedback during the targeting process. First, at the staff planning level, the JTCB provides a designated point of contact and a formal process for target nomination. Next, components can redress disagreements over the JTCB target priorities at the component commander level. Finally, the JFC can arbitrate any unresolved issues between the components. In every case, the JTCB provides feedback to the components explaining why nominated targets either did or did not make the final target list.

Throughout the process, the Joint Force Air Component Commander retains responsibility for assuring mission priorities and target selection remains consistent with the CINC's objectives. Simultaneously, the JFACC is also the point-man for addressing Army, Navy, Marine Corps and special forces concerns about airpower priorities.

Model B

In Model B, the JTCB is a decision making body that acts with the authority of the JFC for all targeting matters. Organizationally, it stands between the JFACC and the JFC and "provides a daily forum

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[14]Rick Atkinson, *Crusade* (Boston: Houghton Mifflin Company, 1993), 221. In response to the corps commanders requests, General Schwarzkopf authorized the DCINC, General Waller, to arbitrate Army nominations to ensure the corps commanders received the required level of support. Air leaders during Desert Storm mark this decision by General Schwarzkopf as a premature shift (because the phase air objectives had not been met) from the strategic attack phase to the ground support phase.

for review of the overall progress in meeting the JFC's campaign objectives."[15] In this model, the JTCB is responsible for ensuring targeting selection focuses on accomplishing the JFC's objectives. In contrast to Model A where the JFC provided his objectives directly to his subordinate Air Component Commander, Model B uses the JTCB rather than the JFACC to, "implement JFC guidance and pursue objectives."[16]

Unfortunately, a board structure may not provide a target list structured to accomplish the JFC's objectives. In most cases, a board focuses on compromises that satisfy as many component requests as possible, rather than on how best to meet the JFC's objectives. Normally, organizations use boards or committees to gain consensus for a contentious position or to solve a specific problem. However, committees tend to compromise and often do not make hard choices when faced with limited resources, many tasks, or a need for quick decision. Although boards and committees often compromise in the business world or during military peacetime operations, does this fact imply compromise should also occur in the armed forces during war? In the U.S. military, the Joint Chiefs of Staff (JCS) are a good example of how the board decision making process works.

Historically, the Joint Chiefs, acting as a type of decision making committee, resolved service differences by compromise rather than by choosing in favor of one position.[17] The JCS process for resolving Air Force and Marine Corps disagreements over the procedures for tactical operations resulted in the compromise that became the Omnibus agreement. During World War II, rather than choose between

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[15]US. Atlantic Command, US. Pacific Command, *Joint Force Air Component Commander Concept of Operations,* 7 January 1993, 4.

[16]Naval Doctrine Command, *A Review of JFACC Organization and Processes,* Second Draft, 10 November 1993, III-2. The discussion stresses the importance of the JTCB/JFACC interface link in the JFACC's ability to prosecute joint air operations. However, the link seems one-way, from the JTCB directed at the JFACC. The JTCB, as defined in appendix 2, page A2-1, acts as a JFACC with one exception, it does not build or execute the ATO. As an example of the broad range of JTCB responsibilities, JTCB products include, "targeting guidance, weight of effort to various operations, and prioritized target categories." The target guidance includes "an apportionment statement with prioritization of target category, desired level of target damage, desired probability of achieving the desired damage, and any restrictions on air operations." The JFACC essentially acts as an ATO builder and target servicer. For the Army viewpoint, see: "Joint Airpower Application Briefing ," (Fort Monroe, VA: Army Training and Doctrine Command [TRADOC] Briefing, December 1993).

[17]An excellent overview of how the JCS and the services handle contentious issues, see Thomas A. Cardwell III, "How Interservice Issues Arise," *Air University Review,* May-June 1986, 76-80.

General MacArthur's or Admiral Nimitz's strategy for defeating Japan, the JCS compromised and recommended both strategies to President Roosevelt. In 1967, the JCS avoided the contentious issue of centralized control of airpower and compromised on the single manager for air in Vietnam when they decided, "All air assets *except Army aviation assets and bombers belonging to SAC* are placed under the operational control of the air component commander."[18]

The JFACC concept currently described in joint publications is another example of compromise by committee. Joint doctrine leaves it up to the JFC to determine whether the JFACC acts with command authority or acts only as a focal point for airpower matters.[19] The JCS compromise provides the latitude to include the Navy/Marine Corps position that the JFACC is a coordinator and the Air Force position that the JFACC is a functional component commander. However, the Center for Naval Analysis contends this latitude can cause problems because, "The existing JFACC doctrine is a JCS compromise between the service positions. Existing JFACC doctrine is vague and, therefore, open to interpretation."[20] Yet, if

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[18]Ralph A. Rowley, *Tactics and Techniques of Close Air Support Operations 1961-1973,* 1976, 60-61, USAFHRA #K168.7041.131-144. Although the JCS made the decision to designate a single manager for air, Air Force General William Momyer, 7AF Commander, only acted as the single manager for air during the siege at Khe Sanh. During the Vietnam Conflict, the Marine Corps resisted any type of outside command and control and despite the Omnibus Agreement of 1986 between the Air Force and the Marine Corps, the USMC remains reluctant to give up control of their airpower because it is such a critical resource for accomplishing their assigned mission.

[19]Joint Pub 3-0 describes three types of command relationships: First, *combatant command (COCOM)*--It essentially describes the command authority of a JFC--control over organization, operations, training and logistics. Next *operational control (OPCON)*--directed at the functional component level, a commander with OPCON controls military operations and joint training. The lowest level is *tactical control (TACON)*--A commander with TACON controls only those forces necessary to accomplish an assigned task. Usually, a commander exercises TACON only over another component's forces or portion of forces if they are made available. For example, the Marine Corps argues that the JFACC should exercise TACON and control only those Marine sorties that are "excess sorties:" sorties that are not required to directly support Marine operations.

[20]Maureen A. Wigge, *The Joint Force Air Component Commander: Theory and Practice* (Alexandria VA, Center For Naval Analysis, March 1993), 14. The Navy and Marine Corps view the JFACC as a coordinator of air operations responsible for "coordinating assets to fulfill the needs of the component commanders as they execute their offensive and defensive activities to complete their JFC assigned missions." In this view, the JFACC is not a component commander, only a coordinator for multi-service aircraft that support the component commanders. The Air Force views the JFACC as a functional component commander that should have OPCON over all theater assets. The components request air support and the JFACC responds to their requests within the apportionment guidelines set by the CINC and on the basis of the JFACC's judgment for the most effective use of airpower. The compromise leaves it up

compromise is the standard outcome for a decision made by a board or committee, then the JFC must answer two key questions: First, how will the JTCB handle conflicts among the services? Second, can the JTCB effectively identify and rank order the most appropriate targets that help achieve the JFC's objectives?

The JTCB in Model B provides an "equal forum" for all components' requests. However, most component target requests usually focus on achieving tactical objectives and not the JFC's theater objectives.[21] Corps commanders typically request air strikes to support corps objectives because their concerns focus on targets that directly threaten their operations. During Desert Storm, the Model B JTCB mirrored the idea of conflict resolution by compromise rather than choosing the most effective way to accomplish the JFC's objective. The JTCB compromise of "equal allocation of targets between ground commanders so that each got their fair share" did not meet the CINC's objective of decreasing the Iraqi combat strength to less than fifty percent. Instead, the JTCB equal allocation assured airpower could not meet the JFC's objective in the more heavily defended area in front of the U.S. Marine forces while exceeding the requirement in the less defended area in front of the U.S. Army units.[22]

Thus, in Model B the JTCB presents two potential sources of concern for the JFC. First, there is the potential to dilute the JFC's objectives because of the inherent limitations of a board structure. Also, the board's "drive for consensus" may not offer the most effective targeting solution to meet the JFC's objectives.

Offensive

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to the JFC to determine the actual process for air operations and the extent of the JFACC's authority. Thus, the JTCB concept flows from the vagueness of the JFACC compromise. For the Air Force view of the JFACC, see Headquarters, US Air Force, *JFACC Primer,* Second Edition, February 1994.

[21]Current joint doctrine describes three levels of war: *strategic*-this level of war focuses on achieving the national policy objectives. Actions at this level directly affect the war's outcome. The *tactical* level of war focuses on the application of force to win battles or engagements. The *operational* level of war links the tactical and strategic levels and is concerned with winning campaigns in a theater of operations. In short: the *strategic* level is concerned with fighting the war, the *operational* level with campaigns in a theater and the *tactical* level with battles or engagements.

