

AIR WAR COLLEGE

AIR UNIVERSITY

Professional Studies Paper

***“Implementing Effects-Based Operations:
Redefining the Role of the JTCB”***

By

Lt Col James G. Welton, USAF

Seminar 14

Submitted to the Faculty
In Partial Fulfillment of the Graduation Requirements

Faculty Advisor: Col Joseph Cheney, USAF

Maxwell Air Force Base, Alabama

Word Count: 5901

Distribution A: Approved for public release; distribution unlimited.
--

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 2003		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE Implementing Effects-Based Operations: Redefining the Role of the JTCB				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air University Press Maxwell AFB, AL 36112-6615				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 34	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Disclaimer

The views expressed in this academic research paper are those of the author and do not reflect the official policy or position of the US government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Biography

Lieutenant Colonel James G. Welton, USAF, served as an F-111 weapons system officer from 1982 until 1991. From 1991 until 1994 he was an exchange officer with the Royal Air Force (RAF) responsible for aircrew training at two Tornado replacement-training units. From 1994 until 1997 Lt Col Welton served as a weapons test director for the Air Force Operational Test and Evaluation Center, Detachment 2, Eglin Air Force Base (AFB). From 1997 to 1999, he served as the Director of Operations, 39th Operations Support Squadron where he directed operational training support for Operation Northern Watch units comprising 10 deployed USAF, USN, USMC, and RAF flying squadrons; and United States Air Forces in Europe weapons training detachments. From 1999 to 2002, Lt Col Welton served in a NATO assignment at Regional Headquarters Allied Forces Southern Europe (AFSOUTH), as the chief of the J3 Air Cell where he was responsible for planning and monitoring air operations in NATO's Southern Region and AFSOUTH's Joint Operations Area (JOA) comprising the Kosovo Force (KFOR), Stabilization Force (SFOR) in Bosnia-Herzegovina, and Task Force Fox in the Former Yugoslav Republic of Macedonia; he also served as a member of the AFSOUTH Joint Targeting Board (JTB) and Joint Coordination Board (JCB). A graduate of Hastings College with a Bachelor of Arts degree in Political Science and Geography, he also has a Master of Arts degree in International Relations from the University of Southern California, and a Master of Arts degree in Public Administration from Troy State University. His professional military education includes Squadron Officers' School, Air Command and Staff College, Joint Forces Staff College,

and Air War College. Lieutenant Col Welton's next assignment is Commander, 7th AF Air and Space Detachment, Osan Air Base, Korea. His current email is: james.welton@maxwell.af.mil. After 1 July 2003, he may be reached at DSN 315-784-7005 and at: james.welton@osan.af.mil.

Contents

	<i>Page</i>
DISCLAIMER	ii
ABSTRACT	ix
BIOGRAPHY	v
INTRODUCTION	1
NEED FOR EFFECTS-BASED OPERATIONS AT THE	3
OPERATIONAL LEVEL OF WAR	3
JTCB SHORTFALLS	5
OPERATION DESERT STORM	7
OPERATION ALLIED FORCE	9
TWO JCB PARADIGMS	12
CENTCOM JCB CONSTRUCT	12
RHQ AFNORTH JCB CONSTRUCT	14
THE WAY AHEAD: JCB ROLES AND RESPONSIBILITIES	15
JCB COMPOSITION	16
JCB FUNCTIONS AND RESPONSIBILITIES	18
JOINT COORDINATION ORDER (JCO)	22
JCB ROLE IN TARGETING	23
JCB ROLE IN SYNCHRONIZING OPERATIONAL MANEUVERS	24
RECOMMENDATIONS	26
CONCLUSION	27

GLOSSARY OF TERMS	28
BIBLIOGRAPHY	32

Illustrations

	<i>Page</i>
Figure 1. JCB Composition – Board Members.....	17
Figure 2. Joint Coordination Process	21

Tables

	<i>Page</i>
Table 1. Nominal JCB Agenda	19
Table 2. JCB Functions and Responsibilities	20
Table 3. JCO Format.....	23

Abstract

This paper addresses an issue pertinent to the organizational structure of a Joint Task Force (JTF). The author proposes the role of the Joint Targeting Coordination Board (JTCB) should be redefined and broadened to function as a Joint Coordination Board (JCB) to facilitate the Joint Force Commander (JFC) in his efforts to employ effects-based operations. Essentially, the 'T' in JTCB should be dropped from the title to allow the board to function with a broader operational scope. The JCB will focus on campaign integration and employment of joint forces by effect, rather than merely synchronization of events by component. The proposed construct will provide the JFC with a better staff mechanism and organizational framework with a macro-level view of the Joint Operations Area (JOA) to integrate forces and coordinate joint fires with operational maneuvers to achieve desired effects. In an effort to attain effects-based operations at the joint level, redefining and expanding the role of the JTCB to function as a JCB makes sense both from a joint and a component perspective.

INTRODUCTION

“Separate ground, sea, and air warfare is gone forever. If ever again we should be involved in war, we shall fight it in all elements, with all services, as one single concentrated effort.”¹

—Dwight D. Eisenhower

Ever since General Eisenhower spoke of the nation’s military services operating jointly as one single concentrated effort, the Armed Forces of the United States (US) have struggled to devise an optimum method of integrating and synchronizing forces. Today, US joint doctrine prescribes that the nation’s air, land, sea, and space forces must operate as part of a joint/combined team under the unified direction of a designated Joint Force Commander (JFC).² The term JFC, as used throughout this paper, refers to an operational commander who is either a unified combatant commander with combatant command (COCOM) authority, or a designated Joint Task Force (JTF) commander authorized to exercise operational control (OPCON) over a joint force to attain operational and/or strategic objectives.³ The JFC is ultimately responsible for integrating, synchronizing, and employing joint forces in pursuit of operational and strategic objectives. The JFC’s ability to balance effectiveness and efficiency with campaign objectives in a dynamic environment depends on the operational situation and changes in the battlespace that affect his priorities. Joint doctrine currently suggests the Joint Targeting Coordination Board

Notes

¹ Joint Forces Staff College (JFSC) Publication (Pub) 1, *The Joint Staff Officer’s Guide*, Norfolk, VA: Joint Forces Staff College, 2000, v.

² Joint Publication (JP) 0-2, *Unified Action Armed Forces (UNAAF)*, 10 July 2001, I-5.

³ *Ibid.*, I-6 – I-8.

(JTCB) should serve as “an integrating center for the targeting oversight effort *or* a JFC-level review mechanism.”⁴

This paper proposes the JFC will be supported better organizationally by redefining and expanding the role of the JTCB to orchestrate campaign integration and synchronization from a macro-level view of the joint operations area (JOA). Basically, the “T” in the JTCB should be dropped from the title to allow the board to function with a broader operational scope as a Joint Coordination Board (JCB). This name change will be more than symbolic; the focus of the JCB will be orchestrating effects-based operations at the operational level of war rather than only approving recommendations of target sets. The new role and purpose of the JCB will be to focus on the campaign integration and employment of joint forces by *effect*, rather than merely *synchronization by component*, to achieve desired operational and/or strategic effects.⁵ The JCB construct, as proposed, does not advocate making operational decisions by committee; the JFC will be the final decision-making authority. However, the JCB construct will provide the JFC with a suitable organizational framework for ‘operationalizing’ effects-based methodologies by integrating and synchronizing forces, and coordinating joint fires and operational maneuvers to achieve desired effects to support campaign objectives.

The concept of effects-based operations is not new and the JCB concept is not a panacea to bring effects-based operations to the forefront of joint/combined operations. However, establishment of a JCB will provide the JFC with a better mechanism to orchestrate force integration and synchronization at the component level to achieve desired operational/strategic effects. Additionally, participation in the JCB will provide components with a better appreciation of the JFC’s vision and how their assigned missions contribute to the desired end-

Notes

⁴ JP 3-60, *Joint Doctrine for Targeting*, 17 January 2002, III-10.

⁵ Gp Capt Stuart Peach, “The Doctrine of Targeting for Effect,” *RUSI Journal*, December 2000, 72.

state. Therefore, redefining the role of the JTCB by broadening the scope of the board makes sense both from a joint perspective, and also from a component force perspective. The JCB will provide better support to the JFC and improve coordination between component commands by focusing on campaign integration and employment of effects-based methodologies at the operational level of war.

This paper assesses the need to ‘operationalize’ effects-based methodologies at the operational-level of war, reviews the shortcomings of the current JTCB model using examples from Operations Desert Storm and Allied Force, and analyzes two JCB paradigms used by US Central Command (CENTCOM) and NATO’s Regional Headquarters Allied Forces Northern Europe (RHQ AFNORTH). The paper proposes a nominal JCB construct with specific roles and responsibilities. In conclusion, the paper offers a set of recommendations to establish a JCB and ‘operationalize’ effects-based operations and a summary of the benefits of expanding the role of the JTCB to function as a JCB.

