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"Talk'n Ain't Fight'n" Synchronization and the Joint Task Force Training Process

**A Monograph
by
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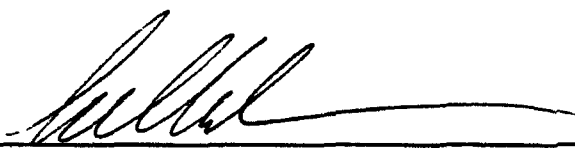
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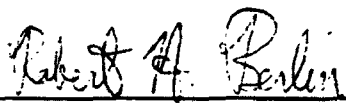
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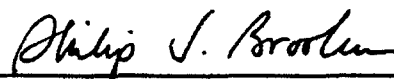
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ABSTRACT

TALK'N AIN'T FIGHT'N'

SYNCHRONIZATION AND THE JOINT TASK FORCE TRAINING PROGRAM by Maj John V. Scudder, USA, 50 pages.

This monograph examines whether or not a Combatant Command Training Program would improve Joint Task Force (JTF) synchronization in a resource constrained environment. Using historical examples, doctrinal analysis, and current combatant command training practices, the study focuses on JTF challenges when synchronizing operations.

The monograph begins with the relevance of synchronization in military operations. Analyzing Operation's Desert One, Urgent Fury, and Just Cause, this paper identifies significant JTF historic trends and shortcomings. Secondly, this study reviews the purpose and importance of synchronization as expressed in current joint publications. The next section examines current combatant command JTF training practices to determine the CINC's role in training JTF synchronization. Using the US Army's Battle Command Training Program (BCTP) as a proven 7 year active training model, the monograph then proposes a JTF Training Program (JTFTP) designed to evaluate and train future JTF synchronization. Tailoring BCTP to fit future adoption by combatant commands, the JTFTP focuses on producing a clear campaign plan, developing a competent observer-controller team, possessing a viable simulation system, teaching effective AAR techniques, and writing useful take-home packages.

The monograph concludes with the advantages of such a program outweighing the disadvantages. With current resource cutbacks and obvious shortcomings in synchronizing joint operations, the US military needs a cost effective means of training JTF synchronization. The Joint Task Force Training Program serves this need by using the CINC staff members as competent OCs who can evaluate the synchronization process.

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INTRODUCTION

The map is no longer flat, it is cubic, requiring the synchronization of air, sea, and ground.

- General John Galvin

Supreme Allied Commander, Europe¹

In an era of dwindling resources and shrinking budgets, the military is working hard to get the most of every dollar. Although readiness must be maintained, high-cost training is no longer business as usual; efficiency and innovation are the norms.² Commanders and their joint battle staffs will have to do more with less. They will need to anticipate, act, and remain completely flexible. Time and confusion will be their enemies. Strategic warning of an imminent conflict will very often be missing, since intelligence collection assets may not be optimized for the area where conflict is likely. Joint battle staffs will need to be razor sharp, cohesive teams; responsive to the needs of the commander. Unless the military devotes sufficient time and effort to their battle staff training, the less likely they will be prepared to meet the challenges of a lethal, new world environment.³

Vital to training readiness is the ability of joint staffs to synchronize all land, sea, air operational forces. Synchronization is the arrangement of activities in time and space to mass at the decisive point. Synchronization includes the effects of overwhelming combat power at the point of decision. Joint operations demand careful synchronization of operations to effect intertheater and intratheater logistics flow, mutual support, effective use of all available resources, and ultimate application of force to achieve the strategic purpose.⁴

Staffs must understand their commander's intent since they are responsible for a large part of synchronization. Synchronization thus occurs first in the minds of commanders, and then in detailed planning and coordination of movements, fires, and supporting activities. Rehearsals are key to successful execution of synchronized operations. Skilled staffs work within the framework of the commander's intent to direct and control units, as well as provide resources to support the desired end. In the end, the product of effective synchronization is maximum use of every resource to make the greatest contribution to success.⁵

Joint staffs bring a myriad of diverse experiences and competencies to the planning table. Successful joint staffs synchronize complementary and competing capabilities. To achieve a high standard in an increasingly complex environment, joint staffs must train synchronization. One method to train synchronization is to rigorously evaluate the JTF planning process. An evaluation program should contain procedures that test key synchronization activities in a stressful environment.

During even a cursory examination of large-scale joint operations, three challenges become immediately apparent. First, the training of staffs to control large joint forces through massive field training exercises is constrained by resources of all types. Money, lift, force levels, and the space and freedom to maneuver large formations in the field are all in short supply. Second, US joint doctrine is incomplete. Joint force interoperability and team training are vaguely defined. This is especially apparent at the critical stage when a JTF is initially created. Third, a JTF is transient. During the infrequent periods when it is brought together, the JTF commander is insulated from his forces by service-component walls and, in many cases, geography.⁶ Unless the military can devise an affordable training methodology, the capability of JTFs in the

future to synchronize will atrophy rapidly after each large joint field exercise. Attempting to identify a solution to the synchronization problem, this monograph proposes a combatant command training program to help improve JTF synchronization in a resource-constrained environment.

This study focuses on six areas: the historical importance of synchronization; synchronization as addressed in current United States Armed Forces publications; synchronization training in US combatant commands; synchronization in a combatant command evaluation training program; the advantages and disadvantages of such a program; and conclusions.

Fundamentally, this monograph proposes the use of the US Army's Battle Command Training Program (BCTP) model as a fix to historical, doctrinal, and current JTF synchronization shortcomings. Adopting a proven (over 7 years) training methodology, BCTP can be easily expanded to the joint arena. This study offers a systematic means for evaluating JTF synchronization using the military decision making process as a training vehicle. By outlining the Army BCTP's purpose, evaluation process, and identified lessons learned, this paper unifies joint methods that are not currently standardized. Furthermore, the monograph analyzes the advantages and disadvantages of using a combatant command-driven JTF evaluation program. Besides program cost, this monograph analyzes three key principles of training: 1] Simulate conditions expected in wartime; 2] Regularly exercise JTFs that are likely to be deployed; and 3] Enhance interoperability; i.e., joint force commanders (JFC) and staffs reflect the composition of the joint force employed.⁷ Finally, the research culminates by determining that a JTF training program will help prepare units for combat by allowing them to synchronize more effectively.

HISTORICAL IMPORTANCE OF SYNCHRONIZATION

Proof that a divine Providence watches over the United States is furnished by the fact that we have managed to escape disaster even though our scrambled professional military set-up has been an open invitation to catastrophe.

- Harry S. Truman⁸

To fully comprehend the significance of synchronization in military operations, it is important to understand JTF operational trends and shortcomings. United States history provides abundant examples of synchronization problems that occurred when joint forces were employed. Over the past 15 years, US forces have operated on several continents, in every ocean, and in the air. The size of the forces deployed, as well as the distances traveled, made prosecuting the war impossible without close cooperation among the Services.⁹ This section briefly describes the synchronization challenges that faced those joint staffs involved in the Iran Rescue Mission, Operation Urgent Fury, and Operation Just Cause. These joint force experiences served as a basis for joint doctrine and continued to provide models for future operations. By studying these operations, the military may draw conclusions about the conditions best suited for training and evaluating JTF synchronization.

Iran Rescue Mission

The decline of American military prestige and competence in the '70s was dramatically highlighted by the unsuccessful mission to rescue fifty-three US hostages held in Teheran. The world was shocked, and most wondered how the most technologically advanced nation in the world could fail to fly eight helicopters 540 miles, with no enemy opposition, and suffer equipment failures that prevented three of them from reaching their destination. Moreover,

having projected only five helicopters at the Desert One landing site, the US could not even get them out undetected. The crash of an RH-53D helicopter into a C-130 while refueling on the ground at the landing site killed eight men and wounded several others. When it was all over, the impact of the failed raid contributed to the defeat of President Jimmy Carter in the 1980 election.¹⁰ The disastrous Iran raid dramatized the inability of US planners to conceive and execute a joint military operation even though it had six months to organize it.

The Iran raid fiasco illustrates most importantly a failure to synchronize operations. Four planning factors stand out. First, the planning staff had no experience in the operations of this sort, made more debilitating by the fact that the planning structure was so confused and bureaucratic that communication among its members was difficult. When the President ordered the Joint Chiefs of Staff (JCS) to prepare a contingency plan to rescue the hostages, a staff element was hastily created within the JCS and assembled piecemeal. It was an ad hoc, inexperienced group which finally devised the plan, and it took almost two months to assemble the complete staff. Second, to prevent security leaks, each component of the force was so compartmentalized that no one had the overall authority to check the components to ensure that they were capable of performing their missions. There was an over-emphasis on operational security (OPSEC). The planners seemed so concerned with the possibility that the plan might be discovered that they even blocked communications with the planning staff and the rescue force itself, making a detailed overview of the plan impossible.¹¹ Moreover, concern for OPSEC led to bypassing the normal review process. This meant that the rescue plan was never subjected to rigorous testing and evaluation by qualified, independent observers outside of the JCS.¹² Finally, a number of key decisions seemed to have been made on the

basis of interservice rivalry, bureaucratic consensus, and political criteria rather than operational requirements.¹³

Synchronization was also marred in preparation for the operation. The rescue force did not train together. Instead, each service component trained separately and at dispersed training centers. Some elements even trained at their home bases. Each component trained under the direction of its own commander and its own service officers, so that, in the end, none of the components was ever evaluated by officers from other services.¹⁴ In effect, training was planned and conducted in a highly decentralized and de-synchronized manner. Rehearsals were piecemeal, with each unit trained in its own phase of the operation. There was not even a final rehearsal combining mission elements.¹⁵ All these factors doomed the rescue mission at the first deviation from the untried plan.

Operation Urgent Fury

The 1983 incursion into Grenada, Operation Urgent Fury, also merits investigation when reviewing the historically weak synchronization of joint operations. The US Government was worried about the situation in Grenada and its effect on the stability of the Caribbean region. By mid-October, the situation had deteriorated to the point where the National Command Authority (NCA) was seriously concerned with Cuban and Soviet presence in Grenada. The NCA was also worried about the safety of several hundred US nationals (mostly medical students and residents on the island).¹⁶ In this operation, the previously developed US Atlantic Command (USLANTCOM) Plan 2360 called for the creation of a JTF around the XVIII Airborne Corps headquarters. Despite the existence of this plan, the Commander-in-Chief, LANTCOM (CINCLANT) chose to ignore the plan and create a new, scratch JTF 120 from USLANTCOM's headquarters staff.