[22]Lieutenant Colonel Richard B. Lewis, "Desert Storm--JFACC Problems Associated With Battlefield Preparation" (Research Paper for U. S. Army War College, Carlisle Barracks, PA, 15 April 1993), 11.

Offensive action seizes, retains, and exploits the initiative.

This principle suggests that offensive operations are the most effective way to pursue and attain the theater objectives. Although there may be times when the JFC's strategy requires a defensive posture, defensive operations are a temporary condition until he has the necessary means available to pursue offensive action. Offensive action "permits the military commander to capitalize on the initiative, impose his will on the enemy, and react to rapidly changing situations and unexpected developments."[23]

Airpower, because of its ability to concentrate firepower rapidly, over great distances, and with great precision, can force an enemy onto the defensive, thus allowing friendly forces to retain the initiative. The positive military result of the attack at Pearl Harbor is an excellent example of this concept. Airpower also provides protection for ground forces while denying the enemy his objectives, allowing friendly forces to remain on the offensive. One good example of using airpower to ensure security is the Allied air superiority umbrella over northern France during the preparations for and the D-Day amphibious landings at Normandy.

However, the ability to exploit airpower's capabilities fully depends on the effectiveness of the planning and targeting process. To retain the initiative, the process must be responsive enough to take advantage of airpower's capabilities. Joint Pub 1 states, "The modern theater environment puts a premium on JFCs and their components to conduct campaign planning under severe time constraints and pressures."[24] Thus, to maintain effective offensive operations, the JTCB's targeting process must be flexible enough to handle unforeseen enemy operations and responsive enough to react rapidly to changing priorities.

Model A

In Model A, the JFACC responds to fluid operations and makes decisions concerning airpower to assure U.S. offensive operations successfully retain the theater initiative. The JTCB works the normal

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[23]FM100-5, 174.

[24]Joint Pub 1, *Joint Warfare of the US Armed Forces,* 11 November 1991, 45.

targeting process cycle, but it is the JFACC who reacts when a quick response is critical to success. Since the Allied operations in North Africa during World War II, the JFACC concept and the centralized control of airpower has evolved because of the historical problems of uncoordinated, unresponsive air operations.

Except for Desert Storm, conflicts since World War II that required airpower started with decentralized, multi-agency control but moved towards greater centralized control of airpower by the conflict's end. During the 1942 campaign in North Africa, control of airpower moved away from the ground commanders towards greater centralized control. After problems with the initial air operations controlled by multiple air components in Korea, the Far East Air Forces (FEAF) commander, Lieutenant General George Stratemeyer, attempted to exercise operational control over all air operations. During the Vietnam conflict, General William Momyer, the 7th Air Force commander, also requested centralized control. In all three cases, by the end of the conflict the air component commanders gained greater control over forces previously directed by ground commanders and exercised some form of coordination control over Naval and Marine Corps air operations.[25]

The consolidation of all theater airpower under the responsibility of the JFACC provides the flexibility needed to respond to last second changes or new JFC priorities. The JFACC uses the JTCB to determine target priorities but can make timely decisions to redirect aircraft missions when required to remain on the offensive. Additionally, the JFC and the other component commanders can go directly to the JFACC, who is responsible for responding to their short-notice requests.

Model B

The JTCB in Model B could cause confusion during offensive operations for two reasons. A board structure cannot quickly make decisions and it does not remain in constant session. The deliberation process takes time to build consensus, especially when the board must make tough choices.[26] Unfortunately, the pace of the board's decision cycle could potentially slow the component planning

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[25]Although coordination control did not allow Stratemeyer or Momyer to actually task Naval or Marine Corps airpower, it did allow for a formal process and provided a central point for information that produced greater cooperation and more effective operations.

[26]Commander Christopher L. Powers, "Joint Warfighting Without Joint Bureaucracy" (Research Paper, Naval War College, Newport RI, 17 May 1993), 6.

process, resulting in decreased offensive capability. During the joint exercise in the Pacific Ocean called COBRA GOLD 92, the JTCB deliberations took so much time the JFC eventually imposed a time limit for decisions. Lessons learned emphasized, "Following a JTCB meeting agenda is critical to timely publishing of a prioritized target list."[27] Internal Army Fact Sheets supporting a Model B JTCB also voice concern that "decision by committee is not responsive to a fast paced effort with limited resources."[28]

In addition to the board's slow deliberation process, the JTCB does not convene twenty-four hours a day. In this model, the JTCB meets daily but is not in constant session. The potential nonavailability of the JTCB raises two key questions for the JFC: If the JTCB is not in session and a problem arises that immediately requires a diversion from JTCB directed priorities, who is responsible for authorizing changes? Even if the JTCB immediately convenes, can it reach a consensus in a timely manner?

In recent exercises, a lack of JTCB responsiveness forced the JFACC to make immediate decisions about new air taskings, overriding the JTCB guidance to meet the JFC's objectives. For example, during the Pacific Command Joint Exercise TANDEM THRUST 93, the JTCB process for immediate target nominations required "components to submit a formatted message to the JTCB component liaison officer (LNO), the LNO submitted it to an emergency session of the JTCB, after approval JTCB specialists scrubbed it for Law of Armed Conflict factors."[29] The JTCB released the target to the JFACC for execution only after the completion of these procedures. This cumbersome process was not responsive and caused extensive delays in the execution of the exercise's ground offensive. Finally, the JFC bypassed the JTCB and directed the JFACC to respond to immediate target requests.

Mass And Maneuver

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[27]Joint Universal Lessons Learned (JULLS) Long Report # 52120-92447, "Exercise Cobra Gold 92 CJTB Agenda," 4 May 1992. The JULLS system is a computerized database located in the Pentagon that tracks all the formal exercise and combat after-action reports for recommendations or changes.

[28]Army Fact Sheet, "Joint Airpower Application," 19 November 1993. Army Information Paper, "Joint Targeting Coordination Board," 18 November 1993. Army Information Paper, "Joint Force Air Component Commander," 18 November 1993.

[29]Tandem Thrust 93 Observer, Colonel Charles Westenhoff interview, 18 November 1993. The observer was part of a joint task force looking for joint doctrinal disconnects or problems with joint airpower employment.

Mass concentrates the effects of combat power at the place and time to achieve decisive results. Maneuver places the enemy in a position of disadvantage through the flexible application of combat power.

Airpower, more than any other instrument of military force, can concentrate a preponderance of combat power where it can achieve decisive results. Furthermore, airpower's flexibility and speed mean it does not sacrifice maneuver to apply concentrated firepower. In Vietnam, for example, "Airpower constituted a unique switchable faucet of firepower; its point of application could be shifted 450 miles and more in less than an hour."[30] However, airpower's abilities to mass firepower and maneuver throughout the theater is a double-edged sword. Because it can provide firepower everywhere, the potential exists to dilute airpower's effects by parceling it out in small packets throughout the theater.

The effective planning process requires an understanding of how airpower can contribute to concentrating firepower at the operational level of war. Air operations concentrate firepower, not by the number of sorties allocated or individual targets destroyed, but by the destruction of critical target sets that produce the desired military effect. To be an effective tool for the JFC, the JTCB must be able to select targets whose destruction achieves the required effect and assures the concentration of aerospace combat power. If the JTCB does not choose targets for theater effect, airpower application becomes simply *striking targets* instead of *striking the right targets.* Now the measure of success for a theater-level mission degenerates into target counts, no better than the "body counts" emphasized in Vietnam. Thus, to be effective, the JFC's targeting process requires an in-depth knowledge of airpower's capabilities and air planning expertise.

Model A

During World War II's North Africa campaign, General Eisenhower discovered there was only one solution to his problems of controlling all theater aircraft and massing air firepower at the decisive point. In a message to General George Marshall he wrote, "I have come to the conclusion that a single air

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[30]General William W. Momyer, *Airpower in Three Wars*, Department of the Air Force, 1978, 339.

commander is necessary, to coordinate with the other commanders."[31] In Model A, the JFACC uses the JTCB as a mechanism for assuring target priorities concentrates firepower to accomplish the objectives. The JTCB develops a target list, ranked in order of importance, as an integral part of the overall planning process. Because the JTCB interacts with air planning throughout the process, the board understands the "desired operational effects" required to accomplish the JFC's objectives, Thus, the JTCB can select the appropriate targets that concentrate airpower to obtain those effects.

