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THE IMPERFECT STORM:
INTELLIGENCE-OPERATIONS INTEGRATION IN THE GULF WAR

BY
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The undersigned certify that this thesis meets master's-level standards of research, argumentation, and expression.

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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.



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ABSTRACT

This thesis explores intelligence-operations integration in the planning and execution of the Gulf War air campaign. Ultimately, the problems between intelligence and operations experience can be attributed to an unhealthy command climate; ineffective communication; and excessive compartmentalization. The Air Force achieved success in the Gulf War *in spite of* significant intelligence-operations process deficiencies—deficiencies that in a different conflict, time, place, and context might result not in major success, but in overwhelming failure.

These problems first revealed in Washington with the Air Staff planning conducted by Checkmate, and later in Riyadh with the Black Hole, had an inordinate influence on subsequent problems building a cogent intelligence-operations team. These problems led to the inability of intelligence and operations planners to create a seamless intelligence-operations planning team, despite organizational changes meant to better integrate the two functional areas. As the Airmen kicked off the DESERT STORM strategic air campaign, the problems of command climate, communication, and compartmentalization endured and transitioned from planning to execution.

Identifying these process deficiencies is important due to the invariable aura of infallibility ascribed to the Gulf War air campaign due to a successful outcome attributed to unprecedented airpower decisiveness. In future wars, the Air Force may not be able to overcome process problems through overwhelming force, favorable terrain and weather, and enemy incompetence as it did during the Gulf War. In personnel and resource constrained environments, the Air Force may not have the mass and depth necessary. Therefore, it is essential to get the process correct to make successful outcomes easier to attain. This includes ensuring healthy command climates, effective communication, and minimal compartmentalization to enable better intelligence-operations integration.

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Chapter 1

Introduction

Iraqis will not forget the maxim that cutting necks is better than cutting means of living.

-President Saddam Hussein, 1990

Let me say clearly: There is no way Iraq can win. Ultimately, Iraq must withdraw from Kuwait.

-President George H. W. Bush, 1990

During July 1990, US Central Command (CENTCOM) and its component commands conducted Exercise INTERNAL LOOK to test the viability of its new Operations Plan (OPLAN) 1002-90. The focus of OPLAN 1002-90 was the defense of the Arabian Peninsula in order to ensure the region's oil continued to flow to the US and its allies. Of the countries in the region, CENTCOM planners believed Iraq was the greatest credible threat due to its large and battle-tested military forces equipped with advanced weapons acquired from the United Socialist Soviet Republics (USSR) and Western Europe. Additionally, Iraq's autocratic president, Saddam Hussein, actively developed and maintained nuclear, biological, and chemical capabilities for its already formidable military arsenal. Thus, with the recent end of the Cold War, CENTCOM shifted its focus from a possible Soviet or Iranian threat to the region. Instead, OPLAN 1002-90 focused on countering an Iraqi invasion of Kuwait and Saudi Arabia.¹ Nearly concurrent with the CENTCOM exercise planned to test OPLAN 1002-90, events in the Middle East demonstrated an eerie resemblance to those depicted in the fictional Internal Look scenario.

¹ Tom Clancy, *Every Man a Tiger* (New York: Putnam, 1999), 6–7, 22, 238–239; Roger Cohen, *In the Eye of the Storm: The Life of General H. Norman Schwarzkopf* (New York: Farrar, Straus, and Giroux, 1991), 185–186; Thomas A. Keaney, *Revolution in Warfare?: Air Power in the Persian Gulf* (Annapolis, Md: Naval Institute Press, 1995), 24–25, 67, 106; John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington, D.C: Potomac Books, 2007), 142; Diane T. Putney, *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991* (Washington: Air Force History and Museums Program, 2004), 11–12, 17–19; Richard T. Reynolds, *Heart of the Storm: The Genesis of the Air Campaign Against Iraq* (Maxwell Air Force Base, Ala.: Air University Press, 1995), 4; H. Norman Schwarzkopf and Peter Petre, *General H. Norman Schwarzkopf the Autobiography: It Doesn't Take a Hero* (New York: Bantam Books, 1992), 336–337.

Tensions were on the rise in the Middle East. On July 17, Saddam Hussein threatened to use military force “against Arab oil-exporting nations if they did not curb their excess production, which he said had weakened oil prices and hurt the Iraqi economy.”² As reported by *The Washington Post* on July 19, “President Saddam Hussein charged that some Persian Gulf states had stabbed Iraq in the back ‘with a poison dagger’ by exceeding their oil-production quotas...[He] said the sharp drop in oil prices in the first half of 1990, which cost Iraq \$14 billion in revenue, was the result of a US-planned ‘subversive policy’ intended to ‘secure the flow of oil...at the cheapest prices.’”³ These threats and accusations followed other statements by Iraq’s oil minister directed against the United Arab Emirates and Kuwait in previous weeks as well as a letter from Iraq’s foreign minister to the Arab League denouncing the two Arab states. Further, Saddam Hussein accused the Kuwaitis of stealing billions of dollars of oil from the disputed Rumaila oil fields.⁴

Spiraling war debt from the Iran-Iraq War pushed the Iraqi president to insist on increasing oil export prices and, at the same time, to demand Kuwait repay Iraq for the misappropriated oil. Saddam Hussein’s complaints and intimidations reflected his country’s precarious position due to severe financial problems and labor shortages after the recently concluded eight-year war against Iran. Despite these problems, Iraq had emerged from the war in arguably better shape than its erstwhile enemy. Iraq’s clear status as a regional power and its large battle-tested military force emboldened Saddam Hussein to lean heavily on that force.

While most Arab neighbors believed Saddam Hussein was bluffing, Iraqi military forces, equipment, and materiel steadily flowed south and assembled on the Kuwaiti border. Like many states in the Middle East, various commentators believed Iraq’s

² Youssef M. Ibrahim, “Iraq Threatens Emirates and Kuwait on Oil Glut,” *New York Times*, July 18, 1990, <http://www.nytimes.com/1990/07/18/business/iraq-threatens-emirates-and-kuwait-on-oil-glut.html?action=click&module=Search®ion=searchResults%230&version=&url=http%3A%2F%2Fquery.nytimes.com%2Fsearch%2Fsite%2F%23%2Fsaddam%2Bhussein%2Bthreatens%2Bkuwait%2F>.

³ Carlyle Murphy, “Iraq Accuses Kuwait of Plot To Steal Oil, Depress Prices; Charge Seen Part of Gulf Power Move by Saddam Hussein,” *The Washington Post*, July 19, 1990, <http://search.proquest.com/docview/307282541?accountid=4332>.

⁴ Murphy, “Iraq Accuses Kuwait of Plot To Steal Oil, Depress Prices; Charge Seen Part of Gulf Power Move by Saddam Hussein”; Ibrahim, “Iraq Threatens Emirates and Kuwait on Oil Glut.”

actions were no more than scare tactics intended to intimidate Kuwait into compliance.⁵ On August 2, however, the massed Iraqi military forces crossed the border and quickly overran the country. In less than three days, Iraq conquered the whole of Kuwait and appeared to be regrouping for further action—possibly an incursion into Saudi Arabia.⁶ The US government reacted by examining its available options, including those provided by its military forces.

The Commander-in-chief of CENTCOM (CINCCENT), General H. Norman Schwarzkopf, began working on the military options with his staff and component commanders. Central Command's OPLAN 1002-90 was not yet developed enough to serve as the baseline plan so General Schwarzkopf looked elsewhere. Airpower represented the most flexible and responsive military capability. General Schwarzkopf, therefore, depended upon Central Command Air Forces (CENTAF) Commander, Lieutenant General Chuck Horner, to develop a rough plan for the immediate defense of the Kingdom of Saudi Arabia.

After briefing President George H. W. Bush and his National Security Council staff members, Secretary of Defense Dick Cheney, General Schwarzkopf, Lieutenant General Horner, and other key CENTCOM and National Security Council (NSC) staff members traveled to the Middle East to begin conferring with America's regional partners on the way ahead. The delegation secured the Saudi king's support for an American military buildup in the Kingdom, which needed to begin immediately. Prior to returning to the US, General Schwarzkopf ordered Lieutenant General Horner to remain in Riyadh, Saudi Arabia as acting-commander of CENTCOM Forward. Lieutenant

⁵ Michael R. Gordon, "U.S. Deploys Air and Sea Forces after Iraq Threatens 2 Neighbors," *New York Times*, July 25, 1990, <http://search.proquest.com.aufric.idm.oclc.org/nationalnewsexpanded/docview/108518712/pageviewPDF/BC7E79D12D4F4B06PQ/211?accountid=4332>; Caryle Murphy, "Mubarak Tries to Ease Crisis in Gulf; U.S. Activates Fleet as Iraq Threatens," *The Washington Post*, July 25, 1990, <http://aufric.idm.oclc.org/login?url=http://search.proquest.com/docview/307339470?accountid=4332>; "To the Brink of War," *The Long Road to War* (PBS, January 15, 1991), <http://www.pbs.org/wgbh/pages/frontline/shows/longroad/>.

⁶ Cohen, *In the Eye of the Storm*, 180–181; Putney, *Airpower Advantage*, 21–22; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 337–340, 346.

General Horner's job was to establish the CENTCOM Forward Headquarters, and begin the logistics and bed down of the inbound joint military forces.⁷

As Lieutenant General Horner became busy in Saudi Arabia, his Headquarters 9th Air Force (9 AF) staff was in the midst of deployment preparations. Air component planners, then, were unable to begin working an air campaign plan. Understanding 9 AF's limitations, General Schwarzkopf requested the Air Staff at the Pentagon to look at airpower-centric response options. Air Force leaders charged Checkmate, a little known Air Staff division focused on doctrine and warfighting concepts, to begin work on a strategic air campaign. Lieutenant General Horner was unhappy about Washington D.C.-based staff working air campaign planning, as it reminded him of the interference from the nation's capital that warfighters contended with during the Vietnam War.⁸ Thus, the resultant INSTANT THUNDER air campaign plan earned the ire of the Joint Air Force Component Commander (JFACC) before he even saw it.

Responding within days to General Schwarzkopf's request, the Checkmate planners developed an offensive air campaign concept to provide a stand-alone war-winning "*military solution* (emphasis in original) to the problem presented by the Iraqi regime."⁹ As General Schwarzkopf noted in his autobiography, *It Doesn't Take a Hero*, he questioned the plan's optimistic and seemingly unrealistic estimate of six days of strategic bombing to defeat the Iraqi forces and compel their acquiescence to US demands. Lacking any other viable military options at that juncture in the crisis, however, General Schwarzkopf approved the concept. He then ordered Colonel John Warden and his planners to deliver and turn it over to Lieutenant General Horner to develop further.¹⁰

Before receiving the presentation, Lieutenant General Horner was already irritated at what he believed was a Vietnam-like overreach by "ivory tower types" intending to run the war from Washington D.C. Therefore, his subsequent reaction to Colonel Warden's briefing let those present know he viewed the effort as only an academic exercise. Even

⁷ Clancy, *Every Man a Tiger*, 180–189; Putney, *Airpower Advantage*, 23–29; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 346–357.

⁸ Clancy, *Every Man a Tiger*, 187; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 371–372.

⁹ Olsen, *John Warden and the Renaissance of American Air Power*, 159; Putney, *Airpower Advantage*, 132.

¹⁰ Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 369–372.

so, Lieutenant General Horner saw merit in the proposed target list, believing it might prove useful in the development of the real air campaign. In sum, those present, including the whole of the primary senior CENTAF staff members, understood their boss was less than impressed or pleased with Checkmate's efforts.¹¹ The JFACC's verbalized discontent produced a negative climate, which in turn caused many of the operations and intelligence problems affecting planning and execution over the subsequent eight months to flourish.

Despite operations and intelligence difficulties, Operations DESERT SHIELD and DESERT STORM were by any measure overwhelmingly successful. For airpower enthusiasts, the Gulf War vindicated many of the promises of airpower theory at its inception. Advanced capabilities and organizational concepts, including stealth, precision weapons delivery, precision weapons, space, communications, and information technologies as well as the centralized control of theater air assets under the JFACC, justified classical airpower theory.¹² This theory rested on three core precepts. First, airpower is an inherently offensive weapon and its best use is in bringing the fight to the enemy. Next, airpower is inherently strategic. According to airpower theorist Colonel Phillip Meilinger, "Aircraft can routinely conduct operations that achieve strategic level effects. To a great extent airplanes obviate the need to confront terrain or the environment because of their ability to fly over armies, fleets and geographic obstacles and strike directly at a country's key centers."¹³ Finally, classical airpower theory required independent control of air assets by a single Airman to ensure decisive results.¹⁴ As retired Rear Admiral James Winnefeld, a Korea and Vietnam naval aviator turned

¹¹ Clancy, *Every Man a Tiger*, 255, 260–265; Richard G. Davis, *On Target: Organizing and Executing the Strategic Air Campaign Against Iraq* (Honolulu, Hawaii: University Press of the Pacific, 2005), 81–84; Olsen, *John Warden and the Renaissance of American Air Power*, 175–182; Putney, *Airpower Advantage*, 125; Reynolds, *Heart of the Storm*, 43.

¹² William J. Perry, "DESERT STORM and Deterrence," *Foreign Affairs*, no. Fall 1991: 70, accessed March 1, 2014, <http://www.foreignaffairs.com/articles/47141/william-j-perry/desert-storm-and-deterrence>.

¹³ Colonel Phillip S. Meilinger, *10 Propositions Regarding Air Power* (Washington, D.C.: Air Force History and Museums Program, 1995), 10–11.

¹⁴ Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945* (Princeton, N.J.: Princeton University Press, 2002), 69–76; Carl H. Builder, *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force* (New Brunswick, N.J.: Transaction, 2003), 62; William Mitchell, *Winged Defense: The Development and Possibilities of Modern Air Power, Economic and Military* (Mineola, N.Y.: Dover Publications, 2006), 9, 199, 213.

RAND analyst, observed shortly after the Gulf War, “Airpower has come of age and is an equal partner with the other forms of military power.”¹⁵ There are great amounts of literature that extol the technology while pointing out where it failed to work as designed or promised. Largely the lessons gleaned promote the continued use and development of select technology, while offering recommendations on improvements to those that fell short.

In most of these studies, human dynamics might be mentioned in context, especially if detrimental to smooth and seamless efforts, but authors focus little analysis on the importance of human interactions in the conduct of the air campaign. For example, in the 1991 White Paper entitled “Air Force Performance in DESERT STORM,” the authors focus on the superb performance of systems and equipment. They criticize systems and equipment that failed to perform, but only briefly do they make passing references to the personnel and leadership that enabled technological success.¹⁶ In his article “DESERT STORM and the Lessons of Learning,” Army Lieutenant Colonel Joseph J. Collins points out that “*technology-inspired lessons from a single war are likely to have a very short life, and a single war will seldom prove the long-term utility of any branch of service or component of the force* (emphasis in original).”¹⁷ He further cautions that “*learning about war is complicated by the human factor, which includes the state of unit and individual training, as well as other intangibles such as individual morale, esprit de corps, and discipline*. The experience of modern wars suggests that human factors are more powerful than technology (emphasis in original).”¹⁸

In review of the historical scholarship evaluating Air Force performance in the Gulf War’s planning and execution, the literature is mixed. The predominant DESERT STORM narrative indicates that while operations succeeded, intelligence largely failed.¹⁹

¹⁵ Rear Admiral James A. Winnefeld, “Joint Air Warfare: Halfway There,” in *Air Power Confronts an Unstable World*, ed. Richard P. Hallion (London: Brassey’s, 1997).

¹⁶ Department of the Air Force, “White Paper: Air Force Performance in DESERT STORM,” April 1991, <http://www.dtic.mil/dtic/tr/fulltext/u2/a235941.pdf>.

¹⁷ Joseph J. Collins, “DESERT STORM and the Lessons of Learning,” *Parameters*, Autumn 1992, 87, <http://www.dtic.mil/dtic/tr/fulltext/u2/a529112.pdf>.

¹⁸ Collins, “DESERT STORM and the Lessons of Learning,” 89.

¹⁹ See the following: Davis, *On Target*; Lt Gen (ret) Buster Glosson, *War with Iraq: Critical Lessons* (Charlotte, NC: Glosson Family Foundation, 2003); Richard Hallion, *Storm Over Iraq: Air Power and the Gulf War*, Smithsonian History of Aviation Series (Washington: Smithsonian Institution Press, 1992); Edward C. Mann, *Thunder and Lightning: DESERT STORM and the Airpower Debates* (Maxwell Air Force

Stove-piped processes and undeveloped communications architectures led to untimely and unhelpful intelligence. The exact same technological indictments on stove-piping and undeveloped communications architectures could be levied at operations as well, but they were ultimately deemed successful—because the result of the war was successful. Presenting a contrary view, Air War College professor Jeffrey Record contends the Gulf War might be better termed a “hollow victory” from a strategic perspective despite the Air Force’s arguably successful operational performance.²⁰ Finally, former Air Force historian Diane Putney presents probably the most balanced assessment of the intelligence-operations dynamic in her Gulf War history entitled *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991*. Her work holistically examines the available record and identified problems in both functional areas which neither intelligence nor operations Airmen were able to solve.²¹

In the end, all of these authors imply the same conclusion: the successful Gulf War outcome overshadows and validates the process used. While often identifying various problems, these accounts minimize the relative importance of the problems in process and interpersonal relations endemic in Air Force Gulf War planning and execution. According to decision-making scholar James March, the astuteness “of an action is defined in terms of its *outcomes*. An action is defined as intelligent if, after all the results are in...it has satisfied the wishes of relevant parties...An outcome-based definition of intelligence not only makes intelligence an *ex post* assessment but also makes intelligence subjective...[T]he intelligence of an action is determined by the value of its outcomes (emphasis in original).”²² The assumption made in many of these accounts is that if the intervening process resulted in a successful outcome, then there is a link between the process and outcome. This, however, is a flawed assumption because

Base: Air University Press, 2004); Olsen, *John Warden and the Renaissance of American Air Power*; John Andreas Olsen, *Strategic Air Power in DESERT STORM* (London: Frank Cass, 2003); Reynolds, *Heart of the Storm*; James A. Winnefeld, *A League of Airmen: U.S. Air Power in the Gulf War*, Project Air Force (Santa Monica, CA: Rand, 1994).

²⁰ Jeffrey Record, *Hollow Victory: A Contrary View of the Gulf War* (Washington, D.C.: Brassey’s (US), Inc., 1993), 1.

²¹ Putney, *Airpower Advantage*.

²² James G. March, *A Primer on Decision Making: How Decisions Happen* (New York: The Free Press, 1994), 224. Of note, “intelligence” as used in this quote is not referring to the intelligence function or personnel. March uses the word “intelligence” to describe the rationality, brilliance, or understanding of the process used for a particular result.

“[t]he links between processes and outcomes cannot be assumed. They must be demonstrated.”²³ In fact, the historical record indicates the Air Force achieved success in the Gulf War *in spite of* significant process deficiencies—deficiencies that in a different conflict, time, place, and context might result not in major success, but in overwhelming failure.

This thesis explores Air Force planning and execution in order to assess the causes of the poor intelligence-operations dynamic. As Collins contends, “we cannot evaluate high technology as an isolated variable.”²⁴ The human dynamic, thus, is a critical component to understanding the limitations of technology during the Gulf War and the importance of the intangible and less measurable elements of interpersonal relationships. Because working relations were at best strained and at worst nonexistent, other factors such as enemy weakness and ineptitude; environmental conditions favorable to an air campaign; and overwhelming military force combined to render poor processes and relationships irrelevant in the successful outcome of the air campaign planning and execution.

The next chapter begins with a discussion of the origins of the INSTANT THUNDER concept that became the basis for the CENTAF planning and execution effort in Operations DESERT SHIELD and DESERT STORM. It presents a concise history of the tasking, planning, and delivery of the INSTANT THUNDER air campaign plan to CENTCOM and CENTAF. Further, it describes the role of both intelligence and operations personnel, focusing on the origins of many later problems.

The third chapter takes up the story of intelligence and operations Airmen in forging the Gulf War offensive air campaign from the shell of the INSTANT THUNDER plan. It focuses on the key leaders and personalities that set the tone for the intelligence and operations dynamic in the Special Planning Group (SPG), a tone that led to some of the miscommunications endemic between the two groups. The compartmentalized SPG, otherwise known as the Black Hole, became CENTAF’s center of gravity for the air campaign in both planning and execution.

²³ March, *A Primer on Decision Making*, 223.

²⁴ Joseph J. Collins, “DESERT STORM and the Lessons of Learning,” 87, 89, 90.

The fourth chapter concludes the story by delving into the normalization of the SPG into a more open Directorate of Campaign Plans as the Coalition forces went to war. It examines the lasting problems evident during wartime execution caused by the poor command climate occurring early and throughout the planning process. While senior leaders intended organizational changes to break down some of the barriers built through secrecy and compartmentalization, the poor command climate established by those same senior leaders enabled the continuation of bad feelings and terrible communication among intelligence and operations Airmen.

Finally, chapter five uses the previous chapters' analyses to enlighten current and future operations-intelligence integration. It offers observations drawn from the three distinct Gulf War planning and execution periods. This chapter seeks to provide insights for operations and intelligence professionals to consider in current and future interactions.²⁵

In evaluating Operations DESERT SHIELD and DESERT STORM, it is easy to ascribe to the view that proverbial “intelligence failures and operations successes” defined the CENTAF air campaign, as many historical studies do. Clinging to this artificial dichotomy obviates the need to examine critically the difficult human problems that give life both its texture and complexity. In fact, it is fair to say that there were plenty of problems and failures within operations as well. Technology will not and cannot completely solve these problems. Instead, military professionals and leaders must examine the human and interpersonal—those things that establish, define, and regulate the relationships between operations and intelligence professionals.

²⁵ Collins, “DESERT STORM and the Lessons of Learning,” 94.

Chapter 2

Open Planning

Okay, but we ain't picking the goddamn targets in Washington!
-Lieutenant General Chuck Horner, 1990

Colonel John Warden and his Checkmate planners viewed the chance to develop a strategic air campaign for CENTAF as a magnificent opportunity. Colonel Warden had distinct thoughts on the use of airpower and had, in fact, written a book capturing his ideas when he attended the National War College entitled *The Air Campaign: Planning for Combat*. These ideas formed the basis of the planning he and his staff did on behalf of CENTCOM and General Norman Schwarzkopf. The man to whom Colonel Warden ultimately passed his so-called INSTANT THUNDER concept was none too happy about any interference by the Pentagon in what should, as Lieutenant General Chuck Horner believed, be an in-theater composed plan.¹

Lieutenant General Horner's antipathy was well known among his primary CENTAF staff members. Nonetheless, he recognized CENTAF's current predicament. It was not yet manned to conduct all of the planning that was required. His small deployed team was focused on getting the resources and personnel it still required in country. Few on the CENTAF staff had the time or expertise to focus on much more than a bare bones defensive air plan, much less any larger designs for an air campaign. Therefore, he prepared warily to receive the Air Staff input with an eye for anything that might help his staff progress in its planning.²

¹ Tom Clancy, *Every Man a Tiger* (New York: Putnam, 1999), 187, 258; John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington, D.C: Potomac Books, 2007), 64–82, 144–147; Diane T. Putney, *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991* (Washington: Air Force History and Museums Program, 2004), 31–34; H. Norman Schwarzkopf and Peter Petre, *General H. Norman Schwarzkopf the Autobiography: It Doesn't Take a Hero* (New York: Bantam Books, 1992), 363, 369–370.