The main military objectives of the operation were to rescue the students at the medical school, take over the island, and install a regime more friendly to American interests.¹⁷

Urgent Fury came as a shock to USLANTCOM. The operation involved techniques and tactics bearing no resemblance to the normal day-to-day activities of the staff at Norfolk; maneuvering naval battle groups in support of NATO, convoy protection, or antisubmarine warfare. An ad hoc joint headquarters was created and charged with planning and coordinating the operation on and around Grenada. With the exception of an Air Force officer, the staff was exclusively Navy. Despite knowing that the operation would involve ground operations, the CINC did not include any Army staff personnel. As a result of limited time, the JTF was assembled from units and staffs who had never trained together, but were now forced to plan in isolation, and in total ignorance of what others were doing. For instance, a regrettable omission was the lack of any staff members who understood how to plan and coordinate joint fire support programs for ground forces on the island. Moreover, many staff officers were unfamiliar with planning airborne assault operations - a type of operation which would figure prominently in the concept.¹⁸ Finally, a plan for joint logistics did not exist. There was no logistics plan to cross-coordinate between services, no prioritization of sustainment effort, no plan for medical treatment or evacuation, nor any plan for handling prisoners of war.¹⁹

Some command and control problems during execution dramatically illustrated a lack of synchronization between rival services. Navy air strikes were delivered against Army positions on at least one occasion. Army and Marine ground units in the same area could not talk to each other because their radio frequencies were different and unknown to each other. Nor could Army units talk directly to Marine or Navy aircraft to direct air strikes in support of

ground operations. During the initial days of the operation, Army ground units had to send calls for air strikes back to their headquarters in Fort Bragg. The messages would then be relayed via satellite to the Navy commander, who passed the requests on to the air controller aboard the aircraft carriers.²⁰

Thus, Operation Urgent Fury magnified the problem of forcing an ad hoc joint staff to synchronize operations under severe time constraints. Although the operation against a weak opponent was politically and militarily successful, one must question the performance of a joint staff that lacked ground, air, and special operational expertise. Grenada exemplified significant synchronization shortcomings when integrating air, ground, and naval operations.

Operation Just Cause

In response to the problems experienced in the employment of joint forces, Congress passed the Goldwater-Nichols Department of Defense Reorganization Act of 1986. The military's fundamental problem, according to congressional reformers, was the absence of unity of command in joint operations. This act strengthened the power of the CINC in conjunction with reemphasizing his accountability for success or failure. It gave him authoritative direction over the operations, joint training, and logistics of subordinate commands in pursuance of the assigned mission. It empowered him to select (and dismiss) his subordinate commanders and assign them command functions. Finally, it granted the CINC control over logistics and administration.²¹ By reducing the effects of service parochialism, America was better prepared to synchronize its conduct of joint operations.

On 16 December 1989, Manuel Noriega became the self-proclaimed "maximum leader" of Panama. Noriega's disregard for the democratic process, his disdain for the good offices of the Organization of American States, and his

contempt for the United States encouraged his subordinates to conduct rash and lethal actions against American citizens. As a result, President George Bush ordered the US Armed Forces into Panama to create an area safe for Americans, ensure the security of the Panama Canal, provide a stable environment for the freely elected Endara government, and bring Noriega to justice.²²

On 20 December 1989, the US military began an assault on Noriega's forces. The operation was characterized by the introduction of overwhelming combat power on 27 targets simultaneously during the hours of darkness. The goal was to minimize casualties on both sides and to incapacitate the Panama Defense Forces (PDF) and its leadership as quickly as possible. Noriega surrendered to US forces on 3 January 1990, ending the operation.²³

The real lesson of Just Cause lies in what contributed to such an effective, synchronized operation. One factor was a chain of command and direction in which each participant performed in the proper role. There was no doubt as to who was responsible for what. A second contributing factor was a well-executed military plan that combined the principles of war with precision and timing. A third factor was the remarkable proficiency of all Services' troops. This derived from superior training at lower levels and from a series of joint rehearsals that were made possible because training time was available and used.²⁴ Moreover, enough time had been available to fine-tune key aspects of the operational plan, resolve doctrinal and procedural differences, and assure relatively thorough and effective direction of a highly centralized operation.²⁵ Thus, operational synchronization was enhanced.

Despite overwhelming success, several synchronization shortcomings merit attention. While not denigrating the effectiveness of the operation, the command and control requirements of JTF SOUTH were not as stressful as would have been required had the force been more "joint." A US Army JTF

headquarters, formed from the XVIII Airborne Corps and augmented as required by service components, conducted a ground-oriented campaign predominately with Army forces.²⁶ Secondly, the joint staff did not plan for creating a new government, nor consider in great depth what would occur after the shooting ceased. The absence of post-conflict planning resulted in massive looting, a weak Panamanian government with a hollow military force, a shattered societal infrastructure, and the hasty assembly of a Civil-Military Operations Task Force that lacked unity and had little guidance. JTF South, the operational headquarters, assumed that after a brief period (30 days), responsibility for supporting restoration would be transferred to the US Embassy. Moreover, planners anticipated that there would be a functioning civilian government in place.²⁷ Working in unfamiliar territory, the joint staff did not prepare or synchronize conflict termination into the total operational plan. Contingency planning for restoration was seen in the short-run, not as part of a broad, synchronized political-military strategy. Finally, interagency coordination was nonexistent. US Government agencies that would have to participate in the restoration of Panama were excluded throughout the planning process.²⁸

In summary, historical trends have shown that significant synchronization shortcomings in joint planning stand out. Ad hoc and inexperienced JTF staffs formed prior to execution appear to significantly hinder any operation. Furthermore, service component plans developed in isolation without a review from higher headquarters tend to increase the margin for disaster. Even JTFs with time available to rehearse and synchronize overlook key planning requirements. Above all, JTF staffs that succumb to parochialism or interservice rivalry doom joint planning from the start.

The need to synchronize joint operations is paramount. Future wars and crises may not be as forgiving to ill-prepared or inadequate staffs as highlighted in the previous examples. Joint staffs must be prepared to meet challenges of an unpredictable, fast-paced, unforgiving world. The true lesson is that JFCs must help achieve synchronization by honing their staff skills in peacetime, or else suffer defeat or over-costly victory in war.

DOCTRINAL REVIEW

To understanding synchronization in today's military, one must review current joint doctrinal literature. Although synchronization is stressed in most joint planning manuals, our doctrine gives little guidance for its training and evaluation. The following fundamental joint doctrinal manuals concern themselves with the synchronization process and merit analysis and review: Joint Pub 1, Warfare of the US Armed Forces; JCS Pub 3-0, Doctrine for Unified and Joint Operations; Armed Forces Staff College (AFSC) Pub 1, The Joint Staff Officers Guide; AFSC Pub 2, Service Warfighting Philosophy and the Synchronization of Joint Forces; JCS Pub 5-00.1, Joint Tactics, Techniques, and Procedures for Campaign Planning; and JCS Pub 5-00.2, JTF Planning Guidance and Procedures.

Joint Pub 1 is the capstone joint manual written to help ensure members of the US Armed Forces fight successfully together. It states that modern warfighting requires a common frame of reference, a joint campaign, within which operations on land and sea, undersea, and in the air and space are integrated and harmonized. From this, the joint campaign plan achieves sequenced and synchronized employment of all available land, sea, air, special operations, and space forces; and orchestrates the employment of these forces

in ways that capitalize on the synergistic effect of joint forces. Thus, the objective of synchronization is the employment of overwhelming military force designed to wrest the initiative from opponents and defeat them in detail.²⁹ Yet, the absence of information about processes and techniques has caused some critics to deride Joint Pub 1 as being "little more than pabulum."³⁰ Although it tells one to synchronize operations in the campaign plan, Joint Pub 1 does not specify the "How-to" aspect of synchronization.

JCS Pub 3-0 is the central document of the joint operations series. This publication sets forth doctrine to govern the joint activities and performance of the US Armed Forces in joint operations. It provides military guidance for use by the Armed Forces in preparing their appropriate plans and prescribes doctrine for joint operations and training.³¹ Focusing on joint planning, JCS Pub 3-0 emphasizes the synchronization of air, land, sea, space, and special operations in harmony with diplomatic, economic, and informational efforts to attain national and multinational objectives. It states that joint plans synchronize operations by establishing command relationships among subordinate commands, by describing the concept of operations, by assigning tasks and objectives, and by task organizing forces. It gives eleven tenets that should be included in synchronized plans. Noting that plans should not be too complex, JCS Pub 3-0 identifies the JFC's challenge in synchronizing the wide range of capabilities available into "full dimensional operations" against the enemy.³² As with Joint Pub 1, these measures describe what must be done, but they do not tell "How-to" do it.

To compound this lack of guidance, JCS Pub 3-0 prescribes the use of ad hoc exercise opportunities to train joint staffs. It states that staffs should be identified and trained for planning and controlling joint operations. It emphasizes that those employing the joint staff should have thorough

knowledge of their capabilities and limitations. The training focus for all forces and the basis for exercise objectives should be the combatant commander's joint mission essential task list (JMETL).³³ One problem is this manual condones ad hoc training methods, professes employment of a joint staff by assuming adequate knowledge of its capabilities, and creates the term JMETL without defining it. This practice, in conjunction with a lack of "How-to" guidance in synchronizing joint planning, highlights a significant problem area in our doctrine.

To clearly outline the fundamentals of the joint planning system, AFSC Pub 1 is an educational reference book designed to assist new "joint" staff officers. Its organization and content offers the "big picture" of a complex planning system; introduces joint and combined organizations and their command relationships; describes the responsibilities of joint staff action officers; and present references and detailed guides to assist staff officers in joint planning.³⁴ Although this manual never formally recognizes synchronization as a key requirement, it does detail the relationship of the CINC and the National Command Authority (NCA) through deliberate and crisis action planning. Furthermore, this publication gives joint planners an appreciation of a higher-level process that contributes to campaign planning.