NEED FOR EFFECTS-BASED OPERATIONS AT THE OPERATIONAL LEVEL OF WAR

Air Force Major General Dave Deptula, a leading proponent of effects-based operations, believes military planners must move beyond their narrow tactical viewpoints and legacy methods that focus on “destroying targets, moving arrows on a map, and waging wars of attrition” and transition to a campaign-planning philosophy to “avoid attrition encounters, applying force at the right place and time to achieve specific operational and strategic effects.”⁶ Integrating effects-based operations into the campaign plan is dependent upon the ability to

Notes

⁶ David A. Deptula, “Air Force Transformation: Past, Present, Future,” *Aerospace Power Journal*, Fall 2001, 89.

identify options, both lethal and non-lethal, to achieve the desired effects that support the JFC's operational and strategic objectives.⁷ Current joint doctrine is vague with regard to effects-based operations and the concept of creating synergies through force integration generally results in Service-centric approaches to joint warfare.⁸

A primary role and function of the JCB will be to assess the operational situation and advise the JFC on effects-based operations to apply the right force, at the right place, and right time to achieve desired effects. The JFC, his planners and component commanders must understand that "implementing joint effects-based operations will also demand rethinking the assumption that close combat is the only way to defeat opposing land forces."⁹ The JCB will add value to the process by ensuring joint forces and joint fires are not only synchronized, but fully integrated to support assigned tasks and missions. Furthermore, the JFC's planners should incorporate effects-based operations methodology into the campaign plan to attain outcomes throughout the battlespace that directly affect the enemy's ability to continue resisting, rather than only employing air and space power to impose pain and punishment.¹⁰

Effects-based operations should be planned, integrated, and employed across the spectrum of the battlespace. After NATO's war over Kosovo, Lieutenant General Short, the Combined Forces Air Component Commander (CFACC) in Operation Allied Force, opined that if the air component commander cannot explain the 'effect' he expects to have by bombing a target, then he "should not be bombing that target."¹¹ Correspondingly, if a ground component

Notes

⁷ JP 3-60, I-5.

⁸ Price T. Bingham, "Seeking Synergy, Joint Effects-Based Operations," *Joint Forces Quarterly*, Spring 2002, 58.

⁹ Ibid., 59.

¹⁰ Benjamin S. Lambeth, *Transformation of American Air Power*, Ithaca, NY: Cornell University Press, 2000, 269.

¹¹ Michael C. Short, "An Airman's Lessons from Kosovo," in *From Manoeuvre Warfare to Kosovo?* ed. by John Andreas Olsen, The Royal Norwegian Air Force Academy, 2001, 285.

commander cannot explain the ‘effect’ he expects to gain through operational maneuvers and force-on-force engagements, he should not be committing forces to attack the enemy. In the application of effects-based operations, the JFC needs to know when and what to change in a dynamic environment with sufficient force integration and adaptability to win decisively. The JCB is a forum the JFC can use to ensure effects-based operations are considered and applied at the operational level of war, through integration of forces by effect, throughout the campaign.

JTCB SHORTFALLS

The integration of joint targeting into the campaign crosses functional and component seams and is performed at the tactical, operational, and strategic levels. The JFC, in consultation with his component commanders, is responsible for setting priorities, providing clear targeting guidance, and determining the weight of effort to be waged during the course of operations.¹² Joint doctrine allows the JFC considerable leeway in determining how best to integrate the targeting function and, depending on the circumstances, the JFC may either retain targeting responsibility on his staff, or delegate some or all of the targeting processes and authority to a subordinate commander. However, the JFC must ensure mechanisms are in place to bring unity of effort to the targeting process as well as to the employment of joint military operations. JFCs typically organize a JTCB as either an integrating center for the joint targeting effort or as a review mechanism.¹³ The collaboration between the combatant command, JTF, component commands and national agencies is a critical element that must be fully integrated into the joint targeting process.

The current JTCB construct is designed to provide a forum in which strategies and

Notes

¹² JP 3-60, vi.

¹³ JP 3-60, III-10.

priorities can be articulated to ensure joint operations are integrated and synchronized.¹⁴ The JTCB focuses on the operational level of war to ensure that intelligence, operations, and fires are synchronized and de-conflicted by component. The JTCB is typically responsible for: reviewing target information; developing targeting guidance and priorities; refining the draft joint integrated prioritized target list (JIPTL);¹⁵ maintaining a list of restricted targets and areas where SOF forces are operating; ensuring target nominations are consistent with the JFC's concept of operations; and ensuring that information operations are adequately addressed.¹⁶ The JFC determines who will lead the JTCB; it is often chaired by the deputy JFC and the J3 is normally tasked to organize the JTCB and serve as a member. Key considerations for the JFC when determining organizational structure, board composition, and concept of operations are: unity of effort, centralized planning and direction, and decentralized execution.¹⁷

A review of the JTCB construct in previous operations is relevant to discussion of the proposal to redefine and expand its role to function as a JCB with a broader operational scope. Although it is not within the scope of this paper to provide a lengthy campaign analysis of previous operations, it is useful to view the JTCB from an operational perspective. Arguably, the potential 'value-added' is that a JCB would have provided the JFC a better staff-level mechanism with a macro-level view of the JOA in both Operation Desert Storm and Operation Allied Force.

Notes

¹⁴ JP 3-60, III-10.

¹⁵ Note: Responsibility for developing the JIPTL may reside on the JFC staff, or be delegated to a component commander. The JIPTL is developed to prioritize targets based upon the effects their attacks will have in attaining campaign objectives. It is the JFC's prerogative to assign responsibility to develop the draft JIPTL to whomever he determines best capable. (See JP 3-60, pp. III-3 and III-10 for further details).

¹⁶ JP 3-60, III-11.

¹⁷ JP 3-0, x.

Operation Desert Storm

The JFC (who dual-hatted himself as the JFLCC) delegated broad targeting authority to his CFACC with regard to developing and maintaining the joint target list (JTL) and the JIPTL.¹⁸ There is little evidence the JFC became routinely involved in micro-managing targeting decisions. The JFC, who dual-hatted himself as the Joint Force Land Component Commander (JFLCC), made it clear to his subordinate commanders that there was only one person in charge of air operations: the CFACC.¹⁹ However, as a result of concerns voiced by the two Army corps commanders regarding preparation of the battlefield, the JFC established a JTCB mid-way through the war (chaired by the deputy JFC) to review and approve the draft JIPTL submitted by the CFACC.²⁰ Nevertheless, the CFACC was afforded broad authority to determine targeting policy, procedures, and tasks that provided unity of command and unity of effort, which directly contributed to the success of the joint air campaign. Despite the stand-up of a JTCB, friction ensued between the Army and the Air Force when the corps commanders, unaware the CFACC was only following the JFC's guidance and targeting priorities, blamed the CFACC for failing to strike all of their target nominations during the air campaign.²¹

Once the ground offensive commenced, friction arose between the CFACC and the corps commanders regarding coordination of fires in the deep battle and the placement of the fire support coordination line (FSCL). The corps commanders established the FSCL forward of their

Notes

¹⁸ Note: The JTL is a consolidated list of potential targets in a combatant commander's area of responsibility and is tailored to meet specific objectives and priorities of an operational plan (OPLAN). The JFC staff, in conjunction with component commanders, national agencies, higher headquarters, and/or supporting commands may develop and nominate targets for inclusion on the JIPTL. (See JP 3-60, pp. III-2, III-3, and III-8 for further details).

¹⁹ Lambeth, *Transformation of American Air Power*, 132.

²⁰ James A. Winnefeld, and Dana J. Johnson, *Joint Air Operations, Pursuit of Unity in Command and Control, 1942-1991*, Annapolis, MD: Naval Institute Press, 1993, 125.