² Clancy, *Every Man a Tiger*, 187, 255, 258; Lt Gen (ret) Buster Glosson, *War with Iraq: Critical Lessons* (Charlotte, NC: Glosson Family Foundation, 2003), 14; Putney, *Airpower Advantage*, 5, 31–32, 90, 123; Richard T. Reynolds, *Heart of the Storm: The Genesis of the Air Campaign Against Iraq* (Maxwell Air Force Base, Ala.: Air University Press, 1995), 91; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 371.

This chapter explores the development of the initial INSTANT THUNDER concept, focusing on the intelligence and operations integration. The chapter also discusses Colonel Warden's briefing to Lieutenant General Horner. Many of the later difficulties in creating a positive intelligence and operations planning relationship originated in the poor execution of this endeavor, which led to inadequate communication between the two camps, and was exacerbated by compartmentalization of the INSTANT THUNDER planning in the Pentagon. These problems, first revealed in Washington and later in Riyadh, had an inordinate influence on subsequent problems building a cogent intelligence-operations team.

Planning in Washington

After Saddam Hussein's invasion of Kuwait in 1990, the Checkmate director, Colonel John Warden, became convinced the US would engage militarily—it was just a matter of time. He and Lieutenant Colonel David Deptula, an officer assigned to the Secretary of the Air Force's policy staff group, reviewed the existing deployment plan for OPLAN 1002-90. They determined there were no existing plans for a strategic air campaign and CENTAF seemed poised to execute a defensive strategy. Colonel Warden and his Checkmate staff had already begun working on some unsolicited proposals for what a viable strategic air campaign would look like. Both Colonel Warden and Lieutenant Colonel Deptula sought ways to influence the ongoing planning effort. Their chance came when General Schwarzkopf called the Air Force Vice Chief of Staff General John Loh on August 8, 1990, and asked for the Air Staff's help in developing a retaliatory air option. Colonel Warden and his boss, acting-Deputy Chief of Staff for Operations and Planning, Major General R. Minter Alexander, reported to General Loh's office for guidance and direction. After this meeting, Colonel Warden began building a strategic air campaign option under a strict need-to-know basis.³

Prior to his meeting with Major General Alexander and Colonel Warden, General Loh called the commanders of Strategic Air Command (SAC) and Tactical Air Command (TAC) to notify them of the impending planning efforts. General John Chain of SAC

³ Olsen, *John Warden and the Renaissance of American Air Power*, 128, 140–147; "An Oral History: The Commanders: Schwarzkopf," *The Gulf War*, January 9, 1996, <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/schwarzkopf/1.html>; Putney, *Airpower Advantage*, 32–36; Reynolds, *Heart of the Storm*, 15.

offered any assistance the Air Staff required. General Robert Russ of TAC had his own staff planners begin working on an option for CENTAF. While General Loh notified SAC and TAC as well as his Checkmate planners, he failed to notify Major General James Clapper, the Air Force Assistant Chief of Staff for Intelligence, about the Air Staff efforts.⁴ These communications, or lack thereof, would prove both a help, in the case of SAC's planning assistance, and a hindrance, in the case of TAC's parallel planning and the late inclusion of Air Force intelligence.

Planning Principles

Having completed a recent study on emerging management principles, Colonel Warden wished to use the principle of open planning in the development of the air campaign concept. Essentially, he wanted to bring a wide variety of Airmen from different backgrounds together to create the plan. From these different perspectives, he hoped to develop a coherent air campaign very quickly. Therefore, the planners immediately determined the campaign's goals to frame their efforts.⁵ According to the *Gulf War Air Power Survey*, "[t]hey took the President's objectives from his speech of 8 August: (1) Iraqi withdrawal from Kuwait; (2) restoration of Kuwaiti sovereignty; (3) security and stability of the Persian Gulf; (4) protection of American lives...The Checkmate planners used the President's objectives to fashion military objectives: (1) force Iraqi withdrawal from Kuwait; (2) degrade Iraq's offensive capability; (3) secure oil facilities; (4) render Saddam ineffective as a leader."⁶

To focus his planners, Colonel Warden introduced the Checkmate contingent to his concept of the Five-Rings Model. Colonel Warden believed whole-heartedly in the idea that the efficient defeat of an enemy could be achieved by attacking the enemy system at its center. His theory is typically depicted as five "concentric circles, reflect[ing] the relative importance of the target-sets contained within a nation-state."⁷ The rings, from the center to outside in decreasing degree of importance, were: leadership and command and control (C2); critical war production; infrastructure; population; and

⁴ Putney, *Airpower Advantage*, 33–35.

⁵ Olsen, *John Warden and the Renaissance of American Air Power*, 147–152.

⁶ Putney, *Airpower Advantage*, 44; Thomas A. Keane and Eliot A. Cohen, eds., *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning* (Washington, D.C: Department of the Air Force, 1993), "Planning," pg 109.

⁷ Olsen, *John Warden and the Renaissance of American Air Power*, 109.

fielded military forces (Figure 1). According to Colonel Warden's theory, airpower had the unique capability of inducing paralysis on the enemy system through the cumulative effects achieved by simultaneous attacks on targets from each of the ring categories.⁸

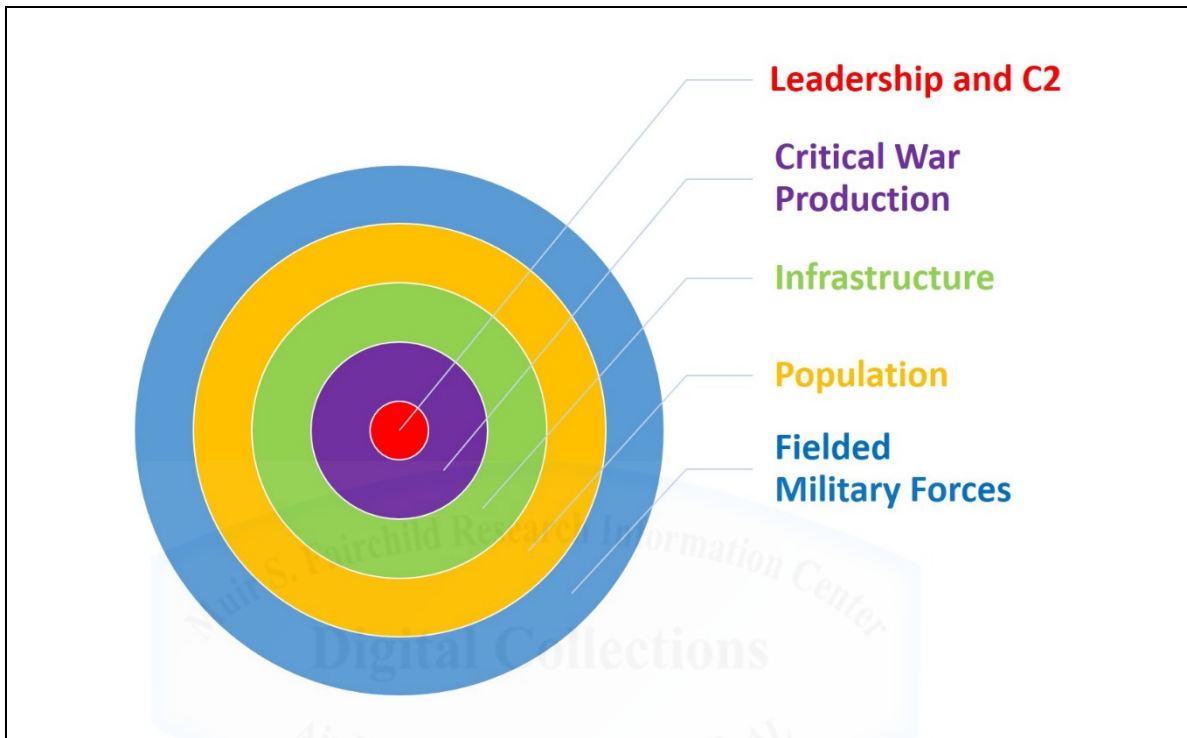


Figure 1. Warden's Five-Rings Model (Source: Olsen, *John Warden and the Renaissance of American Air Power*, 109)

Intelligence Support

As the operations planners got their arms around the theoretical model Colonel Warden wished to use, Major General Alexander requested support for the campaign planning from Major General Clapper. According to oral history interviews conducted after the Gulf War, Major General Alexander reported getting push back from Major General Clapper instead of support. Based on his recollections after the war, Major General Clapper questioned the need for the Air Staff effort, since he had recently visited CENTAF and believed they already had much of the work for a strategic air campaign completed. Instead of explaining the genesis of the requirements for the Air Staff efforts, Major General Alexander, by his own admission, got frustrated and called General Loh to

⁸ Olsen, *John Warden and the Renaissance of American Air Power*, 109–110.

complain about the lack of support from the Air Force's senior intelligence Airman. Eventually, after gaining a better understanding of the support requirements, Major General Clapper dispatched his senior targeting officer, Colonel James Blackburn, assigned to the Air Force Intelligence Agency (AFIA), to determine what support the Checkmate planners required.⁹ Like the Checkmate staff, Colonel Blackburn and his Airmen were staff officers. They had responsibility for intelligence and targeting policy, not campaign planning.

Colonel Blackburn quickly realized he and his targeting personnel were behind the power curve. The concept required a well-developed target list and supporting target folders. They began the arduous work of identifying Iraqi facilities and conducting analysis to determine key components and elements. The targeteers also had to request imagery that did not yet exist, as the larger intelligence community (IC) had not focused collection on Iraq during the Cold War. Since Colonel Blackburn was not a member of an organization chartered for planning or intelligence analysis, the national IC treated any official requests he made into the intelligence system as a much lower priority than those originating from the combatant commands or their subordinate component commands. Thus, he had to leverage contacts and interpersonal networks to attain the imagery and other analytical products he and his staff required. Initially, the targeteers conducted their work geographically separated at Bolling Air Force Base. Wanting to connect his planners' efforts together with those of the targeteers, Colonel Warden requested they move the target development into the Checkmate spaces at the Pentagon.¹⁰ Collocation

⁹ Lt Gen James R. Clapper, Jr., "Memorandum for the Secretary of the Air Force (Office for Security Review)," May 31, 1994, Call #K239.0472-119, IRIS #0876334, Desert Story Collection, AFHRA, Maxwell AFB AL; Richard G. Davis, *On Target: Organizing and Executing the Strategic Air Campaign Against Iraq* (Honolulu, Hawaii: University Press of the Pacific, 2005), 68; Olsen, *John Warden and the Renaissance of American Air Power*, 152–153; Oral History Interview of Lt Gen Robert M. Alexander, interview by Lt Col Suzanne Gehri, Lt Col Richard Reynolds, and Lt Col Edward Mann, typed transcript, June 3, 1992, 5–9, Call #K239.0472-70 Copy 1, IRIS #0876232, Desert Story Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 35, 46–47; Reynolds, *Heart of the Storm*, 31–32.

¹⁰ Colonel James R. Blackburn, Jr., "What AF/INT Did during the War or Air Staff as a Warfighting HQ" (briefing slides, Call #K239.0472-33, IRIS #0876189, Desert Story Collection, AFHRA, Maxwell AFB AL, 1991); Davis, *On Target*, 68; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 122; John Andreas Olsen, *Strategic Air Power in DESERT STORM* (London: Frank Cass, 2003), 103; Oral History of Colonel Jim Blackburn, interview by Col Edward Mann, Lt Col Suzanne Gehri, and Lt Col Richard Reynolds, typed transcript, April 21, 1993, 25–30, Call #K239.0472-73 Copy 1, IRIS #0876239, Desert Story Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 47–50; Reynolds, *Heart of the Storm*, 32–33.

facilitated better communication and collaboration on the strategic air campaign concept between planners and intelligence Airmen.

“Shit, I love it!”¹¹

After just two days, Colonel Warden had a draft INSTANT THUNDER plan. Travelling to CENTCOM headquarters on August 10 with Major General Alexander and several operations planners, Colonel Warden presented the concept to General Schwarzkopf. Of note, the delegation did not include an intelligence officer to answer questions on the targets or gain greater understanding of planning requirements. Similarly, only General Schwarzkopf, the J-3 Major General Burt Moore, and the deputy commander General Buck Rogers received the briefing. No J-2 representative attended the briefing, demonstrating that General Schwarzkopf tended to keep things between himself and his closest advisors. He set the tone for the compartmentalization and the secrecy of the subsequent planning efforts. In their first hack on the plan, General Schwarzkopf expressed his enthusiastic approval and directed Colonel Warden to continue with detailed planning. He directed Colonel Warden to present the pitch to General Colin Powell, Chairman of the Joint Chiefs of Staff (CJCS). Furthermore, Colonel Warden had seven days to flesh out the plan and return to Tampa to present it to the CINCENT and his key staff.¹²

The very next day, Colonel Warden briefed the plan to General Powell and received similar rave reviews. Again, Colonel Warden’s entourage included a few Checkmate planners, but did not include an intelligence officer. Neither he, General Loh, nor any of the planners could answer General Powell’s intelligence and targeting-specific questions. Instead, Colonel Warden offered to send sample target folders to the Chairman for his review the next day.¹³

¹¹ General Schwarzkopf quoted in: Olsen, *John Warden and the Renaissance of American Air Power*, 158; Oral History Interview of Lt Gen Robert M. Alexander, interview by Lt Col Suzanne Gehri and Lt Col Richard Reynolds, typed transcript, June 3, 1992, 29–30, Call #K239.0472-69 Copy 1, IRIS #0876230, Desert Story Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 57.

¹² Davis, *On Target*, 68–69; Olsen, *John Warden and the Renaissance of American Air Power*, 155–159; Oral History of Colonel Jim Blackburn, 173; Putney, *Airpower Advantage*, 50, 57–59; Reynolds, *Heart of the Storm*, 51, 53–57.

¹³ Olsen, *John Warden and the Renaissance of American Air Power*, 163–165; Putney, *Airpower Advantage*, 61–63; Reynolds, *Heart of the Storm*, 71–74.

Other Efforts

After the CINCENT and CJCS briefings, the Checkmate planners sought to gain control of the different areas of operations planning. They formed teams to address “tankers and [psychological operations (PSYOPS)]; munitions and logistics; strategy and doctrine; search and rescue; foreign aircraft; and [Suppression of Enemy Air Defenses].”¹⁴ Other than the targeting team led by Colonel Blackburn, Checkmate did not set up any intelligence team to work planning issues and support. Some of these ill-considered critical intelligence areas were Iraq political and military analysis; order of battle; unit support; imagery and signals intelligence analysis; national and theater-based intelligence, surveillance, and reconnaissance (ISR) collection management; and bomb damage assessment.¹⁵ Failing to consider the myriad of intelligence support requirements, the Checkmate Airmen spent the next five days developing the INSTANT THUNDER plan further in anticipation of another briefing to General Schwarzkopf on August 17.

While Colonel Warden was getting rave reviews from the Chairman and the CENTCOM commander, the TAC staff was working its own plan. General Russ had seen a copy of the INSTANT THUNDER plan and believed it too violent and unrealistic. He believed the plan focused completely on targets within Iraq and failed to account for the large Iraqi ground forces in Kuwait that posed the greatest threat to Saudi Arabia and the American forces building up in the region. He also disliked the idea of the air war being planned in Washington D.C. Upon approving a TAC alternative, General Russ sent the plan to the Air Staff. By the time it arrived, however, it was overcome by events. General Schwarzkopf had already approved the INSTANT THUNDER plan and awaited another Checkmate briefing with further improvements.¹⁶

At the same time, Lieutenant General Jimmie Adams, Air Force Assistant Chief of Staff for Plans and Operations, was unhappy with the planning effort, begun while he was on leave, ongoing in one of his subordinate directorates. Not only did he question the methodology with which the plan was taking shape, but he also understood the rancor

¹⁴ Putney, *Airpower Advantage*, 63.

¹⁵ Davis, *On Target*, 61; Putney, *Airpower Advantage*, 63.

¹⁶ Davis, *On Target*, 81; Olsen, *John Warden and the Renaissance of American Air Power*, 159–163; Putney, *Airpower Advantage*, 55–56, 60–61; Reynolds, *Heart of the Storm*, 39–45, 47–51.

from both TAC and more importantly, Lieutenant General Horner. The Air Staff had impinged on what should have been a theater-driven planning process. After speaking with Lieutenant General Horner, Lieutenant General Adams sent Lieutenant Colonel Steve Wilson, a trusted agent well-known by both men, to Riyadh to explain the INSTANT THUNDER plans. Additionally, he was to assist with anything else Lieutenant General Horner required. Upon arriving in theater on August 14, Lieutenant Colonel Wilson briefed an irritated Lieutenant General Horner. The JFACC did little to contain his disdain for the INSTANT THUNDER plan and those who planned it thousands of miles outside the warfighting theater. Even with the understanding of General Schwarzkopf's desire for Air Staff assistance developing the air campaign, Lieutenant Horner's irritation and scorn would color his subsequent response to Checkmate's plan.¹⁷ It would also create a negative command climate wherein the CENTAF staff believed not supporting the Air Staff plan was part of their senior leader's intent.

Targeting and the Operations Order

Meanwhile, as the Checkmate operations planners refined the INSTANT THUNDER plan, Colonel Blackburn coordinated his targeteers' work with that of the CENTCOM J-2 target development branch. According to Colonel Blackburn, Colonel Warden did not want to include entities outside the Checkmate fold in the ongoing compartmentalized planning effort. Colonel Blackburn, however, explained the need for CENTCOM sanction to gain IC target production support, otherwise prioritized to the combatant commands. Upon creating the lash up, Colonel Blackburn learned CENTCOM had developed a list of 109 targets, while Checkmate and the Air Staff targeteers had identified only 84 targets in the INSTANT THUNDER concept. 76 targets were on both lists. After CENTCOM delegated imagery production tasking authority to the AFIA Directorate of Targets, Colonel Blackburn submitted images of CENTCOM's 109 targets to the Defense Mapping Agency Aerospace Center (DMAAC) to have the desired points of impact (DPI) mensurated for multiple weapons systems and not just

¹⁷ Davis, *On Target*, 81–82; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 126; Olsen, *John Warden and the Renaissance of American Air Power*, 175–176; Putney, *Airpower Advantage*, 120; Reynolds, *Heart of the Storm*, 84–86, 91–93.

those designated within INSTANT THUNDER.¹⁸ In doing so, Colonel Blackburn unilaterally decided not to request mensuration on the eight targets that were uncommon between the INSTANT THUNDER and CENTCOM target lists. He rationalized that if the CENTCOM targets shop did not intend to use them then the limited DMAAC resources should be leveraged only for anticipated targets.¹⁹

Since the operations planners had specific reasons for every target identified in the INSTANT THUNDER concept, Colonel Blackburn did not consider his decision's impact on the plan. By failing to communicate his decision to the operations planners, the planners would transition their concept to CENTAF believing that the critical target refinement was continuing on the complete INSTANT THUNDER target list. Thus, they continued to plan against it. This lack of communication and coordination resulted in later frustrations when the forward-deployed operations planners in Riyadh not only failed to receive the corresponding target folders but also refined target coordinates for precision employment.

With the targets at DMAAC for mensuration, Checkmate completed its modifications and improvements on the INSTANT THUNDER plan for the August 17 briefing to General Schwarzkopf. They offered a much more robust air campaign scheme than had been briefed seven days prior, including a master attack plan and operations order (OPORD). Of note, the INSTANT THUNDER OPORD had numerous annexes for critical supporting functions that roughly corresponded to the functional teams created in the planning process. These included command and control (C2), PSYOPS, logistics, munitions, and search and rescue.²⁰

¹⁸ A Desired Point of Impact (DPI) is “[a] precise point, associated with a target and assigned as the impact point for a single unitary weapon to create a desired effect” and is otherwise called an aim point. An aimpoint is defined as “[a] point associated with a target and assigned for a specific weapon impact.” Mensuration is “the process of measurement of a feature or location on the earth to determine an absolute latitude, longitude, and elevation.” See Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington D.C.: Department of Defense, 2010), 5, 73, 169, http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

¹⁹ Blackburn, Jr., “What AF/INT Did during the War or Air Staff as a Warfighting HQ”; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 122; Putney, *Airpower Advantage*, 75–76.

²⁰ “COMUSCENTAF Operations Order Offensive Campaign--Phase I,” September 2, 1990, Call #K178.81-122, IRIS #1129249, AFHRA, Maxwell AFB AL; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 126; Putney, *Airpower Advantage*, 77–79.

While there was also an intelligence annex to the OPORD, it failed to address many of the critical support requirements for an air campaign of the magnitude anticipated. Annex B, “Intelligence,” included known Iraqi order of battle information and a proposed target list. Yet, Annex B failed to address national and theater-based ISR collection management, including the entire requirements for planning and direction; collection; processing and exploitation; analysis and production; and dissemination (PCPAD) concept of operations (CONOPs).²¹ It also failed to cover other critical intelligence activities such as unit support; time sensitive and mobile targets CONOPs; “target selection and critical-node analysis; production and dissemination of target materials; and establishment of a quick-reaction bomb damage assessment (BDA) system.”²²

Thus, especially in regard to intelligence combat support concepts, the INSTANT THUNDER OPORD was incomplete. The accelerated timelines certainly had something to do with this, but there was also the continuing inability of the planners to communicate with intelligence Airmen that allowed little work to be done on Annex B. Additionally, since Colonel Warden was sworn to secrecy in the planning, the compartmentalization it engendered made it difficult to include adequate intelligence Airmen to assist in the planning. Checkmate had Colonel Blackburn’s targeteers to accomplish target analysis and production. The myriad of other intelligence tasks and planning requirements, however, required Airmen from the other various intelligence disciplines, such as all-source political and military analysis; signals intelligence; human intelligence; and collection requirements and management. Checkmate had only one other intelligence officer acting as a liaison officer to the AFIA staff’s analysis directorate.²³ Since there was so much work and the planning was compartmentalized, this one officer could not do all of the necessary work himself nor could he pull in other intelligence Airmen to tackle all of the intelligence tasks. Checkmate’s OPORD clearly failed to address all of the

²¹ “COMUSCENTAF Operations Order Offensive Campaign--Phase I”; Department of Defense, *Conduct of the Persian Gulf Conflict: An Interim Report to Congress* (Washington, D.C: U.S. Government Printing Office, 1991), 21–3; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 126; Putney, *Airpower Advantage*, 188; James A. Winnefeld, *A League of Airmen: U.S. Air Power in the Gulf War*, Project Air Force (Santa Monica, CA: Rand, 1994), 221.