AFSC Pub 2 is designed to supplement AFSC Pub 1 by laying out logically the framework for the synchronization of joint forces. It defines synchronization as the arrangement of land, sea, and air operational forces in time, space, and purpose to produce maximum relative combat power at the decisive point. It includes the vertical integration of service functions within each theater operating system and the horizontal integration of those functions across operating systems in time and space to maximize a unified effort.³⁵ This manual's chief merit is that it coalesces the fundamentals of campaign

planning and operational design. Defining terms such as center of gravity, lines of operation, culminating points, phasing, sequencing, or application of resources (to name a few), AFSC Pub 2 lists the tools a joint planner must have to achieve operational synchronization.³⁶ Again, as in previous manuals, the "How-to" portion essential to bring these concepts together is missing.

Rather than achieve synchronization through the military decision making process, AFSC Pub 2 attempts to enhance synchronization by linking service functions through the ability of JFCs to achieve "asymmetrical" relationships. No longer do we fight for control solely by air-to-air, sea-to-sea, or land-to-land battles of the past. Today's armed forces gain advantage by planning asymmetrical operations that are diametrically opposite the enemy in methodology and style. For example, asymmetry can be achieved when enemy air is countered by navy anti-air in combination with army air defense. In this way, asymmetrical relationships permit the theater commander to mass selective capabilities of his land, sea, and air forces against the weaknesses of his opponents' forces.³⁷ By inference, asymmetrical operations demand a degree of synchronization beyond that needed for more conventional actions. While outlining synchronization in theory, this manual fails to provide the essential detail to guide joint planners in attaining operational synchronization.

JCS 5-00.1 (Draft) prescribes doctrine and selected tactics, techniques, and procedures (TTP) for joint planning and provides guidance when preparing these plans. Initially, this manual repeats the same synchronization concepts outlined in JCS Pub 3-0 and AFSC publications. However, 5-00.1 expands the synchronization definition by first emphasizing the importance of synchronizing activities to bring a campaign to conflict termination. Second, it explains that joint force operations are conducted at a tempo and point in time

that best exploit friendly and hinder enemy capabilities. JFCs can selectively apply and prioritize capabilities to synchronize application of the force in time, space, and purpose. Third, the use of rehearsals in joint planning is stressed in order to determine how well the joint force is synchronized to carry out major campaigns. Fourth, this publication states that wartime planning must consider the synchronization of capabilities and actions in various dimensions to achieve assigned objectives quickly and with minimum casualties. Finally, this manual stresses that joint staffs should be trained on a regular basis by making maximum use of established or ad hoc training exercises. This will ensure, the manual argues, that those who have responsibility for fighting the force will have the knowledge and ability to accomplish the mission.³⁸

Even though JCS Pub 5-00.1 provides new and useful guidance in developing joint plans, it still falls short in giving the reader a "How-to" remedy. Granted, the manual states that success is dependent on the JFC's ability to integrate joint force capabilities and synchronize their full dimensional efforts. However, there is no discussion of what constitutes a good or bad plan. Moreover, there is no guarantee that plans are synchronized even if a joint staff can execute given specific guidance. As with Joint Pub 3-0, there still remains a tendency to embrace ad hoc training. Since JCS Pub 5-00.1 is a TTP manual, one would expect doctrinal specifics on how to train effective staff teams that habitually work together and must develop a common experience in writing a joint plan, ideally more than once.

The final publication, JCS Pub 5-00.2, establishes joint planning guidance and procedures for forming, staffing, deploying, employing, and redeploying a JTF for short-notice contingency operations. It implies synchronization by stating that the JFC's key responsibility is to ensure that cross-service support is provided and that the force operates as an effective, mutually

supporting team.³⁹ This manual's strength lies in its appendices, which contain lists of questions, arranged by crisis phase, that the JFC and planners should consider during a crisis situation. Covering the joint staff spectrum, this publication provides a checklist of questions provided by Defense agencies, component commands, Services, and past JFCs.⁴⁰ Although this document can help in developing coherent training plans, it falls short in addressing how to synchronize the vast array of activities posed by an overwhelming checklist.

In varying degrees, these doctrinal manuals have emphasized the importance of synchronization and have provided detailed guidance for joint planning. However, it appears our manuals have missed the mark in outlining worthwhile synchronization guidance. On one hand, our manuals are vague while on the other hand they are too "process" oriented by offering "cookie cutter" checklists and formatted decision making tools to help synchronize joint operations. Joint doctrine would improve if it reached a balance by emphasizing the value of experience gained from repeated training, then codified these lessons learned in the form of updated tactics, techniques, and procedure manuals. Due to "real-world" constraints of minimal training time, increased standards, and limited resources, the joint planner faces the danger of reinforcing training deficiencies. More significantly, by condoning ad hoc training, our future readiness becomes susceptible to the mistakes of the past.

Many critics suggest that revision is necessary due to a variety of authors, press deadlines, and complexities of coordination present in current joint doctrine.⁴¹ What is needed is a coherent doctrine which avoids redundancy and outlines standards and procedures. Such clear doctrine promotes synchronization at the JTF level. Once this is accomplished, a common joint doctrine can assist JFCs and staffs to effectively synchronize operations.

CURRENT COMBATANT COMMAND TRAINING PRACTICES

CINCs don't have time or the money to train every JTF staff.

- Colonel Tom Lyons
US Air Combat Command⁴²

Having identified synchronization difficulties in history and in doctrine, this section reviews selected practices in various combatant commands. The goal is to determine the role of the CINC and his staff in training standing or potential JTFs in the intricacies involved in synchronizing joint operations. Research of these practices will demonstrate the degree to which units train synchronization.

Training subordinate JTFs in synchronization falls into three categories: Total decentralization with no CINC input; decentralization with a varying degree of CINC staff assistance, and centralized practices that fully involve the CINC in all exercises. Simulation, "piggyback," or full-scale exercises are used to train joint staffs. In some cases, Corps Battle Simulation (CBS) supported exercises allow joint Army and Air Force commands to train against a computerized opposing force (OPFOR). In a resource constrained environment, many combatant commands use the "piggyback" method in which joint training ties into scheduled subordinate service component training.⁴³ Full-scale exercises involve deployment of an entire JTF staff to an actual theater of operations. In this latter category, exercises such as "Team Spirit" in South Korea emphasize joint and combined training. In essence, simulation, piggyback, and full-scale exercises train synchronization by testing the JTF decision making process, preparation of combat orders, and command and control.

The first training category includes unified combatant commands that follow a decentralized approach. In this case, JTFs receive very little CINC guidance on training synchronization of JTF operations. It appears that the combatant command places more emphasis on service components, and seeks to provide competent staff officers to newly formed JTFs. For instance, US Central Command (USCENTCOM), uses the J-1 (joint personnel and administration staff officer) to organize ad hoc joint staffs when the situation requires it. By training joint staffs through on-the-job training (OJT), USCENTCOM piggybacks or uses a full-scale exercise to train synchronization. No outside evaluation of JTF synchronization is conducted.⁴⁴

The second training category incorporates combatant commands that give specific guidance and staff assistance, yet still execute in a decentralized manner. US Pacific Command (USPACOM) uses a Deployable Joint Task Force Augmentation Cell (DJTFAC) to "provide joint, multi-disciplined expertise in the operational level of war to a uni-service staff in order to form the JTF staff."⁴⁵ The DJTFAC is a nominal team of 25-30 personnel, representing all services and functional areas tailored from the CINC, US Pacific Command (CINCPAC) staff. The DJTFAC can deploy within 6 hours of alert notification. The DJTFAC assists in the development of the CINCPAC activation and warning order prior to deployment. Once deployed, the DJTFAC integrates into the subordinate JTF plans, intelligence, operations, and logistics cells to develop JTF commander's estimate, campaign plan, and operation order (OPORD). The DJTFAC assists JTF synchronization by being apart of the staff during crisis action planning. To ensure readiness of the JTF, DJTFACs train and exercise regularly with joint force commanders.⁴⁶ For example, should the US Army I Corps be assigned the task of commanding joint forces, CINCPAC would augment the Corps' staff with a tailored DJTFAC. Finally, in order to maintain high standards of training, the

CINCPAC inspector general (IG) designates a team to evaluate selected exercises. Within his capability, the JTF commander helps the evaluation team accomplish its mission.⁴⁷

Finally, the third category is the combatant command centralized training concept. Both US European Command (USEUCOM) and US Atlantic Command (USACOM) appear to be the most prescriptive and detailed of those units sampled. USEUCOM assists their JTF staff by sending 20-80 people from Headquarters, USEUCOM, to focus on public affairs, logistical resource requirements, and political military teams. Referred to as a "little standing and a little ad hoc," these JTF staffs are created on the basis of USEUCOM's unique mission.⁴⁸ JTF staff training is broken into four events. First, one-day seminars are held biannually to explain to potential key staff officers how a joint headquarters works, to promote a deeper understanding of capabilities and employment factors, and to enhance team building. Second, USEUCOM has constructed an annual crisis planning exercise command post exercise (CPX) to refine crisis action procedures used when a JTF is being formed. Third, USEUCOM trains synchronization through biannual "piggybacking" on existing field exercises. Overlaying JTF training on external command-funded exercises has created joint field training opportunities to train command and control, logistics, ballistic missile, and special operations synchronization. Finally, annual computer assisted exercises play an important role in joint training. These exercises focus on planning and decision-making against a challenging opponent. Moreover, USEUCOM components have developed free play, force-on-force wargames within operational exercises. Participants document observations to codify lessons learned that assist in developing accurate training assessments.⁴⁹

USACOM focuses on a three-tier program to improve the joint training of assigned Continental United States (CONUS) based forces. Tier 1 contains all of the training by which service components achieve service-directed standards of performance. Tier 2 encompasses the joint training of forces at the tactical level of joint operations. This service-sponsored training focuses on joint tactics, techniques, and procedures (TTP) in the near term. Major rotations of brigade packages at the National Training Center (NTC) are examples of Tier 2 exercises in which the US Army sponsors Air Force, Marine, and Navy involvement. USACOM provides support and sponsorship to add the "joint" for field training. Tier 3 training provides for the joint exercise of combat staffs at the operational level of conflict. Full scale joint exercises such as "Ocean Venture" and "Agile Provider" provide the only current mechanism for JTF staff training.⁵⁰

Currently, USACOM assists their subordinate JTF staff by sending a 38-person augmentation cell (called JTF 140C) that is drawn from the CINC HQs. This planning cell focuses solely on the J-5 political-military planning arena. It appears the J-1 (Personnel), J-2 (Intelligence), and J-3 (Operations) staff directorates are given only superficial help. The members of this JTF 140C Augmentation cell are identified early on a battle roster kept by the J-7 (Operational Plans and Interoperability). This augmentation cell trains only biannually. Furthermore, since USACOM is predominately a naval HQs, only Army and Air Force officers are identified for augmentation duty to round-out necessary "joint" positions.⁵¹ In this regard, should XVIII Airborne Corps be designated a JTF, naval officers would have to be hastily added to the augmentation list. Unfortunately, this procedure gives the joint staff an ad hoc tendency.