²¹ Tom Clancy with General Chuck Horner (Ret), *Every Man a Tiger*, New York: G.P. Putnam and Sons, 1999, 471 and 474.

maneuvering troops to define the area short of which close air support missions had to be coordinated with ground units; the CFACC could attack targets beyond the FSCL without coordinating with the corps.²² On the third day of the ground offensive, General McPeak, former Air Force Chief of Staff, asserts the corps commanders moved the FSCL well beyond their ability to affect the close battle without coordinating with either the JFC or CFACC.²³ As a result, the CFACC was prevented from interdicting the main lines of communication (LOC) between Baghdad and Kuwait, creating a 17-hour sanctuary from air strikes for retreating Iraqi units.²⁴ After the war, the JFC admitted he had known little of this friction between his corps commanders and the CFACC.²⁵ In the final analysis, the Army corps commanders “had little to complain about, other than not having been properly kept in the loop” by the JFC.²⁶

A discussion of the merits of designating a separate JFLCC during Operation Desert Storm is beyond the scope of this paper. However, the establishment of a JCB and participation of a JFLCC would have provided clear insight to the corps commanders of the JFC’s preference for striking the Republican Guard over frontline forces in Kuwait and thereby avoided much of the friction between components.²⁷ A JCB would have better served the JFC by enhancing unity of effort and unity of command by keeping all components informed of his vision and concerns for wider operational issues.

Notes

²² John H. Cushman, Lt Gen, U.S. Army (Ret), *Thoughts for Joint Commanders*, Annapolis, MD: privately printed by the author, August, 1993, 32.

²³ General Merrill A. McPeak, “Presentation to the Commission on Roles and Missions of the Armed Forces,” 14 September 1994, 35.

²⁴ Ibid., 35.

²⁵ Lambeth, *Transformation of American Air Power*, 136.

²⁶ Ibid., 137.

²⁷ Thomas A Keaney and Eliot A. Cohen, *Revolution in Warfare? Air Power in the Persian Gulf*, Annapolis, MD: Naval Institute Press, 1995, 132.

Operation Allied Force

During NATO's air war over Kosovo, the CFACC was not afforded the same broad targeting authority enjoyed by the CFACC in Operation Desert Storm. There is ample evidence the US European Command (EUCOM) combatant commander was routinely involved in micro-level targeting decisions.²⁸ Aside from the fact that there were two parallel command structures (US and NATO), it should be noted that the operational commanders in both the US and NATO chains of command were dual-hatted in corresponding roles.²⁹

The combatant commander established a disjointed and cumbersome organizational structure that imposed non-standard targeting processes between multiple commands and impeded the JFC's ability to streamline the target nomination and approval process.³⁰ The multi-layered command and staff-level mechanisms lacked a coherent organizational framework and inhibited unity of command and unity of effort. Through both the US and NATO command structures, the combatant commander often bypassed his JFC in making air apportionment and targeting decisions.³¹ Under the command and control (C2) construct used in Operation Allied Force, the combatant commander should have given broader authority to the JFC to plan and execute the air war over Kosovo; this would have dovetailed into the already established NATO C2 arrangement. Admiral Ellis contends the decision by General Clark to not designate a JFLCC was "doctrinally flawed and operationally dangerous."³² Lieutenant General Short surmised that

Notes

²⁸ Benjamin S. Lambeth, *NATO's Air War for Kosovo*, Santa Monica, CA.: RAND, 2001, 213.

²⁹ Note: The US EUCOM commander, General Clark (USA) was dual-hatted as the NATO Supreme Allied Commander Europe (SACEUR); the US JTF Noble Anvil JFC, Admiral Ellis (USN) was dual-hatted as the NATO Regional Commander of Allied Forces Southern Europe (AFSOUTH); and the US JTF Noble Anvil JFACC, Lieutenant General Short (USAF) was dual-hatted as the NATO Regional Air Component Commander of Allied Air Forces Southern Europe (AIRSOUTH) and designated as the CFACC.

³⁰ Lambeth, *NATO's Air War for Kosovo*, 213.

³¹ Ibid., 193.

³² Bruce R. Nardulli, Walter L. Perry, Bruce Pirnie, John Gordon IV, and John G. McGinn, *Disjointed War: Military Operations in Kosovo, 1999*, Santa Monica, CA: RAND Arroyo Center, 2002, 113-114.

designation of the NATO ACE Rapid Reaction Corps (ARRC) commander as the JFLCC may have proved beneficial to conducting air operations over Kosovo and may have increased the effectiveness of air operations against fielded forces by bringing land expertise into the process.³³ Although the General Clark considered designating a JFLCC, he opted to defer the appointment to avoid organizational complications between the US and NATO command structures.³⁴

Effects-based targeting methodology is well understood by US air power professionals, but it was not widely employed during Operation Allied Force. Although JTF Noble Anvil established a JTCCB to review targets, it did not function as prescribed in joint doctrine.³⁵ Benjamin Lambeth asserts targeting decisions seemed to entail “parceling out sortie and munitions allocations by target category, without much consideration for how a target’s neutralization might contribute toward advancing the campaign’s objectives.”³⁶ General Jumper described the process as “campaign-by-target-list management” whereby planners simply managed the list of approved targets on a daily basis rather than applying effects-based methodologies.³⁷ In testimony to the US Senate, Lieutenant General Short acknowledged that the national command authorities of each NATO nation had a role to play in target selection and approval, but at some point the JFC and his CFACC should have been given approved target sets and categories from which to choose specific targets at the operational and tactical levels.³⁸

In place of the JTCCB, the JFC needs a high-level coordination board, like the proposed JCB, to do things the JTCCB does not do: integrate forces by effect, synchronize joint fires and

Notes

³³ Michael C. Short, Lt Gen (Ret), interviewed by the author, 5 December 2002. Note: The British-led ARRC was deployed to Macedonia and organized for entering Kosovo in a permissive environment. The ARRC headquarters staff became the core staff for the Kosovo Force (KFOR).

³⁴ General Wesley K. Clark, *Waging Modern War*, New York: Public Affairs, 2001, 283.

³⁵ Short, Lt Gen (Ret), interviewed by the author, 5 December 2002.

³⁶ Lambeth, *Transformation of American Air Power*, 222.

³⁷ Ibid., 222.

³⁸ US Senate, *US Policy and NATO Military Operations in Kosovo: Hearings before the Committee on Armed Services*, 106th Cong., 1st sess., 1999, 400.

operational maneuvers to achieve desired effects in support of the JFC's campaign plan. If a JCB construct had been established, in either the US or NATO command structure, the JFC and the CFACC may have still been frustrated by political constraints and interference from the combatant commander, but at least a forum would have existed to elevate critical concerns regarding campaign integration and effects-based operations. Furthermore, the joint coordination process encapsulated in the JCB construct may have allowed Milosevic to be viewed as a unique rather than a generic opponent and an analysis of his particular vulnerabilities may have helped to shape a campaign plan utilizing effects-based operations.³⁹

Notes

³⁹ Benjamin S. Lambeth, "Lessons from the War in Kosovo" *Joint Forces Quarterly*, Spring 2002, 16.

TWO JCB PARADIGMS

A review of two JCB paradigms is pertinent to the discussion of redefining and expanding the role of the JTCB. The JCB model used by CENTCOM provides procedures and responsibilities for planning, integrating, synchronizing, de-conflicting, and executing joint fires by US and coalition forces in the CENTCOM area of responsibility (AOR). At the time of researching and writing this paper, little had been documented on how the JCB functioned during Operation Enduring Freedom. The AFNORTH model prescribes campaign synchronization and targeting processes for planning and executing a NATO Combined Joint Task Force (CJTF) led by RHQ AFNORTH in either an Article 5 or non-Article 5 crisis response operation.⁴⁰ The JCB construct has been employed in numerous NATO exercises conducted in the AFNORTH AOR,⁴¹ and was adapted by RHQ Allied Forces Southern Europe (AFSOUTH) for use during Exercise Dynamic Mix 2002.⁴²

CENTCOM JCB Construct

The CENTCOM document establishing the JCB construct is authoritative and directive for the activities of joint/combined forces, unless otherwise determined by the combatant

Notes

⁴⁰ Note: Article 5 regards an attack against one NATO member as an attack against all members. An example of a non-Article 5 crisis response operation is Alliance military action outside of NATO territory, such as the war over Kosovo. For further details of Article 5 operations, see the *NATO Handbook*, Brussels, Belgium: NATO Office of Information and Press, 2001, 528.

⁴¹ Note: The AFNORTH AOR includes Belgium, the Czech Republic, Denmark, Germany, Luxembourg, the Netherlands, Norway, Poland, the United Kingdom, and the North Sea, Irish Sea, English Channel, Skagerrak, the Kattegat, the Sound and Belts and the Baltic Sea. See the *NATO Handbook*, 260.