Model B

In Model B, because of the JTCB's viewpoint from the JFC level, it has the advantage of "seeing the big picture." This broad view provides the JTCB with the potential to match target priorities and allocation to mass airpower's striking capability and accomplish the JFC's objectives. However, to rank order targets effectively, the members of the JTCB must understand and agree on how to exploit airpower's capabilities. For example, during Desert Storm many nominated targets did not fit into neat categories. These targets went through the JFACC staff process and air experts determined their viability and validity.[32] The staff then used their expertise to categorize targets and establish airpower priorities. If the JTCB's members do not have that expertise, the only other option is to integrate target selection and force apportionment into the component planning process.

Unfortunately, the Model B JTCB does neither; it does not contain airpower experts and it develops target and mission priorities outside the normal planning process. The first option requires airpower experts on the board. Although the theater concepts of operations do not specify manning requirements, the nominal composition includes one airman on a nine-member JTCB.[33] During the latest

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[31]Alfred D. Chandler, ed., *The Papers of Dwight David Eisenhower, The War Years: II* (Baltimore: The John Hopkins Press, 1970), 843.

[32]Lieutenant W. J. Campbell US Navy, *Desert Storm Naval Intelligence Support to the JFACC After Action Report,* 8 March 1991, 5. During Desert Storm, Lt. Campbell acted as Intelligence Support Officer for Navy strike planners in the JFACC staff. He offers examples of problems caused by Navy requests to strike "Navy" targets and argues the JFACC and internal JTCB ensured, "There were NO Navy targets and NO Air Force targets. JFACC matched all nominated targets to available assets."

[33]US. Atlantic Command, US. Pacific Command Concept of Operations, 4. JTCB members include, J2, J3, J5, MARFOR, NAVFOR, SOCFOR, ARFOR, and AFFOR. The JTCB Chairman is the Deputy JFC

major exercises, after-action reports highlighted the problems caused by a lack of air component expertise on the board.[34] Thus, the potential exists for the JTCB to lack the air expertise needed to exploit airpower's full effects gained through mass and maneuver.

In the past, this lack of experience in airpower application also caused problems. During Vietnam, "There were excessive demands for airpower from numerous requesting units. The operations center was not designed to judge the validity of the targets requested and had to rely on the judgment and restraint of the Army's senior corps of advisors who nominated targets for attack."[35] Yet, if the JTCB lacks air experts it can overcome problems if it develops target priorities while integrated into the planning process. However, Model B deliberately avoids the second option of integration into the component staff. Organizationally, the model places the JTCB outside the component planning process to assure it remains an honest broker for all the components.

Thus, if the JFC decides to use Model B, he must be aware that mass or maneuver may not be options for JTCB planning, if the board does not include the qualified air planning experts needed to establish airpower mission and targeting priorities effectively.

Economy of Force

Economy of force allocates minimum essential combat power to secondary efforts.

The principle of economy of force closely relates to the principle of the objective because true economy of force may require the JFC to accept prudent risks in less critical areas in order to achieve superiority in the areas crucial to accomplishing his operational objectives. The planning process must focus on the primary goal and not allow diversions towards less pressing objectives. Target selection and

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who may or may not be an airman. If he is, then the board contains two members with extensive expertise in airpower application.

[34]JULLS Long Report #51637-68438, "Cobra Gold 93 JTCB Representation," 14 May 1993. The Lessons Learned included, "Components must be officially represented at the JTCB."

[35]John Schlight, *The War in South Vietnam: The Years of the Offensive 1965-1968* (Washington DC: Office of Air Force History, 1988), 43.

airpower priorities must achieve the JFC's objectives and avoid piecemealing aircraft missions out to nonessential targets.

Model A

The JFACC, as the single air manager, is the JFC's expert on airpower application. He stays involved throughout the planning process and understands how many and what types of aircraft can best accomplish the JFC's objectives and support the other components' tasks. Because the Model integrates the JTCB into the air component staff containing joint airpower experts, the board should understand airpower resources, limitations, and how best to exploit the available capability.[36](see appendix) In Model A, the JTCB provides the JFACC with a ranked ordered target list that includes a consideration for economy of force.

Desert Storm provides an example of how Model A enhances the potential of air targeting by adhering to the principle of economy of force. As the D-Day for the ground war approached, more and more of the targets submitted by the Corps were Iraqi surface to air missiles and mobile anti-aircraft sites. The JFACC did not strike many of these specific targets and this apparent disregard for land force target submissions increased the frustration of the ground commanders, who argued they needed more air support. The VII Corps Commander, General Frederick Franks, complained about the perception that "coalition air did not perform battlefield preparation in accordance with stated desires."[37]

However, the JFACC and his staff focused on economy of effort rather than the number of targets attacked. Instead of attacking the mobile sites with strike aircraft that would have trouble finding and destroying them, the JFACC used suppression of enemy air defense (SEAD) aircraft such as F-4G Wild

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[36]Prior to Desert Storm, none of the services had a formal JFACC concept of operations that explained the JFACC duties and responsibilities. Most of the warfighting commands also did not have formal manning requirements that led to problems about whether General Horner's staff was truly "joint" because it included such an overwhelming number of Air Force personnel. After the war, all of the warfighting CINCs developed a JFACC concept of operations that clearly defined the JFACC's responsibilities and duties and formalized the manning requirements by duty, grade, service and source for each theater of operations. The manning requirements ensures the JFACC staff is a joint staff with the required expertise for joint air operations. See Appendix A for an example of the USCINCPAC/USCINCLANT JFACC manning requirements.

[37]Lewis, 36.

Weasels or F-18 aircraft. Both aircraft carried high speed anti-radiation missiles (HARM) designed to home in on enemy radars should they emit in an attempt to attack coalition aircraft. These area defense suppression aircraft provided the most effective air support should the Iraqis activate their air defenses and simultaneously freed strike sorties for other tasks. The Corps Commanders had the protective air umbrella they needed and the JFACC could use strike sorties against better suited targets, thus ensuring economy of force.

Just as in Desert Storm, Model A focuses on economy of effort because the measure of effectiveness for airpower rests on achieving the desired military effect rather than on the number of targets bombed or the number of strike sorties flown. Model A gives the JFC the ability to achieve the greatest effect with the number of aircraft available.

Model B

Model B could provide effective target priorities while adhering to the principle of economy of force if the board contains members with air targeting expertise or if the JTCB has a staff with the experience to aid in airpower target selection. However, even if the JTCB members in Model B have the necessary air expertise, there is the potential for another problem. In some cases, Model B could increase component parochialism when mission and targets priorities are determined.

In Model A, the JTCB acts as the forum for the components to request air targets that support their efforts to accomplish the CINC's objectives. The rank ordered target categories in Model A are a product of JTCB selection, JFACC approval, and Component Commander review. In contrast, the JTCB in Model B organizationally sits above the component commander level and directs target priorities to the components before they begin planning or can offer component recommendations to the JFC. Thus, the planning cycle for the components begins with targeting, not strategy, driving component planners towards a "match sorties to targets" mentality.

Additionally, because the JTCB develops target priorities outside the component planning process, there is the potential for component planners to measure success by the number of "their targets" selected by the JTCB. Now, rather than acting as an integrating center, the JTCB could become a focal point for component competition. Once the JTCB turns into a competitive arena for target selection,

economy of force and the JFC's theater objectives are no longer the measure of merit. Instead, each component measures the effectiveness of their JTCB representative by the number of targets selected or by the priority ranking he earns for his component's target requests. For example, during OCEAN VENTURE 92, one component representative to the JTCB remarked to an observer, "I won! My component got the highest priority targets again and that's all that really matters."[38]

In Model A, there are three levels of oversight for assuring the JFC's objectives remain the focus: at the component staff level, at the component commander level and at the JFC level. However, since the JTCB in Model B acts at a level above the component commanders, they have only one recourse to solve disagreements over JTCB decisions: component commanders must appeal directly to the JFC. Thus, in Model B there is the potential for the JTCB to subordinate economy of force considerations with little regard for overall campaign effectiveness.

Unity of Command

Unity of command ensures unity of effort under one responsible commander for every objective.