Realizing that a major shortcoming in joint staff training existed, and understanding the exorbitant cost of full scale exercises, USACOM conducted a study in September 1993 to improve and centralize Tier 3 training. As a result, the Chairman of the Joint Chiefs of Staff (CJCS) approved the creation of the Joint Warfighting Center (JWFC) to provide for training, planning, exercise, and rehearsal of CONUS-based staffs for joint operations in a computer-assisted command post exercise (CPX). However, the future JWFC still requires a facility and instructional staff to teach joint doctrine as well as tactics, techniques, and procedures. The JWFC also needs a support staff to conduct computer-assisted exercises and rehearsals for training audiences two echelons below the combatant command. The ability to provide and host professional observer-controllers (OC), opposing force (OPFOR), and technical support staff is essential for superior Tier 3 programs. In essence, the CINC's vision for fiscal year 1996 is to centralize joint staff training. This includes an academic/seminar phase, planning exercise phase, and joint computer-assisted combat modeling.⁵¹

Although USACOM has a long term plan to address the JTF synchronization training problem, the short term effect will be minimal. Currently ad hoc JTF staffs force the CINC to rely on service component training and the experience gained from infrequent full-scale exercises. Should the USACOM become involved in a regional conflict, a newly-formed ad hoc staff may not be prepared to adequately synchronize a crisis action plan. The result is to put future readiness at risk.

Besides a challenge in the short run, one must question USACOM's future training proposal. Time will be a significant factor when USACOM tries to train six potential JTFs (which may include: I Corps, III Corps, XVIII Airborne Corps, 2nd Marine Expeditionary Force, 8th Air Force, and 2nd Fleet). Due to financial constraints, a large training audience, and minimal resources, one may

question whether the JWFC can service all the potential JTFs in a reasonable amount of time. Additionally, the JWFC staff may take time to achieve sufficient competence in organizing evaluation procedures, understanding joint doctrine, and developing administrative harmony. Still lacking is a CINC-driven training program that features observer-controllers who can evaluate JTF synchronization, who can decipher vague joint doctrine and expected standards, and who can prepare JTF staffs in the short run.

A JOINT TASK FORCE TRAINING PROGRAM

In wartime, a predominant interest of the combatant commander is to ensure that campaign plans incorporate his intent, achieve strategic objectives, synchronize all military forces, and orient on the enemy center of gravity. Equally important is the ability of JTF staffs to prepare estimates, conduct thorough wargaming, produce quality plans, and synchronize all military forces in a timely manner. Accordingly, training the JTF staff assists the combatant commander in accomplishing this goal.

Fundamental to JTF planning is the estimate process, which is essential to formulating and updating military action to meet the requirements of any situation. A six-step process, the estimate helps organize and outline key operational factors essential to making viable decisions. It entails mission and situational analysis (in the geostrategic context), course of action (COA) development (to include force requirements, logistical and deployment concepts, and time estimates), COA analysis (or wargaming), comparison of COAs, and the decision.⁵³ Thus, by training in the estimate process, a JTF staff should develop and refine its decision-making capability. By evaluating a staff's planning, preparation, and execution process, a JTF training program can

enhance the synchronization of US ground, air, naval, and special operations forces.

The purpose of this section is to outline a combatant command-driven training program that focuses on evaluating JTF synchronization. The methodology involves explaining the US Army's Battle Command Training Program (BCTP) and then discussing key requirements of this model that can be applied to training a functional JTF.

This proposal uses the two-tier command and control model for contingency operations. Fundamentally, the two-tier concept places the CINC as the strategic headquarters and the JTF as the subordinate operational/warfighting headquarters. To illustrate, USCINCPAC is the overall headquarters retaining combatant command (COCOM) of all US Pacific Command (USPACOM) forces. Accordingly, a designated JTF is the subordinate headquarters exercising operational control (OPCON) of assigned JTF forces. Service components provide logistical and administrative support to their JTF components as required. A BCTP type program can facilitate training JTF synchronization using the two-tier concept.

BCTP is the Army's premier training vehicle for corps and division staffs. Established at Fort Leavenworth, Kansas in 1987, its aim is to provide a standardized, carefully evaluated training experience for divisions and corps under stressful, near combat conditions. The aim is achieved using dedicated and skilled opposing forces (OPFOR), observer-controllers (OC), and exercise periods long and intense enough to force 24-hour operations. Advanced computer technology, in the form of the Corps Battle Simulation (CBS) model, is used to simulate realistic combat conditions across all functional areas (intelligence, maneuver, fire support, air defense, mobility/countermobility, logistics, and command and control).⁵⁴ The model also allows for the interplay

of all significant battlefield functions. Operations run the gamut from contingency deployments through set-piece, high-intensity conflicts, to operations other than war. Besides training US Army divisions and corps' leaders and staffs, BCTP serves as a data source for improving US Army doctrine, training, leader development, organizations, and soldiers.⁵⁵

BCTP is a three-phased program. Phase I is an educational-technique development phase. It begins with an extensive reading program covering doctrine from the tactical to the strategic level of war. The phase concludes with a five-day commander's conference at Fort Leavenworth where the BCTP staff assists the commander in team building, focusing application of Army doctrine, and strengthening the command and staff estimate processes. The seminar stimulates thinking about doctrine and tactics, promotes insights and discoveries about the complexity of war, and promotes understanding of the commander's battle style and unit standard operating procedures (SOP).⁵⁶ In effect, a division or corps command and staff team should leave Phase I with a solid understanding of the decision making process, and a focus on key areas that must be trained at home station.

Phase II of BCTP is the WARFIGHTER exercise (WFX), based on the unit's mission essential task list (METL) and a previously developed operations plan. Normally occurring four to six months after the seminar, the WFX is a simulation supported, multi-echelon, fully integrated tactical command post exercise (CPX).⁵⁷ The WFX is supported by a battle simulation center (SIMCTR) where multiple computers and workstations simulate all the subordinate elements of the corps or division, and where the exercise controllers are located. The SIMCTR in turn is linked electronically to the National Simulation Center at Fort Leavenworth. To the unit in the field, the simulation is transparent. Using organic communication means, units are given battle

resolution by controllers at the simulation center. There are no computer terminals for the commander and staff, only the realistic and stressful atmosphere generated by the real-time, comprehensive CBS simulation and SIMCTR players who "role-play" combat effects. Thus, time-sensitive decision making becomes critical as the dynamics of the simulation quickly overcome those who choose to react instead of anticipate events.⁵⁸ In all WFXs, tough performance standards are established by using a thinking, "world class" OPFOR that uncompromisingly uses realistic enemy tactics and doctrine to achieve decisive, measurable results.⁵⁹

The importance of the WFX is the observations made by the observer-controllers (OC) throughout the unit's current execution and future planning process. Beginning with the initial planning meeting for the exercise, OCs observe the interactive information flow that develops the commander's intent and operational concept in the eyes of his subordinates. Synchronization of battlefield activities depends upon good information flow. The commander's clear articulation of concepts and the development of synchronizing tools contribute to this. Staff briefings must be scheduled to decision cycles that provide critical information to the commander. Within three command posts (CP) habitually used by US Army divisions and corps (i.e., tactical, main, and rear), such mundane things as standard staff procedures, a common scale of maps, uniform radio-telephone procedures, and a correct understanding and use of operational security among the CPs are important. Most important, a clear delineation of responsibilities among CPs is essential to avoid confusion and enhance synchronization of effort.⁶⁰

During the WFX, BCTP OCs provide after action reviews (AAR). These are the heart of the exercise. Each command layer of the unit undergoing evaluation receives an AAR. The BCTP staff facilitates the AAR by blending

computer records and multiple observations from every functional and command area to capture and brief an objective, precise assessment of the previous three days of training. The BCTP staff carefully maintains the objectivity and professionalism of the AAR by accurately documenting the critical exercise events. This is done by effectively filtering the plethora of data and focusing on mission accomplishment.⁶¹

BCTP's final phase consists of a two-product, take home package. The final exercise report (FER), issued one to two months after exercise completion, is a written product from the OCs based on their observations throughout the WFX. It covers the planning, preparation, and execution of each mission conducted and identifies unit strengths and weaknesses. Four to six months after the WFX, BCTP provides the unit a proficiency sustainment package (PSP). The PSP consists of two to three actual vignettes from the WFX and develops these situations into a training package for the unit. This package is complete with scenarios, reports, orders, and implementing instructions. It facilitates conduct of home station Command Post Exercises (CPX) designed to correct identified shortcomings.⁶²

Overall, BCTP has changed the US Army's focus on training large units. By increasing the evaluation criteria for division and corps level units, the standard for synchronizing combat operations has increased. Increases notwithstanding, over the past seven years, several recurring synchronization shortcomings continue to stand out. Unit's still fail to adequately synchronize operations by conducting ineffective wargaming and rehearsals, resulting in a failure to implement the commander's intent. Moreover, BCTP has identified synchronization shortcomings in the Intelligence Preparation of the Battlefield (IPB) in which G-2s did not provide adequate focus for collection, maneuver, and fire planning. Finally, in the area of combat service support, many

maneuver control plans were not synchronized with the concept of support.⁶³

BCTP has identified almost every imaginable shortcoming in executing large unit operations. What is important is that these shortcomings have been identified and that Army units are better off now than we were before the advent of BCTP. In terms of training unit synchronization, BCTP has provided senior Army leaders with essential feedback to improve performance and ensure combat readiness.