⁴² Regional Headquarters Allied Forces Southern Europe (RHQ AFSOUTH), Draft Standard Operating Procedures (SOP) for Joint Coordination Board and Joint Coordination Board Working Group, 12 April 2002. Note: The AFSOUTH AOR includes Greece, Hungary, Italy, Spain, Turkey, and the Black Sea, the Sea of Azov, the whole of the Mediterranean Sea and the Atlantic approaches to the Strait of Gibraltar, and an area around the Canary Islands and its associated airspace. See the *NATO Handbook*, 261.

commander.⁴³ The basic premise of the JCB construct is that components conduct supporting operations, not independent campaigns, and that planning and executing operations is an iterative and continuous process.⁴⁴ The JCB is used to assist component commanders' planning, coordination, and synchronization of limited joint fires resources.⁴⁵ The JCB is also used to promulgate JFC priorities and intent, and refine his targeting guidance to component commanders.⁴⁶ The JCB maintains a macro-level view of the JOA and ensures unity of effort throughout the campaign by focusing 72-96 hours out.⁴⁷ The CENTCOM JCB also assigns supported/supporting commander relationships for specified missions and tasks.⁴⁸

The JFC's guidance and objectives are used to focus target development and evaluation of potential targets using a systems analysis approach to identify critical target sets that, if attacked, are likely to achieve desired effects. The CENTCOM J2 is responsible for producing the JTL to support JTFs and designated operational plans (OPLANs).⁴⁹ CENTCOM utilizes the JFACC to establish and chair a Joint Target Working Group (JTWG) to evaluate and further refine the JTL into a draft JIPTL, and to present targeting options and recommendations to the JFC through the JCB.⁵⁰

The JCB is also used to review component fire support coordination measures (FSCMs) throughout the JOA. Appropriate-level ground commanders may implement approved measures to control and coordinate fires within their assigned area of operations (AOs) after coordinating and disseminating the FSCMs to all other components as necessary. The approval authority to

Notes

⁴³ US Central Command, "*Concept of Operations for Joint Fires*," 10 November 1999, 1.

⁴⁴ Ibid., 1.

⁴⁵ Ibid., 2.

⁴⁶ Ibid., 5.

⁴⁷ Ibid., 12.

⁴⁸ Ibid., 3.

⁴⁹ US Central Command, 15.

⁵⁰ Ibid., 8.

establish and move the FSCL is normally retained by the JFC, or delegated to his J3 to ensure events are synchronized with all components.⁵¹

RHQ AFNORTH JCB Construct

The JCB construct employed in RHQ AFNORTH describes campaign synchronization as the coordination and prioritization of all effort in order to maximize the effectiveness and synergism of combined forces.⁵² The construct describes joint targeting as a process of selecting targets and matching the appropriate response to achieve a desired political or military objective.⁵³ The joint coordination process envisioned by RHQ AFNORTH synchronizes the campaign efforts of the components to capitalize on their synergistic effect. The JFC establishes the JCB to serve as an integrating center to provide a top-level campaign synchronization and joint targeting review mechanism for the entire JOA.

The RHQ AFNORTH JCB is an executive-level review body integrated within the JFC's staff and comprises representation from all staff divisions, including legal and political advisers and component commands. The JCB provides a macro-level view of the JOA and balances competing component requirements with the JFC's direction and guidance. The JCB assigns execution responsibilities to components, assigns supported/supporting commander relationships for specified missions and tasks, and prioritizes and synchronizes joint fires. The board prepares a daily Joint Coordination Order (JCO) for the JFC to amplify his direction and guidance for a period of 3 to 10 days ahead to keep the campaign on track and in concert with his vision.

Notes

⁵¹ Ibid., 23.

⁵² Northern Region Directive (NRD) 80-93, *Campaign Synchronization and Joint Targeting*, Regional Headquarters Allied Forces Northern Europe, Brunssum, The Netherlands, 7 September 2001, 2.

⁵³ Ibid., 3.

The JFC uses the JCO to prioritize and synchronize component tasks, and to provide visibility of his overall operational focus to his component commanders by showing the total integration of all forces and capabilities in one document. The RHQ AFNORTH JCB concept delegates the bulk of the targeting responsibility to the component command that best supports the OPLAN's joint targeting processes, which is normally the air component (AIRNORTH). A JTWG, comprised of representatives of all functional components, is normally established at AIRNORTH and reports to the JFC through the JCB. The JTWG is responsible for developing and maintaining the JIPTL. Campaign synchronization is an iterative process and the JTWG collaborates with the JCB to ensure the JIPTL matches the JFC's direction and guidance promulgated in the JCO.

THE WAY AHEAD: JCB ROLES AND RESPONSIBILITIES

The main proposition of this paper is that by redefining and expanding the role of the current JTCB to a JCB construct, the JFC will be better supported in orchestrating the efforts of his component commands to achieve campaign integration and effects-based operations. Both the CENTCOM and AFNORTH models provide a basis from which to organize a suitable framework to meet the specific needs of a JFC. Although neither model is all encompassing, each have merits that should be adopted and utilized in a JCB construct designed to bring effects-based operations methodologies to the operational level of war.

The proposed role and purpose of the JCB is to focus on the integration and employment of joint forces by effect, rather than merely synchronization by component. The establishment of a JCB will provide the JFC with a forum to ensure force integration, synchronization, and employment is designed to achieve specific desired effects in support of the campaign plan. Experimentation with the concept should be conducted through joint exercises to determine how

best to ‘operationalize’ the JCB construct to meet the JFC’s compressed decision cycles and battle rhythm in a dynamic environment.

As the US force structure continues to shrink and operational demands increase, the JFC cannot afford to allow his components to fight inefficient parallel campaigns. In the absence of unlimited resources, the JFC must balance the attainment of operational objectives with limitations placed on operations. Redefining and expanding the role of the JTCB to focus on campaign integration and effects-based operations makes sense both from a joint perspective, and also from a component force perspective. The establishment of a JCB will help rather than hinder the JFC in striking the right balance among conflicting imperatives with regard to integrating forces and selecting appropriate courses of action in support of the joint campaign. The JCB will also serve to ensure component commanders are kept abreast of the JFC’s vision and the wider operational issues he must contend with throughout the course of the campaign. The key to integrating component planning in the battlespace is through their active participation in the joint coordination process set forth in a JCB construct.

JCB Composition

The JCB will facilitate the joint coordination process to integrate component planning and synchronize events in a dynamic environment. Each JTF Headquarters (HQ) staff function and each component will have specific responsibilities in the joint coordination process and the JCB. Nominally, the deputy JFC will serve as the chairman of the JCB and the JFC's J3 will be tasked to organize the JCB, provide facilities for the staff support element, and serve as a member of the JCB. The members of the JCB, as depicted in Figure 1, should include the JFC’s legal advisor (LEGAD), political advisor (POLAD), and the J1, J2, J3, J4, J5, and J6 division chiefs, and senior representatives from each component commander. The component command

representatives must have the authority to make recommendations on behalf of their sending commander. Issues that cannot be agreed by the JCB will be decided by the JFC in consultation with his component commanders.

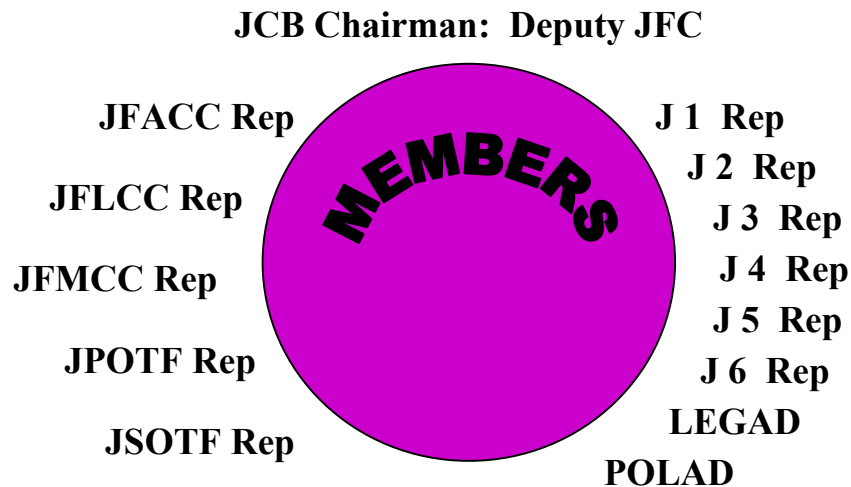


Figure 1. JCB Composition – Board Members⁵⁴

JCB Staff Element (JCBSE)

The JCBSE will be comprised of staff officers, mirroring the composition of the JCB, and will be tasked to assist the J3 in preparing for the JCB meeting; the director will be designated by the J3. The director will appoint a member of the JCBSE to attend and take minutes of the JCB meetings and disseminate the daily meeting minutes to JCB participants. Accurate meeting minutes will be a necessary feature to relay the JFC's key guidance and concerns to component commanders to avoid misinterpretations and pitfalls associated with the video-teleconference

Notes

⁵⁴ See Glossary of Terms for definitions.