²² Putney, *Airpower Advantage*, 188.

²³ Oral History of Colonel Jim Blackburn, 74.

disparate functional issues for a plan of this magnitude. Despite the plan's deficiencies, though, Checkmate completed the draft for the follow-up briefing to General Schwarzkopf.

Back to Tampa

On August 17, Colonel Warden and his composite team of operations and intelligence planners drawn from the Joint Staff, Checkmate, AFIA, SAC, TAC, and the other services travelled to CENTCOM. Major General James Meier, Joint Staff Deputy Director for Operations, provided introductory remarks. Then, Colonels Blackburn and Warden presented the updated INSTANT THUNDER concept to General Schwarzkopf and a full complement of the CENTCOM J-staff. Colonel Blackburn briefed the targeting methodology and representative examples of targets from each of the Five-Rings-derived categories addressed in the plan. He also explained to General Schwarzkopf that he was in lock step with the CENTCOM J-2 Targets Branch personnel in working on the target deck. Colonel Warden first briefed the central precepts underpinning the operations concept and later addressed INSTANT THUNDER execution and the strategic scheme of maneuver.²⁴

General Schwarzkopf reacted positively to the briefing. According to notes taken by Checkmate planners during the meeting, General Schwarzkopf extolled the plan saying, "This is what makes the US a superpower! This uses our strengths against their weaknesses, not our small army against their large army. Our airpower against their's is the way to go—that's why I called you guys in the first place!"²⁵ General Schwarzkopf directed Colonel Warden to deliver and pass off the plan to Lieutenant General Horner in Saudi Arabia for the CENTAF staff's further development.²⁶

Passing off the Plan

Upon returning to Washington D.C., the Checkmate-led team congratulated themselves on how far they had come within just over two weeks' time. They also

²⁴ Davis, *On Target*, 75–76; Olsen, *John Warden and the Renaissance of American Air Power*, 171–174; Putney, *Airpower Advantage*, 79–83; Reynolds, *Heart of the Storm*, 110; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 369–372.

²⁵ Lt Col Ben Harvey, "Memorandum and Notes," August 17, 1990, Call #CHP-7, IRIS #0871738, AFHRA, Maxwell AFB AL; Olsen, *John Warden and the Renaissance of American Air Power*, 174; Oral History of Colonel Jim Blackburn, 82–83; Putney, *Airpower Advantage*, 82; Reynolds, *Heart of the Storm*, 110.

²⁶ Davis, *On Target*, 80; Olsen, *John Warden and the Renaissance of American Air Power*, 174; Putney, *Airpower Advantage*, 82–83; Reynolds, *Heart of the Storm*, 110.

discussed how they would continue to refine the plan for transfer to CENTAF Forward. Colonel Warden believed Checkmate's role would become one of providing data as required or requested. Colonel Warden decided to take three of his operations planners, Lieutenant Colonels Deptula, Ben Harvey, and Ron Stanfill, with him to present and pass off the INSTANT THUNDER air campaign. Believing the plan achieved approval at the most important level, Colonel Blackburn felt no need to travel to Riyadh to deliver the plan to Lieutenant General Horner. Instead, he focused on developing and refining CENTCOM's list of 109 targets versus the original INSTANT THUNDER list of 84 targets. He and his targeteers also began work on Iraqi airfield target development for the air superiority fight.²⁷

When Colonel Warden and his team arrived in Riyadh on August 19, they presented the INSTANT THUNDER plan to the CENTAF key staff, including: Major General Tom Olsen, CENTAF Deputy Commander; Brigadier General Pat Caruana, CENTAF strategic forces advisor; Brigadier General Larry Henry, electronic warfare expert; Colonel Jim Crigger, CENTAF Director of Operations; Colonel John Leonardo, CENTAF Director of Intelligence; and Lieutenant Colonel Sam Baptiste, Ninth Air Force weapons and tactics. Additionally, Lieutenant Colonel Wilson attended the briefing and later provided CENTAF atmospherics.²⁸

In general, the CENTAF staff received the briefing positively and made few criticisms. Brigadier General Henry provided the only substantive critique to the INSTANT THUNDER plan. He did not like INSTANT THUNDER's use of service-specific geographic delimitations to conduct air operations. He argued that they should heed the lessons of Vietnam, where the similar route package concept originated. Brigadier General Henry objected to route package-like concept in the INSTANT THUNDER plan. He believed it enabled service autonomy within assigned areas to the detriment of a fully integrated joint air campaign. The notion also challenged the relatively new JFACC concept. By denying the JFACC's ability to centrally plan and

²⁷ Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 122; Olsen, *John Warden and the Renaissance of American Air Power*, 176; Putney, *Airpower Advantage*, 83; Reynolds, *Heart of the Storm*, 113–114.

²⁸ Olsen, *John Warden and the Renaissance of American Air Power*, 176–177; Putney, *Airpower Advantage*, 119–120; Reynolds, *Heart of the Storm*, 116–118.

flexibly control limited airpower assets, airpower might be misused or fail to be employed efficiently and effectively against enemy targets.²⁹

The Checkmate planners explained that target proximity to friendly force staging areas was the sole rationale for the geographic boundaries. Further, the planners did not intend for those boundaries to deny effective aircraft and weapons employment. Instead, they intended to optimize aircraft and weapons against Iraqi targets across the theater of operations. This explanation appeared to placate Brigadier General Henry. Other than the perceived Vietnam-like route packaging, the plan did not generate any other critiques. Seemingly a positive sign, Lieutenant General Olsen praised the effort as a good complement to CENTAF's D-Day planning. In fact, he told the team he wanted them to stay in theater to continue refining the INSTANT THUNDER plan.³⁰

The next morning, Lieutenant Colonel Wilson met with Lieutenant Colonel Deptula to provide an assessment on CENTAF's efforts and the command environment. Lieutenant Colonel Wilson expressed his frustration at what he believed was short-sightedness on the part of the CENTAF planners in their singular focus on the defensive planning. He believed CENTAF had no leadership. The CENTAF staff focused myopically on a defensive plan without a long-term strategy for the defeat of Iraq. Further, he had already presented an early version of INSTANT THUNDER to Lieutenant General Horner's dissatisfaction. According to Lieutenant Colonel Wilson, the JFACC did not believe the INSTANT THUNDER plan was viable. Therefore, Lieutenant Colonel Wilson cautioned the Checkmate officers to expect a negative reaction to the INSTANT THUNDER concept.³¹

The morning also included meetings between CENTAF key staff and the Checkmate team. The CENTAF planners briefed Colonel Warden and his team on the D-Day plan. In addition, the Checkmate team spoke to CENTAF's Director of Operations further about executing the INSTANT THUNDER concept. Colonel Crigger advised Colonel Warden that the Checkmate team should work with the CENTAF intelligence staff on the target list to gain accord and then begin refinement. Despite the

²⁹ Olsen, *John Warden and the Renaissance of American Air Power*, 176–177; Putney, *Airpower Advantage*, 119–124; Reynolds, *Heart of the Storm*, 116–118.

³⁰ Olsen, *John Warden and the Renaissance of American Air Power*, 176–177; Putney, *Airpower Advantage*, 119–124; Reynolds, *Heart of the Storm*, 116–118.

³¹ Putney, *Airpower Advantage*, 123; Reynolds, *Heart of the Storm*, 116, 119–120.

warnings from Lieutenant Colonel Wilson, all of the other CENTAF interactions indicated the Checkmate planners offered a valuable alternative and addition to the ongoing defensive planning of the CENTAF staff.³² These positive interactions, however, would not replay themselves when Colonel Warden briefed Lieutenant General Horner on INSTANT THUNDER.

Briefing the JFACC

In the early afternoon, Colonel Warden finally got his opportunity to present the INSTANT THUNDER plan to the JFACC. Those CENTAF staff members who attended the previous night's pre-brief to the Deputy Commander were present, along with a few additional lower level staff members, and the Checkmate team. Given the positive reception the night before, Colonel Warden minimized the warnings Lieutenant Colonel Wilson provided. Overconfident, Colonel Warden began the briefing assuming the pitch would result in a request from Lieutenant General Horner to remain in theater to lead further fine-tuning of the INSTANT THUNDER concept.³³ This, however, was not the result.

For his part, Lieutenant General Horner came to the briefing of two minds. First, he was irritated about Air Staff involvement in planning. He believed lessons from Vietnam indicated effective operational war planning only occurred in the theater of operations by those who would execute the plans. In an interview after the Gulf War, General Horner said, "I was concerned because in Vietnam the targets were picked in Washington and it's one of those Vietnam lessons that's engrained in all of us, the fact you don't pick the targets outside the theater. That's not the way to do it, and so I was concerned about that."³⁴ Although he understood General Schwarzkopf requested the help, he believed the ad hoc planning efforts from both the Air Staff, as well as TAC, disregarded the normal chain-of-command.

On the other hand, however, Lieutenant General Horner understood his staff was overwhelmed and overworked by the magnitude of deployment and planning tasks that

³² Putney, *Airpower Advantage*, 124.

³³ Olsen, *John Warden and the Renaissance of American Air Power*, 176; Putney, *Airpower Advantage*, 125, 130; Reynolds, *Heart of the Storm*, 120, 122.

³⁴ "An Oral History: The Commanders: Horner," *The Gulf War*, January 9, 1996, <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/horner/1.html>.

filled their days. The enormity of the tasks confronting the CENTAF staff was only one aspect complicating planning.³⁵ The other was the largely understood reality that those Airmen assigned to CENTAF were the “‘second team’ with regard to service staffing.”³⁶ Brigadier General Buster Glosson, who would soon serve as the lead offensive planner for the JFACC, explained this idea of a “second team” in his memoirs by saying that “[t]he lack of a strong planning staff was our own fault in the Air Force—not that we wanted to admit it. The truth was we didn’t send our best and brightest to the staffs of the numbered air forces in those days, even though these “numbered” air forces, like the Ninth, became the Air Force element of the combatant command in time of war. Many officers at CENTAF has already been passed over for promotion. Now here they were as the forward air component for what might be a major battle.”³⁷ Recognizing this reality, Major General Olsen therefore advised Lieutenant General Horner that there were some good components within the INSTANT THUNDER plan. Moreover, at the very least, CENTAF could use some additional smart Airmen in theater to assist in planning efforts.³⁸

As a result, Lieutenant General Horner approached the briefing as an opportunity to gain some ideas useful in advancing CENTAF planning as well as a job interview for Colonel Warden and his team. Lieutenant General Horner critically appraised the INSTANT THUNDER concept and the individuals selling it. In the first, Lieutenant General Horner believed the plan offered what he viewed as some great but incomplete insights for the conduct of an air campaign against Iraq. A positive aspect was the targets list—it far surpassed anything CENTAF had been able to create to that point. He disparaged the concept’s optimistic timelines. He derided the incomplete information that would preclude CENTAF from turning the plan into an executable air tasking order (ATO). With both good and bad elements, the JFACC ordered his staff to take

³⁵ Clancy, *Every Man a Tiger*, 187, 259–260; Olsen, *John Warden and the Renaissance of American Air Power*, 177, 180; Putney, *Airpower Advantage*, 125; Reynolds, *Heart of the Storm*, 129; “An Oral History: The Commanders: Horner.”

³⁶ Oral History Interview of Major Sandy Terry, typed transcript, April 4, 1992, 35, Call #K168.051-89, IRIS #1187419, Operation DESERT SHIELD/DESERT STORM Oral History Collection, AFHRA, Maxwell AFB AL; “Task Force V: Interim Report to the SECAF,” March 4, 1992, 3, Call #TF5-2-64, IRIS #0872779, GWAPS Collection, AFHRA, Maxwell AFB AL.

³⁷ Glosson, *War with Iraq*, 21.

³⁸ Olsen, *John Warden and the Renaissance of American Air Power*, 177; Putney, *Airpower Advantage*, 125.

Checkmate's plan and improve it. However, he also told his operations, intelligence, and logistics chiefs to avoid doing anything in planning an offensive campaign that might compromise CENTAF's ability to conduct defensive air operations, as the defensive ATO was his priority.³⁹ Lieutenant General Horner realized that without significant ground forces in theater, the air component was the only available military force to stop the massed Iraqi forces should they invade Saudi Arabia.

As far as the job interview, Colonel Warden failed to make a positive impression that would have earned him a spot on the CENTAF team. Instead, Lieutenant General Horner requested Colonel Warden's three lieutenant colonels remain as the core of a CENTAF planning cell that would build an offensive air plan, while Colonel Warden was sent back to the Pentagon. Lieutenant General Horner did not hide his disdain for the Colonel and, by extension, the INSTANT THUNDER plan, made evident by his disparaging remarks and dismissive attitude. The JFACC also continued to refer to the defensive plan as his priority and one which he did not feel CENTAF had a good handle on yet.⁴⁰

Establishing the Command Climate

Lieutenant General Horner, by many accounts, was visibly annoyed and combative throughout the briefing, interrupting Colonel Warden and ridiculing INSTANT THUNDER. Various sources describe the acrimony with which Lieutenant General Horner addressed Colonel Warden, likely because the more junior officer's briefing style got under his skin. He saw Vietnam in the plan. The use of what looked like route packages; planning and targeting from Washington; and even the name "INSTANT THUNDER" was reminiscent of the debacle that was Rolling Thunder. He was contemptuous of both Colonel Warden and the Checkmate concept, denigrating both the man and the plan. He called the plan "an academic study" and nothing more than a "target list."⁴¹ He indicated it existed more in fantasy than in the reality he operated in,

³⁹ Clancy, *Every Man a Tiger*, 260, 264–265; Harvey, "Memorandum and Notes"; Olsen, *John Warden and the Renaissance of American Air Power*, 179–180; Putney, *Airpower Advantage*, 128, 130–132; Reynolds, *Heart of the Storm*, 125, 129–130.

⁴⁰ Clancy, *Every Man a Tiger*, 260, 264–265; Harvey, "Memorandum and Notes"; Olsen, *John Warden and the Renaissance of American Air Power*, 179–180; Putney, *Airpower Advantage*, 128, 130–132; Reynolds, *Heart of the Storm*, 120–130.

⁴¹ Harvey, "Memorandum and Notes"; Reynolds, *Heart of the Storm*, 123.

especially in light of Checkmate's optimistic projection of only a six-day air campaign to defeat Iraq.

Lieutenant General Horner had different concerns than Colonel Warden. Lieutenant General Horner needed an executable plan that could be made into an ATO, and Colonel Warden's concept was not there. INSTANT THUNDER could assist CENTAF, however, in getting there faster than without it. His negative and, by some accounts, explosive reaction left an impression on his primary staff. Creating an uncomfortable environment for all present, his response also left longer-lasting questions as to the status of the INSTANT THUNDER plan and the Checkmate planners who remained in theater. They saw it as an indictment on INSTANT THUNDER as well as on the Checkmate planners who remained behind to assist.⁴² The JFACC's comments and attitude would continue to affect the ability of those working on the offensive air campaign to gain CENTAF staff buy-in for resources and planning support. Lieutenant General Horner in this instance created an adverse command climate in which the CENTAF staff could refuse support and radiate animosity toward those working on the offensive air campaign, believing that was what their boss wanted and expected.

Conclusion

Generating less than the overwhelming enthusiasm Colonel Warden expected, the plan seemed to fall flat. However, since Lieutenant General Horner wished Colonel Warden's three planners to remain in theater, Colonel Warden believed there might be some hope for the plan to survive in some form. Nonetheless, Lieutenant General Horner's contempt for the effort was evident to all present and word quickly spread throughout the CENTAF staff. Because he failed to communicate his intent clearly for the planners and the INSTANT THUNDER plan to his staff primaries, they departed the briefing believing INSTANT THUNDER was dead on arrival. Therefore, they mimicked their commander's disdain with their own staffs, perpetuating an aura of hostility toward the remaining Checkmate planners and their wares. This would continue to frustrate the efforts of both the Checkmate planners and the CENTAF staff members as offensive planning began in earnest, compartmentalized into complete secrecy.

⁴² Clancy, *Every Man a Tiger*, 260, 264–265; Harvey, "Memorandum and Notes"; Olsen, *John Warden and the Renaissance of American Air Power*, 179–180; Putney, *Airpower Advantage*, 128, 130–132; Reynolds, *Heart of the Storm*, 120–130.

Chapter 3

Planning in a Vacuum

[It was called the Black Hole] because we would send people in, and they would never come out. We would never see them again because they would just stay there.

-Lieutenant Colonel Sam Baptiste, 1992

Lieutenant General Chuck Horner was largely unimpressed by the INSTANT THUNDER air campaign concept Colonel Warden and the Checkmate planners presented. The JFACC, however, clearly understood he had no other offensive options developed. His Combat Plans staff members were inundated with building daily ATOs consisting of combat air patrol (CAP), airborne early warning and control, and reconnaissance sorties. They also worked on the defensive plan with its first day ATO (called the D-Day ATO) designed to thwart a further Iraqi incursion into Saudi Arabia. The Checkmate plan gave the JFACC a start on what General Norman Schwarzkopf called the retaliatory option. The problem, as Lieutenant General Horner saw it, had more to do with Colonel Warden's presentation style and personality. It had less to do with the concept itself, since he certainly recognized the importance of the well-developed target list that eclipsed anything his staff had on hand.¹

This chapter, then, explores the development of the offensive campaign plan from the initial INSTANT THUNDER concept produced by Checkmate, focusing on key operations and intelligence interactions throughout. The discussion centers on the continued refinement of the INSTANT THUNDER base plan into an offensive air campaign by the CENTAF SPG, nicknamed the Black Hole, formed initially with a few Checkmate staffers. Throughout the CENTAF planning prior to the Gulf War, an unhealthy command climate and inadequate communication combined with the compartmentalization of the plan, due to its secretive nature, resulted in the inability of

¹ Tom Clancy, *Every Man a Tiger* (New York: Putnam, 1999), 249; Diane T. Putney, *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991* (Washington: Air Force History and Museums Program, 2004), 97-98; H. Norman Schwarzkopf and Peter Petre, *General H. Norman Schwarzkopf the Autobiography: It Doesn't Take a Hero* (New York: Bantam Books, 1992), 369-370.

intelligence and operations planners to create the CENTAF team necessary to drive planning.

The Exiles

After Colonel Warden's departure, Lieutenant General Horner understood the need to work on an offensive option. At his request, Lieutenant Colonels Deptula, Harvey, Stanfill, and Wilson remained in Riyadh to form the core of the team that would refine the INSTANT THUNDER concept to build an offensive air campaign plan. On August 20, the four officers developed a plan for the first several days of planning in which they would produce a target list by August 22; an attack flow by August 23; force packaging by August 24; and an offensive ATO by August 25. The project's timeline was aggressive, requiring significant human support and material resources from a CENTAF staff that was largely uninformed at best or hostile at worst.² As quoted in various Gulf War histories, Lieutenant Colonel Deptula believed he and his team "were getting slow rolled at every turn from the CENTAF staff."³ This initial timeline required extensive support from the CENTAF staff that was not immediately forthcoming. Without a more senior leader with Lieutenant General Horner's backing to head the effort, the "Exiles" faced gaining little traction for their aggressive planning timeline.⁴

The CENTAF staff had good, or at least understandable, reasons to discount or ignore requests for personnel and resources from the Washington-based planners. Lieutenant General Horner's less than warm reception of the INSTANT THUNDER plan and its Checkmate brokers gave the CENTAF senior staff the impression that the plan was stillborn. Even those not present for Colonel Warden's briefing to Lieutenant General Horner were well-aware of the plan's cold reception from the JFACC. In fact,

² Richard G. Davis, *On Target: Organizing and Executing the Strategic Air Campaign Against Iraq* (Honolulu, Hawaii: University Press of the Pacific, 2005), 85; Thomas A. Keaney and Eliot A. Cohen, eds., *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning* (Washington, D.C: Department of the Air Force, 1993), 126; Putney, *Airpower Advantage*, 133–134.

³ Putney, *Airpower Advantage*, 134.

⁴ Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 142; Oral History Interview of Captain John Glock, interview by Major Sandy Terry, Frank Kistler, and Dr. Mark Mandeles, typed transcript, January 30, 1992, 16, Call #TF4-8-153, IRIS #0872552, GWAPS Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 133.

many heard that Colonel Warden had been thrown out of the theater by the JFACC.⁵ According to Captain John Glock, one of the initial targeteers assigned to support the offensive air campaign planning, “There was just not a perception that anyone was really supposed to be support[ing] this plan but we were supposed to start working from scratch.”⁶ Thus, because “[n]o senior officer had yet directed the CENTAF staff to support” refined INSTANT THUNDER planning, the CENTAF staff believed the effort which competed for limited personnel and resources deserved little attention.⁷ Therefore, the four lieutenant colonels scrounged around the CENTAF forward headquarters for computers, work space, personnel, and intelligence support.

Crowned leader of the Exiles by virtue of date of rank, Lieutenant Colonel Wilson approached Major General Olsen to get a planning area and other resources. Since Lieutenant Colonel Wilson had been in theater, he and other CENTAF augmentees had used the CENTAF Commander’s conference room to gather and work since space was at a premium. Understanding the additional security concerns in planning the offensive campaign, the Deputy Commander immediately directed a secure tent facility be erected at a fenced-in soccer field near-by. The tent would provide the necessary secure workspaces to handle the compartmented planning requiring both sensitive compartmented information (SCI) classified intelligence as well as special category (SPECAT) operational data.⁸

⁵ Thomas A. Keane and Eliot A. Cohen, *Gulf War Air Power Survey: Summary Report* (Washington, D.C.: Department of the Air Force, 1993), 129; Oral History Interview of Captain John Glock, 13–14; Putney, *Airpower Advantage*, 133–134.

⁶ Oral History Interview of Captain John Glock, 14–15.

⁷ Putney, *Airpower Advantage*, 134.