"Unity of command means directing and coordinating the action of all forces toward a common goal or objective."[39] The joint warfighting structure with its clear line of authority, promotes unity of command by design. The idea is to avoid confusion and keep the lines of command and control short and direct. However, it is important to understand that the principle of "unity of command" requires the application of "unity of effort." This relationship is critical because unity of effort provides the mechanism for accomplishing the joint commander's theater objectives. All of the components must direct their efforts towards the common goal of achieving campaign success.

To ensure unity of effort, the joint commander needs a chain of command that can communicate his strategy and priorities. A clear chain of command assures that each component commander understands his responsibilities and can focus his efforts on achieving the JFC's goals. In support of unity

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[38]Ocean Venture 93 Army Observation, Lt Colonel Liivak, US Army Training and Doctrine Command (TRADOC), interview with author, 3 March 1994.

[39]Fm 100-5, 176.

of effort, the planning process must also be responsive to the JFC's intent and there must be someone with the responsibility, authority, and accountability to carry out the JFC's orders.

Model A

The value of centralized control for airpower to support unity of effort evolved from lessons learned during previous wars. The JFACC and the JFACC responsibilities described in joint doctrine promote adherence to unity of effort by providing unity of command at the theater level and unity of effort between the components. The JFACC is responsible for the effective application of airpower throughout the theater. The JFC provides the JFACC with the authority to carry out his responsibilities and the JFACC is accountable for airpower's effectiveness to the JFC.

Model A integrates the JTCB into the air planning process and directly supports the JFACC. Organizationally, the JTCB does not interfere with the chain of command because the JFACC remains responsible to the JFC and can focus solely on the joint commander's priorities. An embedded JTCB avoids the problems of dispersed airpower, diluted effects, and diversions to lesser priority objectives that occurred in the past. For example, during the Vietnam Conflict, General Momyer, the Seventh Air Force commander did not report directly to the defacto theater commander, General William Westmoreland. Instead, he had two bosses, General Westmoreland, Commander, U.S. Military Assistance Command, Vietnam (COMUSMACV) and Admiral Sharp, Commander in Chief, Pacific Command (CINPACOM), responsible to both for air support. Unfortunately, because "both CINCPACOM's and COMUSMACV's primary interest centered on their own areas of operations, they often demanded more cumulative sorties than 7th AF could provide."[40] However, Model A avoids the problem of divided responsibility because the JFACC, as an equal among all the component commanders, provides a direct link with the JFC and ensures unity of effort. The JTCB facilitates the planning process and supports the JFACC's efforts to achieve the assigned theater objectives using all of the available aircraft.

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[40]Lieutenant Colonel Abner Prophett USAF, "A Concept for Command and Control of Tactical Air Forces in Joint Operations" (Air War College Research Paper, April 1972), 34.

Still, there is the potential for Model A to cause an organizational problem that affects unity of command. Coordination problems may occur if the JFC chooses not to use a Naval or Land Component Commander (LCC) or assumes the role of a component commander himself. For the purpose of discussion, we'll assume the JFC decides to act as the LCC. The ground forces are now at a potential disadvantage in the targeting process because they do not have a component commander who can coordinate, act as focal point, or provide feedback for ground force issues. This organizational problem could occur for any dual-hatted JFC, for example: the problem could also happen if the JFC was an airman and also acted as the JFACC.

An example of a "dual-hatted" JFC occurred in Desert Storm when General Schwarzkopf, as the JFC, also assumed the role of LCC. This meant he had a senior Army Commander (General Yeosock) and a senior Marine Commander (General Boomer) but neither had the authority of a Land Component Commander. While acting as the JFC and LCC, General Schwarzkopf carried both theater and sub-theater responsibilities. The Corps Commanders under the LCC remained less concerned with the theater objectives because their priority lay "in hitting targets in their area of interest."[41] However, because General Schwarzkopf worked directly with the JFACC at the component commander level, the Corps Commanders lacked the feedback on changes in air priorities or targets that a separate LCC should have provided. Thus, when the JFACC executed the air battle to achieve the CINC's theater objectives, the Corps Commanders mistakenly believed the JFACC ignored corps' inputs. This organizational problem, shown in figure 5, caused frustration between the JFACC and the land forces that culminated in the establishment of a JTCB as a forum for them to voice their targeting concerns.

Establishing a component commander or equivalent, even when the JFC decides to wear "dual hats," could solve the specific component concerns about a "level playing field" for airpower target selection. This organization also provides every component three levels of feedback in the Model A target selection process.

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[41]Colonel William L. Bond, US Army, "Targeting for Deep Attack" (Washington DC: Executive Research Project for the Industrial College of the Armed Forces, 1992), 12.

Model B

When planning theater campaigns, the JFC usually establishes a JFACC organization to ensure unity of effort for air operations at the theater level. To be effective, the JFACC must have clear authority and responsibility to carry out his orders. In return, the JFC holds the JFACC accountable for the effectiveness of theater air operations.

However, the JTCB in Model B adds an additional layer between the JFACC and the JFC. The JTCB essentially acts with command authority for developing target priorities and mission apportionment, but does not have the responsibility for carrying out the actual missions. Thus, somewhere during the planning process there is a shift in responsibility and a "gray area" potentially exists that violates the principle of unity of command.[42] If any questions arise, where is the clear break of responsibility between the JTCB and the JFACC? What if the JFACC cannot meet the target priorities because of the JTCB apportionment decision? Who is accountable to the JFC?

These problems caused by a split in responsibility and authority occurred during the Vietnam Conflict. In 1967, although the White House developed the actual priorities, the Rolling Thunder Targeting Team in Washington was the agency with the authority to build the target list. Yet, the air commanders in the theater had the responsibility for actually attacking the targets. When the campaign failed, planners argued it was due to poor execution while the theater commanders argued that the target priorities were wrong. Although the RTTT was not a JTCB in any sense, it acted as the focal point for target selection and provides a good illustration of the perception problems and confusion that occurs when the authority for target selection and the responsibility for attacking those targets are split between two organizations.

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[42]Joint pubs do discuss the importance of continuity of command between the components which shifting between campaign phases or when shifting the focus from one component to another. See Joint Publication 3-56, *Command and Control Doctrine For Joint Operations,* Proposed final publication, 21 January 1994, I-4.

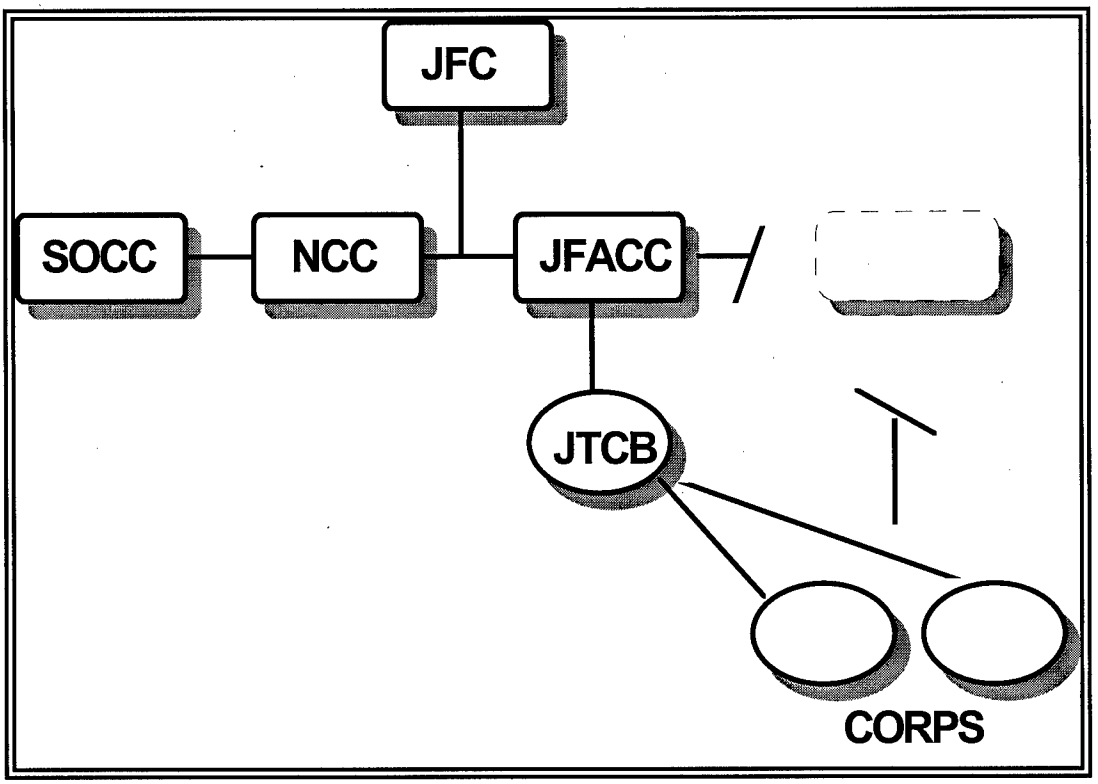

FIGURE 5
MODEL A PROCESS WITHOUT A LCC

The problem concerning confusion over who has responsibility for determining target priorities at specific times during the planning and execution cycle also occurred during TANDEM THRUST 92. During this Pacific Command annual joint exercise, "Components found the targeting process confusing and frustrating. Initially, components did not understand the difference in the process between recommending a target for the Joint Target List (JTL) and nominating a target that needs to be immediately attacked."[43]