To improve JTF synchronization, one must look to tailoring the Army's BCTP for adoption by combatant commands. A joint BCTP can assist the Joint Force Commander by increasing staff readiness at a low cost. Equally important, because BCTP stresses the joint staff collectively, such a program challenges individual members to learn their professional trade. Above all, BCTP provides a feasible way to train large units within current resource constraints.

By using the BCTP model, a combatant commander may look to curing the problems associated with ad hoc staffs. The CINCs need a relatively quick and efficient program that discourages service parochialism, exercises the inexperienced, and reduces compartmentalized planning. A joint, CINC-driven, BCTP-type program can develop increased JTF planning skills and enhance synchronization. Combining these issues, I propose a BCTP-type exercise at the JTF level called the Joint Task Force Training Program (JTFTP). This JTFTP would institutionalize the BCTP methodology at the joint level: A week long Phase I commanders conference at CINC headquarters; a Phase II, JTFTP WFX at the JTF headquarters six months later; and a Phase III take-home package follow-up within a two to six month timeframe. Besides the BCTP-type timeline, the JTFTP must include five essential requirements to drive a program that trains synchronization and provides key feedback to the CINC. These points include

producing a clear campaign plan, developing a competent OC team, possessing a viable simulation system, teaching effective AAR techniques, and writing useful take-home packages.

The Campaign Plan

The CINC's staff must produce a campaign plan that is plausible, clear, and simple. Fundamentally, the campaign plan must focus on identifying the strategic objectives, providing adequate resources, and giving a clear intent that orients theater forces on the enemy's strategic center of gravity. Furthermore, the plan outlines viable command and control relationships to ensure unity of effort among all subordinate units. Finally, the campaign plan clearly defines what constitutes success in terms of a concrete endstate. In effect, a thorough plan which specifies the CINC's ends, ways, and means gives the JTF staff a basis of information to begin translating operational objectives into a tactical operations plan (OPLAN). By giving the JTF staff a useable campaign plan, the CINC staff can begin evaluating the JTF planning ability as well as its ability to process information. Concrete information provided from the onset will allow the CINC staff to effectively measure the synchronization strengths and weaknesses in a JTF OPLAN.

The OC Team

Developing a competent OC team is another JTFTP requirement (see Appendix 1 for organizational chart). The program demands a joint team composed of 30 officers with expertise in the following staff directorates: J-1 (personnel), J-2 (intelligence), J-3 (operations), J-4 (logistics), J-5 (plans and policy), and J-6 (command, control, and computer systems).⁶⁴ In addition, special sections that include the engineer, medical, and transportation staff

members will be necessary to reinforce the J-4 OC team. Responsibility for organization and specific manning of the team would be the job of the J-5. Using the authority of the CINC and the Combatant Command Chief of Staff, the combatant command evaluation team will evaluate the JTF commander and his staff as they formulate their operations plan. The CINC OC team would evaluate the JTF estimate process, OPLAN rehearsal, and execution. Since joint service standards are currently in their infancy, it will be incumbent upon each staff member to incorporate his own service component standard to ensure a comprehensive evaluation. Initially resource intensive, the cost in time is made up in experience gained from researching doctrine, applying interservice tactics, techniques, and procedures (TTP), and observing exercises.

Rather than sending out evaluators with a clipboard and checklist to test units, the selected members of the CINC staff would go through a rigorous training program to become competent OCs. The combatant command must maintain credibility by training OCs to become joint doctrinal experts, and to apply the relevant service component manuals in the correct situation. Second, the OCs must understand why something happened during a particular event. They do this by asking pertinent questions of counterparts, continuously observing in order not to miss critical events, and examining the "audit trail" to link cause and effect. Next, OCs must interact with other evaluators. In order for a operational fires OC to know why targets were not tied to the J-2 template, he must coordinate with the JTF intelligence OC to research the problem. Fourth, OCs must follow up unanswered questions before making a final judgment. Fifth, OCs should use doctrinal checklists. Not all soldiers have the mental capacity to memorize field manuals, and thus the use of checklists or guides relieves the OC of this burden. Finally, OCs must innovate and share techniques and ideas. Video taped evaluations, checklist examples, specific field

manuals, and service-specific doctrinal picture boards may be good ideas that OCs must share among themselves. In effect, the OC becomes a professional trainer. Furthermore, the inclusion of OCs on the CINC's staff enhance joint awareness by sharing service related doctrine and evaluation procedures. The end result will be the development of CINC-sponsored evaluation standards that can be used not only within the command, but also shared among various US military theaters.

The Simulation System

The use of existing simulations to "test" the JTF OPLAN is another key JTFTP requirement. Currently, all combatant commands have available to them the Joint Conflict Model (JCM) to train a JTF staff.⁶⁵ The JCM is a dynamic, event-sequenced computer-based model in which all elements of ground, air and sea combat are treated stochastically. Outcomes of events occur according to the laws of probability and chance. The JCM is capable of simulating campaign plans that involve up to two divisions (or a Marine Expeditionary Force [MEF]), five Air Force Wings, and several naval task groups.⁶⁶ By using the JCM, the JTFTP can replicate the BCTP's WARFIGHTER exercise. Using the same framework, the CINC can create a JCM SIMCTR and evaluate the JTF staff as it operates in its "wartime" command post. The realistic and stressful atmosphere will be generated by the real-time JCM simulation and SIMCTR players who "role-play" combat effects. Thus, time-sensitive decision making becomes critical as the dynamics of the simulation quickly verify the true nature of JTF synchronization.

After Action Review Techniques

The next JTFTP requirement is inculcating effective after action review techniques. It has been my experience that there is a crucial weakness in the ability of US Army officers to conduct AARs. For the purpose of this section, I will assume the same deficiency exists across all services. Thus, I will discuss in detail key AAR techniques gleaned from my personal experience as an OC at the US Army's National Training Center (NTC).

It is instructive to analyze the US Army's use of AAR in training. The Army's Chief of Staff, General Gordon Sullivan, recently commented on the AAR process:

The payoff for conducting any training is in the lessons that we learn and the resultant influence on future performance. The AAR is the most significant development to come out of the entire creative process.⁶⁷

He further noted that AARs and take-home packages capture the tactical essence of our Army, providing snapshots of the state of training. In providing unit feedback, no other method has been so successful in giving the Army a clear assessment of its potential.⁶⁸

Army field manual FM 25-101, Battle Focused Training, defines an AAR as a review of training that allows soldiers, leaders, and units to discover for themselves what happened during training and why. The manual stresses that AARs must guide discussions toward achieving learning objectives, stimulating soldier interest, and controlling the AAR to involve all participants.⁶⁹ In effect, Army doctrine is unclear on how to guide, stimulate, and control the AAR process.

Most new OCs have difficulty learning procedures and techniques necessary to stimulate effective AARs.⁷⁰ New controllers tend to criticize

soldiers rather than help coach, guide, and mentor. Effective methods which produce competent AAR leaders include reading existing manuals, watching others conduct an actual AAR, or by trial and error. Although reading, watching, and trial and error are methods commonly used, focusing on group dynamics is key to success.⁷¹

To be effective, an OC must enhance his communication skills by understanding group dynamics, how to conduct a meeting, how to provide feedback, and how to use questioning techniques.⁷² The OC must skillfully guide, stimulate, and control a meeting (the AAR). He guides the group by outlining an agenda, requesting participation, and not allowing participants to stray from the discussion topic. Next, he stimulates the group by creating a "nonthreatening environment." For instance, the OC may positively manipulate the environment by carefully selecting an indoor AAR site out of bad weather. He can use the word "we" when providing feedback to give the impression that the OC is part of the group. Finally, the OC controls the group by exercising his authority as leader and not allowing excuses for training failures.

The OC must understand the principles for useful feedback. Feedback is worthwhile when it is descriptive, specific, and can be fixed in a reasonable amount of time.⁷³ There are many instances of evaluators giving vague and confusing feedback that covers every item in a training manual. Feedback must be clear, useful, and well-timed. The OC must know the unit's mission essential task list (METL) in order to provide accurate feedback.

The OC must understand the use of questioning techniques. In some AARs have the evaluator monopolizes the conversation by not allowing others to speak.⁷⁴ When this occurs, the AAR degenerates into a critique. To be successful, the OC must know when to talk, and when to let the unit members talk. There are many times when the OC will have missed certain key events,

and the unit itself will surface the deficiency. The OC must recognize that he is not all-knowing and that the group is a wealth of knowledge. Therefore, he must master the art of asking leading questions. Since he is basically aware of both the friendly and enemy situation, the OC must shape his AAR by asking those questions designed to "pull-out" pertinent information from the group. In essence, the AAR tenet of discovery learning relies on the OC's ability to talk less while stimulating group participation with questioning. The OC can then effectively funnel key training objectives in lessons learned that the group collectively identifies. The mark of a good AAR is a group on "auto-pilot"- that is, group members freely discuss issues among themselves with only periodic involvement by the AAR leader.⁷⁵

Take-home Packages

The ability of the CINC's staff to write useful take-home packages is the final JTFTP requirement. Within three weeks of the conclusion of the Joint simulation phase of the exercise (slightly adjusting the BCTP model), the exercise control staff provides the JTF commander a take-home package with which he and his staff may assess the status of their training. Additionally, the JTF may use the take-home package to develop training strategies and plans to improve or sustain proficiency. The take-home provides key evaluations on each operational function or staff section.

The CINC's staff presents the take-home package in a standardized format summarizing execution and the key lessons learned from the exercise. It outlines the operation by covering the plan, preparation, and execution phases in great detail. When writing a take-home package, OCs must emphasize causal relationships by linking training failure to doctrinal requirements. Equally important, OCs must emphasize learning points by quoting doctrinal

publications when applicable. Consequently, units receive a document that is specific enough to guide them in their future training, as well as a doctrinal teaching vehicle.

Due to the fluidity of joint operations, there are many occasions when circumstances might hinder the CINC's ability to gain a true assessment of his potential JTF's ability to synchronize. The JTFTP gives the CINC the opportunity to "look in the mirror" and receive positive, realtime feedback. Hence, by formally observing the planning, preparation, and execution facets of each JTF's planning process, the CINC can gain a thorough insight to subordinate level execution.