(VTC) meetings characterized by Admiral Ellis as “poor substitutes for rigorous mission planning and written orders.”⁵⁵

In current joint doctrine, the J3 Joint Fires Element (JFE) is an optional staff element that may be adapted to form the core of the JCBSE.⁵⁶ The JCBSE will be tasked to support the JCB in its functions and responsibilities, as described below. The aim of the JCBSE is to review the current operational assessment, the JFC’s direction and guidance, and agree to any proposed changes to the JCO prior to submitting it to the JCB for consideration and subsequent approval by the JFC. The component command liaisons to the JCBSE must have the authority to propose courses of action, voice concerns and state the position of their sending commander.

JCB Functions and Responsibilities

The primary objective of the JCB is to attain the most efficient use of the JFC’s forces, resources, and assets by capitalizing on their synergistic effects. During the execution phases of the campaign, the focus of the JCB will be on the time frame between 3 and 10 days ahead. This period of time conforms to the requirements of the air tasking order (ATO) cycle; it is also adaptable to the JFLCC’s scheme of operational maneuver and looks out far enough to prepare components for impending and future operations without interfering with current operations.⁵⁷

Notes

⁵⁵ Lambeth, *NATO’s Air War for Kosovo*, 217.

⁵⁶ JP 3-60, III-6.

⁵⁷ Note: Notionally, the full ATO cycle from JFC guidance to execution spans a 30 to 72-hour time period (see JP 3-56.1, IV-6); and 72-96-hours, the JFLCC must determine who needs additional resources, or he becomes reactive and loses the initiative (see General Crosbie E. Saint, “A CINC’s View of Operational Art,” 67).

Table 1. Nominal JCB Agenda

Serial	Agenda Item	POC
(1)	Opening Remarks by Chairman.	Dep JFC
(2)	J3 Current Situation Assessment and Key Task Accomplishments.	J3 JOC
(3)	J2 Combat Assessment and Forecast 3-10 Days Out.	J2
(4)	Meteorological Forecast and Potential Impact on Operations 3-10 Days Out.	MET
(5)	Review of Key Tasks, Missions, Desired Effects, to Attain Operational Objectives.	J5
(6)	Integration of Forces and Resources Available to Achieve Tasks and Missions.	J5
(7)	Logistics Requirements and Priorities.	J4
(8)	Review of AO Boundaries, Coordination Requirements, and Component Concerns.	Component Reps
(9)	Draft JIPTL and Air Apportionment Review and Approval.	JFACC Rep
(10)	Draft JCO Review and Approval.	JCBSE Rep
(11)	Final Remarks.	Dep/JFC
Total Time Allocated: Approximately One Hour		

As set out in the nominal agenda, Table 1, the JCB will serve as a facilitating function to provide top-level campaign integration, synchronization and joint targeting oversight functions for the JFC. The JCB should meet daily, or as directed by the chairman, in concert with the JFC's battle rhythm and decision-making cycle. The aim is to facilitate force integration, synchronization and employment to achieve desired effects in concert with the JFC's objectives, direction and guidance. Courses of action, timing and tempo of joint fires and operational maneuvers will be integrated by effect and synchronized by event to support the JFC's objectives, taking account of operational requirements and capabilities, as well as political and legal constraints. The JCB will assign specific tasks and mission responsibilities to components and integrate, synchronize, prioritize, and de-conflict all aspects of joint fires and operational

maneuvers. The functions and responsibilities of the JCB include assessing and recommending courses of action to the JFC, with regard to the operational issues depicted in Table 2.

Table 2. JCB Functions and Responsibilities

Serial	Functions and Responsibilities
(1)	Desired effects and operational objectives for specific operations.
(2)	Current situation and prioritization of sequenced campaign objectives.
(3)	Combat assessment of effectiveness in attaining JFC's objectives.
(4)	Forces and resources necessary for components to achieve their operational missions.
(5)	Requirements and priorities for the provision of logistic support to sustain operations.
(6)	Rules of engagement (ROE) requirements for specific missions.
(7)	Coordination of information operations with the overall targeting effort.
(8)	Targeting guidance to the components; high-value/high-payoff target lists; restricted and no-strike target lists; and time-sensitive target (TST) categories.
(9)	The draft JIPTL and recommended air apportionment.
(10)	Supported/supporting command relationships for specific tasks and missions.
(11)	Allocation of available Intelligence, Surveillance and Reconnaissance (ISR) assets.
(12)	The draft JCO.

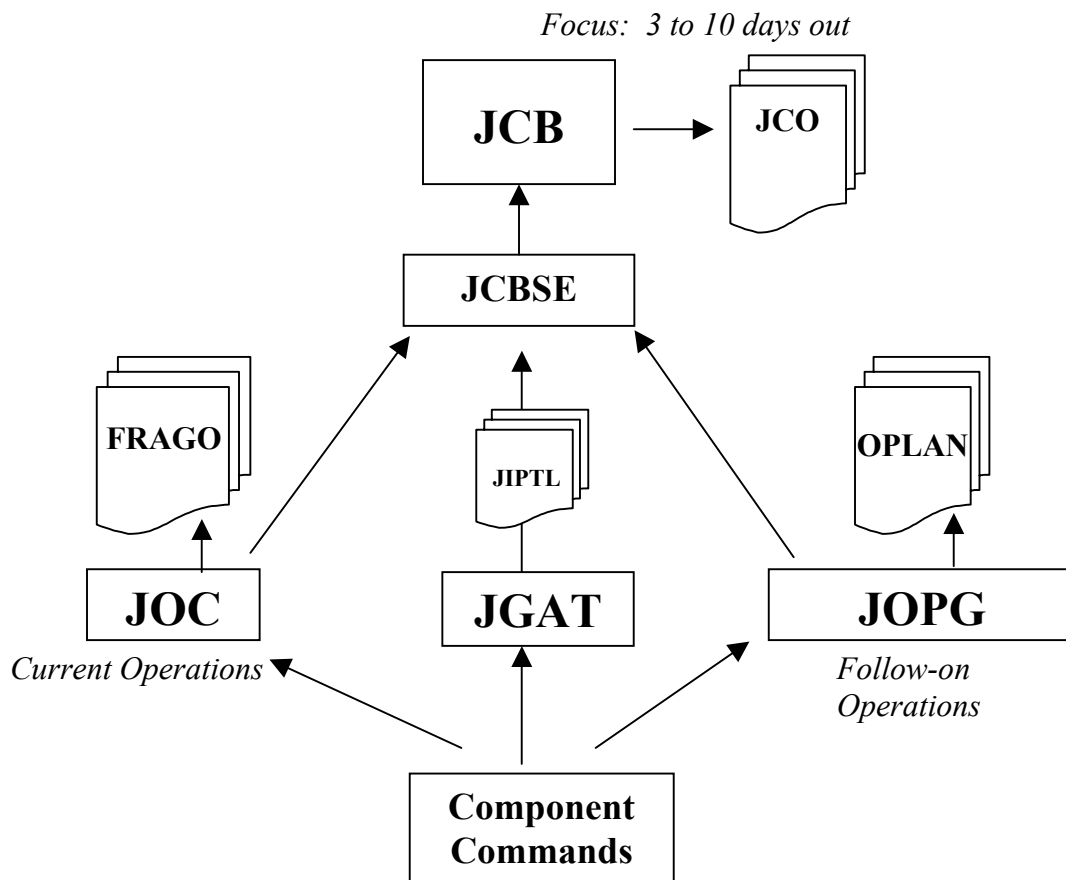


Figure 2. Joint Coordination Process⁵⁸

Figure 2 depicts the joint coordination process incorporating three entities separately tasked to focus on the current battle, the integration and synchronization of forces for follow-on operations, and the integration of joint fires to attain desired effects. The J3 Joint Operations Center (JOC) is responsible for dealing with current operations by coordinating joint fires and issuing fragmentary orders (FRAGOs) for up to 3 days out. The J3/J5 Joint Operations Planning Group (JOPG) is responsible for planning operations for successive phases of the campaign. The

Notes

⁵⁸ Note: Adaptation from figure in Regional Headquarters Allied Forces Southern Europe (RHQ AFSOUTH), Draft Standard Operating Procedures (SOP) for Joint Coordination Board and Joint Coordination Board Working Group, 12 April 2002, 2.