⁸ “Security Clearance Frequently Asked Questions,” 4, accessed May 11, 2014, http://www.clearancejobs.com/security_clearance_faq.pdf; “Director of Central Intelligence Directive (DCID) 6/1: Security Policy for Sensitive Compartmented Information and Security Policy Manual” (Central Intelligence Agency, November 4, 2003), 5, http://www.ncix.gov/publications/policy/docs/DCID_6-1.pdf; Putney, *Airpower Advantage*, 134. See DCID 6/1: Sensitive compartmented information (SCI) is “classified information concerning or derived from intelligence sources, methods, or analytical processes, which is required to be handled within formal access control systems established by the Director of Central Intelligence.” See “Security Clearance Frequently Asked Questions”: Special Category (SPECAT) refers to other “categories of classified information, some of which have extra need-to-know restrictions or require special access authorizations. There are many such markings stamped or printed (caveats) on classified material, but most are only acronyms denoting special administrative handling procedures.” Technically, SPECAT could refer to SCI information, but the term is typically used to denote specially-handled and protected operational data.

Given their self-imposed tight timeline, the Exiles realized the immediate need for intelligence support to bolster their planning. In briefing Major Walter Jordan on the morning of August 21, the executive officer and designated point of contact for CENTAF intelligence, the Exiles stressed the importance of building the target list and gaining target materials and imagery to continue planning. The Checkmate planners knew the imagery existed for the 84 INSTANT THUNDER targets. Major Jordan and Lieutenant Colonel Stanfill contacted Checkmate to request the materials built by the AFIA targeteers be hand-delivered to Riyadh. In response, Colonel Blackburn refused to bring the materials to CENTAF Forward. Colonel Blackburn believed in-theater personnel needed to work through their component intelligence personnel to request the imagery he had already provided to CENTCOM J-2. From his perspective, when he and Colonel Warden briefed General Schwarzkopf on the INSTANT THUNDER concept on August 17, they had effectively passed off the plan to those responsible for the theater and had no further role. Further, Colonel Blackburn remained concerned that his departure to Riyadh would allow Colonel Warden to misuse the AFIA Airmen for tasks other than targeting. Thus, the target materials Colonel Blackburn and his Airmen built for INSTANT THUNDER never showed up in Riyadh for the Checkmate planners.⁹

The Exiles were understandably upset by what they perceived as a complete lack of support when the war could break out at any time. In fact, Lieutenant Colonel Stanfill noted it was “criminal” and that “aircrews will die” if Iraq were to attack and war broke out before the target materials arrived.¹⁰ This characterization of the dire situation without the INSTANT THUNDER target materials was obviously overblown, since these targets had little to do with the Iraqi ground forces currently poised against CENTAF in Kuwait. The INSTANT THUNDER strategic air campaign focused on leadership and C2 targets versus those tactical targets that would primarily be the focus of air strikes to counter an Iraqi initiated attack. Nonetheless, this is another instance of poor

⁹ Davis, *On Target*, 86–87; John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington, D.C: Potomac Books, 2007), 183–184; Oral History of Colonel Jim Blackburn, interview by Col Edward Mann, Lt Col Suzanne Gehri, and Lt Col Richard Reynolds, typed transcript, April 21, 1993, 82–83, Call #K239.0472-73 Copy 1, IRIS #0876239, Desert Story Collection, AFHRA, Maxwell AFB AL; Oral History Interview of Captain John Glock, 21; Putney, *Airpower Advantage*, 134–135, 150.

¹⁰ Putney, *Airpower Advantage*, 135.

communication among the intelligence and operations planners, leading the latter to believe the former had no desire to support the war effort.

Grudging Intelligence Support

At the same time, Colonel Leonardo and his deputy, Colonel William Hubbard, gathered five targeteers, all junior officers at the captain level, to give them guidance for their assignments to the Black Hole to assist the planning. The colonels directed the five targeteers to report to the Checkmate planners to receive the INSTANT THUNDER briefing and begin work on CENTAF's offensive target list. In an oral history interview after the Gulf War, Captain Glock relayed that Colonel Leonardo told the targeteers that "[Colonel] Warden had been thrown out. [Lieutenant General] Horner thought that the plan was dog shit. And that these [Air Staff planners from Checkmate] would be off the Peninsula within a few days."¹¹ Colonel Leonardo directed the targeteers to begin working on an alternative plan from scratch that could eventually serve as a counterproposal for Lieutenant General Horner to consider. Echoing Lieutenant General Horner's ire, Colonels Leonardo and Hubbard expressed their contempt for the INSTANT THUNDER-based planning effort.¹² Their negative attitudes shaped how the targeting officers approached their support to the planning.

Captain Glock and his four cohorts reported to the Checkmate Exiles to receive the INSTANT THUNDER briefings. At this point, the two colonels, Major Jordan, and five captains were the only intelligence Airmen briefed into the SPECAT INSTANT THUNDER plan.¹³ The operations compartmentalization limiting the number of intelligence professionals in-briefed on INSTANT THUNDER would have repercussions on the amount of intelligence support the operations planners could expect and enjoy. The *Gulf War Air Power Survey* captured the ensuing problems of the SPECAT planning effort:

Due in no small part to the political sensitivity of offensive campaign planning at this early juncture, the Black Hole planners set themselves up as a special access organization and made little effort to inform intelligence personnel of their concept of operations. CENTAF

¹¹ Oral History Interview of Captain John Glock, 14.

¹² Oral History Interview of Captain John Glock, 7–8, 11, 14–15; Putney, *Airpower Advantage*, 135.

¹³ Davis, *On Target*, 86; Oral History Interview of Captain John Glock, 7–9; Putney, *Airpower Advantage*, 134–135.

intelligence went ahead with its own target planning and viewed initial requests from the Black Hole planners as a nuisance. When intelligence personnel failed to respond expeditiously to their initial requests, the Black Hole regarded them as generally nonresponsive and looked elsewhere for support. Thus began an unfortunate rift between theater intelligence organizations and the Black Hole, a gap that widened as time went on.¹⁴

After Captain Glock was briefed into the plan and had acquired the existing target list, Lieutenant Colonel Deptula explained his need for a new consolidated targets list and a map depicting all of the targets geographically for his attack flow plan. The five officers immediately sought out a location to work with the SPECAT operational materials to develop the new target list. The officers used four disparate target lists as the basis of a new compilation: the OPLAN 1002-90 targets, the Punishment ATO targets, the CENTCOM J-2's target list created in early August, and the INSTANT THUNDER targets. Departing from the original INSTANT THUNDER list, the targeteers' analysis led them to add and delete targets. This resulted in a new target list that was not merely an amalgamation of the four available compendiums, since they identified targets previously left off of the original lists that they believed essential to a strategic air campaign. Ultimately, they developed the new target list and briefed Colonel Leonardo as directed.¹⁵

When the Exiles found the targeteers working in a basement pump room, because there were no other secluded areas available, Lieutenant Colonel Deptula was unhappy that the targeteers had negated targets from INSTANT THUNDER in their new listing. According to Captain Glock, Lieutenant Colonel Deptula argued that Colonel Blackburn, the chief targeteer, built the INSTANT THUNDER list. Captain Glock, however, believed the target analysis was not done well and key targets had been omitted from the INSTANT THUNDER listing. Additionally, Captain Glock questioned AFIA's expertise in conducting target system analysis for a theater they were not responsible for and in staff positions in which their charter was administrative issues and not target development.¹⁶ In regard to Lieutenant Colonel Deptula's request for the depiction of the

¹⁴ Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 129–130.

¹⁵ Olsen, *John Warden and the Renaissance of American Air Power*, 184; Oral History Interview of Captain John Glock, 7–9, 12, 15, 17–20; Putney, *Airpower Advantage*, 134–135.

¹⁶ Oral History Interview of Captain John Glock, 19; Putney, *Airpower Advantage*, 135–136.

targets on a map, Captain Glock reportedly told the more senior officer that “we don’t work for you.”¹⁷

These initial intelligence-operations interactions set a tone for the corrosive relationship that would follow throughout the rest of the planning and execution of the Gulf War. Because CENTAF senior leaders from the JFACC himself down to his intelligence and operations chiefs exhibited deleterious attitudes about the Air Staff personnel as interlopers and their plan as pedestrian and incomplete, subordinates followed their lead believing both the planners and their plan would soon be discarded. Lieutenant Colonel Deptula would term the treatment the “not invented here syndrome.”¹⁸ While this certainly explained part of the problem, the lack of support from key leaders dictated that junior officers would follow suit.

Therefore, believing the intelligence support for their planning effort would not improve, the Exiles reached back to Checkmate to request support on August 22. Colonel Warden willingly accepted the request and pledged Checkmate’s full support. Ultimately, the intelligence directorate’s unwillingness and inability to support offensive planning enabled an alternate intelligence conduit to take shape, become entrenched, and prove more valuable than in-theater resources.¹⁹ Checkmate’s ability to act as a pseudo-fusion center, providing more timely intelligence and support, eventually undermined the ability of in-theater intelligence personnel to have a relevant voice in planning and execution of the air campaign. The Air Staff Exiles ensured they maintained the secrecy of the reach-back link to Checkmate for as long as possible to avoid bringing it to the attention and displeasure of Lieutenant General Horner. Eventually, the lack of support from CENTAF’s intelligence directorate, both from unwillingness and deficient

¹⁷ Oral History Interview of Captain John Glock, 11.

¹⁸ Oral History Interview of Lt Col David Deptula, typed transcript, November 1, 1990, 23, Call #TF6-47-539, IRIS #0873094, GWAPS Collection, AFHRA, Maxwell AFB AL.

¹⁹ Davis, *On Target*, 87, 224–225; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 231; Olsen, *John Warden and the Renaissance of American Air Power*, 184; John Andreas Olsen, *Strategic Air Power in DESERT STORM* (London: Frank Cass, 2003), 133–134; Putney, *Airpower Advantage*, 136; James A. Winnefeld, *A League of Airmen: U.S. Air Power in the Gulf War*, Project Air Force (Santa Monica, CA: Rand, 1994), 187, 189.

resources, made the link a valuable and sanctioned communications node for planning and execution.²⁰

There's a New Sheriff in Town

Since Colonel Warden failed to make a positive impression earning him the senior planner posting, Lieutenant General Horner recognized that he did not have a senior leader on his CENTAF staff that could spearhead the new planning effort. His senior staff members were all engaged in urgent efforts associated with defensive planning, which remained Lieutenant General Horner's first priority. Instead, Lieutenant General Horner selected Brigadier General Buster Glosson to lead the offensive air campaign planning efforts. Lieutenant General Horner knew Brigadier General Glosson could be a divisive figure, but the JFACC needed a lead planner he could depend on to "get the job done" because he was a "go-getter."²¹ On August 21, Brigadier General Glosson arrived to take on his new post.

In their initial evening meeting upon Brigadier General Glosson's arrival in Riyadh, the JFACC's marching orders to his new senior planner consisted of several seemingly simple tasks. First, Brigadier General Glosson was to receive both the INSTANT THUNDER offensive concept and the CENTAF staff's defensive plan briefings. Lieutenant General Horner wanted him to develop a retaliatory plan that could be used if Saddam Hussein made any rash moves, such as executing Western hostages. Lieutenant General Horner told Brigadier General Glosson to use the INSTANT THUNDER concept as he saw fit. Essentially, Brigadier General Glosson could disregard it, use bits of it, or use it as the base of a more comprehensive offensive air campaign plan. Whatever he decided, however, Lieutenant General Horner expected the retaliatory plan with two to three days of corresponding ATOs within one week. After retaliatory ATOs were in place, Brigadier General Glosson could then turn his attention to building the larger strategic air campaign.²² According to Brigadier General Glosson, Lieutenant

²⁰ Oral History Interview of Captain John Glock, 58; Putney, *Airpower Advantage*, 144; Colonel Richard S. Rauschkolb, "CENTAF/IN After Action Report and Lessons Learned, Attachment 3: INT-Targets," March 25, 1991, O-6, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

²¹ Clancy, *Every Man a Tiger*, 266-267; Davis, *On Target*, 84-85; Putney, *Airpower Advantage*, 132-133, 136-137.

²² Clancy, *Every Man a Tiger*, 266-267; Davis, *On Target*, 84-85; Putney, *Airpower Advantage*, 137.

General Horner gave him free reign saying, “This is your problem, go solve it. I don’t have time to focus on this.”²³

Next, he had to build a planning team. He was limited, however, to the four lieutenant colonels from the Air Staff who remained in theater and any other personnel he wished to bring in from deployed or stateside units. Lieutenant General Horner believed the remaining Checkmate planners might be useful initially to provide the INSTANT THUNDER briefing, but they should not stay in theater indefinitely. The JFACC wanted the Washington crew sent home as soon as possible because he was still irritated that the Air Staff was trying to dictate how CENTAF would run the air campaign.²⁴ According to Brigadier General Glosson, Lieutenant General Horner told him, “Make damn sure everything is done here. Everybody works for you and you can get rid of those guys that came over with [Colonel] Warden. Put them all on an airplane tomorrow and get them out of here. I have already sent [Colonel] Warden’s ass back to the Pentagon.”²⁵

Third, Lieutenant General Horner ordered his senior planner to maintain absolute secrecy regarding the offensive planning to ensure it did not affect ongoing diplomatic efforts to end the crisis without military action. Finally, Lieutenant General Horner offered the conference room adjacent to his office for the offensive planning team. It provided a secure environment necessary to conduct the planning with SPECAT operational data near the JFACC’s workspace, but away from the mainstream CENTAF staff working areas.²⁶

On August 22, armed with his marching orders, Brigadier General Glosson met with all of the key CENTAF staff members from intelligence, operations, logistics, plans, and legal to gain an understanding of where planning stood. When he met with the Director of Intelligence, Colonel Leonardo explained his manning, systems, and resource limitations that would likely impede his ability to support Brigadier General Glosson in his new CENTAF planning position. Most critical to the planning effort was the lack of target intelligence and imagery. At this point, Brigadier General Glosson realized he

²³ Lt Gen (ret) Buster Glosson, *War with Iraq: Critical Lessons* (Charlotte, NC: Glosson Family Foundation, 2003), 15.

²⁴ Clancy, *Every Man a Tiger*, 266–267; Davis, *On Target*, 84–85; Glosson, *War with Iraq*, 14–16, 25; Putney, *Airpower Advantage*, 137–138.

²⁵ Glosson, *War with Iraq*, 16.

²⁶ Clancy, *Every Man a Tiger*, 267–268; Davis, *On Target*, 86; Putney, *Airpower Advantage*, 137.

might need to find alternate conduits for the intelligence information he and his planners would require to do their work.²⁷ These initial interactions and those of his Air Staff subordinates built a negative impression of CENTAF intelligence Airmen and their capabilities. This negative impression grew as the days, weeks, and months wore on. In his memoirs, Brigadier General Glosson charged:

Intelligence was my number-one problem. Personalities, antiquated systems, Cold War mentality—the obstacles were too long to list. CENTAF intelligence at the time had no capacity and no understanding of how to go about planning. It was absolutely the worst situation a human could imagine. The only thing they knew how to do was to brief [Lieutenant General] Horner on the latest intelligence that had been wired over to them electronically in the previous 24 hours. They would say, “Iraq flew so many sorties yesterday.” Whatever Washington intelligence gave them, they spouted out for [Lieutenant General] Horner.

That was the sum total of their capability. They didn’t know how to think. They didn’t know how to plan. They didn’t even know what we were trying to accomplish. No matter how graphic I make it, no matter how emotional I make it, no matter how I choose my words, I cannot say how bad it was. I had never seen anything in my entire military service that was a parallel to the incompetence of CENTAF intelligence. Never.²⁸

After meeting with the CENTAF staff primaries, Brigadier General Glosson received the INSTANT THUNDER briefing from Lieutenant Colonel Deptula. He believed there were good aspects of the plan, including the general targeting methodology and the 84 well-developed targets with imagery. Certainly, he believed INSTANT THUNDER represented a starting point that was much better than anything else CENTAF had available. After the briefing, Brigadier General Glosson told the four lieutenant colonels that Lieutenant General Horner had authorized them to stay in theater as part of a new SPG to build two to three days of executable ATOs using INSTANT THUNDER as the foundation by August 26.²⁹

Building an Empire

As the four Lieutenant Colonels began work on the daunting task before them, Brigadier General Glosson tackled the other work space, security, and personnel

²⁷ Glosson, *War with Iraq*, 18, 25, 33–34; Olsen, *John Warden and the Renaissance of American Air Power*, 187–188; Putney, *Airpower Advantage*, 137–138.

²⁸ Glosson, *War with Iraq*, 33.

²⁹ Glosson, *War with Iraq*, 17–18, 27–28; Olsen, *Strategic Air Power in DESERT STORM*, 132–133; Putney, *Airpower Advantage*, 138.

requirements for his new team. In regard to planning space, Lieutenant Colonel Wilson had already worked with Major General Olsen to get an SCI and SPECAT accredited tent erected in the near-by soccer field. Understanding the immediate need for the tent to house the targeteers and their SCI targeting and imagery data, Brigadier General Glosson pushed to expedite its set up for the target intelligence effort. However, he saw it more as an intelligence work space than as a space for the whole SPG. Brigadier General Glosson and Lieutenant Colonel Deptula were unwilling to leave the conference room they currently occupied for a couple of reasons. First, few operations Airmen held the requisite SCI clearances to work unescorted in an SCI facility (SCIF). Second, and probably more important than the administrative clearance concern, they wanted to maintain their close proximity to the JFACC.³⁰

They likely believed the nascent offensive plan stood a better chance of survival in the hostile CENTAF environment if the planners remained in the JFACC's line of sight to gauge his priorities and concerns. Contiguity could mean the difference between relevance and obscurity. Additionally, Brigadier General Glosson was known as "very political; he was always working an agenda with great skill; he was always intriguing."³¹ Remaining close to his new boss was consistent with these tendencies.

Regardless of the primary rationale, proximity to the JFACC had distinct costs. The conference room separated the operations planners from the intelligence personnel who had to work in an area accredited for the processing and storage of SCI-caveated intelligence. In the end, only the intelligence Airmen occupied the SCI tent. This separation coupled with the different intelligence and operations security requirements created a schism. This schism created a fissure far greater than the physical distance between the two work areas. In fact, the schism was not only between Brigadier General

³⁰ Dr. Alexander S. Cochran, "EAC Modification, 10 January 1993--17:05--Finding #32: Operations and Intelligence," January 10, 1993, Call #K239.04.99, IRIS #0875100, GWAPS Collection, AFHRA, Maxwell AFB AL; Lt Col Holder and Captain Perrin, "Historical Overview on the Development of the Productions Division (CENTAF/INP)," March 25, 1991, 7-39, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Commander Daniel J. Muir, "DESERT STORM: A View from the Black Hole," *Proceedings*, October 1991, 85; Oral History Interview of Captain John Glock, 10; Oral History Interview of Major Sandy Terry, typed transcript, April 4, 1992, 11, Call #K168.051-89, IRIS #1187419, Operation DESERT SHIELD/DESERT STORM Oral History Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 134; Lt Col F. L. Talbot, "Geographic Separation of Targets and Combat Plans," March 25, 1991, 3-18, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

³¹ Clancy, *Every Man a Tiger*, 266-267.

Glosson's planners and the intelligence directorate, but also between those working in the SPG and the rest of the JFACC's staff. This meant that Brigadier General Glosson and his team created a compartmented environment both literally and figuratively separated from the rest of the CENTAF staff, other planning efforts, and intelligence support. Without a SPECAT read-in, the CENTAF Commander's conference room was off limits to CENTAF staff members. Eventually, the SPG would be known as the "Black Hole"—people and information went in but did not come back out.³²

Coupled with the Black Hole security requirements and the geographic separation, the personnel situation created additional barriers to a seamless CENTAF planning team. As far as other personnel, despite Lieutenant General Horner's statement to the contrary, existing CENTAF staff members were largely off-limits due to other priority efforts. Besides the four Air Staff Lieutenant Colonels Deptula, Harvey, Stanfill, and Wilson, operations manning was slim. Colonel Crigger, the CENTAF Director of Operations, had few officers to devote to the new planning cell because of daily ATO production and defensive planning.³³

Similarly, intelligence personnel assigned to the Black Hole were few and far between. Those apportioned initially consisted of more junior and less experienced intelligence officers that Colonel Leonardo, and his replacement Colonel Christopher Christon, could afford to lose to the effort. Central Command Air Forces intelligence, especially in the early months of the planning for the Gulf War, was chronically

³² Clancy, *Every Man a Tiger*, 268; Lt Col Sarah L. Cunningham, "DESERT SHIELD/DESERT STORM Lessons Learned," March 13, 1991, 5–10, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Lt Col Sarah L. Cunningham, "INO-Operations/Intelligence After Action Report," March 25, 1991, O–9, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; "DESERT SHIELD/Storm USCENTAF/STRATFOR After Action Report," March 25, 1991, 15–11, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Colonel Jeff Hage, "Deputy Chief of Intelligence/Director of Combat Intelligence After Action Report," March 25, 1991, 1–4, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Muir, "DESERT STORM: A View from the Black Hole," 85; Oral History Interview of Lt Col David Deptula, interview by Lt Col Edward Mann and Lt Col Richard Reynolds, typed transcript, December 10, 1991, 18–19, Call #K239.0472-83 COPY 1, IRIS #0876260, Desert Story Collection, AFHRA, Maxwell AFB AL; Oral History Interview of Brigadier General Buster Glosson, interview by Technical Sergeant Theodore J. Turner, typed transcript, October 18, 1990, 8, 22, Call #MISC-122, IRIS #0875001, GWAPS Collection, AFHRA, Maxwell AFB AL; Oral History Interview of Major Sandy Terry, 10; Putney, *Airpower Advantage*, 133–134, 137, 140; Talbot, "Geographic Separation of Targets and Combat Plans," 3–18; "Task Force V: Interim Report to the SECAF," March 4, 1992, 1, Call #TF5-2-64, IRIS #0872779, GWAPS Collection, AFHRA, Maxwell AFB AL; Winnefeld, *A League of Airmen*, 187, 215.

³³ Clancy, *Every Man a Tiger*, 267; Glosson, *War with Iraq*, 17.

undermanned and the limited personnel in place were mostly inexperienced and junior in rank.³⁴ As previously described, the CENTAF intelligence leadership often bad-mouthed the Black Hole efforts. This gave the Airmen sent to work in the Black Hole an initial negative impression of the planning effort and the importance of their mission.