In summary, a JTF Training Program like that described would be a valuable tool that inculcates current doctrine, enhances joint planning procedures, and effects synchronization. The program's key to success will be producing a clear campaign plan, using well-trained OCs who constantly observe and follow up, possessing a viable simulation system, executing thorough AARs, and writing useful take-home packages. Not only will such a program evaluate the planning process in excruciating detail, it will apply a cost-efficient (and existing) simulation to verify whether the JTF plan is truly synchronized.

ADVANTAGES AND DISADVANTAGES OF A JTF TRAINING PROGRAM

In the unpredictable environment of the post-cold war era, the armed forces are constantly faced with challenges to United States security and vital interests. To meet future threats, CINCs must adopt a joint evaluation package to better synthesize joint operations. The purpose of this section is to analyze the advantages and disadvantages of using a CINC-driven evaluation system to

improve JTF synchronization. The criteria applied as a measure of effectiveness include: lowering cost of training; simulating conditions expected in wartime; regularly exercising JTFs that are likely to be deployed; and enhancing interoperability.

The JTF Training Program offers several advantages, particularly concerning the cost involved in full-scale JTF training exercises. Primarily, the JTFTP focuses on a small training audience - no more than a 60 person JTF staff.⁷⁶ Although a full-scale JTF staff may be as large as 800 people, the JTFTP will only evaluate the principal and deputy member of each directorate. Brought together on temporary duty (TDY) status to "think" warfighting, these selected staff members will be evaluated only on their ability to synchronize joint operations. Combining this training audience with a 30 person OC team and various computer analysts requires an approximate total of 100 people. Keeping costs focused strictly on temporary duty (TDY) expenditures and limiting JCS training fund requirements, the JTFTP cost is a pittance compared to current joint simulation exercises like "Ocean Venture" or "Internal Look."⁷⁷ Furthermore, with the joint conflict model (JCM) simulation already in place, additional equipment requirements are minimized. Finally, the cost in time is reduced. Concentrating on a small training audience for a total of two weeks (during the JTFTP's seminar and WFX), allows CINCs and JFCs time for other missions.

Embedded in the JTFTP is the joint principle of "simulating conditions expected in wartime." The JTFTP replicates many battlefield conditions by creating a realistic planning environment. The JTF staff must perform the normal myriad of planning tasks and produce an OPLAN under constrained time. In addition to increasing the stress level, the JTFTP demands high standards by presenting the staff with complex situations under the OC's

watchful eye. The existence of the JCM's "civilian-contracted" OPFOR further challenges the staff to synchronize operations against an intelligent enemy who fights to "win." Finally, the JCM can replicate a wide variety of theater environments while forcing joint staffs to plan combined operations.

"Regularly exercising JTFs that are likely to be deployed" is another key joint principle that the JTFTP supports. Training frequency is increased with a small staff audience and minimal OC support. Since the JTFTP seminar and WFX cover only a two week period, CINCs are given more time to run additional synchronization exercises. Moreover, JTFTP's low cost allows for the distribution of training exercises across most, if not all, the potential JTFs.

Finally, the joint principle, "enhance interoperability," is a fundamental JTFTP tenet when training JTF synchronization skills. Throughout the training sequence, joint doctrine is constantly stressed and refined by capable OCs who observe each training event. In this way, the CINC's OC team can assist in refining existing doctrine and developing new joint tactics, techniques, and procedures (TTP) and subsequently submit lessons learned into the Defense Department's Joint Uniform Lessons Learned System (JULLS). Above all, the JTFTP OC team can identify deficiencies that currently inhibit our joint training.

Taking all four criterion into account, two potential JTFTP disadvantages evolve. First, it is difficult to simulate the challenges of a full-scale deployment. Given the opportunity (and funds), a full-scale deployment would allow "piggyback" OCs to evaluate JTF synchronization at many command levels. For instance, an OC team could observe planning at the JTF, and then track that planning through subordinate service component levels. However, expanding and integrating multiple CINC OC teams into hugely expensive joint exercises may be beyond the budgetary restraints of the unified command. At the same

time, the requirement for officers to fill any new OC positions will compete with other service and joint manning quotas. A second disadvantage of the JTFTP is the "dual-hat" nature of many likely JTFs. Many potential JTFs are liable to more than one CINC for training. For example, XVIII Airborne Corps appears in the training plans of USACOM, USCENTCOM, and the US Southern Command (USSOUTHCOM). Finding any time for JTFTP while competing against multiple combatant commands for use of particular headquarters may prove extremely difficult.

To overcome these two disadvantages, the military must convince Congress of the cost effectiveness and benefits of a standing CINC OC team in preparation for combat. Next, CINCs can attempt to tie in the JTFTP into major contingency exercises. Linking the JTFTP with a major joint exercise can force synchronization training prior to any deployment. By thoroughly coordinating JTF training time, the "dual-hat" disadvantage can become a positive experience as CINCs jointly validate the JTF's JMETL and eliminate training redundancy. This practice will improve combat readiness as the CINCs train the various JTFs.

Despite shortcomings and CINC competition for JTF training time, the Joint Task Force Training Program will enhance JTF synchronization. By minimizing costs, stressing leaders, developing standards and evaluating to standard, improving doctrine, maintaining constant pressure on staffs, and enhancing interoperability, this program will improve JTF synchronization.

CONCLUSIONS AND IMPLICATIONS

In retrospect, one must ask if a combatant command training program can significantly improve Joint Task Force synchronization in a resource constrained environment. Reviewing the importance of synchronization in history, in doctrine, and in current combatant commands, a JTFTP is essential to training JTF synchronization.

Historical trends have shown that ad hoc JTF staffs formed prior to execution which acquiesce to service parochialism significantly hinder military operations. Additionally, plans developed in isolation without a review from higher headquarters tend to increase the margin for disaster. The most prominent warning from history is that future JTF staffs must practice developing integrated plans in peacetime or else risk defeat in combat.

Second, our joint manuals are either vague or too "process" oriented to help synchronize joint operations. Joint doctrine would improve if it reached a balance by emphasizing the value of experience gained from training, then codified these lessons learned in the form of updated tactics, techniques, and procedure manuals. There is no coherent doctrine which now outlines standards and procedures promoting synchronization at the JTF level.

Third, an analysis of current combatant command practices reveals that training the synchronization of JTF operations falls into three categories: total decentralization with no CINC input; decentralization with a varying degree of CINC staff assistance, and centralized practices that fully involve the CINC in all exercises. Most combatant commands exercise the JTF planning and execution process through simulation, "piggyback," or full-scale operations. Except for USACOM's concept for creating a Joint Warfighting Center, most commands lack an affordable, CINC-driven training program that features OCs who can evaluate

JTF synchronization and can decipher vague joint doctrine. Without such a training program, the ability of newly formed JTFs to synchronize operations could be significantly diminished.

Fourth, in view of historical synchronization shortcomings, incomplete doctrinal training methodology, and inconsistent training practices, the US military must adopt the proven, Army BCTP training model and expand it to the joint arena. In this way, the proposed Joint Task Force Training Program provides a systematic means for evaluating JTF synchronization using the military decision making process as a training vehicle. This program's function would be to assess JTF synchronization in terms of staff planning, preparation, and execution. In contrast to USACOM's JWFC, one key aspect of this program is that it involves only 30 OCs from the CINC staff, evaluates a maximum of 60 members JTF staff members, and requires limited JCM support personnel -- Therefore, it is affordable.

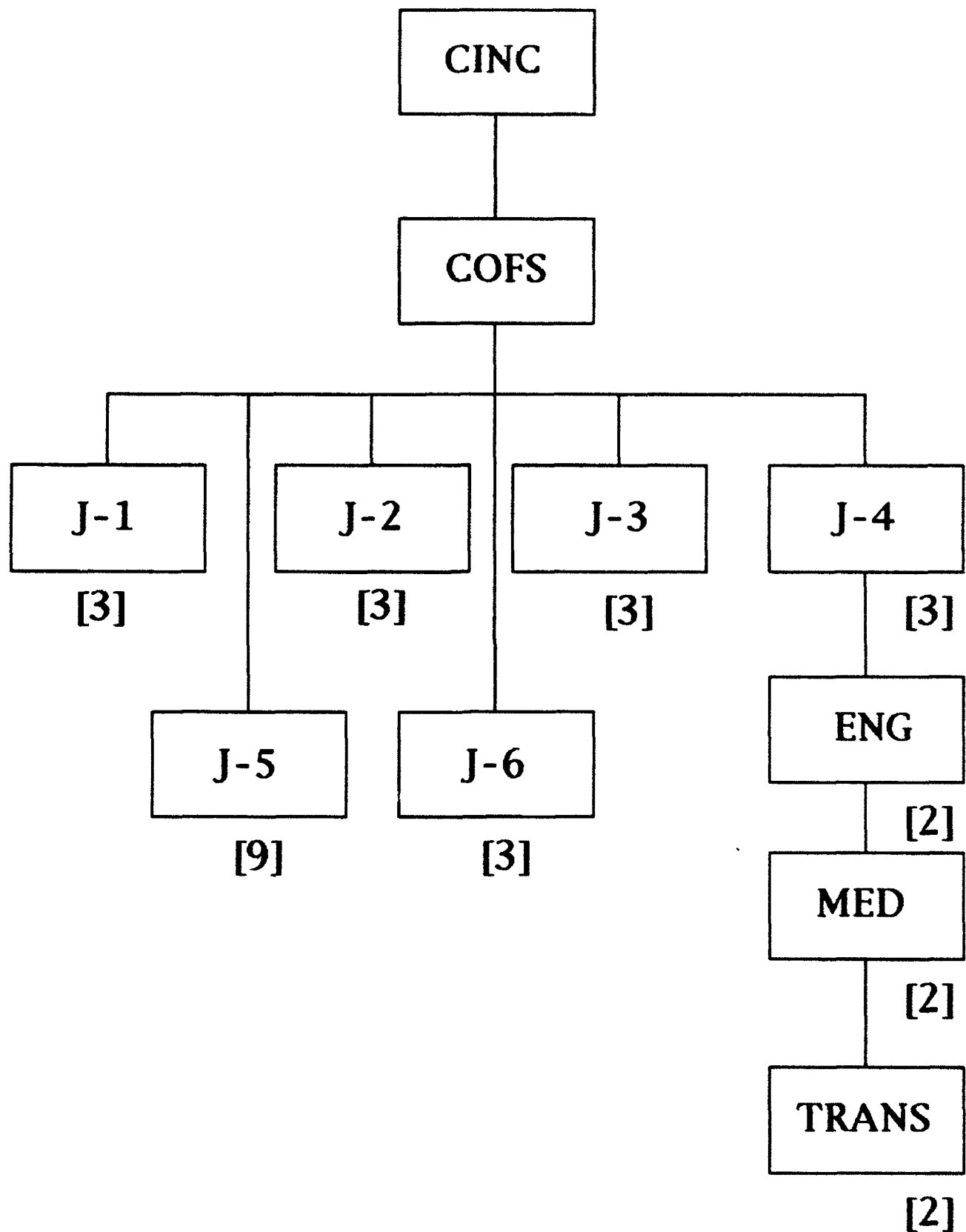
Finally, with the JTFTP, the CINC establishes and maintains a qualified OC team in which every member masters doctrine, gives quality AARs, and writes user-friendly take-home packages. A thoroughly trained OC team gives superior feedback to the CINC and to the subordinate joint commander. Because the team uses the same people each time, the process ensures consistency in feedback. In this way, the CINC can be confident that he has unbiased information to enhance his overall training assessments. Furthermore, the CINC can check synchronization by verifying that his intention is reflected in the actual planning and coordination of movements, fires, and supporting activities.