Thus, Model B could cause problems in unity of command if the JTCB retains directive or veto authority for determining airpower mission priorities and the target selection process. When the JTCB acts in a command role, it splits the responsibility for planning and execution between the JTCB and the JFACC.

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[43]Wigge, 30. The same problems occurred during the air tasking process over apportionment. The JTCB and the JFACC had different interpretations over apportionment responsibility that meant the JFACC "found it impossible to compensate for extremely skewed allocations and so meet the JTCB apportionment guidance."

Security and Surprise

Never permit the enemy to acquire an unexpected advantage.

Strike the enemy at a time and place or in a manner for which he is unprepared.

To achieve the principle of surprise, friendly forces must first ensure they have protected themselves as much as possible from unexpected enemy actions. Security protects materiel and intentions from enemy forces while surprise results from attacking an enemy where or when he is unprepared.

Airpower provides security in many ways, but there are two air missions critical for secure theater operations. First, airpower enhances situational awareness by aerial reconnaissance and surveillance; and second, it protects friendly forces from enemy air attacks by gaining and maintaining air superiority. The planning process and the determination of airpower mission priorities must assure the accomplishment of these theater-wide missions.

Once the JFC believes his forces are secure, airpower can contribute to the principle of surprise because it can potentially strike an enemy at any time and anywhere in the theater of operations. To enhance the potential for surprise, planners must understand and fully exploit the capabilities of airpower's mobility and three dimensional maneuver. Targeting priorities should emphasize strikes achieving the greatest operational effect, rather than destroying the greatest number of tactical targets.

Model A

The Model A JTCB helps achieve security because integrated planning minimizes the risk of "vulnerability gaps" occurring due to the misapplication of the JFC's theater airpower. How does the Model A JTCB decrease the potential for security lapses? Inherent checks and balances during the process uncover potential weaknesses that the enemy could exploit. When planning starts, the JFC provides his guidance and intent and the components begin their portion of the planning cycle. First, the JFACC determines the required air operations to support the theater campaign. Then the joint air experts in the JFACC staff and on the JTCB provide target priorities as an integral part of the component planning cycle. If the staff discovers weaknesses in the plan, planners can change the mission priorities or targets to cover any perceived or unexpected problems. Thus, the JTCB, in concert with the JFACC planning process,

increases the potential for theater-wide security. Once the JFACC ensures the security of friendly operations, it enhances his ability to achieve surprise.

To surprise the enemy, the JFC requires a responsive planning system that can quickly exploit potential enemy weaknesses. Fast-paced air warfare requires a command and control arrangement where a full time responsible air commander, the JFACC, can make timely decisions and has the authority to change priorities. For example, during World War II, General George Kenney acted as General MacArthur's air commander in the Southwest Pacific. Because General Kenney understood airpower and how to use it to surprise the enemy, he recommended an airborne, air-supplied assault on the north coast of New Guinea in November of 1942. Although the entire staff opposed the plan, General MacArthur approved it. Once executed, it achieved complete surprise and the Allies established a critical base needed to continue the drive towards Tokyo.[44]

Model A provides the JFC with a target selection process that enhances security but does not stifle the JFACC's ability to use airpower to achieve surprise. Although the JFACC still makes command decisions, he receives joint input on how best to synchronize air targeting to achieve the greatest effects for all of the components.

Model B

If the members sitting on the JTCB in Model B are experts in air application, it lessens the potential for selecting target categories or mission priorities that weakens the security of theater operations. However, one potential problem still remains. A JTCB could prematurely change mission priorities or decrease the amount of effort for a critical objective before airpower achieves theater security for the JFC's operations. Thus, the JTCB may put theater operations at risk if it compels the JFACC to support a lower priority requirement before the JFACC assures the theater is secure. For example, the JTCB could direct changing the number one airpower mission priority from air superiority to interdiction and shift aircraft away from the air superiority mission even though the JFACC believes air superiority should remain the

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[44]General George C. Kenney, *General Kenney Reports* (Washington DC: Office of Air Force History, 1987), 116.

number one priority for airpower because it has not achieved the principle of security. Now, if the JFACC has not attained theater air superiority, friendly forces may be vulnerable to enemy attack.

An example of a theater versus a tactical level viewpoint occurred during the preparations for the D-Day invasion. The Allied staff struggled with a difference in targeting priorities critical to the success of the landing. Although most historians call it the "oil versus transportation controversy," it was actually a battle over whether to secure air superiority prior to the invasion or only over the beaches during the invasion. General Carl Spaatz wanted to strike oil targets deep in Germany to force the Luftwaffe into the air where the AAF could destroy it as a fighting force prior to D-Day. In contrast, Sir Trafford Leigh-Mallory argued that "It made no difference, for the great battle for air superiority would take place over the beaches and the Allies would win it then."[45] The staff, acting as a JFC-level JTCB chose to accept local air superiority over the beaches. Fortunately, Spaatz had enough aircraft to accomplish the transportation plan while simultaneously attacking enough oil targets to fatally weaken the Luftwaffe and he persuaded General Eisenhower to let him attack both target sets before the invasion began.

Thus, Model B has the potential for placing security at risk because a committee or board makes decisions that a subordinate commander may not agree with, but must obey. Additionally, Model B may not allow the JFC to achieve surprise using airpower because it is often difficult for a group of people to agree on how joint forces best achieve theater security or for a board to be responsive enough to take advantage of a perishable enemy vulnerability.

Simplicity

The purpose of simplicity is to prepare clear, uncomplicated plans and concise orders to ensure understanding

Airpower provides a vast array of capabilities for the commander at the operational level. However, to exploit airpower's flexibility and versatility throughout the theater requires clear, concise, orders and objectives. Equally important, the JFC requires a direct and streamlined planning process to

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[45]David R. Mets, *Master of Airpower* (Novato, CA: Presidio Press, 1988), 201. Also see, Sir Arthur Tedder, *With Prejudice* (Boston: Little, Brown and Company, 1966), 512-515.

assure airpower retains its responsiveness and flexibility. The rapid pace of modern warfare requires the joint commander's planning team to work quickly so the JFC can make timely decisions and effectively deploy forces. Thus, the JFC should keep the planning bureaucracy at a minimum to ensure planning remains unimpeded by unnecessary layers that do not contribute to achieving the theater objectives. A "lean" process accomplishes the required planning but avoids redundancy.

Model A

In Model A, the JFACC and his staff are responsible for all aspects of air operations that support the JFC. Internally, the JFACC's staff contains component representatives, familiar with joint air targeting, permanently assigned to the JFACC staff.[46] The JTCB, containing senior component liaisons, receives the inputs from the components, and lists target categories in priority order, based on the JFC's planning guidance. Finally, JFC approval of the plan restarts the cycle.

Setting target priorities is an integral part of component planning in Model A. The step by step process ensures simplicity and limits the potential for confusion over input requirements and air target requests procedures. Unlike Model B, the JFACC retains responsibility throughout the process, avoiding confusion over how the JFACC interacts with a JTCB that resides outside the component planning cycle. A board that complements the air planning process limits problems like those that occurred during an Atlantic Command joint exercise called OCEAN VENTURE 92, where the JFC-level JTCB "caused considerable confusion as to the function and integration of the JFACC into the joint targeting process."[47] Model A assures simplicity because the JFACC interacts throughout the planning and targeting cycle rather than being included or excluded at specific points during the mission priority and targeting selection process.