For his part, Brigadier General Glosson came to believe the CENTAF staff writ large lacked the requisite intellectual capital among its assigned Airmen to assist his efforts. He eventually brought in officers from outside the theater to fill in the team, but he later lamented that “I knew I needed to enlarge the staff...yet how could I have missed the fact that I needed more people?...The fix was that we got more people and moved them from different places within CENTAF, but that never really solved the problem because they weren’t the quality of people that I could have gotten had I done it earlier. It plagued me the entire time.”³⁵

With his mixed talent pool, Brigadier Glosson wasted little time, cashiering those who he believed just did not get it—this became the fate of three of the four Air Staff lieutenant colonels. On August 25, Brigadier General Glosson lamented in his diary, “*If attitudes don’t change, Deptula and crowd are history...They are thinking and acting like an [Squadron Officer School] war gaming seminar* (emphasis in original).”³⁶ Other than Lieutenant Colonel Deptula, who improved and excelled, the others were sent back to Washington within the first couple of weeks of Brigadier General Glosson’s reign.³⁷ Brigadier General Glosson was known to distrust those who did not make the cut for his team—“[i]f you were not on his team, then you must be the enemy” and he “didn’t have

³⁴ Colonel Christopher L. Christon, “Assessment of DESERT STORM Intelligence Operations,” 1991, 4, 44, 48, Call #TF4-8-152, IRIS #0872551, GWAPS Collection, AFHRA, Maxwell AFB AL; Lt Col Sarah L. Cunningham, “Training-CENTAF,” March 25, 1991, 5–25, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Hage, “Deputy Chief of Intelligence/Director of Combat Intelligence After Action Report,” 1–2–1–3; Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 128–129; Captain Edward P. O’Connell, “A Captain’s Perspective on the Gulf War,” in *From the Line in the Sand: Accounts of USAF Company Grade Officers in Support of DESERT SHIELD/DESERT STORM*, ed. Michael P. Vriesenga (Maxwell AFB, AL: Air University Press, 2002), 165; Oral History Interview of Captain John Glock, 5, 57; Putney, *Airpower Advantage*, 134–135; Rauschkolb, “CENTAF/IN After Action Report and Lessons Learned, Attachment 3: INT-Targets,” O–2; Lt Col F. L. Talbot, “Inadequate Targets Manning of 9 TIS to Support COMCENTAF,” March 25, 1991, 3–20–3–21, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Winnefeld, *A League of Airmen*, 187.

³⁵ Glosson, *War with Iraq*, 148–149.

³⁶ Glosson, *War with Iraq*, 27.

³⁷ Clancy, *Every Man a Tiger*, 269; Glosson, *War with Iraq*, 32.

much patience with slow learners or foot-draggers.”³⁸ This meant that the Black Hole remained divorced from the CENTAF staff, creating an “us versus them” mentality (see Figure 2, USCENTAF Organization, Current as of September 1990).³⁹ Several factors—Brigadier General Glosson’s leadership persona and personnel preferences; the CENTAF staff’s less than helpful demeanor and limited capabilities; and security compartmentalization and geographic separation—aggregated to create an unhealthy environment for teamwork to flourish.

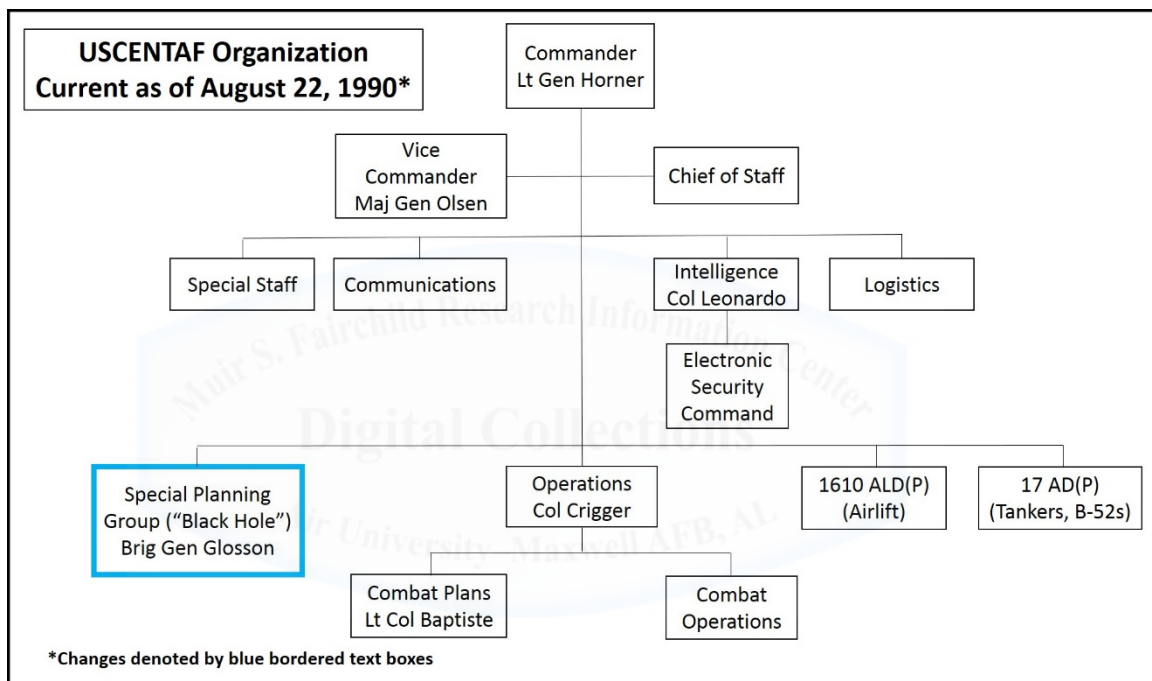


Figure 2, USCENTAF Organization, Current as of September 1990

Disappointments

In the evening of August 23, Brigadier General Glosson visited the targeteers in their newly built SCIF tent. After pleasantries and introductions, Brigadier General Glosson told the targeting officers they worked for him and should immediately complete the combined target list they were working on, including all of the requisite target materials and imagery to enable ongoing planning. He also promised to get them a

³⁸ Clancy, *Every Man a Tiger*, 267, 269.

³⁹ Hage, “Deputy Chief of Intelligence/Director of Combat Intelligence After Action Report,” 1–1; Oral History Interview of Brigadier General Buster Glosson, 9, 22; Oral History Interview of Major Sandy Terry, 37; Putney, *Airpower Advantage*, 283–287; Talbot, “Geographic Separation of Targets and Combat Plans,” 3–18.

telephone, tables, and chairs for their work area. The targeteers failed to communicate the sorry state of the intelligence resources at their disposal so the General departed believing his tasking was clear and would be taken for action.⁴⁰

In a post-war oral history interview, Captain Glock explained, “We [had] limited target materials because [they simply] didn’t exist for the most part. I mean Iraq had not been the [intelligence community’s] focus and so we were very limited on what existed to begin with.”⁴¹ The targeting officers only had imagery and other intelligence on about 30 of the 84 targets on the INSTANT THUNDER list. Lieutenant Colonel Deptula and the Checkmate planners assured the targeteers the rest of the target materials developed by Colonel Blackburn would arrive, but they never did. Instead, DMAAC transmitted SPECAT messages to CENTAF with the resulting mensurated coordinates for each of the targets Colonel Blackburn had submitted.⁴² According to Captain Glock, “What we ended up getting from [DMAAC] probably started coming in the first week of September sometime were messages with mensurated coordinates on them but no imagery still. And the messages would say like ‘northwest corner of east building in southwest quadrant of facility.’ I’m to sit there with a pen then figure out when you’ve got this thing mensurated down to three decimal points: ‘OK that must be the point we are talking about here.’ The messages were useless. So [was] DMAAC’s mensuration.”⁴³

Brigadier General Glosson and his Black Hole planners did not seem to understand the process required to produce imagery, intelligence, and other targeting materials. Without a true understanding of the processes involved, they made unreasonable requests on preposterous timelines that the CENTAF intelligence officers could never satisfy with the resources at CENTAF’s disposal. When they failed to produce the imagery, intelligence, or other target materials per the SPG’s specifications, Brigadier General Glosson and his planners levied unfair criticism. Dissatisfied with the capabilities and resources available to CENTAF intelligence, the Black Hole found other entities or agencies to get the intelligence they needed. Yet, they never shared those

⁴⁰ Oral History Interview of Captain John Glock, 18; Putney, *Airpower Advantage*, 140.

⁴¹ Oral History Interview of Captain John Glock, 42.

⁴² Oral History of Colonel Jim Blackburn, 82–83, 102–113; Oral History Interview of Captain John Glock, 25; Putney, *Airpower Advantage*, 150.

⁴³ Oral History Interview of Captain John Glock, 25.

resources with CENTAF intelligence in the attempt to make things better.⁴⁴ Ultimately, Brigadier General Glosson and his planners demonstrated in their ignorant criticism that the less one knows about a task, the easier it seems to be.

Without imagery, it was exceedingly difficult to perform the target development and planning required for the strategic air campaign because it was “really critical that you have imagery; you can’t talk intelligently about a target if you don’t know what it looks like... You’re going to try to nail down the critical elements at those installations, without imagery you can’t do that.”⁴⁵ Even without all of the necessary imagery and other intelligence data, the targeteers did their best with the resources they had to support planning.⁴⁶

Where are the Target Folders?

Later on the evening of August 23, Brigadier General Glosson held a meeting to discuss the way ahead on the retaliatory plan with the planners and targeting officers, including those newly arrived and integrated into the Black Hole. He reiterated much of his previous discussion with the targeteers earlier in the evening—directed the consolidation of the multifarious target lists, prioritization of the targets in accordance with CENTCOM’s guidance, and production of target materials, including imagery. They also discussed the target materials Colonel Blackburn refused to supply again. While the planners were still working to get those materials, they also discussed the messages expected from DMAAC that would indicate the mensurated coordinates for each of the target’s aim points, even if the imagery lagged.⁴⁷ Again, the intelligence officers present, including the newly arrived Strategic Forces Director of Intelligence (STRATFOR/IN) Lieutenant Colonel John Meyer, failed to explain CENTAF’s shortfalls in resources, systems, and data.

⁴⁴ Glosson, *War with Iraq*, 26, 33–34, 155, 231, 232, 283, 286, 287; Putney, *Airpower Advantage*, 284.

⁴⁵ Oral History Interview of Captain John Glock, 22.

⁴⁶ Lt Col F. L. Talbot, “DIA Support to CENTAF Targets Division,” March 25, 1991, 3–33, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Lt Col F. L. Talbot, “Joint Intelligence Processing Center (JIPC) Support to CENTAF Targets,” March 25, 1991, 3–35, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Lt Col F. L. Talbot, “Local Area Network (LAN) Support to CENTAF Targets,” March 25, 1991, 3–32, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁴⁷ Glosson, *War with Iraq*, 25; Oral History Interview of Captain John Glock, 21, 25; Putney, *Airpower Advantage*, 140.

Despite repeated requests, Colonel Blackburn refused to send the target materials that supported the INSTANT THUNDER concepts to CENTAF. In oral history interviews after the Gulf War, Colonel Blackburn explained his rationale for disregarding the requests from Lieutenant Colonel Stanfill and CENTAF. First, Colonel Blackburn believed it was CENTCOM's job to support their subordinate component commands. Since Colonel Blackburn had sent copies of the imagery for each of the INSTANT THUNDER targets to Tampa, he believed CENTAF intelligence needed to tap into their higher headquarters to get the imagery and other materials. Also, Colonel Blackburn argued he could not send the only copies he retained in Checkmate because he and his targeteers might need the materials for further Checkmate planning support as required.⁴⁸

Next, Colonel Blackburn quibbled about what the target materials he and his staff created should be called. When CENTAF called Checkmate requesting the INSTANT THUNDER "target folders," Colonel Blackburn responded that he did not have target folders. To him, the disparate materials quickly put together to support the concept amounted to little more than "working folders or target workups."⁴⁹ In a true target folder, he explained, he would expect to see "a lot more meat in there than there was. To me, if someone handed me a target folder, and I opened it up and there was a Xerox copy of a piece of imagery, I would be pretty disappointed."⁵⁰ Instead, he believed a target folder would include "a write-up on the installation. I would like to see good imagery. I would like to see enlargements of aim points, specific building dimensions, construct of the building, everything I need to support weaponeering. [They] didn't have any of that so it's really a misnomer to call them target folders."⁵¹ While Colonel Blackburn was technically correct, CENTAF was looking for any targeting materials that they could get for their planning activities, especially any imagery regardless of quality.

Third, in refusing to send what he believed were poor images anyway, Colonel Blackburn believed the operations and intelligence planners would push the proper intelligence dissemination systems to work.⁵² Admittedly, he did not understand how the

⁴⁸ Oral History of Colonel Jim Blackburn, 109–110; Putney, *Airpower Advantage*, 150–153.

⁴⁹ Oral History of Colonel Jim Blackburn, 103.

⁵⁰ Oral History of Colonel Jim Blackburn, 103–104.

⁵¹ Oral History of Colonel Jim Blackburn, 104.

⁵² Oral History of Colonel Jim Blackburn, 109–110; Putney, *Airpower Advantage*, 150–153.

intelligence system worked in the CENTCOM theater, but he “was trying to get them to invigorate the right procedures and taskings to get shit out into the number of quantities at the right quality to support planning and execution! A Xeroxed copy in a folder is not going to do that!”⁵³ The oral history interviewers accused Colonel Blackburn of wanting to “[teach the CENTAF planners] a lesson,” which Colonel Blackburn denied.⁵⁴ Regardless, Colonel Blackburn focused on process to the detriment of getting intelligence products and support to the planners who needed it most; it was the forward planners who were directly threatened by impending hostilities.

Since no help was forthcoming from Colonel Blackburn, getting the required target materials was primarily up to the five targeting captains assigned to support the Black Hole. As previously described, CENTAF intelligence was poorly manned and equipped to support and conduct an air campaign in the early months of DESERT SHIELD—it lacked adequate Airmen, systems, communications, and intelligence resources. In order to get the imagery required, the targeteers needed to task a collection management system that was not yet in place and would not be operational until November.⁵⁵ The collection management system they required would satisfy intelligence requirements, including imagery requests, across CENTAF directorates. However, this system never materialized. CENTAF/IN never achieved the integration across the planning and execution staff elements, especially the Black Hole, to learn of requirements in a timely enough manner to provide relevant intelligence products. Additionally, manning limitations meant the collection management section had difficulties keeping up with the incredible amount of intelligence requests for information.⁵⁶

Lieutenant General Horner later lamented, “In peacetime, we never practice wartime intelligence, so the ability to move wartime levels of targeting information is never experienced.”⁵⁷ He further said, “There is no doubt about it, we were ill-prepared to go to war on the intelligence side. We had a peacetime organization trying to fight war. We never exercised intelligence properly during [operational readiness inspections].

⁵³ Oral History of Colonel Jim Blackburn, 111.

⁵⁴ Oral History of Colonel Jim Blackburn, 111.

⁵⁵ O’Connell, “A Captain’s Perspective on the Gulf War,” 165; Putney, *Airpower Advantage*, 153–155.

⁵⁶ “After Action Report-CENTAF/INP,” March 25, 1991, 7–1–7–4, 7–11, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁵⁷ Quoted in Putney, *Airpower Advantage*, 284.

We blew that. We exercised maintenance, we exercised munitions, we exercised pilots. I'm not down on the people; I'm down on the way we prepared to fight the war.”⁵⁸ Because CENTAF was not the highest priority command for either personnel or resources prior to the Gulf War, it lacked the proper infrastructure in place to run from a standing start.

Frustrated at the inability to get the imagery and other intelligence he required, Captain Glock, who augmented CENTAF from SAC headquarters, established unofficial back-channel communications with his parent command's intelligence section. Leveraging the intelligence resources available to Offutt-based SAC, the targeteers began receiving some of the imagery and intelligence they required to support the Black Hole planners. This ad hoc communications link assisted the targeteers in providing a more rapid response to the planners' requests until Lieutenant Colonel Meyer shut down the link. From the end of August, Lieutenant Colonel Meyer required all correspondence to SAC and its subordinate units go through STRATFOR/IN, creating an unnecessary bureaucratic way station that delayed timely data flow.⁵⁹

Intelligence versus Operations

In addition to struggling to meet the intelligence requirements, the targeteers clashed with the special planners. Certainly, the inability to meet their requirements in a timely manner contributed to the problem. The poor relationship also resulted from CENTAF leadership-induced hostility as well as the criticism posed by the targeteers about the INSTANT THUNDER concept forming the basis of the strategic air campaign. The targeteers believed the message they received from Lieutenant General Horner and his staff was that the plan was garbage and the Air Staff officers would be going back to Washington shortly.⁶⁰ According to Captain Glock, “[B]asically it was pretty obvious to them that 1) there was a great deal of hostility and 2) we were being non-supportive of their needs.”⁶¹ Some of the criticism levied against the plan from the intelligence officers included that “it look[ed] more like an Air War College paper than a serious air campaign...So it just looked like really a very superficial thing that somebody had come

⁵⁸ Quoted in Putney, *Airpower Advantage*, 154–155.

⁵⁹ Putney, *Airpower Advantage*, 157.

⁶⁰ Putney, *Airpower Advantage*, 155.

⁶¹ Oral History Interview of Captain John Glock, 16.

up with to employ air power to win a war and not really a serious military plan.”⁶² The targeteers objected to Lieutenant Colonel Deptula’s idea of “targeting for effects.”⁶³

Captain Glock explained that

[H]e [had] a view that it’s much better to go out and hit a wide spectrum of targets and shock the enemy and overwhelm them by this approach...[H]e wanted to free up more aircraft to cover more targets and maybe not destroy them to the level we would recommend their destruction but he felt that the effect would be there, that you could achieve the same effect with his approach...It did cause problems because we were like “No, you don’t understand. It’s not going to work.” I think the problem it created was that he and [Brigadier General] Glosson felt that we weren’t ever going to support them and they had to rely on other sources and that was primarily equate[d] to Checkmate here and in the Pentagon and [Rear] Admiral [Mike] McConnell, JCS/J-2 for [Brigadier General] Glosson.⁶⁴

Thus, the planners believed the intelligence officers did not understand what they were trying to do.⁶⁵ Instead of explaining it, however, they created other mechanisms, like their Checkmate conduit, to get the intelligence support they needed when it was not forthcoming from CENTAF intelligence Airmen.

In addition to the growing mutual hostility and distrust, the planners also thought the intelligence officers were being obstructionist on purpose. In addition to the negative interaction between Lieutenant Colonel Deptula and Captain Glock over providing a targets map, the planners and targeteers differed over how the targets would be referenced during planning. As the targeteers completed their analysis and promulgated the new consolidated target list, Lieutenant Colonel Deptula used his personally developed alternate numbering system originally derived from Colonel Warden’s Five-Rings target categories in early August. Lieutenant Colonel Deptula believed his alphanumeric target category numbers were easier for the planners to use, because a planner could quickly look at a Deptula number and know what category the target belonged and where it was on that category’s list.⁶⁶

⁶² Oral History Interview of Captain John Glock, 16–17.

⁶³ Glosson, *War with Iraq*, 32–33, 153; Oral History Interview of Brigadier General Buster Glosson, 15–16; Putney, *Airpower Advantage*, 161–165.

⁶⁴ Oral History Interview of Captain John Glock, 37–38.

⁶⁵ Glosson, *War with Iraq*, 33, 155; Oral History Interview of Major Sandy Terry, 11.

⁶⁶ Edward C. Mann, *Thunder and Lightning: DESERT STORM and the Airpower Debates* (Maxwell Air Force Base: Air University Press, 2004), 138–139; Olsen, *John Warden and the Renaissance of American Air*

The targeting officers, however, continued to use the Basic Encyclopedia (BE) numbers used by the larger IC to reference target installations. They objected to the so-called “Deptula numbers” because the system was internally derived and would not translate correctly to outside operational units in execution or to intelligence analysis and production agencies in requests for support. Additionally, since the numbers became fixed when applied and a target installation could be listed under two separate category listings based on its various functions, shuffling a target’s priority on a list would mean the original Deptula number lost its meaning. For example, under Lieutenant Colonel Deptula’s system, a surface-to-air missile site would be listed as SAD11, which indicated the eleventh strategic air defense target on that category’s list.⁶⁷

In contrast, a surface-to-air missile site might be listed as BE number 0169-03126 in the intelligence community databases. Each “BE number uniquely identifies a [target] installation.”⁶⁸ As Colonel Blackburn explained in a post-war interview, “[I]f you want any intel[ligence] exploitation, collection, or production or tasking or analysis of those, you have got to use what the [intelligence] community uses: BE numbers.”⁶⁹ Thus, BE numbers were used throughout the IC as the common reference for each target and the Joint Staff had mandated their use to reduce needless errors and duplication of effort. As a targeteer became more familiar with the numbering scheme, he or she would know that the first four numbers referred to a specific area on the world aeronautical charts, making the last five numbers the shorthand for each target installation.⁷⁰

When the targeteers consolidated the target list, they did away with the “Deptula numbers” and prioritized the targets regardless of the previous INSTANT THUNDER category. Captain Glock urged Lieutenant Colonel Deptula to use the updated list with the BE numbers instead of applying unique target category numbers. While he tried, Lieutenant Colonel Deptula could not conceptualize the targets as he had been able to

Power, 153, 190; Oral History Interview of Lt Col David Deptula, December 10, 1991, 8; Putney, *Airpower Advantage*, 159–161, 283–287.

⁶⁷ Mann, *Thunder and Lightning*, 138; Olsen, *John Warden and the Renaissance of American Air Power*, 190; Oral History of Colonel Jim Blackburn, 137–154; Putney, *Airpower Advantage*, 159–161.

⁶⁸ James R. Blackburn, Jr., “What AF/INT Did during the War or Air Staff as a Warfighting HQ” (briefing slides, Washington D.C., 1991), 138.

⁶⁹ Oral History of Colonel Jim Blackburn, 137.

⁷⁰ Oral History of Colonel Jim Blackburn, 137–154; Oral History Interview of Captain John Glock, 30–32; Putney, *Airpower Advantage*, 159–161.

under his own system. He therefore ordered the targets be returned to their original target category numbers and lists, and that all new targets be given sequential “Deptula numbers” after the original INSTANT THUNDER targets. Captain Glock fought him on the decree, arguing the need to maintain a single prioritized list. According to Captain Glock, Lieutenant Colonel Deptula’s method failed to prioritize the targets in relation to others within or between the various categories.⁷¹ Explaining the disconnect between the targeteers and planners in an oral history interview, Captain Glock stated,

We started to maintain the target list for them. We wanted to work with prioritized target lists and felt that was the way to approach it and the 84 target [INSTANT THUNDER] list was prioritized within the 10 categories but there was not an overall prioritization that would tell you that the fourth air defense target was more or less important than the second electric target. And we would normally work at integrating all target categories into a prioritization so that you kind of had a feel for the relative importance of each target in relation to all the targets not just within a single category. [Lieutenant] Col[onel] Deptula didn’t like the idea but he let us do that. We did it, but he had a problem in that they weren’t using BE numbers...[T]hey were using an alpha numeric that they had essentially created on the Air Staff so [strategic] air defense was known as SAD and you had SAD1, SAD2. Well, when [we] prioritized this target list, SAD8 might have been our number one target so now all those numbers are out of sequence and he felt that that was going to be going to be confusing, was going to confuse people out in the field and so he decided not to stay with the prioritize[ed] list [and to go back to the list as they had it. And the problem with that is that while the initial 84 [was] prioritized, any targets that were added, and I mean by the time we go to the war we were up to 700, it was chronologically added. So many of your [biological warfare] targets would be like C [the category for chemical, nuclear, and biological warfare targets] in the 20s even though they ended up being your primary targets. So again, you kind of had no ranking or relative importance.⁷²

In the end, Lieutenant Colonel Deptula’s ability to conceptualize the targets in building the attack flow documents for the ATO necessitated the planner’s use of the “Deptula numbers.” Therefore, he told the targeteers that the planners would maintain the targets list themselves.⁷³

⁷¹ Oral History Interview of Captain John Glock, 30–32; Putney, *Airpower Advantage*, 159–161.