Joint Guidance, Apportionment, and Targeting (JGAT) cell, in the Joint Air Operations Center's (JAOC) Combat Plans Division, is organized to develop the draft JIPTL.⁵⁹ The JGAT, under the auspices of the JFACC, may opt to convene a Joint Target Coordination Working Group (JTCWG) with components to refine the JIPTL prior to the JCB.⁶⁰ The draft JIPTL for 3-days out is presented to the JCB for approval to coincide with the timing sequence of the air tasking order (ATO) cycle and release of the next JCO.⁶¹

Joint Coordination Order (JCO)

The JCB will prepare a JCO for the JFC to amplify or change his direction and guidance to his component commanders. The JCO will be issued by phase, and may also be issued on a daily basis (if required) or in preparation for significant operational events. Although the JCO is primarily intended to cover the period of 3 to 10 days ahead, it may be used to provide essential direction and guidance for immediate action in a dynamic environment. The JCO is not intended to be a replacement for the OPORD; it is intended to amplify guidance for operations that are due to take place within the next 3 to 10 days, and identify supported and supporting command relationships for specific missions and tasks in one document.

The JCO provides, in one document, the overall operational focus of the campaign for the next 3 to 10 days by detailing the interaction of all forces and capabilities, lethal and non-lethal, that the JFC has available to achieve his mission objectives. For example, the JCO will provide broad guidance for the integration of army deep assets and naval and marine air assets into the

Notes

⁵⁹ JP 3-60, III-9, and Air Force Instruction (AFI) 13-1AOC, Volume 3, Operational Procedures—Aerospace Operations Center, 1 July 2002, 30-31.

⁶⁰ AFI 13-1AOC, Volume 3, Operational Procedures—Aerospace Operations Center, 1 July 2002, 30-31

⁶¹ Note: Notionally, the full ATO cycle from JFC guidance to execution spans a 30 to 72-hour time period; the precise timeframes will be specified in the OPLAN, or in the JFACC's Joint Air Operations Plan (JAOP) (see JP 3-56.1, IV-6).

JFACC's air plan to support operational objectives. The purpose of the JCO is to refine the JFC's guidance to components for operations that are scheduled to take place within the timeframe of the current OPORD. The format for the JCO, depicted in Table 3, contains five main paragraphs.

Table 3. JCO Format

Serial	"Subject"
(1)	JFC's " <u>Intent</u> " for the next 3 to 10 day period.
(2)	" <u>Points of Main Effort and Desired Effect.</u> "
(3)	" <u>Integration and Synchronization Areas.</u> "
(4)	JFC's " <u>Direction and Guidance.</u> "
(5)	" <u>Coordinating Instructions</u> " to components.

The JCBSE develops the draft JCO based on inputs from higher headquarters, component commands, and the JFC's internal staff. The draft JCO is submitted through the JCB for JFC approval. The JCO should be flexible enough to deal with possible changes in priority that may occur over the course of the next 3 to 10 days, but it must provide clear guidance on the relationship of desired effects to various phases of the joint campaign plan. Component commanders will have the possibility to influence the JCO in the JCBSE, during the JCB, and in direct consultation with the JFC.

JCB Role in Targeting

The functional and organizational challenge facing the JFC is how to achieve unity of command and unity of effort throughout the joint campaign. The ability to integrate and synchronize joint fires and operational maneuvers in the most effective and coordinated manner is crucial for success at the operational level of war. An integral part of the joint coordination process, involving targeting for effect, is the incorporation of information operations into the campaign plan. Although initiation of information operations begins with the development of

the OPLAN, it should be a top-level priority reviewed by the JCB to ensure resources are maximized to attain desired effects. The joint coordination and targeting process is also responsible for providing documentation that maintains a logical linkage between the JFC's direction and guidance, and current operations.⁶² This targeting documentation should trace the analytical reasoning that supports the nomination of targets and details of anticipated effects. The JFC should delegate broad targeting responsibilities to the JFACC, who is normally the component commander with the preponderance of assets to service targets on the JIPTL and has the necessary planning expertise resident in the JAOC. This joint coordination process also provides a channel for the JCB to discuss mitigation of risk for the attacking force and assess the probability of attaining the desired effects.

JCB Role in Synchronizing Operational Maneuvers

Attaining synergy through force integration and synchronization of joint fires and operational maneuver is of particular significance in the context of air-land operations.⁶³ Without mechanisms to ensure forces are integrated, Professor Philip Sabin of King's College, London, contends it is "possible that two forces may interfere with one another and have an overall affect which is less than the sum of their individual parts."⁶⁴ A function of the JCB will be to review FSCMs and set conditions for the timing and tempo of FSCL changes in relation to the JFC's scheme of operational maneuver. According to Army General Crosbie Saint's view of the JFC's role in shaping and integrating forces to achieve synergy in joint operations, the JFC should provide "prudent, personal control when necessary, while avoiding too much

Notes

⁶² JP 3-60, II-7.

⁶³ Dr. Philip A.G. Sabin, "Air Power in Joint Warfare," in *Perspectives on Air Power: Air Power In Its Wider Context*, ed. by Gp Capt Stuart Peach, London: Royal Air Force Bracknell, Joint Services Command Staff College, The Stationary Office, 1998, 265.

⁶⁴ *Ibid.*, 256.

interference” with his component commanders.⁶⁵ In practice, the JCB will be responsible to the JFC for maintaining a macro-level view of the JOA in order to achieve the synergy of an effects-based operation.

The aim of operational maneuver is to position forces for rapid transition to apply appropriate joint fires, lethal and non-lethal, against the enemy. The JCB, maintaining a macro-level view of the JOA, will be involved in the process to integrate forces and synchronize joint fires and operational maneuvers in support of the JFC’s concept of operations. In this role, the JCB will review and recommend how far in front of friendly ground forces the FSCL should be established, and correspondingly, how much airspace above the close battle should belong to the JFLCC. Air Force Major General Tim Kinnan, former Commandant of Air War College, regards the FSCL as a tactical FSCM that has the potential for “unintended consequences at the operational level” and should therefore be under the purview of the JFC.⁶⁶ The synchronization of operational maneuver is an appropriate issue for the JCB to consider because only the JFC has the authority over forces operating throughout the JOA. The ultimate aim of maneuver warfare is to “get as directly as possible to the strategic center of gravity... by economizing on engagements.”⁶⁷ The essence of operational art in joint warfare is the ability to integrate air, land, sea, and space forces by effect, and not merely synchronization of events by component.

Notes

⁶⁵ General Crosbie E. Saint, “A CINC’s View of Operational Art,” in *Military Review*, U.S. Army Command and General Staff College, September 1990, 67.

⁶⁶ Dewayne P. Hall, *Integrating Joint Operations Beyond the FSCL, Is Current Doctrine Adequate?* Maxwell Air Force Base, AL: Air University Press, 1997, iv.

⁶⁷ William S. Lind, “The Origins of Maneuver Warfare and its Implications for Air Power,” in *From Manoeuvre Warfare to Kosovo?* ed. by John Andreas Olsen, The Royal Norwegian Air Force Academy, 2001, 33.

RECOMMENDATIONS

The JFC is ultimately responsible for integrating, synchronizing, and employing joint forces to achieve campaign objectives in pursuit of operational and strategic objectives. The JTCB should be redefined and expanded to function as a JCB to provide better support to the JFC in orchestrating the efforts of component commands to attain campaign objectives. The proposed JCB construct will provide the JFC with a better staff mechanism and organizational framework, with a macro-level view of the JOA, to ‘operationalize’ effects-based operations. JFCs should adopt the following five recommendations to establishment a JCB to integrate forces by *effect*, rather than merely *synchronizing events by component*:

- (1) Redefine and expand the role of the JTCB. Symbolically, this change should start with a name change by dropping the ‘T’ from the board’s title. These changes will allow the forum to function with a broader operational scope as a JCB.
- (2) The role and purpose of the JCB should be to focus on the integration and employment of joint forces by effect and to synchronize joint fires and operational maneuvers to achieve desired effects.
- (3) Delegate responsibility to the JFACC to develop the draft JIPTL using effects-based methodologies to attain campaign objectives in the shortest possible time and on terms favorable to the US.
- (4) The JFC should not dual-hat himself; each component in a JTF should be an active participant in the joint coordination process.

- (5) JFCs should experiment with the proposed JCB construct in joint exercises to determine how best to implement campaign integration and effects-based operations into the operational level of war.

CONCLUSION

Redefining the role of the JTCB by broadening the scope of the board makes sense both from a joint perspective, and also from a component force perspective. The proposed JCB construct will add value to the joint planning and coordination process by ensuring component forces are integrated and synchronized to achieve desired effects. Through active participation in the JCB, components will have a better appreciation of the JFC's vision and concept of operations and how their assigned missions and tasks contribute to the desired end-state. One of the greatest challenges facing a JFC is how to orchestrate and integrate joint forces so that they are capable of achieving effects-based operations and attain operational/strategic objectives. By expanding and redefining the role of the JTCB, the establishment of a JCB will help the JFC 'operationalize' effects-based operations by striking the right balance among conflicting imperatives with regard to integrating forces and selecting appropriate courses of action throughout the course of the joint campaign.