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[46]For example, if it is an AF JFACC staff, the Battlefield Coordination Element (BCE) represents the Army planners, the Naval/Amphibious Liaison Element (NALE) represents Naval and Marine forces, and the Special Operations Liaison Element (SOLE) represents Special Forces air concerns. In Model A, each element provides inputs into the JTCB and is an integral part of the mission priority and target development process.

[47]JULLS Long Report #50856-27726, "Ocean Venture 92 Joint Doctrine on JFACC Concept," 1 May 1992.

Model B

A Model B JTCB requires a new layer of supervision into the theater planning process. Also, the JFC-level JTCB adds new duties to the JFC staff that may require additional manning to accomplish the tasks of target prioritization and sortie allocation.

Why does the Model B JTCB need additional staff help? Because, to rank order targets or target categories, the JTCB needs people to do target analysis and accomplish the same administrative tasks as the individual components.[48] These are tasks the current JFC staff cannot accomplish. It takes specialists to review the targets and prepare the information for the 10-12 person board and to provide support when the board is in session. Once the JTCB determines mission priorities and completes the target list, administrative specialists must consolidate it, format it for message delivery and distribute the list to the components.[49]

Although the current Pacific Command/Atlantic Command Concept of Operations does not specifically discuss additional manning, it does state "staff support for the JTCB is provided by the JFC staff."[50] However, after-action reports from at least one exercise using a Model B JTCB found, "The staff was not manned adequately to complete the administrative and targeting review tasks associated with the JTCB."[51] Thus, if a JFC uses Model B, he may sacrifice some simplicity in the planning process because the JTCB requires duplication of the component target review process and needs an additional bureaucratic layer of supervision and staff work to accomplish its assigned responsibilities.

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[48]Powers, 6.

[49]During most Pacific Command exercises the JTCB needed experts to "combine all target nominations from the components and the JTF staff. Then, compare the targets with the JFC priorities and develop an integrated, rank ordered Joint Target List, brief it to the JCS, and distribute it to subordinate headquarters." See, Pacific Command Briefing, "JFACC-JTCB Relationship," 8 November 1993.

[50]US. Atlantic Command, US. Pacific Command Concept of Operations, 4.

[51]JULLS Long Report # 51827-79098, "Exercise Cobra Gold 93 Joint Targeting Coordination Board," 14 May 1993. The "Lessons Learned" recommends additional manning to support three distinct cells, A) Target Review Cell that provides a top level review of the target data base. This cell requires a lawyer to work ROE and laws of armed conflict. B) Administrative Cell that does the detailed administrative tasks required to produce and disseminate JTCB messages. C) Apportionment and Guidance Cell that develops the recommended inputs for the JFC Air Operations Order and Apportionment Message.

ASSESSMENT

Future JFCs may face tough decisions over the best way to select air targets and mission priorities. Today's joint doctrine offers broad guidance but leaves the actual organizational and process choices up to the theater commander. Although each campaign is unique, the JFC must have a method for weighing the alternatives for air target selection. This analysis presented two models and evaluated the models against the currently accepted principles of war. The models represent two potential alternatives on where to place and how to use a JTCB. In Model A, the JTCB remains integrated into the JFACC staff while the JTCB in Model B acts at a level above the JFACC, outside the planning process. After evaluating the two models against the principles of war, there are obvious advantages and disadvantages to using either model. Chart 1 depicts the pros and cons of both models for the JFC. One factor immediately stands out: The analysis indicates that as they affect the principles of war, *Model A consistently adheres to the principles of war while Model B has a greater potential to violate the principles of war than does Model A.*

Model A adheres to the principles of war as long as the JFC and the component commanders remain focused on the theater objectives. In the past, Model A's biggest disadvantage lay with its potential to subordinate the JFC's objectives to the air component's missions. The Center for Naval Analysis assessment focuses directly on the key argument against the concept of integrating the JTCB into the JFACC staff when it asks, "Who is looking at the overall operation and trying to conceive of how best to use strike assets to accomplish the overall objectives of the joint force in the most effective manner possible?"[52]

Joint Publication 3-0 answers that question: "The successful **JFC** is familiar with the capabilities and limitations of component forces. **JFC's** integrate and synchronize operations in a manner that applies force from different dimensions to shock, disrupt, and defeat opponents."[53] The component commanders

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[52]Peter J. Perla, *The Navy and JFACC Making Them Work Together,* (Alexandria VA: Center for Naval Analyses, April 1993), 35.

[53]Joint Pub 3-0, III-4.

must also have a theater perspective, and act as an extension of the JFC. They "must understand how their own pieces fit into the overall design and best support the joint force commander's plan and goals."[54]

Model A assures that the air component's missions do not take precedence over the JFC's objectives because of its built-in checks and balances system. Disagreements over air mission priorities or target selection are addressed at the lowest level first (the JTCB). Next, the component commanders resolve any remaining differences. The JFC makes the final decision about theater target priorities and air allocation after he considers the recommendations of the component commanders.

In contrast, the JTCB in Model B takes the place of the component commanders, acting with command authority for determining target and airpower mission priorities. When evaluated against how well it adheres to the principles of war, Model B has three potential disadvantages for the JFC. *First, a board-type structure inherently tends to compromise and seek consensus.* Therefore, the JTCB may not offer the most effective targeting solution to meet the JFC's objectives. *Second, Model B violates the principle of unity of command because it splits responsibility for campaign planning and execution between the JTCB and the JFACC.* Regarding unity of command, also Model B raises the question of "Who is accountable if the JFC requires feedback?" *Finally, Model B adversely affects the principles of simplicity, offensive, and economy of force because it requires a duplication of tasks already performed in the component staffs.* The redundancy may cause confusion, slowing the targeting process, resulting in less responsive combat action.

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[54]Joint Pub 1, 37.

PRINCIPLES	MODEL A		MODEL B	
	PRO	CON	PRO	CON
OBJECTIVE	DIRECT COMMUNICATION		UNBIASED	TENDENCY TO COMPROMISE
OFFENSIVE	CENTRALIZED CONTROL RESPONSIVE		CENTRALIZED CONTROL	CUMBERSOME PROCESS
MASS & MANEUVER	INTEGRATED INTO PLANNING		THEATER FOCUS	LACKS AIR EXPERTISE
ECONOMY OF FORCE	STREAMLINED			MAY PROMOTE PAROCHIALISM
UNITY OF COMMAND	KEEPS COMMAND RELATIONSHIP INTACT	REQUIRES COMMANDER COORDINATION		BLURS LINE OF AUTHORITY, RESPONSIBILITY, & ACCOUNTABILITY
SECURITY & SURPRISE	INTEGRATED INTO PLANNING REACTIVE TO ENEMY	COULD OVERRIDE APPROVED PRIORITIES		COULD CHANGE PRIORITIES PREMATURELY
SIMPLICITY	DIRECT COMMAND LINE			ADDS BUREAUCRACY REDUNDANT

CHART 1
PROS AND CONS

CHAPTER 5

RECOMMENDATIONS

In future conflicts, the JFC must decide whether a JTCB improves his ability to plan and conduct a successful joint campaign. If the JFC does determine he needs a JTCB, then he must clearly define its responsibilities and decide where it fits best into the planning process. Although current joint doctrine offers some broad guidance, it does not provide the JFC with recommendations for, or the advantages and disadvantages of, using a JTCB.

To assist the JFC in his decisions about the usefulness of the JTCB, this paper offers three recommendations:

RECOMMENDATION #1: The JFC should integrate the responsibility for target prioritization and allocation into the campaign planning process.

Nineteenth century strategist Baron Henri de Jomini regarded councils of war as,

> A deplorable resource and can be useful only when concurring in opinion with the commander ... they should be simply consultative and have no further authority; but if instead of this harmony there should be difference of opinion, it can only produce unfortunate results.[1]

In the past, JFCs have used targeting boards to alleviate component differences over the air mission and targeting priority process. However, the historical data and analysis using the principles of war agree with Jomini's assessment that targeting boards, operating outside the normal chain of command, potentially could become dysfunctional or unfocused. On the basis of this paper's analysis, **a JTCB integrated into the JFACC staff has the greatest potential for providing the JFC with an effective air targeting**

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[1]Baron Henri De Jomini, *The Art of War,* trans. Captain G. H. Mendell and Lieutenant W. P. Craighill (Westport: Greenwood Press, 1971), 58.

and apportionment process. There are two advantages for making the JTCB responsible to the JFACC:

First, it consolidates responsibility for air operations planning and execution in a single commander. An integrated JTCB allows the planning to flow uninterrupted from strategy to targets in a "top down" process. A JTCB acting outside the normal chain of command identifies target priorities at the beginning of the cycle, forcing component planning to wait until the JTCB issues its guidance. However, when the JFC integrates the JTCB into the JFACC planning cycle, target priorities are the result of the process that flows from the theater objectives to JFC guidance to to the component strategies and their resultant operational requirements.