⁷² Oral History Interview of Captain John Glock, 25–26.

⁷³ Olsen, *John Warden and the Renaissance of American Air Power*, 190; Putney, *Airpower Advantage*, 161.

This poor communication and inability to determine a compromise solution to the different targeting philosophies resulted in further operations and intelligence disintegration. In hindsight, a simple solution might have been a list that incorporated both the “Deptula numbers” and the BE numbers as cross-reference tool. This would have made the operations planners’ job easier in mentally visualizing the attack flow. It would have also ensured the targets officers could easily use the BE numbers for external intelligence and operations support and coordination. As Captain Glock admitted,

It’s not that we couldn’t [use the ‘Deptula Numbers’]. It[’s] just that we recognize that anything that you’re going to do within the intelligence community—if you’re going to want any sort of support for target materials or anything else you’re going to have to use those basic encyclopedia numbers. If you’re going to talk to somebody who isn’t sitting there with this SPECAT list, SAD12C2 is meaningless to anybody who doesn’t have the same list that you are sitting there with...[A glossary] is what the target list that was maintained is.⁷⁴

Additionally, the “Deptula numbers” alter the classification of target because the designation associates each target with an actual plan.

Instead, the planners effectively cut the targeteers out of the targeting process. Since the targeting officers no longer created nor managed the targets list, their knowledge on the targets diminished as the planners added new targets. The operations planners became the experts on the targets and how they fit into the larger targeting strategy and air campaign. This problem was further exacerbated by the physical distance of the Black Hole planning cell and SCIF where the targeteers had to work because of the classification level of the intelligence used in target development. Because the intelligence officers were not sitting in the same space work spaces as the planners, they were not privy to the planning discussions and decisions. In effect, they played catch up every time they received a support request, as they were largely uninvolved in the planning process and had little knowledge about why decisions were made. One officer expressed his frustration at often learning about intelligence used to make decisions from planners when they requested clarification, target coordinates, or imagery.⁷⁵ Overall, the ill-will and perceived lack of support drove the Black Hole

⁷⁴ Oral History Interview of Captain John Glock, 30.

⁷⁵ Putney, *Airpower Advantage*, 285; Rauschkolb, “CENTAF/IN After Action Report and Lessons Learned, Attachment 3: INT-Targets,” O-6.

planners to become more insular and dependent upon their ad hoc and informal information conduits.

The Retaliatory Plan and Intelligence Shortfalls

Despite the extreme animus, the planners and targeteers produced a retaliatory ATO and plan per Lieutenant General Horner's expedited timeline. On August 28, Brigadier General Glosson briefed Lieutenant General Horner on the retaliatory plan and gained his approval. The Checkmate planner then continued to work on the CENTAF OPORD and preparations for the briefing to General Schwarzkopf on September 5. Lieutenant General Horner signed the final OPORD on September 2. Since the INSTANT THUNDER OPORD became the basis for the CENTAF OPORD, the CENTAF intelligence annex continued to be plagued by an incomplete and undeveloped intelligence plan to support the DESERT SHIELD and DESERT STORM operations.⁷⁶ With the dysfunctional relationship between the operations planners and the intelligence officers, there is little surprise that more thought had not gone into the intelligence processes and requirements anticipated in the impending conflict.

On September 5, Brigadier General Glosson delivered the final retaliatory plan briefing to General Schwarzkopf. Given his disappointment in the intelligence resources and support he had received in theater, it is curious Brigadier General Glosson did not mention intelligence support as a limiting factor.⁷⁷ Since intelligence and operations were not effectively working together and the planners had created workarounds to gain the intelligence they required, Brigadier General Glosson likely believed it was a problem he adequately solved on his own. However, Brigadier General Glosson also missed an opportunity to raise the intelligence shortfalls to the four-star combatant commander-level to gain greater attention on the issues and advocacy for solutions.

The problems with adequate out-of-theater resources and support were equally matched by those inadequate ones closer to home. The biggest things that continued to plague the intelligence-operations dynamic in CENTAF was the lack of a concerted intelligence effort and consistent intelligence presence. Increasingly, CENTAF senior intelligence officers believed the captains in the targeting shop were unsuccessfully

⁷⁶ Olsen, *Strategic Air Power in DESERT STORM*, 135; Putney, *Airpower Advantage*, 144.

⁷⁷ Putney, *Airpower Advantage*, 188.

dealing with their counterparts in the Black Hole (who were mostly majors and lieutenant colonels) because of their more junior rank. By mid-September, Colonel Christon assigned recently arrived lieutenant colonel augmentees to shepherd the targeting function and interaction with the Black Hole planners. When Lieutenant Colonel Meyer arrived, he was initially placed in charge of the targeteers until Lieutenant Colonel F. L. Talbot arrived to take the post. Both lieutenant colonels saw their role as flying top cover for the young captains, and therefore, began attending Brigadier General Glosson's daily meetings and providing the primary communication conduit between the Black Hole and the targeteers. However, Lieutenant Colonel Talbot could not primarily spend his time in the Black Hole because he was in charge of all of CENTAF/IN's target operations, including those supporting the defensive planning.⁷⁸

Captain Glock lamented the additional "level of bureaucracy" created by the lieutenant colonels that further exacerbated the divisions between the planners and the targeteers. Additionally, after they arrived, Captain Glock said the targeteers "never really saw [Lieutenant Colonel] Deptula and people again except when we had to take something over...[We were] completely separated and you had [Lieutenant] Col[onel] Talbot and [Lieutenant] Col[onel] Meyer going to a morning briefing if you will periodically strolling through the Black Hole and they would bring taskings back and take whatever we did back. So we were pretty much totally out of it now."⁷⁹ Since, no one was assigned to the Black Hole full time, intelligence personnel failed to create the necessary relationships with Brigadier General Glosson and his planners to repair earlier enmity and establish more positive interactions. Further, several planners complained that while a CENTAF intelligence representative attended Black Hole meetings regularly, they typically left immediately after the meeting was done and only provided support when directly asked.⁸⁰

In addition to what he perceived as weak targeting support, Brigadier General Glosson was also increasingly disappointed in the other intelligence the Black Hole received, or did not receive as the case might be. One particular instance revolved around a draft intelligence report analyzing the Iraqi air defense system. The report

⁷⁸ Putney, *Airpower Advantage*, 286.

⁷⁹ Oral History Interview of Captain John Glock, 43–44.

⁸⁰ Putney, *Airpower Advantage*, 240–241.

pointed out numerous new bits of information that the planners had not yet known. When Brigadier General Glosson asked the Black Hole's senior intelligence representative whether he had known about the report, the intelligence officer said he had. Brigadier General Glosson also learned the Black Hole had not received the report from CENTAF/IN because the planners had not specifically asked for the information therein. The planners wanted intelligence pushed to them, but instead what they received was outdated or irrelevant intelligence.⁸¹

As Major Robert Eskridge, a F-117 pilot who augmented the Black Hole, explained, “[I]t would always seem to be a pull-system rather than a push. It was always [Brigadier] Gen[eral Glosson's] favorite quote...He would say ‘What about this?’ ‘Oh, yes, sir, this happened yesterday or the day before’ and you could see [Brigadier] Gen[eral Glosson] go—‘Don’t you think I would like to have known that?’”⁸² Increasingly, they believed the only way to get it was to pull it out of CENTAF/IN, or better yet, bypass CENTAF/IN for more reliable sources.⁸³

Out-Sourcing Intelligence

As the fall season wore on, Brigadier General Glosson believed he had the alternative intelligence sources he needed to plan the air campaign, with or without CENTAF/IN participation. In early September, he officially requested Lieutenant General Adams allow Checkmate to support the Black Hole planning. Brigadier General Glosson needed Checkmate to shore up the disappointing lack of intelligence capabilities and resources in theater. Specifically, he cited the need for target materials and imagery. As the operations planners continued planning the subsequent phases of the strategic air campaign, they depended upon Checkmate even more to provide the support that was lacking from CENTAF/IN. Besides Checkmate, which operated as an intelligence fusion

⁸¹ James R. Clapper, Jr., “Desert War: Crucible for Intelligence Systems,” in *The First Information War: The Story of Communications, Computers, and Intelligence Systems in the Persian Gulf War*, ed. Alan D. Campen (Fairfax, Va: AFCEA International Press, 1992), 84; Mann, *Thunder and Lightning*, 153–156; Putney, *Airpower Advantage*, 165–166.

⁸² Oral History Interview of Major Robert Eskridge, interview by Technical Sergeant Theodore J. Turner, typed transcript, March 1, 1991, 9, Call #K168.051-84, IRIS #1187411, Operation DESERT SHIELD/DESERT STORM Oral History Collection, AFHRA, Maxwell AFB AL.

⁸³ Clapper, Jr., “Desert War: Crucible for Intelligence Systems,” 84; Mann, *Thunder and Lightning*, 153–156; Putney, *Airpower Advantage*, 165–166.

cell, Brigadier General Glosson had cultivated relationships with highly-placed intelligence officers in Washington.⁸⁴

Of these, the most important was the relationship established in October with the JCS/J-2, Rear Admiral Mike McConnell. In meetings conducted in November and December in Washington, Brigadier General Glosson solidified his relationship with Rear Admiral McConnell, securing the J-2's assurances that the Black Hole would receive the best and most recent intelligence available.⁸⁵ In his memoirs, Brigadier General Glosson profusely praised Rear Admiral McConnell as "indispensable. He had absolutely the clearest intelligence picture of what was going on with the war. Without him, the fog of war would be off the scale."⁸⁶ With the JCS/J-2 support and Checkmate's analytical fusion function, as well as other friends and contacts within the national intelligence agency, Brigadier General Glosson was in a much better position to ignore CENTAF/IN.⁸⁷

Brigadier General Glosson did more than just ignore CENTAF/IN; he also marginalized it. Understanding the limitation of in-theater intelligence entities, Brigadier General Glosson could have brought the CENTAF/IN into discussions with his personal intelligence contacts to ensure Colonels Leonardo and Christon had access to the same intelligence resources. Since Rear Admiral McConnell offered the vast capabilities of the JCS Joint Intelligence Center (JIC) to the senior planner, he could have made the introductions and shared the new found intelligence resources. But he did not. Brigadier General Glosson also did not look at his contacts throughout the IC as opportunities to help CENTAF/IN improve support to planning throughout CENTAF.⁸⁸ As historian Diane Putney observed in *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991*, "[Brigadier] General Glosson was satisfied that he himself was the recipient

⁸⁴ Mann, *Thunder and Lightning*, 156; Olsen, *John Warden and the Renaissance of American Air Power*, 192–193; Olsen, *Strategic Air Power in DESERT STORM*, 130; Putney, *Airpower Advantage*, 165–166, 190–195, 240–241.

⁸⁵ Glosson, *War with Iraq*, 84; Mann, *Thunder and Lightning*, 155–156; Olsen, *Strategic Air Power in DESERT STORM*, 144; Putney, *Airpower Advantage*, 165–168.

⁸⁶ Glosson, *War with Iraq*, 151; Oral History of Colonel Jim Blackburn, 47–49.

⁸⁷ Glosson, *War with Iraq*, 84; Mann, *Thunder and Lightning*, 155–156; Olsen, *John Warden and the Renaissance of American Air Power*, 192–193; Olsen, *Strategic Air Power in DESERT STORM*, 130, 144; Putney, *Airpower Advantage*, 165–168, 190–195, 240–241.

⁸⁸ Glosson, *War with Iraq*, 84; Putney, *Airpower Advantage*, 272–273.

of the JIC's intelligence expertise."⁸⁹ There was certainly no effort made to build the intelligence-operations team and, in fact, this example represents more of the compartmentalization and "us versus them" mentality that was endemic between the SPG and the rest of CENTAF.

The CENTAF flying units, however, could not afford to ignore or marginalize CENTAF intelligence since the staff component was their lifeline for intelligence and target materials. When the Chief of Staff of the Air Force visited the theater in September, he heard a litany of complaints from the deployed flying units. Much of these complaints centered on the slow and limited target materials and imagery they had yet received to support an air campaign. For example, the F-117 wing leadership cited the poor support they received from Colonel Leonardo, including the failure to distribute imagery. Additionally, the wing accused Colonel Leonardo of threatening to end critical electronic intelligence support the pilots required to mission plan. The F-117 wing commander wrote several letters to CENTAF criticizing both Colonel Leonardo and Lieutenant General Horner. He indicted Lieutenant General Horner for failing to understand the unique mission planning and support requirements for the stealthy F-117 and said Lieutenant General Horner's words were very similar to what they had heard from Colonel Leonardo.⁹⁰

In response, Lieutenant General Horner minimized the wing's demands and critique, saying that

We also had some of the people that were unhappy about the imagery distribution because they had been spoiled in peacetime. The F-117s are the prime example. When they lived in the desert, they got anything they wanted, and their targeting was minuscule—Nicaragua, Panama, an air field, or something like that. So they always got exactly what they wanted because they were the dream team. When DESERT STORM came along, they were just regular shovel throwers live everybody. There wasn't any difference between the A-10s and the 117s. The 117s went to Baghdad, and the A-10s went to Basra. They used to complain bitterly about not getting any imagery support. We always wanted to do it better, but they got what they needed to do the job.⁹¹

⁸⁹ Putney, *Airpower Advantage*, 273.

⁹⁰ Putney, *Airpower Advantage*, 207–212.

⁹¹ Quoted in Putney, *Airpower Advantage*, 210.

Lieutenant General Horner set the tone as the CENTAF commander and JFACC. If he did not believe the F-117s had valid support requirements and communicated that to his Airmen, then Colonel Leonardo was simply expressing the command's sanctioned view. Similarly, like Brigadier General Glosson, perhaps Lieutenant General Horner did not bring up the intelligence shortfalls to General Schwarzkopf because he did not view them as that important or problematic for the air campaign.

Beyond Lieutenant General Horner's attitude on the unit requirements, CENTAF/IN felt the results of being marginalized by the Black Hole. The planners built and maintained their own target list from intelligence inputs that most likely originated from an external resource to which CENTAF/IN was not privy.⁹² Often, the first indication they received about a new target was when the Black Hole would ask for additional information "to clarify a part of the product provided or to provide imagery or mensurated coordinates for a part of the installation suggested as a target."⁹³ Captain Glock further explained that "somebody would call up and say 'Well, I need a picture of this. It's on the Master Attack Plan for me to strike.' Well, we didn't have [an image] because no one had ever told us it was on the target list...[W]e were always kind of low on the totem pole for distribution [of the target list]."⁹⁴ Without good communication about what targets were on the deck, the intelligence officers could not ensure they had the requisite imagery collection requirements in the system. Therefore, they were constantly reactive to the units, rather than proactively providing the target materials the units needed to execute assigned missions.

Conclusion

After Colonel Warden departed Riyadh, the Checkmate planners faced the negativity of the CENTAF commander and his staff. This negativity permeated the staff, from the commander on down to his subordinates. As the secretive offensive planning took off and gained the support of the JFACC, the damage had been done. Intelligence and operations Airmen failed to communicate to each other in ways easily understood by

⁹² Oral History of Colonel Jim Blackburn, 47-49.

⁹³ Lt Col F. L. Talbot, "Dissemination of Intelligence from Washington Directly to the Combat Planning Function," March 25, 1991, 3-27, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁹⁴ Oral History Interview of Captain John Glock, 45.

the other. Planning and intelligence compartmentalization barred those who could support from doing so, as access and geographic separation limited interaction. In the end, both sides mutually distrusted each other. Leadership at all levels neglected to improve their relationship. They failed to make the needed and critical integration a reality, thereby forcing the operations planners to seek other intelligence sources. The next chapter explores these dynamics in light of a CENTAF Commander directed reorganization and the execution of the DESERT STORM air campaign.



Chapter 4

Lifting the Shroud

The Directorate [sic] of Campaign Plans having his own intel[ligence] network and tasking directly to the units without using the ATO process caused many problems in scheduling support aircraft and complicated the execution of the daily ATO.

-Lieutenant General Chuck Horner, 1992

Over the more than five months of force buildup and planning activities, intelligence and operations planners operated in an environment punctuated by mutual doubt and malice. This unfavorable climate became the norm—leaders at all levels did little to improve the situation. Lieutenant General Horner, having realized the toxic situation, initiated organizational changes in an attempt to break down the barriers necessitated by the secrecy of early offensive planning. In fact, Lieutenant General Horner's action merely exacerbated the problems by putting more power into the hands of a senior leader—Brigadier General Glosson—who aggravated the many divisions within CENTAF through his acrimonious leadership style.

As the Airmen kicked off the DESERT STORM strategic air campaign, all of the wounds on the intelligence-operations relationship of the previous six months would become infected. These germs, tainted by miscommunication and compartmentalization, were stronger and more resistant to treatment. Already incapable of healing itself, this infection became septic and resistant to treatment under the stressors of combat.

The focus of this chapter is the effects of the continuing bad blood between intelligence and operations planners in the last days of air campaign planning and during the 38-days of air campaign execution. It begins with the final month of preparations and the execution of CENTAF staff reorganization driven by Lieutenant General Horner in December 1990. By the stroke of a pen, Brigadier General Glosson gained greater power and influence over both the planning and operational execution of the DESERT STORM air campaign. The previous malevolence remained, however, as Brigadier General Glosson undertook his new duties for both campaign planning and current operations. Many of the previous bones of contention took a different form. Instead of lacking imagery for targeting, as an example, CENTAF struggled for the requisite

imagery to inform BDA and operational effectiveness. Throughout, the same leadership-induced challenges endured, simply transitioned from planning into execution. Intelligence and operations Airmen similarly failed to communicate with one another effectively. Finally, while security and secrecy somewhat waned with the reorganization, the divisions established between members of the Black Hole and CENTAF staff persisted.

Final Preparations for War

By December, the biggest pieces of the strategic air campaign plan were in place. Still, given the difficulties throughout the fall in getting the requisite imagery into theater for the planners as well as the flying units, Colonel Christon anticipated similar problems in conducting timely BDA once the shooting started. In theory, collection managers should be well-integrated in every aspect of planning and execution in order to understand planning and anticipate post-strike assessment requirements. While Colonel Christon and his intelligence Airmen had made great strides in getting imagery of every assigned target to the flying wings, he realized that tasking, collecting, processing, analyzing, and disseminating imagery during combat would be exceedingly difficult. Insufficient manning, planning and execution compartmentalization, and scarce imagery collectors, however, combined to thwart the intelligence Airmen's best efforts. The inability of the imagery system to keep up with pre-and post-strike requirements remained a formidable challenge. Despite this fact, neither he nor anyone else anticipated the need or importance of aircraft video tape recordings for filling some gaps in national and theater imagery sources.¹ Once the war kicked off, this became another friction point between the intelligence and operations Airmen.

In addition to Colonel Christon's preparations, both the Black Hole and Checkmate were also getting ready to deal with BDA. Brigadier General Glosson had assigned one of his planners the primary responsibility of tracking BDA once the war began to ensure results were leveraged into restrike recommendation as required and worked into the ongoing planning cycle. The Black Hole required Colonel Christon to provide the BDA intelligence to enable this effort. Colonel Christon, however, believed

¹ Diane T. Putney, *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991* (Washington: Air Force History and Museums Program, 2004), 276–280.

it far more important to get the BDA results into the Tactical Air Control Center (TACC), since dynamic air retasking would come from the TACC running current operations. Despite his work to anticipate the difficulties and potential BDA pitfalls, Colonel Christon told both Lieutenant General Horner and Brigadier General Glosson that he expected neither enough nor timely BDA to support their requirements in the way they wanted. For its part, Checkmate partnered with Colonel Blackburn and the Defense Intelligence Agency (DIA) to be ready to conduct BDA. During the war, Colonel Blackburn's targeting Airmen worked with DIA imagery analysts to produce the assessments and Checkmate sent the BDA results forward to CENTAF.²

As war loomed ever closer, the planners complained to Lieutenant Colonels Meyer and Talbot about the lack of dedicated intelligence support to the Black Hole. Even though they initially balked at the request, because they believed they served as the SPG's representatives, the lieutenant colonels realized their attention was not fully on the Black Hole and its intelligence requirements. The senior targeteers' duties and responsibilities spanned the entirety of targeting for CENTAF, including support to the defensive planning cell. Therefore, the targeting leaders initially assigned Captain Glock to work fulltime in the Black Hole and eventually added a second targeteer to ensure 24-hour coverage. Upon being asked about whether working in the Black Hole helped the relationship and communications between operations and intelligence, Captain Glock said "It helped I think a lot. I think for one thing I was there when input would come in from Checkmate. We could immediately try to get collections [to] put in things like that to respond to them...I think it worked out well because they started realizing that in fact intel[igence] could help them if intel[igence] was willing to work with them."³

Just about everybody in intelligence had been read-in to the SPG's SPECAT planning efforts by December. The planning was becoming less secretive, but the barriers between those who were chosen for Black Hole duty and everybody else

² Oral History of Colonel Jim Blackburn, interview by Col Edward Mann, Lt Col Suzanne Gehri, and Lt Col Richard Reynolds, typed transcript, April 21, 1993, 123–132, Call #K239.0472-73 Copy 1, IRIS #0876239, Desert Story Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 276–279.