GLOSSARY of TERMS

Air Operations Center (AOC). The principle air operations installation from which aircraft and air warning functions of combat operations are directed, controlled, and executed. It is the senior agency of the Air Force Component Commander from which command and control of air operations are coordinated with other components and Services. (JP 1-02, 18)

Area of Operations (AO). An operational area defined by the JFC for land and naval forces. AOs do not typically encompass the entire operational area of the JFC, but should be large enough for component commanders to accomplish their missions and protect their forces. (JP 1-02, 34)

Area of Responsibility (AOR). The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations. (JP 1-02, 34)

Apportionment (air). The determination and assignment of the total expected effort by percentage and/or priority that should be devoted to the various air operations for a given period of time. (JP 1-02, 32)

Battlespace. The environment, factors and conditions that must be understood to successfully apply combat power, protect the force, or complete the mission. This includes the air, land, sea, space, and the enemy and friendly forces; facilities; weather; terrain; the electromagnetic spectrum; and the information environment within the operational areas and areas of interest. (JP 1-02, 51)

Centers of gravity (COG). Those characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight. (JP 1-02, 63)

Combined Force Air Component Commander (CFACC). A combined force is a military force composed of elements of two or more allied or coalition nations. A commander of air forces composed of elements of two or more allied or coalition nations, whereas JFACC denotes a commander of air forces from two or more Services. (JP 1-02, 79)

Constraint. Limitations place on the command by a higher command. Constraints restrict freedom of action for planning a mission by stating what must be done. (FM 100-5, Glossary-2)

Crisis Action Planning. The Joint Operational Planning and Execution System (JOPES) process involving the time-sensitive development of joint operation plans (OPLAN) and orders in response to an imminent crisis. Crisis action planning follows prescribed crisis action

procedures to formulate and implement and effective response within the time frame permitted by the crisis. (JP 1-02, 106)

Deliberate Planning. The JOPES process involving the development of OPLANs for contingencies identified in joint strategic planning documents. Conducted principally in peacetime, deliberate planning is accomplished in prescribed cycles that complement other Department of Defense planning cycles in accordance with the formally established Joint Strategic Planning System. (JP 1-02, 120)

Fire support coordination line (FSCL). A fire support coordinating measure (FSCM) established and adjusted by appropriate land or amphibious force commanders within their AOs in consultation with superior, subordinate, supporting, and affected commanders. FSCLs facilitate the expeditious attack of surface targets of opportunity beyond the FSCM. A FSCL does not divide an AO by defining a boundary between close and deep operations or a zone for close air support. The FSCL applies to all fires of air, land, and sea-based weapon systems using any type of ammunition. Forces attacking targets beyond the FSCL must inform all affected commanders in sufficient time to allow necessary reaction to avoid fratricide. Supporting elements attacking targets beyond the FSCL must ensure that the attack will not produce adverse effects on, or to the rear of, the line. Short of a FSCL, all air-to-ground and surface-to-surface attack operations are controlled by the appropriate land or amphibious force commander. Ideally, the FSCL should follow well defined terrain features. Coordination of attacks beyond the FSCL is especially critical to commanders of air, land, and special operations forces. In exceptional circumstances, the inability to conduct this coordination will not preclude the attack of targets beyond the FSCL. However, failure to do so may increase the risk of fratricide and could waste limited resources. (JP 1-02, 160)

Guidance, Apportionment, and Targeting (GAT). The GAT team in the JAOC's Combat Plans Division, is responsible for development of a comprehensive JIPTL. Additionally, the GAT team synchronizes aerospace targeting among the respective components, provides a macro-level feasibility review across the components. The GAT may opt to host a daily Joint Target Coordination Working Group (JTCWG) with components to refine the JIPTL prior to the JCB. (AFI 13-1 AOC V3).

Information Operations (IO). Actions taken to affect adversary information and information systems while defending one's own information and information systems. (JP 1-02, 203)

Integration. In force projection, the synchronized transfer of units into an operational commander's force prior to mission execution. (JP 1-02, 208)

Joint Air Operations Center (JAOC). A jointly staffed facility established for planning, directing, and executing joint air operations in support of the JFACC's operation or campaign objectives. (JP 1-02, 220)

Joint Coordination Board (JCB). Proposed board established by the JFC to maintain a macro-level view of the JOA.

Joint Fires Element (JFE). An optional staff element that provides recommendations to the operations directorate to accomplish fires planning and synchronization. (JP 1-02, 222)

Joint Force Air Component Commander (JFACC). The JFACC derives authority from the JFC who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of effort in the accomplishment of the overall mission. The JFC will normally designate and assign responsibilities to the JFACC to include, but not be limited to: planning, coordination, allocation, and tasking based on the JFC's apportionment decision. (JP 1-02, 222)

Joint Force Commander (JFC). A general term applied to a combatant commander, subunified commander, or a joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. (JP 1-02, 223)

Joint Force Land Component Commander (JFLCC). The commander within a unified command, subunified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of land forces, planning and coordinating land operations, or accomplishing such operational missions as may be assigned. (JP 1-02, 223)

Joint Force Maritime Component Commander (JFMCC). The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of maritime forces and assets, planning and coordinating maritime operations, or accomplishing such operational missions as may be assigned. (JP 1-02, 223)

Joint Guidance, Apportionment, and Targeting (JGAT). The JGAT team is a group that makes recommendations for air apportionment to engage targets, and provides other targeting support requiring component input at the JFACC level. (JP 3-60, GL-7)

Joint Integrated Prioritized Target List (JIPTL). A prioritized list of targets and associated data approved by the joint force commander or designated representative and maintained by a joint force. Targets and priorities are derived from the recommendations of components in conjunction with their proposed operations supporting the joint force commander's objectives and guidance. (JP 1-02, 224)

Joint Operations Area (JOA). An area of land, sea, and airspace, defined by a geographic combatant commander or subordinate unified commander, in which a JFC (normally a JTF commander) conducts military operations to accomplish a specific mission. JOAs are particularly useful when operations are limited in scope and geographic area or when operations are to be conducted on the boundaries between theaters. (JP 1-02, 227)

Joint Psychological Operations Task Force (JPOTF). A joint special operations task force composed of headquarters and operational assets. The JPOTF assists the JFC in developing strategic, operational, and tactical psychological operation plans for a theater campaign or other operations. (JP 1-02, 228)

Joint Special Operations Task Force (JSOTF). A joint task force composed of special operations units from more than one Service, formed to carry out a specific special operation or prosecute special operations in support of a theater campaign or other operations. (JP 1-02, 230)

Joint Targeting Coordination Board (JTCB). A group formed by the joint force commander to accomplish broad targeting oversight functions that may include but are not limited to coordinating targeting information, providing targeting guidance and priorities, and refining the JIPTL. The board is normally comprised of representatives from the joint force staff, all components and, if required, component subordinate units. (JP 1-02, 232)

Joint Task Force (JTF). A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing JTF commander. (JP 1-02, 232)

Joint Target List (JTL). A consolidated list of selected targets considered to have military significance in the combatant commander's area of responsibility. (JP 1-02, 232)

Legal Advisor (LEGAD). The military legal advisor to the JFC, on the headquarters staff.

Manuever. Employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy in order to accomplish the mission. (JP 1-02, 253)

Operational level of war. The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or operational areas. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives. (JP 1-02, 311)

Political Adviser (POLAD). The political adviser on the JFC's headquarters staff, a liaison from the US State Department.