JFACC responsibility for planning and execution also involves the JFC's joint air experts. A JTCB integrated into the planning cycle allows the most qualified planners to exploit airpower's full capabilities and provide the support required for developing effective target priorities. An integrated JTCB assures air planners from all the components have a formal mechanism for component air requirements and feedback at the lowest possible level. In contrast, a JFC-level JTCB may not have the air expertise required to make effective decisions about air mission and target priorities.

Consolidated responsibility also provides the JFACC with the flexibility and latitude needed to exploit airpower at the operational level. Today's modern combat environment requires a rapid decision cycle to produce campaign success. Upon direction from the JFC, the JFACC can quickly react to changing events and JFC requirements. The JFACC provides rapid response because he provides command and control for airpower based on a decision by command rather than a decision by committee. When integrated into the planning process, the JTCB assists, rather than directs, the JFACC.

Second, making one person responsible for air planning and execution provides the JFC with a single commander accountable for the success (or failure) of air operations.

When the JFC vests the responsibility for planning and execution with the same person, the JFC simultaneously makes that commander accountable for the success or failure of the theater air operations. A clear line of command responsibility and accountability increases responsiveness because the JFC can go directly to the JFACC with any problems or changes for airpower planning or execution. Unlike a committee structure, a single commander remains accountable throughout the entire cycle, decreasing confusion and the potential for less responsive combat action.

In addition to clear lines of communication up and down the chain of command, a single commander responsible for planning and execution also permits coordination laterally in the command structure. When the JTCB acts as an integrated part of the JFACC planning cycle, every component knows who is responsible for targeting and where to go in the organization for coordination and feedback. In addition, the other Component Commanders can work directly with the JFACC and get immediate response for urgent airpower requests during fast-paced operations.

When using a JTCB integrated into the JFACC, the JFC should be aware of the potential for problems if the organization does not provide every component with an opportunity to provide inputs and receive feedback at the staff, component, and JFC levels. In most cases, establishing a functional component commander would alleviate subordinate commander frustrations. However, a designated substitute (for example, the Deputy JFC) could also act as an effective focal point for component commander airpower coordination.

RECOMMENDATION #2: The JFC may benefit from a JFC-level campaign review mechanism.

Although the targeting process should be an integrated part of component campaign planning, there may be some merit for establishing a JFC-level integration center. This small "campaign review group" could assist the JFC in ensuring consistency of campaign priorities and provide the most current intelligence and updated targeting information to the component commanders. The campaign review group would accomplish three functions for the JFC:

First, act as an integration center, providing the JFC and Component Commanders with current intelligence, target information, and updated campaign progress at their daily meetings. This allows the JFC and his subordinate commanders to operate from a standard baseline of information and increases consistency during the planning cycle.

Second, assist the JFC and Component Commanders by reviewing the Joint Target List to ensure it concurs with the current rules of engagement and the laws of war. Also, the review group provides assessments about any potential problems concerning restricted targets, special forces operating areas and political, religious, or other significant considerations for attacking specific targets or target sets. The campaign review group's assessment is advisory in nature, but a "theater-level view" may assist the JFC in assuring the target list is consistent with his campaign plan.

Finally, the campaign review group provides a focal point for the component planning staffs for feedback and current information concerning the Joint Target List. This includes the updated information provided for the JFC and component commanders concerning restricted targets beyond the Fire Support Coordination Line (FSCL) and special forces operating areas.

RECOMMENDATION #3: If the JFC does elect to establish a JFC-level JTCB, he should be aware of the potential drawbacks.

Although a JFC-level JTCB may not produce the *Sum of their Fears,* in most cases, it does not provide the JFC with the most effective mechanism for determining

airpower mission and target priorities. However, should the JFC decide to use a JFC-level JTCB, he can decrease the chance for potential problems by limiting the JTCB's ability to:

- *Interfere or constrain the JFC's relationship with his component commanders concerning responsibility, authority or accountability.* There must a clear transfer of authority between the JTCB and the JFACC or the JFC will have trouble determining who is accountable at key points in the planning and execution cycle.

- *Cause confusion in the targeting process that reduces the responsiveness of the joint forces.* The JFC should assure the component commanders and staffs understand the different requirements for the JTCB and the JFACC during the campaign. Divided responsibility means different requirements for the normal planning process and for immediate target requests handled by the JFACC. Any confusion over the coordination process and what information the JFACC requires for conducting air operations could decrease responsiveness when the JFC needs it the most.

- *Limit duplication of tasks already accomplished by the JFACC staff and ensure the JTCB includes the air expertise needed for developing mission priorities and air target selection.* Closely related to the second point, redundancy and duplication cause additional layers of bureaucracy and staff work that slow the targeting process and may result in decreased combat responsiveness. As a starting point, the JTCB should include enough joint airpower application expertise to provide the JFC with a coherent and effective target list. The board should also use as much of the component's target information as possible while limiting any additional tasks to avoid duplication of effort.

In the final analysis, the JFC must make the decisions that determine airpower mission and target priorities. The effectiveness of future joint operations may depend on how well the JFC and his component commanders integrate airpower into the operational level campaign plan. Although each component has valid mission requirements, the challenge for the JFC remains to ensure the component's separate missions effectively

contribute to the overall theater objectives. In essence, success in future campaigns may rest on the JFC's ability to establish an organization and planning process that focuses the *Sum of Their Strengths* rather than one that guarantees equal participation of component forces or equal distribution of aircraft. [2]

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[2] Some key concepts about the role of the JFC-level JTCB and the potential for a macro-level integration center included in the recommendations came in an interview with Lt Col Jerry Hust, EUCOM J-5 Doctrine Division, 10 March 1994.

APPENDIX

USCINCPAC/USCINCLANT JFACC MANNING REQUIREMENTS

1. The billet structure listed below identifies the JFACC personnel providing the nucleus of required expertise. Based on specific mission requirements for sustained 24 hour operations, additional personnel will be required. The JFACC will submit requirements for additional support via the chain of command to USCINCPAC/USCINCLANT J1. Components and supporting commands should be prepared to supply additional personnel when requested by USCINCPAC/USCINCLANT J1.

2. SPECIAL ACCESS PROGRAMS: Each component commander must review service Special Access Programs to ensure JFACC staff augmentees provide the required expertise to coordinate Special Access Program use.