³ Oral History Interview of Captain John Glock, interview by Major Sandy Terry, Frank Kistler, and Dr. Mark Mandeles, typed transcript, January 30, 1992, 46, Call #TF4-8-153, IRIS #0872552, GWAPS Collection, AFHRA, Maxwell AFB AL.

remained. Intelligence-operations integration was better with dedicated support resident in the Black Hole, but some tensions still remained. Captain Glock described,

I was sort of like the intell[igence] point of contact. [If a planner] needed something—you needed EOB [electronic order of battle] data, you needed something from intell[igence] and I would go push the right button to get it. Additionally, I was working with [Lieutenant] Colonel Deptula on targeting now. What we should target, what we needed to strike. They're getting set up to do BDA tracking in the Black Hole because the Black Hole basically took 20-30 people say and duplicated the functions that the entire CENTAF TACC organization, [TACC] people would have normally been doing—the planning, the weaponeering, and all that and it was being done in the Black Hole now really by 20 people or so. So...now at least there was somebody in intel[ligence] who was aware of what was going on and was able to work with them...[F]inding out that there [were] problems on both sides of the fence—the intell[igence] op[erations] fence because there were a lot of things that the operators were doing because [they] couldn't get intel[igence] to do [them], at least that was their perception...I was saying "Well...we really wanted to do this, but you all wouldn't let us do that" and so it was becoming clear that in fact there were problems on both sides because intell[igence] wasn't communicat[ing] with them either and wasn't telling them what we could do. [A]dditionally, by this time personalities had gotten so involved into this thing that there were some people in intell[igence] who really just weren't going to support the Black Hole and didn't...I found there were examples of [the planners] always complaining that intell[igence] wasn't responsive and I was always saying "[T]hat's bullshit...because I am getting this as quick as I can. [T]here's no way that anybody could get this quicker than I'm getting it for you." Now, of course, they are getting it directly from Checkmate over a fax which is going to be quicker than my putting in a collection requirement and that sort of thing to get it.⁴

Brigadier General Glosson had other resources, like the JCS/J-2, in addition to Checkmate that fed directly the Black Hole intelligence and other information. As Brigadier General Glosson wrote in his memoirs, "For intelligence, [Rear Admiral] McConnell was the saving grace. *'His impact cannot be overstated* (emphasis in original)."⁵ Despite the improvements in access and in relationships, the out-of-theater external intelligence resources were far more effective than the inexperienced and under-resourced CENTAF intelligence directorate.

⁴ Oral History Interview of Captain John Glock, 48–49.

⁵ Lt Gen (ret) Buster Glosson, *War with Iraq: Critical Lessons* (Charlotte, NC: Glosson Family Foundation, 2003), 200.

Rivalry and Reorganization

Lieutenant General Horner was well-aware of the acerbic intelligence-operations dynamic. According to Putney, “[Lieutenant General] Horner tried to ameliorate the discord among his staff by controlling its intensity. He explained, ‘What you do is, you just manage it. You let them fight a little bit.’”⁶ The JFACC focused little of his own efforts on trying to build a cohesive CENTAF staff team to plan and fight the war. His inability to or disinterest in providing the leadership necessary to bring the team together allowed the disharmony and conflict to continue.

Without the necessary leadership involvement to bandage the hemorrhaging intelligence-operations relationship, things continued as they had with few improvements. According to Captain Glock, however, he believed that

basically December was beyond fixing [the intelligence-operations dysfunction]. It really was. By that point, the Black Hole was doing everything on their own and just didn’t have a need for intell[igence] in their mind and the approaches were just too different. [Lieutenant] Colonel Deptula’s concept of employment of airpower was just too distinctly different and it was never explained...because of that they always thought that we just weren’t being support[ive] and just pissed off a lot of intell[igence] people, especially the leadership and us too, the Captains...[Y]ou got down to some individuals who personally did not want it to work in my opinion.⁷

Captain Glock was not the only one to highlight the lack of explanation for what and how the Black Hole was planning. Major Sandy Terry, a B-52 representative to the Black Hole who arrived after the war kicked off, observed that “the differences [between the intelligence and operations planners were] never really addressed, why we’re doing certain things were never really addressed, so that animosity didn’t go away, and it became, in some ways, a real problem because we didn’t understand what we were doing.”⁸

In these passages, Captain Glock and Major Terry illuminated two factors. First, they highlighted the lack of communication between the intelligence and operations planners. Brigadier General Glosson, Lieutenant Colonel Deptula, and

⁶ Putney, *Airpower Advantage*, 287.

⁷ Oral History Interview of Captain John Glock, 59–60.

⁸ Oral History Interview of Major Sandy Terry, typed transcript, April 4, 1992, 16, Call #K168.051-89, IRIS #1187419, Operation DESERT SHIELD/DESERT STORM Oral History Collection, AFHRA, Maxwell AFB AL.

the other Black Hole planners did not take the time to educate the CENTAF staff, especially the intelligence directorate they required support from, on their planning and targeting methodology. The Black Hole planners never briefed the targeteers on the Five-Rings concept. They never briefed the intelligence officers on what the concept “targeting for effects” entailed. No one had ever briefed the desired damage criteria for weaponeering each of the targets.

The targeteers understood traditional damage criteria enumerated in the Joint Munitions Effectiveness Manual (JMEM). The JMEM estimates statistical weapons effectiveness based on test data and describes the employment “results expected from specific munitions effects, target environment, damage criteria, delivery accuracy, munitions reliability, and ballistics.”⁹ “Targeting for effects,” in contrast, attempted to cause systematic paralysis rather than individual target destruction. So, lacking the understanding they really needed, the targeteers were left understanding they were to minimize the long-term damage to Iraqi infrastructure and any collateral damage. In short, Brigadier General Glosson, Lieutenant Colonel Deptula, and the rest of the Black Hole planners did not impart the knowledge necessary to build common awareness and thus reduce friction and increase understanding.

In his memoirs, Brigadier General Glosson appears of two minds on the leader’s responsibility to educate his subordinates and partners. In one passage he proclaims, “I’ve always felt that you only have two major responsibilities: make sure the people understand the mission and take care of the people.”¹⁰ Yet, he complained about the CENTAF staff, especially intelligence Airmen, not understanding the mission but did little to change that dynamic. He wrote, “My real dilemmas were the shortage of targeting intelligence and the lack of awareness... ‘*We need to connect to the Pentagon and Checkmate for support or we will fail.*’ CENTAF’s intelligence section did not have the equipment, software, or understanding of our objectives (emphasis in original)” and “[T]he intelligence officers have no capacity to understand how I wanted to balance

⁹ “Air Force Pamphlet 14-210 (AFPAM 14-210), USAF Target Intelligence Guide,” February 1, 1998, <http://www.fas.org/irp/doddir/usaf/afpam14-210/part06.htm>.

¹⁰ Glosson, *War with Iraq*, 200–201.

effects and destruction.”¹¹ Later, Brigadier General Glosson said, “This was all so new—and for me, so intuitive—that I did not expect most of the Black Hole and TACC and other CENTAF staff to understand what we were doing. [Lieutenant Colonel] Deptula and [Major] Buck Rogers understood, and so did [Lieutenant Colonel Rick] Lewis and [Colonel Tony] Tolin, 100 percent. I didn’t really care whether anybody else totally understood or not, because one of the four of them had to sign off on everything that was done.”¹² The bravado was certainly there but the leadership responsibility for ensuring “people understand the mission” certainly was not.¹³ Instead, Brigadier General Glosson tended to write people off that did not understand, share his same opinion, or were not on his team, as Lieutenant General Horner well knew.¹⁴

The second aspect that Captain Glock illuminates in his interview is that personal relationships were critical. Brigadier General Glosson appeared to understand this principle in his engagement with external organizations and individuals, ensuring he visited all of the national intelligence agencies, the Pentagon, mentors, and Secretary of Defense Cheney on a mid-tour visit to Washington. He noted specifically on this trip: “I solidified my relationship with the Joint Chiefs J-2, Rear Admiral Mike McConnell in several long meetings.”¹⁵ Even though he seemed to understand the importance of relationship building for getting things accomplished, he failed to apply this to his dealings with the CENTAF staff and especially the Airmen in the intelligence directorate.

All of the ill-will between the intelligence and operations was certainly not helped by Brigadier General Glosson. He was not acting as a team builder; his words and actions indicate he was perfectly comfortable with the disunion of “us versus them.” To change this situation, hands-on leadership involvement was needed to mend the damage. Providing a common vision would have been helpful. Unfortunately, Brigadier General Glosson was unwilling to provide this type of leadership, so Lieutenant General Horner was the last great hope. Lieutenant General Horner, however, was generally uninvolved. He understood the friction between the operations planners and intelligence Airmen. His

¹¹ Glosson, *War with Iraq*, 25–26, 155.

¹² Glosson, *War with Iraq*, 156.

¹³ Glosson, *War with Iraq*, 201.

¹⁴ Tom Clancy, *Every Man a Tiger* (New York: Putnam, 1999), 266–267.

¹⁵ Glosson, *War with Iraq*, 84.

inaction tacitly made it acceptable to continue the caustic interactions which corroded any semblance of a CENTAF team. Organizational changes do not in and of themselves ameliorate problems or integrate people, but Lieutenant General Horner attempted to smooth out the intelligence-operations wrinkles by this means. His attempts to fix some of the resentment in this way amounted to little more than moving deck chairs around the proverbial patio (see Figure 3, USCENTAF Organization, Current as of November 1990 for the depiction of CENTAF's organization prior to the changes in December 1990).

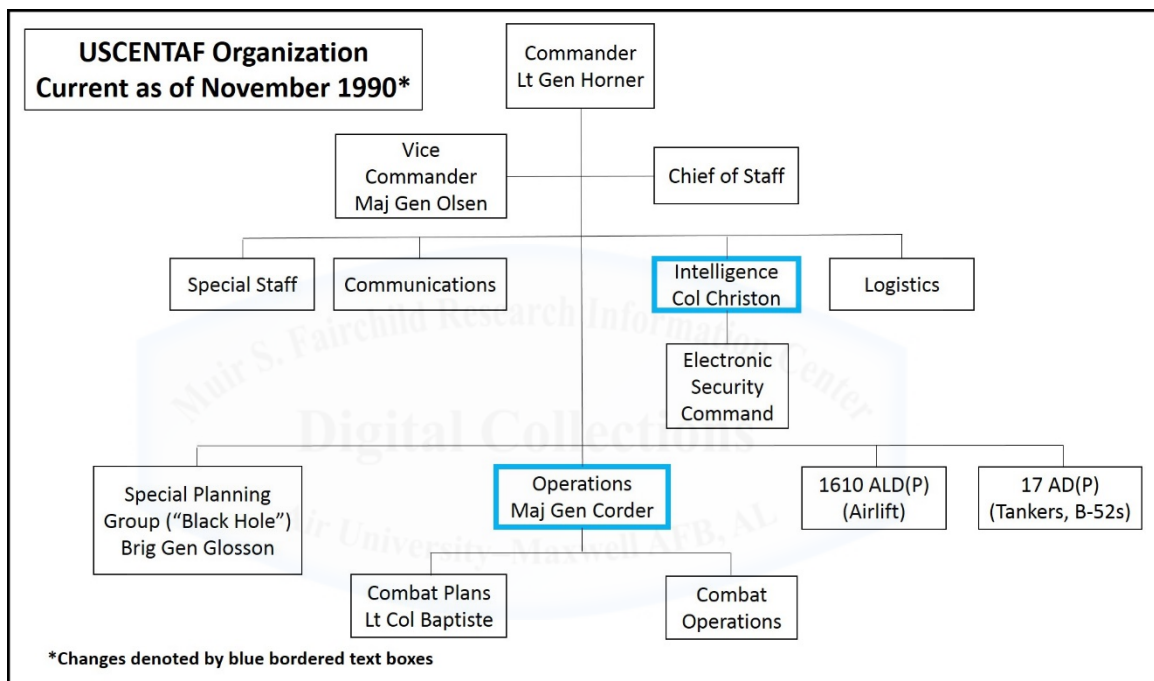


Figure 3, USCENTAF Organization, Current as of November 1990

Throughout December and into January, Lieutenant General Horner made organizational changes he believed would solve some of these problems. First, he created two additional Air Divisions for a total of four and assigned subordinate Brigadier Generals to command them. Lieutenant General Horner wanted to reduce his own span of control which he believed had grown too large and cumbersome with the influx of so many subordinate units and air assets under his direct command. For command of the 14th Air Division (Provisional) [14 AD (P)], he appointed Brigadier General Glosson to take charge of all of the Air Force fighter wings. Brigadier General

Glosson retained his authority and responsibility for campaign planning in the Black Hole, but he also became an operational commander.¹⁶ According to Brigadier General Glosson's memoirs, Lieutenant General Horner told him, "You are now the commander of the 14th Air Division. Now see if that plan of yours is as great as you think it is."¹⁷

The second organizational change was the creation of a Directorate of Campaign Plans, combining both defensive and offensive planning under one planning staff director: Brigadier General Glosson.¹⁸ As Captain Glock observed,

A lot really didn't change. The office or space that was being used as the Black Hole became the GAT [Guidance, Apportionment, and Targeting] and what had been the D-Day Planners became the KTO [Kuwaiti Theater of Operations Planning Cell] room...They created sub areas—you had the Iraqi [Planning Cell] room which is really the strategic air campaign still under [Lieutenant Colonel] Deptula, the KTO [Planning Cell] room which was the D-Day Plan under [Lieutenant Colonel] Baptiste, and then we had a ground room which was manned by the Army which was kind of a subset of the battlefield coordination element from the TACC. NBC [Nuclear, Biological, and Chemical]/Scud Room and an Air Defense Room.¹⁹

Lieutenant General Horner wanted the Black Hole planning socialized among more of the CENTAF staff. He believed organizational changes would give more staff members exposure to the effort.²⁰

While perhaps solving Lieutenant General Horner's perceived span of control problem, reorganization in this way also had unintended consequences in mudding further the lines of control. It also failed to bring the SPG truly into the CENTAF mainstream. Major General John Corder remained the Director of Operations (DO) and out-ranked Brigadier General Glosson. However, Brigadier General Glosson was dual-hatted as both the senior planner, technically working for Major General Corder, and the 14 AD (P) Commander, with a direct line Lieutenant General Horner. This arrangement allowed Brigadier General Glosson more authority than perhaps intended. The dual-hatting also often caused subordinates much confusion on contradictory guidance they

¹⁶ Clancy, *Every Man a Tiger*, 305; Glosson, *War with Iraq*, 87; Putney, *Airpower Advantage*, 309.

¹⁷ Glosson, *War with Iraq*, 87.

¹⁸ Glosson, *War with Iraq*, 101–104.

¹⁹ Oral History Interview of Captain John Glock, 52; Putney, *Airpower Advantage*, 309–310.

²⁰ Putney, *Airpower Advantage*, 310.

received from the DO and 14 AD (P) Commander.²¹ Colonel Jeff Hage, the Deputy Chief of Intelligence and the Director of Combat Intelligence, observed that “decision making within operations was not clearly defined with a DO (Maj[or] Gen[eral]) and two ADOs [Assistant Directors of Operations] (BGs [Brigadier Generals]) not working totally in concert.”²² See Figure 4, USCENTAF Organization, Current as of January 1991.

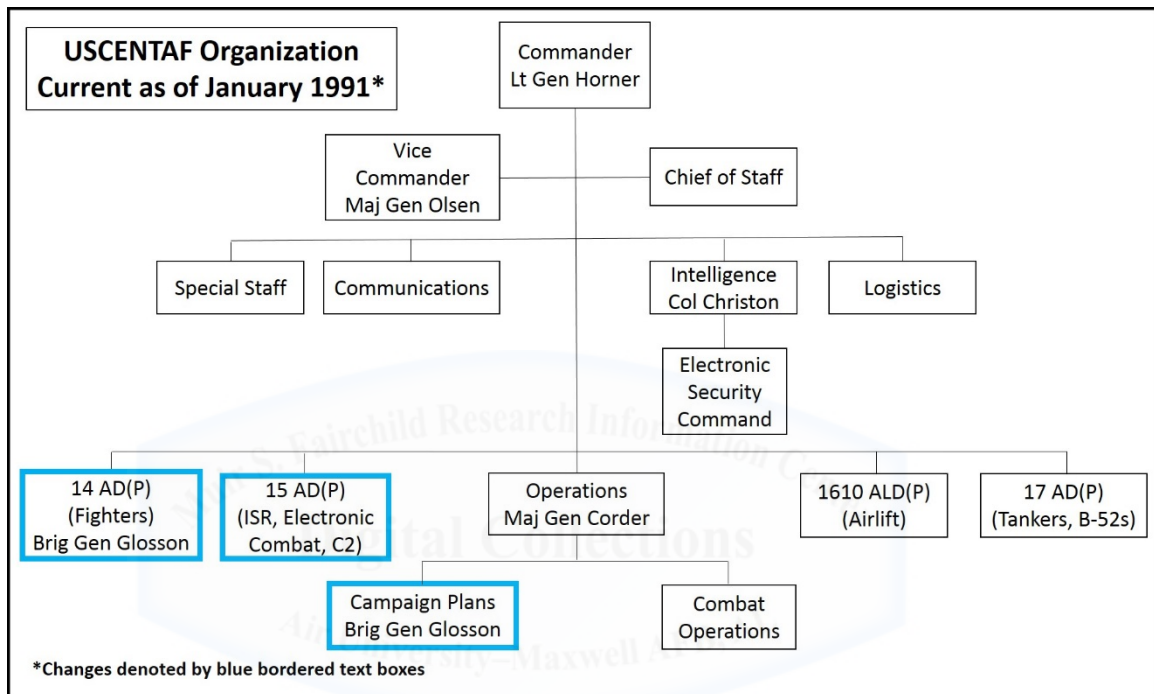


Figure 4, USCENTAF Organization, Current as of January 1991

As Brigadier General Glosson got more comfortable in his powerful new roles, he made more power grabs in order to control campaign execution. Brigadier General Glosson believed the staff members in the TACC did not have enough awareness of the plan to make the correct ATO changes when required. Therefore, he took control of the change process from the TACC. The TACC, which typically made dynamic changes as required, had to have Brigadier General Glosson or one of his four chosen Black Hole representatives initial any ATO change sheet before enacting it.²³ He reasoned, “I owned

²¹ Glosson, *War with Iraq*, 82, 133, 165, 204, 220.

²² Colonel Jeff Hage, “Deputy Chief of Intelligence/Director of Combat Intelligence After Action Report,” March 25, 1991, 1–5, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

²³ Clancy, *Every Man a Tiger*, 313; Glosson, *War with Iraq*, 129–133, 222.

all the fighters as well as the planning. I wanted to make sure that all of the small changes did not add up to a different air war than we meant to prosecute.”²⁴ In his memoirs, Brigadier General Glosson relayed Lieutenant General Horner’s response: “Look, you planned the thing...so you have a better understanding of what you’re trying to accomplish and how things are going. You can’t have other people making changes to what might be the critical cog of a particular night’s efforts without you knowing about it, because you know the impact of moving this and not doing that, and nobody else does.”²⁵ In his support of Brigadier General Glosson, Lieutenant General Horner gave his senior planner an inordinate amount of power to control every aspect of the air campaign.²⁶

These last minute changes, however, would cause problems throughout the planning and execution cycles if they were not communicated in a timely manner with the flying units and intelligence Airmen. Brigadier Glosson believed it was his prerogative to change the ATO as he saw fit “up to an hour or two prior to the aircrew stepping out of the squadron operations center to man their aircraft.”²⁷ Changes could also be driven by weather or a hot piece of intelligence received from either Checkmate or Rear Admiral McConnell. The seemingly arbitrary nature of some changes seemed to indicate Brigadier General Glosson failed to appreciate the stress he added to the war for the planners building the ATO; for the flying units executing the ATO; and for the intelligence Airmen supporting the ATO.²⁸

If not communicated immediately to the intelligence directorate, they often found out about the change from the unit that required new imagery and targeting materials to prepare for their new objective. Of the 23,000 total ATO changes made, intelligence officers would have to potentially jump through hoops on 5,800 target changes during the Gulf War. This lack of communication made intelligence officers reactive rather than proactive. In addition, BDA results might be delayed by the lack of communication

²⁴ Glosson, *War with Iraq*, 132.

²⁵ Glosson, *War with Iraq*, 132–133.

²⁶ Glosson, *War with Iraq*, 211; Thomas A. Keaney and Eliot A. Cohen, eds., *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part II, Command and Control* (Washington, D.C: Department of the Air Force, 1993), 201.

²⁷ Glosson, *War with Iraq*, 155.

²⁸ Richard G. Davis, *On Target: Organizing and Executing the Strategic Air Campaign Against Iraq* (Honolulu, Hawaii: University Press of the Pacific, 2005), 140; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part II, Command and Control*, 229–232.

because with a target change, the intelligence staff had to submit a new ISR collection request.²⁹ In this way, no matter how diligent the intelligence staff had been in preparing its support for the current ATO, they always looked incompetent and unsupportive. Lack of communication from the operations planners in execution put them behind the power curve due to the ATO alterations.

Whether the out-sourced intelligence support from Checkmate or Rear Admiral McConnell resulted in a dynamic ATO change or simply provided the impetus for ATO taskings within the normal tasking cycle, the ad hoc conduits caused second and third order effects. CENTAF intelligence officers continued to resent the interference. They believed the intelligence was not validated because it did not come through formal intelligence channels. Throughout the war, the Black Hole typically did not share the intelligence it received from its ad hoc intelligence network with CENTAF intelligence.³⁰

According to the *Gulf War Air Power Survey*, “[i]ntelligence officers argued that targets selected and struck [as a result of this informal intelligence network] often (a) did not meet [CINCENT] targeting objectives, (b) did not have the appropriate preparatory analysis to identify aim points and desired mean points of impact, and (c) bypassed standard target material production.”³¹ Moreover, Lieutenant General Horner demonstrated an evolution in his thinking after the war, saying: “The Directorate [*sic*] of Campaign Plans having his own intel[ligence] network and tasking directly to the unit without using the ATO process caused many problems in scheduling support aircraft (tankers, [Suppression of Enemy Air Defenses], etc.) and complicated the execution of the ATO.”³² The organizational changes giving Brigadier General Glosson a greater span of control and authority simply caused new problems.

Furthermore, the Black Hole’s isolation from the rest of the CENTAF staff did not end as a result of these organizational changes. Lieutenant General Horner knew the changes had caused more discontent instead of less. Putney asserts “[Lieutenant General

²⁹ Clancy, *Every Man a Tiger*, 370–371; Davis, *On Target*, 228; Glosson, *War with Iraq*, 154–155; Oral History of Colonel Jim Blackburn, 47–49.

³⁰ “DESERT SHIELD/Storm USCENTAF/STRATFOR After Action Report,” March 25, 1991, 15–7, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

³¹ Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part II, Command and Control*, 202.

³² Quoted in Davis, *On Target*, 140.

Horner's] leadership and management style was to work around" the problems and strife, instead of addressing them directly to fix them.³³ According to Lieutenant General Horner, "So we started integrating these two staffs. That was not easy. There was a lot of friction, and sometimes I would beat upon everybody then everybody would calm down. Sometimes I would let them beat up on me. It was just a way of handling people."³⁴ Lieutenant General Horner's words and actions did not fix the problems, but rather indicated his detached style and unstated acceptance of the status quo. Because organizational change did little to change the secrecy that reigned supreme regarding the offensive planning, most CENTAF staff members continued to be in the dark until right before the start of the air campaign.³⁵

And So It Begins...