Synchronization. The arrangement of military actions in time, space, and purpose to produce a maximum relative combat power at a decisive place and time. (JP 1-02, 415)

Bibliography

- Air Combat Command (ACC) White Paper, *Effects-Based Operations, Air Force Doctrine Document 3, Hypothetical Draft*. Langley Air Force Base, VA: Air Combat Command, ACC/XP, May 2002.
- Air Force Doctrine Document (AFDD) 2-1, *Air Warfare*, 22 January 2000. OPR: HQ AFDC/DR: Certified by AFDC/CC. Online, Internet, 9 September 2002. Available at: <http://www.doctrine.af.mil/library/doctrine/afdd2-1.pdf>
- Air Force Instruction (AFI) 13-1AOC, Volume 3, *Operational Procedures—Aerospace Operations Center*, 1 July 2002, 30
- Beaumont, Roger A. *Joint Military Operations, A Short History*. Westport CT: Greenwood Press, 1993.
- Bingham, Price T. "Seeking Synergy, Joint Effects-Based Operations." *Joint Forces Quarterly*, Spring 2002: [52-59].
- Clancy, Tom with General Chuck Horner (Ret), *Every Man a Tiger*, New York: G.P. Putnam and Sons, 1999.
- Clark, Wesley K., *Waging Modern War*, New York: Public Affairs, 2001.
- Cushman, John H., Lt Gen, U.S. Army (Ret). *Thoughts for Joint Commanders*. Annapolis, MD: privately printed by the author, August, 1993.
- D'Amico, Robert J. "Joint Fires Coordination: Service Competencies and Boundary Challenges." *Joint Forces Quarterly*, Spring 1999: [70-77].
- Deptula, Brig. Gen. David A. "Firing for Effects." *Air Force Magazine*, April 2001: [46-53]. Available at: <http://www.afa.org/magazine/april2001/0401effect.html>
- Deptula, David A. "Air Force Transformation: Past, Present, and Future." *Aerospace Power Journal*, Fall 2001. On-line, Internet, 9 September 2002. Available at: <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj01/fal01/phifal01.html>
- Field Manual (FM) 100-5. Operations. Headquarters Department of the Army, June 1993.
- Hall, Dewayne P. *Integrating Joint Operations Beyond the FSCL, Is Current Doctrine Adequate?* Maxwell Air Force Base, AL: Air University Press, 1997.
- Hallion, Richard P. "Critical Aerospace Capabilities for Coalition Operations." In *From Manoeuvre Warfare to Kosovo?* Edited by John Andreas Olsen. The Royal Norwegian Air Force Academy, 2001.
- Headquarters United States Air Force. "The Air War over Serbia Initial Report." Available at Air University, Air War College, k:\awos\Serbia\htm
- Herrly, Peter F. "The Plight of Joint Doctrine after Kosovo." *Joint Forces Quarterly*, Summer 1999: [99-104].
- Joint Forces Staff College (JFSC) Publication (Pub) 1. *The Joint Staff Officer's Guide*. Norfolk, VA: Joint Forces Staff College, 2000.
- Joint Publication 0-2. *Unified Action Armed Forces (UNAAF)*, 10 July 2001. Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp0_2.pdf

- Joint Publication 1-02. *Department of Defense Dictionary of Military and Associated Terms*, 12 April 2001. Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf
- Joint Publication 2-0. *Doctrine for Intelligence Support to Joint Operations*, 9 March 2000. Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp2_0.pdf
- Joint Publication 3-0. *Doctrine for Joint Operations*, 10 September 2001. Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp3_0.pdf
- Joint Publication 3-56.1. *Command and Control for Joint Air Operations*, 14 November 1994. Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp3_56_1.pdf
- Joint Publication 3-60. *Joint Doctrine for Targeting*, 17 January 2002. Available at http://www.dtic.mil/doctrine/jel/new_pubs/jp3_60.pdf
- Joint Warfighting Center. "Joint Force Fires Coordinator Study." 7 February 1997. Available at <https://www-secure.jwfc.jfcom.mil/library/browse/viewer?volumeID=-2001&objectID=437585&style=default>
- Keaney, Thomas A., and Eliot A. Cohen, *Revolution in Warfare? Air Power in the Persian Gulf*, Annapolis, MD: Naval Institute Press, 1995.
- Lambeth, Benjamin S. "Lessons from the War in Kosovo." *Joint Forces Quarterly*, Spring 2002: [12-19].
- Lambeth, Benjamin S. *NATO's Air War for Kosovo*. Santa Monica, CA.: RAND, 2001.
- Lambeth, Benjamin S. *The Transformation of American Air Power*. Ithaca, NY: Cornell University Press, 2000.
- Lawrence, K. Scott. "Joint C2 Through Unity of Command." *Joint Forces Quarterly*, Autumn/Winter 1994-95: [107-110].
- Lind, William S. "The Origins of Maneuver Warfare and its Implications for Air Power." In *From Manoeuvre Warfare to Kosovo?* Edited by John Andreas Olsen. The Royal Norwegian Air Force Academy, 2001.
- Mann, Col Edward, Lt Col Gary Endersby, and Tom Searle. "Dominant Effects: Effects-Based Joint Operations." *Aerospace Power Journal*, Fall 2001. On-line, Internet, 25 October 2002. Available at: <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj01/fal01/phifal01.html>
- McCarthy, Damian J., and Susan A. Medlin. "Two Hats for the Joint Force Commander?" *Joint Forces Quarterly*, Summer 2000: [91-98].
- McKeon, Matt, Maj. *Joint Targeting: What's Still Broke?* Maxwell Air Force Base, Alabama: Air University, June 1999.
- McPeak, General Merrill A., chief of staff, US Air Force. Presentation to the Commission on Roles and Missions of the Armed Forces, 14 September 1994.
- Nardulli, Bruce R., Walter L. Perry, Bruce Pirnie, John Gordon IV, and John G. McGinn. *Disjointed War: Military Operations in Kosovo, 1999*, Santa Monica, CA: RAND, 2002.
- NATO Handbook*. Brussels, Belgium: NATO Office of Information and Press, 2001.
- Northern Region Directive (NRD) 80-93. *Campaign Synchronization and Joint Targeting*. Regional Headquarters Allied Forces Northern Europe, Brunssum, The Netherlands, 7 September 2001. (NATO Restricted).
- Peach, Gp Capt Stuart. "Coalition Air Operations." In *Perspectives on Air Power: Air Power In Its Wider Context*. Edited by Gp Capt Stuart Peach. London: Royal Air Force Bracknell, Joint Services Command Staff College, The Stationary Office, 1998.
- Peach, Air Commodore Stuart. "The Doctrine of Targeting for Effect." In Royal United Services Institute (RUSI) for Defense Studies, *RUSI Journal*, December 2000, 69-72.

- Peters, John E., Stuart Johnson, Nora Benasahel, Timothy Liston, and Traci Williams. *European Contributions to Operation Allied Force, Implications for Transatlantic Cooperation*. Santa Monica, CA: RAND, 2001.
- Quintrall, Lt Col Mick. "A Change-Challenge, The Fire-Support Coordination Box." *Air and Space Power Journal*, Fall 2002, [7-16]. On-line, Internet, 23 October 2002. Available at: <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj02/fal02/vorfal02.html>
- Regional Headquarters Allied Forces Southern Europe (RHQ AFSOUTH). Draft Standard Operating Procedures (SOP). Subject: SOP for Joint Coordination Board and Joint Coordination Board Working Group, 12 April 2002. (NATO Restricted)
- Sabin, Dr. Philip A.G. "Air Power in Joint Warfare." In *Perspectives on Air Power: Air Power In Its Wider Context*. Edited by Gp Capt Stuart Peach. London: Royal Air Force Bracknell, Joint Services Command Staff College, The Stationary Office, 1998.
- Saint, Crosbie E., General, U.S. Army. "A CINC's View of Operational Art." In *Military Review*, U.S. Army Command and General Staff College, September 1990 [65-78].
- Short, Michael C. "An Airman's Lessons from Kosovo." In *From Manoeuvre Warfare to Kosovo?* Edited by John Andreas Olsen. The Royal Norwegian Air Force Academy, 2001.
- UK House of Commons. *Lessons of Kosovo*. Select Committee on Defence Fourteenth Report, 1999-2000 Session. Available at: <http://www.publications.parliament.uk/pa/cm199900/cmselect/cmdefence/347/34702.htm>
- US Atlantic Command. "Joint Task Force Headquarters Standard Operating Procedures" (JTF HQ SOP), 5th Draft, 1 March 1999. Available at <https://www-secure.jwfc.jfcom.mil/library/browse/viewer?volumeID=-2001&objectID=648499&style=default>
- US Central Command. "Concept of Operations for Joint Fires," 10 November 1999. On-line, Internet, 23 October 2002. Available at: <http://www.fas.org/man/dod-101/ops/docs/jfconops.htm>
- US Senate. *US Policy and NATO Military Operations in Kosovo: Hearings before the Committee on Armed Services*. 106th Cong., 1st sess., 1999.
- van Creveld, Martin; Steven L. Canby; and Kenneth S. Brower. *Air Power and Maneuver Warfare*. Maxwell Air Force Base, AL: Air University Press, 1994.
- Wardon, John A. III. *The Air Campaign, Planning for Combat*. Fort Lesley J. McNair, Washington DC: National Defense University Press, 1988.
- Winnefeld, James A., "Joint Warfare: Halfway There." In *Airpower Confronts an Unstable World*. Edited by Richard P. Hallion, London: Brassey's, 1997.
- Winnefeld, James A., and Johnson, Dana J. *Joint Air Operations, Pursuit of Unity in Command and Control, 1942-1991*. Annapolis, MD: Naval Institute Press, 1993.