As a result of significant budget cutbacks, the US military has curtailed full-scale JTF exercises. As individual services fight to maintain combat readiness, the synchronization of JTF operations continues to be a challenge.

As shown by the high expectations expressed in our "joint" doctrine, CINCs are required to maintain combat readiness despite being severely constrained by resources. The JTFTP will train JTF synchronization skills in preparation for war, rather than allow them to atrophy in peace.

In conclusion, the Joint Task Force Training Program is an instrument to focus JTF staff warfighting skills. The JTFTP trains commanders and staffs to be capable of planning and synchronizing air, land, sea, and special operations. It forces training to "joint" standards and assists in codifying lessons to develop new tactics, techniques, and procedures. Above all, the JTFTP is a valuable training tool that enhances "joint" staff precision so units can achieve effective command and control.

Appendix 1 (JTFTP OC Team Organizational Chart)



Note: OC requirement is listed below each staff directorate. Total number of OCs required for JTFTP is 30 personnel. The J-5 is weighted since it must evaluate maneuver, fires, deception, and each service component's contribution to OPLAN preparation and execution.

ENDNOTES

1. AFSC Pub 2, Service Warfighting Philosophy and the Synchronization of Joint Forces, (Norfolk, Virginia, 1992), p. II-1-1.
2. Major Bill Graham, "The Joint Warfighting Center, Joint Forces Quarterly, (Washington, D.C., Autumn 1993), p.112.
3. Major Robert G. Gorrie, "Joint Battle Staff Training," Operations Department Thesis, (Naval War College, 1991), p. 7.
4. US Army. FM 100-5, Operations, (Washington, D.C.: Department of the Army, 1993), p. 2-8.
5. Ibid, p. 2-15.
6. LTG (Ret) John H. Cushman, "Joint Command and Control," Military Review, (Ft. Leavenworth, Kansas, July 1990), p. 26.
7. JCS Pub 3-0, p. IV-2.
8. Public Papers of the President, Harry S. Truman, Special Message to Congress, Washington, D.C., 19 December 1945.
9. Lance A. Betros, "Coping with Uncertainty: The Joint Task Force and Multi-Service Military Operations," (Monograph, SAMS, US Army CGSC, 1991), p.19.
10. Richard A. Gabriel, Military Incompetence, Why The American Military Doesn't Win, (New York: Hill and Wang, 1985), p. 85.
11. Ibid, p. 103.
12. "Iran Rescue Mission: Report Cites Mission's Lack of Review," Aviation Week and Space Technology, 22 September 1980, p. 140.
13. Gabriel, p. 104.
14. Ibid, p. 112.
15. Aviation Week and Space Technology, p. 140.
16. US Army Training and Doctrine Command, Combined Arms Center, Operation Urgent Fury Assessment (U), (Ft. Leavenworth, Kansas), p. II-5.
17. Gabriel, p. 151.
18. Mark Adkin, Urgent Fury: The Battle For Grenada, (Lexington: Lexington Books, 1989), pp. 126-127, 131-132.

19. Colonel Jerome G. Edwards and LTC Michael A. Anastasio, "Grenada: Joint Logistical Insights for 'No-Plan' Operations," National Security Discussion Paper, (Harvard University, 1989), p. 18.

20. Gabriel, p. 178.

21. Public Law 99-433, 1 October 1986, Goldwater-Nichols Department of Defense Reorganization Act of 1986, Sec 164 (c), Command Authority of Combatant Commander: Assignment; Powers and Duties."

22. Thomas Donnelly, Margaret Roth, and Caleb Baker, Operation Just Cause: The Storming of Panama, (New York: Lexington Books, 1991), Forward.

23. Ibid.

24. LTG (Ret) John H. Cushman, Command and Control of Theater Forces: The Future of Force Projection Operations (Draft), (Cambridge: Harvard University, 1991), pp. 75-76.

25. Blair A. Ross, "The Joint Task Force Headquarters in Contingency Operations," (Monograph, SAMS, US Army CGSC, 1993), p. 19-20.

26. James R. Helmly, "Future US Military Strategy: The Need for a Standing Joint Task Force." (Individual Study Project, US Army War College, 1991), p. 20.

27. Richard H. Shultz, In the Aftermath of War. Just Cause, (Maxwell Air Force Base: Air University Press, 1993), pp. 17, 21, 28-30.

28. John T. Fischel, The Fog of Peace: Planning and Executing the Restoration of Panama, (Carlisle Barracks, Pennsylvania: US Army Strategic Studies Institute, 1992), p. viii.

29. Joint Pub 1, pp. iii, 47.

30. Robert A. Doughty, "Reforming Joint Doctrine," Joint Forces Quarterly, (Washington, D.C., Summer 1993), p. 42.

31. JCS Pub 3-0, p. v.

32. Ibid, pp. III-10 to III-29.

33. Ibid, p. IV-2.

34. AFSC Pub 1, The Joint Staff Officers Guide 1993, (Norfolk, Virginia: 1993), p. 1-2.

35. AFSC Pub 2, p. II-1-3.

36. Ibid, pp. II-3-19 to II-3-25.

37. Ibid, p. II-4-5.

38. JCS Pub 5-00.1, Doctrine for Joint Campaign Planning (Revised Initial Draft), (Washington D.C., June 1992), pp. iii, III-12, IV-19.
39. JCS Pub 5-00.2, JTF Planning Guidance and Procedures (Test Pub). (Washington, D.C., June 1988), pp. I-1, II-5.
40. Ibid, Appendix A thru J.
41. Robert A. Doughty, p. 42.
42. Colonel Tom Lyons (Air Combat Command), the author conducted a interview on 12 January 1994 at Norfolk, Virginia.
43. LTC Robert Fulcher (USCENTCOM, Deputy J5), the author conducted a phone interview on 1 December 1993, Ft. Leavenworth, Kansas.
44. Colonel Michael Pasquarette (Director of General Headquarters Exercises, US Army War College), the author conducted a phone interview on 7 January 1994, Ft. Leavenworth, Kansas.
45. Briefing Slides, USCINCPAC Two Tiered C² Concept, (Camp H.M. Smith, Hawaii, 30 November 1993).
46. USCINCPAC Instruction 3020.11A, Organization and Administration of USCINCPAC Joint Task Force Augmentation Cell (DJTFAC), (Camp H.M. Smith, Hawaii, 30 November 1993), pp. 1-5.
47. USCINCPAC Instruction 3550.1N, USCINCPAC Military Exercises, (Camp H.M. Smith, Hawaii, 24 September 1992), pp. 13-14.
48. Colonel Michael Pasquarette (Director of General Headquarters Exercises, US Army War College), the author conducted a interview on 10 December 1993 at Ft. Leavenworth, Kansas. I am indebted to Colonel Pasquarette who provided not only his personal views on current JTF practices, but also relevant factual data regarding specific shortcomings in joint doctrine and methodologies.
49. Colonel Jack Ellerson and LTC Robert Kloecker, The Challenge of Joint Force Training - USEUCOM's Approach to Preparing the Force, (USEUCOM HQs, Stuttgart, Germany, November 30, 1993), pp. 5-8.
50. USACOM Briefing Slides, USACOM Joint Training Program, (USACOM, Norfolk, Virginia, 11 January 1994).
51. Pasquarette, 7 and 25 January 1994 phone interviews.
52. Captain James C. Sherlock (US Navy), USACOM's Joint Training and Simulation Center (JTASC), (USACOM, Norfolk, Virginia, 26 October 1993), pp.1-3.
53. JCS Pub 3-0, pp. C-1 to C-4.

54. LTG General William H. Harrison and LTC Larry Saunders, "Fighting the First Battle Now," Military Review, (Ft. Leavenworth, Kansas, October 1990), p. 13.

55. Department of the Army, TRADOC Regulation 350-XX, Battle Command Training Program (Final Draft), (Ft. Leavenworth, Kansas, October 1993), p.1.

56. Ibid, p. B-1.

57. Ibid, p. 12.

58. Gorrie, p. 19.

59. LTC (Ret) Thomas D. Morgan, "BCTP Training Leaders," Military Review, (Ft. Leavenworth, Kansas, 1990), p. 45.

60. Ibid, p. 50.

61. Harrison, p. 17.

62. TRADOC Regulation 350-XX, pp. 13 and E-1.

63. Briefing Slides, BCTP Lessons Learned, (Ft. Leavenworth, Kansas, 1993).

64. Pasquarette, 19 February 1994 phone interview.

65. LTC Andy Bowers (Joint Conflict Model Program Manager, Joint Warfighting Center, Norfolk, Virginia), the author conducted a phone interview on 15 February 1994. LTC Bowers is the JWC's computer simulation guru. His insights are invaluable to a resourceful CINC who wants to rigorously train a joint staff, but maintain low simulation costs.