LINE	BILLET	CODE	GRADE	SVC	SOURCE	REMARKS
JFC1-01	JFACC	1115	07/08	AF	AFLANT/PAC	
JFC1-02	DEPUTY C/C	13XX	06/07	N	PAC/LANTFLT	CURRENT/POST CVW C/C
JFC2-01	INTELLIGENCE	8085	05/06	AF	AFLANT/PAC	
JFC2-02	INTELLIGENCE	1630	05/06	N	PAC/LANTFLT	
JFC2-03	TARGETEER	8085	03/04	AF	AFLANT/PAC	
JFC2-04	TARGETEER	1630	03/04	N	PAC/LANTFLT	GOODEFELLOW GRADUATE
JFC2-05	CURRENT INTEL	35A	02/03	AR	ARPAC/LANT	I&W/THREAT EXPERIENCE
JFC2-06	CURRENT INTEL	0202	02/03	MC	MARPAC/LANT	I&W/THREAT EXPERIENCE
JFC2-07	MC&G	8065	03	AF	AFLANT/PAC	MC&G
JFC2-08	MC&G	8065	03	AF	AFLANT/PAC	MC&G
JFC2-09	ANALYST	3905/07	E7/E8	N	PAC/LANTFLT	
JFC2-10	ANALYST	20150	E7/E8	AF	AFLANT/PAC	I&W/THREAT EXPERIENCE
JFC2-11	ANALYST	0231	E5/E6	MC	MARPAC/LANT	I&W/THREAT EXPERIENCE
JFC2-12	ANALYST	96B	E5/E6	AR	ARPAC/LANT	I&W/THREAT EXPERIENCE
JFC2-13	ANALYST	20150	E5/E6	AF	AFLANT/PAC	I&W/THREAT EXPERIENCE
JFC2-14	ANALYST	IS	E5/E6	N	PAC/LANTFLT	I&W/THREAT EXPERIENCE
JFC2-15	ANALYST	96B	E5/E6	AR	ARPAC/LANT	I&W/THREAT EXPERIENCE
JFC2-16	ANALYST	0231	E5/E6	MC	MARPAC/LANT	I&W/THREAT EXPERIENCE
JFC3-01	ACOS OPS	1115Q	06	AF	AFLANT/PAC	A/GND INTERDICTION EXP
JFC3-02	STRIKE OPS	13XX	O5/06	N	PAC/LANTFLT	A-6 CVW STRIKE LDR
JFC3-03	AIR OPS	1115B/Q	05/06	AF	AFLANT/PAC	AIR TO AIR (F-15/16)
JFC3-04	STRIKE OPS	13XX	05	N	PAC/LANTFLT	FA-18 CVW STRIKE LDR
JFC3-05	CAS	7509	04	MC	MARPAC/LANT	AV-8
JFC3-06	ELINT/AEW OPS	13XX	04	N	PAC/LANTFLT	E-2 MISSION CC
JFC3-07	AIR DEF/ESCORT	13XX	04	N	PAC/LANTFLT	F-14 TARPS/NFWS GRAD
JFC3-08	STRATEGIC OPS	1235Z	04	AF	AFLANT/PAC	F-117 FWIC GRAD
JFC3-09	INTERDICTION	1235E	04	AF	AFLANT/PAC	F-111 FWIC GRAD
JFC5-01	ACOS PLANS	9907	06	MC	MARPAC/LANT	FA-18
JFC5-02	INTERDICTION	1115B	05	AF	AFLANT/PAC	F-15E/FWIC GRAD
JFC5-03	AWACS	1475T	04	AF	AFLANT/PAC	AWACS
JFC5-04	TLAM STRIKE	11110/20	04	N	PAC/LANTFLT	TLAM EMPLOYMENT
JFC5-05	FIRE SUPPORT	14A	04	AR	ARLANT/PAC	MLRS/ATACMS
JFC5-05a	TLAM OPS	1120	04	N	PAC/LANTFLT	TLAM EMPLOYMENT
JFC5-06	AIR/GND PLANS	1115N	04	AF	AFLANT/PAC	A-10/F-16/FWIC GRAD
JFC5-07	STRIKE PLANS	7541	04	MC	MARPAC/LANT	EA-6B
JFC5-08	STRATEGIC PLNS	1235C	04	AF	AFLANT/PAC	TANKERS/B-52
JFC6-01	ACOS COMM	4945A	04	AF	AFLANT/PAC	CAFMS/CTAPS/JDISS
JFC6-02	COMM WATCH	1XXX	03/04	N	PAC/LANTFLT	FLEET COMM EXP
JFC6-03	AIR C2 SYSTEM	7208	03/04	MC	MARPAC/LANT	MACCS COORDINATOR
JFC6-04	COMMS OFFICER	25C	03/04	AR	ARPAC/LANT	GMF/SHF ARMY COMM
JFC6-05	COMM NCO	RM23XX	E7	N	PAC/LANTFLT	SI COMMS
JFC6-06	ADP WATCH	2531	E5/E6	MC	MARPAC/LANT	
JFC6-07	WWMCCS	49251	E5/E6	AF	AFLANT/PAC	WWMCCS OPERATOR

LINE	BILLET	CODE	GRADE	SVC	SOURCE	REMARKS
JFC6-08	RADIO OPS	49251	E5/E6	AF	AFLANT/PAC	
JFCL-01	SOF LIAISON	TBD	06	AF	SOFPAC/LANT	
JFCL-02	ARMY LIAISON	15A	06	AR	ARPAC/LANT	
JFCL-03	USN LIAISON	13XX	06	N	PAC/LANTFLT	
JFCL-04	USAF LIAISON		06	AF	AFLANT/PAC	
JFCL-05	USMC LIAISON	9907	06	MC	MARPAC/LANT	
JFCL-06	BCE TEAM CHIEF	13A	06	AR	ARPAC/LANT	
JFCL-07	ALLIED	ANY	06EQ		VARIOUS	
JFCL-08	CNA	ANY	06EQ	N	PAC/LANTFLT	
JFCL-09	SPACE LIAISON	TBD	06		VARIOUS	

JFACC AFLOAT REQUIREMENTS

LINE	BILLET	CODE	GRADE	SVC	SOURCE	REMARKS
JFA1-01	JFACC	13XX	07/08	N	PAC/LANTFLT	
JFA1-02	DEPUTY CC	1115X	06/07	AF	AFLANT/PAC	
JFA2-01	ACOS INTEL	1630	05/06	N	PAC/LANTFLT	POST SEA DTY INTEL STF
JFA2-02	TARGETEER	8085	03/04	AF	AFLANT/PAC	
JFA2-03	TARGETEER	1630	03/04	N	PAC/LANTFLT	GOODFELLOW GRAD
JFA3-01	ACOS OPS	13XX	06	N	PAC/LANTFLT	A-6 CVW STK LDR
JFA5-01	ACOS PLANS	9907	06	MC	MARPAC/LANT	
JFA6-01	ACOS COMM	1XXX	04	N	PAC/LANTFLT	FLEET COMMS EXP
JFAL-01	SOF LIAISON	TBD	06	AF	SOFPAC/LANT	
JFAL-02	ARMY LIAISON	15A	06	AR	ARPAC/LANT	
JFAL-03	USAF LIAISON	13XX	06	AF	AFLANT/PAC	
JFAL-04	USMC LIAISON	9907	06	MC	MARPAC/LANT	
JFAL-05	BCE TEAM CHIEF	13A	06	AR	ARPAC/LANT	
JFAL-06	ALLIED	ANY	06EQ		VARIOUS	
JFAL-07	CNA	ANY	06EQ	N	PAC/LANTFLT	

SOURCE: PACOM/LANTCOM JFACC CONCEPT OF OPERATIONS PP. 18-19

GLOSSARY OF ABBREVIATIONS

A

AAA	Anti-Aircraft Artillery
AOR	Area of Responsibility
ARCENT	Army, Central Command
ATO	Air Tasking Order

B

BCE	Battlefield Coordination Element
BDA	Battle Damage Assessment

C

CAS	Close Air Support
CFC	Combined Forces Command (Korea)
CINC	Commander in Chief
CINCPAC	Commander in Chief, Pacific
CINPACFLT	Commander in Chief Pacific Fleet
COCOM	Combatant Control
COMUSMACV	Commander, United States Military Assistance Command, Vietnam
COMUSNAVCENT	Commander, United States Navy Central Command

D

DASC	Direct Air Support Center

E

EUCOM	European Command

F

FAC	Forward Air Controller
FEAF	Far East Air Force
FEC	Far East Command
FSCL	Fire Support Coordination Line

G

GHQTG	General Headquarters Targeting Group

H

HARM	High Speed Anti-Radiation Missile

J

JCS	Joint Chiefs of Staff
JFACC	Joint Force Air Component Commander
JFC	Joint Force Commander
JIPTL	Joint Integrated Prioritized Target List
JTCB	Joint Targeting Coordination Board
JTG	Joint Target Group
JTL	Joint Target List
JULLS	Joint Universal Lessons Learned System

L

LANTCOM	Atlantic Command (Replaced By USACOM)
LCC	Land Component Commander
LNO	Component Liaison Officer

M

MARCENT	Marine Forces, Central Command

N

NALE	Navy Amphibious Liaison Element
NCC	Naval Component Commander

O

OPCON	Operational Control

P

PACOM	Pacific Command

R

ROE	Rules of Engagement
RTCC	Rolling Thunder Coordination Committee
RTTT	Rolling Thunder Targeting Team

S

SAC	Strategic Air Command
SAM	Surface to Air Missile
SEAD	Suppression of Enemy Air Defense
SOCC	Special Operations Component Command
SOLE	Special Operations Liaison Element

T

TACON	Tactical Control
TRADOC	Training and Doctrine Command (U. S. Army)

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