66. Ibid.

67. General Gordon R. Sullivan, "Flexibility Sets the Pace at Combat Training Centers," Army Magazine Green Book, (Arlington, Virginia, Association of the U.S. Army, July 1993), p. 35.

68. Ibid.

69. US Army, FM 25-101, Battle Focused Training, (Washington DC: Department of the Army 1990), p. G-1.

70. Author's Note, US Army National Training Center (NTC) Experience, 1987-9.

71. Warren Wintrode, "The AAR Process Applied," The New Observer/Controller Training Program, (Fort Irwin, California: NTC, October 1989), p. I-2-A.

72. Ibid.

73. Ibid.

74. Author's Note, NTC Experience, 1987-9.

75. Ibid.

76. Pasquarette, 19 February 1994 phone interview. Colonel Pasquarette identified the need for minimizing JCS fund requirements. He pointed out that it would be more feasible to keep a JTF training audience to roughly 100 people, pay them TDY dollars, and fly them to a central training location. For example, if I Corps was designated a JTF, the responsible CINC would send the JTF staff and OC package to Fort Lewis for training. Above all, JCS costs would be better controlled and kept to a minimum.

77. Ibid.

BIBLIOGRAPHY

Government Publications

Armed Forces Staff College. AFSC Pub 1, The Joint Staff Officers Guide 1993. Norfolk, Virginia: 1993.

Armed Forces Staff College. AFSC Pub 2, Service Warfighting Philosophy and the Synchronization of Joint Forces. Norfolk, Virginia: August 1992.

Department of the Army. TRADOC Regulation 350-XX, Battle Command Training Program (Final Draft). Ft. Leavenworth, Kansas, October 1993.

Public Law 99-433, 1 October 1986, Goldwater-Nichols Department of Defense Reorganization Act of 1986, Sec 164 (c), Command Authority of Combatant Commander: Assignment; Powers and Duties."

Public Papers of the President, Harry S. Truman, Special Message to Congress, Washington, D.C., 19 December 1945.

The Joint Chiefs of Staff. Joint Pub 1, Warfare of the US Armed Forces. Washington D.C.: 11 November 1991.

The Joint Chiefs of Staff. JCS Pub 1-01, Joint Publication System, Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program. Washington D.C.: 15 September 1989.

The Joint Chiefs of Staff. JCS Pub 1-02, DOD Dictionary of Military and Associated Terms. Washington D.C.: 1 June 1987.

The Joint Chiefs of Staff. JCS Pub 3-0, Doctrine for Unified and Joint Operations. Washington D.C.: 9 September 1993.

The Joint Chiefs of Staff. Joint Pub 5-0, Doctrine for Planning Joint Operations (Initial Full Draft). Washington D.C.: Undated.

The Joint Chiefs of Staff. Joint Pub 5-00.1, Doctrine for Joint Campaign Planning (Revised Initial Draft). Washington D.C.: August 1993.

The Joint Chiefs of Staff. JCS Pub 5-00.2, JTF Planning Guidance and Procedures (Test Pub). Washington D.C.: 15 June 1988.

The Joint Chiefs of Staff. JCS Pub 5-02.1, Joint Operation Planning System, Volume I, (Deliberate Planning Procedures). Washington D.C.: 6 July 1988.

US Army. FM 100-5, Operations. Washington, D.C.: Department of the Army, 1993.

US Army. FM 25-101, Battle Focused Training. Washington DC: Department of the Army, 1990.

US Army Command and General Staff College. ST 100-9, The Command Estimate. Fort Leavenworth, Kansas: US Army Command and General Staff College, July 1993.

US Army Training and Doctrine Command, Combined Arms Center. Operation Urgent Fury Assessment (U). Ft. Leavenworth, Kansas, 1986.

US Marine Corps. Fleet Marine Force Manual 1 Warfighting. Washington D.C.: Department of the Navy, March 1989.

US Marine Corps. Fleet Marine Force Manual 1-1 Campaigning. Washington DC: Department of the Navy, January 1990.

US Congress. Public Law 99-433, Goldwater Nichols Department of Defense Reorganization Act of 1986. 99th Congress, 2nd Session, 1 October 1986.

Books

Adkin, Mark. Urgent Fury: The Battle For Grenada. Lexington: Lexington Books, 1989.

Clausewitz, Carl Von. On War, ed. and trans. Michael Howard and Peter Paret. Princeton, New Jersey: Princeton, New Jersey: Princeton University Press, 1984.

Cushman, John H., LTG, USA (Ret). Thoughts For Commanders. Annapolis: Whitmore Printing, 1993.

Donnelly, Thomas, Margaret Roth, and Caleb Baker. Operation Just Cause: The Storming of Panama. New York: Lexington Books, 1991.

Fischel, John T. The Fog of Peace: Planning and Executing the Restoration of Panama. Carlisle Barracks, Pennsylvania: US Army Strategic Studies Institute, 1992.

Gabriel, Richard A. Military Incompetence. Why the American Military Doesn't Win. New York: Hill and Wang, 1985.

Heller, Charles E., and Stofft, William A. America's First Battles 1776-1965. Lawrence: University of Kansas Press, 1986.

Rosen, Steven, Peter. Winning the Next War. Ithaca: Cornell University Press, 1991.

Shultz, Richard H. In the Aftermath of War, Just Cause. Maxwell Air Force Base: Air University Press, 1993.

Van Creveld, Martin. Command in War. Cambridge, Massachusetts: Harvard University Press, 1985.

Articles

- Cushman, John H., LTG, USA (Ret). "Joint Command and Control." Military Review. July 1990.
- Doughty, Robert A. "Reforming Joint Doctrine." Joint Force Quarterly. Summer 1993.
- Graham, Bill. "The Joint Warfighting Center." Joint Force Quarterly. Autumn 1993.
- "Iran Rescue Mission: Report Cites Mission's Lack of Review." Aviation Week and Space Technology, 22 September 1980, p. 140-144.
- Harrison, William H., LTG, USA and LTC Larry Saunders, "Fighting the First Battle Now." Military Review. Ft. Leavenworth, Kansas, October 1990.
- Morgan, Thomas D. "BCTP - Training Leaders." Military Review. July 1990.
- Spigelmire, Michael F., MG, USA. "BCTP and the Victory Division." Military Review. October 1988.
- Sullivan, Gordon R., GEN, USA. "Flexibility Sets the Pace at Combat Training Centers," Army Magazine Green Book. Arlington, Virginia, Association of the U.S. Army, July 1993.
- Sullivan, Gordon R., GEN, USA. and Colonel James M. Dubik. "Land Warfare in the 21st Century." Military Review. September 1993.

Interviews

- Bowers, Andy, LTC, USA, Joint Conflict Model Program Manager, Joint Warfighting Center, Norfolk, Virginia. Phone interview by author on 15 February 1994.
- Fulcher, Robert, LTC, USA, USCENTCOM, Deputy J5. Phone interview by author on 1 December 1993, Ft. Leavenworth, Kansas.
- Lyons, Tom, Colonel, USAF, Air Combat Command. Interview by author, 12 January 1994, Norfolk, Virginia.
- Pasquarette, Michael, COL, USA, Director of General Headquarters Exercises, US Army War College. Phone interviews by author on 10 December 1993, 7 and 25 January 1994, and 19 February 1994, Ft. Leavenworth, Kansas.

Unpublished Dissertations, Theses, Briefings, and Papers

- Briefing Slides: USACOM Joint Training Program. USACOM, Norfolk, Virginia, 11 January 1994.

- Briefing Slides: USCINCPAC Two Tiered C² Concept. Camp H.M. Smith, Hawaii, 30 November 1993.
- Betros, Lance A. "Coping with Uncertainty: The Joint Task Force and Multi-Service Military Operations." Monograph, SAMS, US Army Command and General Staff College, 1991.
- Cushman, John H., LTG, USA (Ret). Command and Control of Theater Forces: The Future of Force Projection Operations (Draft). Cambridge: Harvard University, 1991.
- Department of the Army. Briefing Slides: BCTP Lessons Learned. Ft. Leavenworth, Kansas, October 1993.
- Edwards, Jerome G., Colonel and LTC Michael A. Anastasio. "Grenada: Joint Logistical Insights for 'No-Plan' Operations." National Security Discussion Paper, Harvard University, 1989.
- Ellerson, Jack, Colonel and LTC Robert Kloecker. The Challenge of Joint Force Training - USEUCOM's Approach to Preparing the Force. USEUCOM HQs, Stuttgart, Germany, November 30, 1993.
- Gorrie, Robert G. "Joint Battle Staff Training." Operations Department Thesis, Naval War College, 1991.
- Helmly, James R. "Future US Military Strategy: The Need for a Standing Joint Task Force." Individual Study Project, US Army War College, 1991.
- Ross, Blair A. "The Joint Task Force Headquarters in Contingency Operations." Monograph, SAMS, US Army Command and General Staff College, 1993.
- Sherlock, James C., Captain, USN, USACOM's Joint Training and Simulation Center (JTASC). USACOM, Norfolk, Virginia, 26 October 1993.
- Sterling, John E. "The Corps in the JTF Role." Monograph, SAMS, US Army Command and General Staff College, 1992.
- US Atlantic Command. Tidewater Joint Readiness Complex Definition Study. 30 September 1993.
- US Army. TRADOC Regulation 350-XX, Battle Command Training Program (BCTP), Final Draft. Fort Leavenworth, Kansas: US Army Combined Arms Command, 12 October 1993.
- US Pacific Command. Organization and Administration of USCINCPAC JTF Augmentation Cell (DJTFAC). Camp H.M. Smith, Hawaii, 30 November 1993.
- USCINCPAC Instruction 3020.11A, Organization and Administration of USCINCPAC Joint Task Force Augmentation Cell (DJTFAC). Camp H.M. Smith, Hawaii, 30 November 1993.

USCINCPAC Instruction 3550.1N, USCINCPAC Military Exercises. Camp H.M. Smith, Hawaii, 24 September 1992.

Wintrode, Warren. "The AAR Process Applied." The New Observer/Controller Training Program. Fort Irwin, California: NTC, October 1989.