On January 17, 1991, the DESERT STORM strategic air campaign began. The plan, painstakingly adjusted multiple times over the previous six months, seemed to go off without a hitch. The first two ATOs of DESERT STORM had existed for months. Brigadier General Glosson visited each of his subordinate wings to brief the plan to those that would be flying the missions.³⁶ He and his planners continued to check the "tactics, timings, and force packages of various bomb droppers and electronic-combat support aircraft. Anything that looked unworkable was changed on the spot."³⁷ The flying units involved had been able to rehearse their roles and understood how they fit into the plan. Similarly, Lieutenant General Horner and Brigadier General Glosson had briefed and walked through the plans repeatedly in the final days leading up to H-hour. While the first couple of days were orchestrated masterfully, beyond this timeframe little was structured. They would be based in part on the results of the first two and planned using a standard 72-hour cycle.³⁸ The smooth execution in the first days of the campaign would

³³ "DESERT SHIELD/Storm USCENTAF/STRATFOR After Action Report," 15–11; Putney, *Airpower Advantage*, 311.

³⁴ Quoted in Putney, *Airpower Advantage*, 311.

³⁵ Oral History Interview of Major Sandy Terry, 38; Putney, *Airpower Advantage*, 310, 334.

³⁶ Glosson, *War with Iraq*, 108–111.

³⁷ Clancy, *Every Man a Tiger*, 325–326.

³⁸ Clancy, *Every Man a Tiger*, 330.

be replaced by more bumps and dynamic changes as the CENTAF staff adjusted to rhythm of the planning cycle.³⁹

In order to support the first couple of days of air operations, Brigadier General Glosson tasked Lieutenant Colonel Deptula to prioritize the planned targets for BDA. As he worked through target list print outs provided to him by Brigadier General Glosson, he used the Black Hole's target list as a cross-reference to decipher the pages and pages of BE numbers. Once accomplished, Lieutenant Colonel Deptula sent the first 50 on his list to Washington for imagery collection. Once he completed the first day's target prioritization, he continued on to the rest of the target list that had grown to 475 targets in all.⁴⁰ In this way, Lieutenant Colonel Deptula prepared for the master attack plan and ATOs that had yet to be developed for the third day and beyond. It also indicated how the previous months of alienating CENTAF intelligence put them out of the loop of imagery collection management for BDA.

By this point, undermining CENTAF intelligence had become the planners' *modus operandi*. The bad feelings had become entrenched in the mindset of the planners. Moreover, the senior planner and 14 AD (P) commander sanctioned, encouraged, and reflected this mindset himself. Thus, it is not terribly difficult to understand why it persisted. Major Terry explained the situation upon arriving in country. With a more traditional perspective on the value of intelligence personnel in targeting and planning, Major Terry asked, "[W]ho is picking the targets, and why are you putting X-number of airplanes [on these] targets, who is making the decisions?" In response, he heard from "several different people—so, obviously the comments had been batted around—was that this will be an operator-run war. And I guess meaning that we were going to do what we needed to do to do it."⁴¹ Another planner told Major Terry that he was "a SAC [warrior] and navigator, and I know what I'm doing. I don't need intel[ligence] to tell me what I'm doing."⁴² The comments relayed by Major Terry reflect those attributed to Brigadier General Glosson during the Gulf War: "We have decided that this will be an operator run

³⁹ Glosson, *War with Iraq*, 147–149.

⁴⁰ Putney, *Airpower Advantage*, 334–335.

⁴¹ Oral History Interview of Major Sandy Terry, 10.

⁴² Oral History Interview of Major Sandy Terry, 15.

war.”⁴³ Additionally, these comments bare striking resemblance to those made by Brigadier General Glosson in a post-war oral history interview when he said, "I refused to let intel[ligence] tell me what I was going to use on the targets.”⁴⁴ Therefore, the operations planners followed their leader’s cue in enabling poor relations and a bad command climate to percolate throughout all of the operations conducted, both anticipated and not.

“The Great Scud Chase”⁴⁵

The efforts dedicated to finding Iraq’s Scuds were one such unanticipated effort—an effort that would continue to challenge the intelligence and operations relationship. In pre-war briefings to Secretary Cheney, Lieutenant General Horner admitted the difficulties in trying to eradicate the Scud threat. Airpower would target all of the fixed Scud sites, including storage, production, fuel, repair, and support facilities. The problem was that the Scud was a mobile system. It was unlikely that the Scuds would remain at the fixed sites as war became imminent.⁴⁶ Lieutenant General Horner told Secretary Cheney, “There is no way I can stop the Iraqis from launching Scuds at Saudi Arabia, Bahrain, and Israel from their fleet of mobile launchers.”⁴⁷

Of the three countries, attacks on Israel presented the most difficult case. The tenuous nature of coalition politics, especially those with Middle Eastern partners, made it essential to keep Israel from entering the war.⁴⁸ As Richard Hallion wrote in *Storm Over Iraq*, “‘tactical’ ballistic missiles have profoundly strategic implications. For example, Scud attacks could have resulted in Israel entering the war, with unknown but certainly ominous implications for coalition unity.”⁴⁹ General Schwarzkopf later said “I

⁴³ Oral History Interview of Colonel George Souza, interview by Mark Mandeles, typed notes, December 31, 1991, 3, Call #TF4-8-153, IRIS #0872552, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁴⁴ Oral History Interview of Brigadier General Buster Glosson, typed transcript, June 1, 1992, 15, Call #TF6-25-368 V.2, IRIS #0872937, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁴⁵ General Merrill McPeak quoted in David Evans, “Air Force Assesses War’s Lessons: Success Shows Need To Support Programs, General Says,” *Chicago Tribune*, March 16, 1991, http://articles.chicagotribune.com/1991-03-16/news/9101240208_1_air-force-iraqi-air-stealth.

⁴⁶ Clancy, *Every Man a Tiger*, 278, 321, 379.

⁴⁷ Clancy, *Every Man a Tiger*, 321.

⁴⁸ Richard Hallion, *Storm Over Iraq: Air Power and the Gulf War*, Smithsonian History of Aviation Series (Washington: Smithsonian Institution Press, 1992), 179–180; H. Norman Schwarzkopf and Peter Petre, *General H. Norman Schwarzkopf the Autobiography: It Doesn’t Take a Hero* (New York: Bantam Books, 1992), 484–489.

⁴⁹ Hallion, *Storm over Iraq*, 245–246.

don't think we could have held [the coalition] all together, and it certainly would have made our task much, much more difficult in the long run.”⁵⁰ Thus, these political concerns made the Scud hunt an unanticipated high priority.

After the war kicked off, Iraq launched Scuds at Israel and two cities in Saudi Arabia. Washington immediately demanded that CENTCOM do whatever it took to stop additional Scud attacks. Pre-war intelligence estimates did an admirable job in identifying the vast majority of the fixed Scud sites, including storage, production, fuel, repair, and support facilities. Unfortunately, the same cannot be said about mobile Scud launch and hide sites. There was little analysis available prior to the war on Iraqi standard operating procedures or employment tactics. Additionally, little analysis on possible launch locations and hide sites had been accomplished.⁵¹ According to Brigadier General Glosson, intelligence indicated that “the Scud launchers were at fixed sites... We destroyed those sites. Then, all of a sudden, Scuds started flying. Nobody could figure out what was going on. It was news to us that the Iraqis had honed this mobile capability, and now we were going to have to hunt them down.”⁵² Using shoot and scoot tactics, the Iraqis shot the Scuds at night and hid the launchers during the day. Over the weeks an inordinate effort, including many strike and reconnaissance assets diverted from other missions, to comb the western deserts of Iraq attempting to locate the mobile launchers or their hide sites.⁵³

Brigadier General Glosson largely depended upon Rear Admiral McConnell and his intelligence to inform the Scud hunt. Despite having provided useful intelligence to the Black Hole earlier, Rear Admiral McConnell struggled to provide much targetable information to CENTAF. Within the first three days, he provided intelligence on some

⁵⁰ Hallion, *Storm over Iraq*, 180; H. Norman Schwarzkopf, Interview with Gen. Schwarzkopf on Gulf War Aftermath, interview by David Frost, March 27, 1991, <http://usatoday30.usatoday.com/news/index/iraq/nirq053.htm>.

⁵¹ Clancy, *Every Man a Tiger*, 379–380; Glosson, *War with Iraq*, 130–131; Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey: Summary Report* (Washington, D.C.: Department of the Air Force, 1993), 123–124; John Andreas Olsen, *Strategic Air Power in DESERT STORM* (London: Frank Cass, 2003), 244–245; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 475, 486.

⁵² Glosson, *War with Iraq*, 143.

⁵³ Clancy, *Every Man a Tiger*, 378–386; Glosson, *War with Iraq*, 143–147; Hallion, *Storm over Iraq*, 377–388; Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 86–87; US House, *Intelligence Successes and Failures in Operations DESERT SHIELD/Storm*, 103d Congress, 1st Session, August 16, 1993, 11–12, <http://www.dtic.mil/dtic/tr/fulltext/u2/a338886.pdf>; James A. Winnefeld, *A League of Airmen: U.S. Air Power in the Gulf War*, Project Air Force (Santa Monica, CA: Rand, 1994), 132–134.

possible Scud launch sites. In the end, the IC was unable to determine enough possible locations nor was it able to figure out how the Iraqis communicated launch orders. It was only through special operations force (SOF) teams on the ground that CENTAF learned the Iraqis were using roadside culverts, overpasses, or ditches to hide the Scud launchers, and communicated by plugging in to fiber hubs. With this information, CENTAF attempted to attack Iraqi communications, while continuing to patrol the desert for targets of opportunity.⁵⁴ While in other areas Brigadier General Glosson's informal intelligence network paid dividends for the Black Hole, he believed it was less effective than he needed it to be.

Internally to the CENTAF intelligence directorate, the branches diligently worked to support the air campaign in finding and targeting the Scuds. They were hampered, however, by the continued inexperience of the personnel and lack of resources. Nevertheless, the Operations (INO) Branch conducted analysis on the Scud threat, leading them to recommend targets to the Targets (INT) Branch. According to Lieutenant Colonel Talbot, "INO analysts brought INT information concerning Scud deployments and hide locations...which were later turned into targets...The success of this collaborative effort bore many fruit many times, especially as targets were struck shortly after they were detected."⁵⁵

However, this CENTAF intelligence collaboration also resulted in some mistaken targeting or poor BDA that earned high criticism from Brigadier General Glosson. In one particular case, it is not clear from the available evidence where the time-sensitive intelligence came from that led to a strike on Scud transporter erector launchers (TELs). It is also not clear which intelligence entity made the initial BDA determination calling the strike successful. Nevertheless, Brigadier General Glosson credits CENTAF intelligence with "incompetence" because a so-called "'successful' Scud strike briefed on TV had hit four Jordanian fuel trucks, not transporter erector launchers."⁵⁶ Later imagery

⁵⁴ Clancy, *Every Man a Tiger*, 383–384; Glosson, *War with Iraq*, 144–145, 172–173; Hallion, *Storm over Iraq*, 245; Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 83–84; Olsen, *Strategic Air Power in DESERT STORM*, 261; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 486–487.

⁵⁵ Lt Col F. L. Talbot, "INO and INT Cooperation during DESERT SHIELD/DESERT STORM," March 25, 1991, 3–36, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁵⁶ Glosson, *War with Iraq*, 192.

analysis performed in Washington confirmed the target had indeed been fuel trucks instead of the elusive Scud launchers.⁵⁷

In the end, intelligence, whether from Washington or Riyadh, offered little to help in finding, fixing, targeting, and destroying Iraq's Scuds. Lieutenant General Horner had to divert his valuable strike and ISR assets to patrol assessed Scud launch and hide sites. The effort was extremely resource intensive for a very minimal return on investment. According to the US House of Representatives Committee on Armed Services, there is little to indicate CENTAF's counter-Scud campaign ever successfully located and destroyed any mobile launchers.⁵⁸ There are indications that air attacks destroyed decoy launchers or trucks instead of actual Scud TELs.

Even so, there is some evidence that CENTAF's efforts were not in vain. Scud crews were likely intimidated by the continuous air missions and adopted shoot and scoot tactics. The formidable and continual air presence may have driven Scud crews to launch less in fear of air attack. This fear may also have led them to dispel with standard operating procedures requiring lengthy set up and calibration, leading to greater employment inaccuracies.⁵⁹ Nevertheless, the inability to target and destroy the mobile launchers, instead of simply disrupting their normal operating procedures, indicated the need for better intelligence capabilities and analysis to address mobile threats like Scuds.

“Sucking Chest Wound”⁶⁰

Of the many contentious problems during the planning and execution of DESERT STORM, BDA is generally recognized as the most egregious by nearly every Gulf War history. Bomb damage assessment was the cornerstone of Lieutenant Colonel Deptula's idea of “targeting for effects.” It was critically important for the planners and intelligence Airmen to have the requisite BDA on each target to determine the effectiveness of the air campaign. For example, execution of the ground campaign

⁵⁷ Clancy, *Every Man a Tiger*, 350; US House, *Intelligence Successes and Failures in Operations DESERT SHIELD/Storm*, 12.

⁵⁸ US House, *Intelligence Successes and Failures in Operations DESERT SHIELD/Storm*, 11–12; Winnefeld, *A League of Airmen*, 134.

⁵⁹ Clancy, *Every Man a Tiger*, 381–382; Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, n90, 124; Olsen, *Strategic Air Power in DESERT STORM*, 245; US House, *Intelligence Successes and Failures in Operations DESERT SHIELD/Storm*, 12.

⁶⁰ Colonel Chris Christon quoted in Putney, *Airpower Advantage*, 274.

depended upon an assessed 50 percent attrition of Iraqi ground forces.⁶¹ Accurate and timely BDA drove campaign phasing, re-attack recommendations, and combat assessment for war termination. Unfortunately, CENTAF was severely limited from meeting these criteria for every target.

Colonel Christon recognized early before the commencement of combat operations that BDA would cause him immense problems once DESERT STORM began. He knew an IC standard for BDA did not exist and that experts in conducting BDA were almost nonexistent in the IC.⁶² Brigadier General Glosson viewed “the BDA process [as] haphazard, with rules that kept changing.”⁶³ Bomb damage assessment was a lost art form. He planned to conduct his own BDA by depending primarily on reconnaissance imagery and the unit Mission Reports (MISREPs) written and submitted to CENTAF intelligence for every mission.⁶⁴ Colonel Christon “told [Lieutenant] General Horner and [Brigadier] General Glosson on several occasions prior to the war that there will be insufficient imagery BDA to support all of the things [they] would like to do.”⁶⁵

The CENTAF intelligence directorate retained responsibility for conducting the BDA associated with the air campaign in Phase I and II. Colonel Christon established some processes and relationships to try to ease the BDA burden. Working with DIA, he established a ring-down telephone call to tap into the BDA infrastructure DIA created to provide assessments to national senior leaders. While he believed DIA would assist in providing the information necessary to facilitate target restrikes, he believed the DIA system was too complex to depend on for quick reports and annotated imagery. Instead

⁶¹ Davis, *On Target*, 286; Fred L. Frostic, *Air Campaign Against the Iraqi Army in the Kuwaiti Theater of Operations*, A Project Air Force Report (Santa Monica, CA: Rand, 1994), 37; Glosson, *War with Iraq*, 157, 185; Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 102; Putney, *Airpower Advantage*, 331–332.

⁶² Frostic, *Air Campaign Against the Iraqi Army in the Kuwaiti Theater of Operations*, 38; John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington, D.C: Potomac Books, 2007), 235; Oral History of Colonel Jim Blackburn, 130–131; Putney, *Airpower Advantage*, 279; US House, *Intelligence Successes and Failures in Operations DESERT SHIELD/Storm*, 21.

⁶³ Glosson, *War with Iraq*, 185.

⁶⁴ Putney, *Airpower Advantage*, 279; Schwarzkopf and Petre, *General H. Norman Schwarzkopf the Autobiography*, 499.

⁶⁵ Putney, *Airpower Advantage*, 279.

he wanted to use the ring-down report to get the initial assessment on whether the strike achieved the target damage desired.⁶⁶

Indeed, the Black Hole was disappointed by the lack of support they received from CENTAF intelligence on BDA. The Black Hole had developed their own BDA tracking mechanisms to facilitate restrike, but the BDA they expected did not materialize from CENTAF/IN as quickly or in the quantity they required. Wartime imagery was too slow, despite Brigadier General Glosson's arrangement with Rear Admiral McConnell for post-strike imagery on a daily basis. Rear Admiral McConnell's imagery sources simply could not keep up. MISREPs were typically poorly written and failed to cover all of the details necessary to perform BDA. As an added and unwelcome bonus, weather frustrated the ability of many of the overhead and theater-based ISR platforms from collecting viable BDA imagery. Furthermore, the planners found the DIA ring-down method to be too slow to get into the planning cycle like they wanted.⁶⁷

Colonel Christon, though, had anticipated the hit or miss calls from DIA to inform TACC execution decision primarily. He believed the TACC required the BDA information more than the planners because of their role in controlling current operations versus planning the next day's war.⁶⁸ Brigadier General Glosson, Colonel Christon, and Lieutenant Colonel Deptula failed to communicate and agree effectively with one another to determine the goals of the BDA effort. The Black Hole, then, was disappointed by the lackluster results. Colonel Christon had always intended for BDA to inform the ongoing execution traditionally controlled by the TACC, until Brigadier General Glosson gained additional authorities. Communication between the Colonel Christon and the Black Hole could have clarified this changing dynamic to ensure BDA was reported to the correct place.

The Black Hole planners also required a more detailed BDA than typically ascribed in theater. They needed BDA describing the functional damage sustained by a target to inform the overall effects achieved by the air campaign. They also wanted

⁶⁶ Putney, *Airpower Advantage*, 274–283.

⁶⁷ Department of Defense, *Conduct of the Persian Gulf Conflict: An Interim Report to Congress* (Washington, D.C.: U.S. Government Printing Office, 1991), 14–2; Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 16; Putney, *Airpower Advantage*, 279–282.

⁶⁸ Putney, *Airpower Advantage*, 279–282.

analysts to assess the greater effect across target sets. Physical damage, which is typically done first and most quickly, was not what the planners wanted. The more complex functional and systemic analysis, however, took more time to accomplish. Many targets, like communications and C2, were very difficult to assess. When combined with the few capable BDA analysts and limited intelligence available to perform this type of analysis, the Black Hole was often disappointed.⁶⁹ As the *Gulf War Air Power Survey* points out, “[P]art of the difficulty undoubtedly stems from the uncertainties endemic to intelligence functions such as targeting and bomb damage assessment—uncertainties that are ultimately inherent in any use of military force to achieve political ends.”⁷⁰ The CENTAF intelligence officers could have mitigated this disappointment had they better communicated the BDA process as well as its limitations and difficulties.

As mentioned previously, Colonel Christon did not intend to use aircraft video tapes to inform the CENTAF BDA process. He believed the flying unit intelligence officers would watch the film and incorporate the strike information into their MISREPs. Colonel Christon did not initially acknowledge the film as a viable BDA source because it had been used simply to ensure bomb release and not target damage in the past. As the war continued, however, gun camera film became a critical source of BDA information for the Black Hole and CENTAF intelligence. Limited BDA from traditional intelligence and imagery sources drove the Black Hole toward aircraft videos and MISREPs as primary BDA sources.⁷¹ Brigadier General Glosson complained that “BDA on strategic targets was limited but for the fielded forces, the problem was more severe, and more complex. BDA consisted basically of whatever I could ascertain from the tapes from the fighters, or whatever [Rear Admiral] McConnell gave me. For all practical purposes, the rest of the BDA was non-existent and a waste of time.”⁷²

The Black Hole’s dependence on aircraft gun-camera film became a point of contention between the planners and intelligence officers. When traditional BDA

⁶⁹ Davis, *On Target*, 286; Glosson, *War with Iraq*, 156; Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 98; Putney, *Airpower Advantage*, 282.

⁷⁰ Keaney and Cohen, *Gulf War Air Power Survey: Summary Report*, 121.

⁷¹ Frostic, *Air Campaign Against the Iraqi Army in the Kuwaiti Theater of Operations*, 47; Glosson, *War with Iraq*, 185, 187; Putney, *Airpower Advantage*, 279–280.

⁷² Glosson, *War with Iraq*, 185.

imagery was slow in coming, Lieutenant Colonel Deptula requested Colonel Christon's intelligence Airmen watch the tapes and provide BDA assessment. The intelligence officers declined, saying they were too busy with other priority tasks.⁷³ Lieutenant Colonel Deptula was livid and later said, "If you are not doing something that affects what the target is and what kind and how many airplanes we are putting against it and what we need to do next, and it does not affect the master air attack plan, what are you doing? Intel[ligence] for intel[ligence]'s sake?"⁷⁴ Thus, the Black Hole reviewed the gun camera footage themselves to secure BDA in the absence of adequate CENTAF intelligence support.⁷⁵

Lieutenant Colonel Deptula's statement indicates the disdain with which he regarded his intelligence counterparts. Because the relationship had devolved into little or no communication, he did not understand the various tasks intelligence accomplishes in wartime that do not directly relate to targeting. This was a failure on the part of leaders from both communities in maintaining an effective rapport and mutual understanding.

Colonel Christon also understood that several organizations, from CENTCOM to CENTAF and ARCENT, Checkmate to DIA and the JCS/J-2, would be providing their own uncoordinated analysis on each target struck. Consequently, each component and agency would do BDA slightly differently. Army Forces Central (ARCENT), for example, was responsible for Phase III BDA to determine when the Iraqi ground forces had been eroded to 50 percent.⁷⁶ Army Forces Central decided on a "deceptively simple strategy" for this calculation—they would merely calculate "the percentage of armor and artillery destroyed in comparison to a DESERT STORM baseline."⁷⁷ Calculating the air campaign's effects became a point of contention between the Air Force and the Army.

⁷³ Putney, *Airpower Advantage*, 279–280.

⁷⁴ Oral History Interview of Lt Col David Deptula, typed transcript, June 1, 1992, 14, Call #TF6-25-368 V.2, IRIS #0872937, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁷⁵ Putney, *Airpower Advantage*, 279–280.

⁷⁶ Frostic, *Air Campaign Against the Iraqi Army in the Kuwaiti Theater of Operations*, xiii; Putney, *Airpower Advantage*, 276–283.

⁷⁷ Putney, *Airpower Advantage*, 276–283.

The Air Force overestimated while the Army tended to underestimate the effects achieved; the Army only tallied confirmed kills from A-10 MISREPs.⁷⁸

Brigadier General Glosson initially believed the air campaign “[was] *not* attriting the [Iraqi] fielded forces as efficiently as [he] wanted (emphasis in original).”⁷⁹ As the Black Hole adjusted the air campaign, Brigadier General Glosson began getting BDA that reflected better results. Rear Admiral McConnell reported BDA imagery that showed tank plinking was having the desired results. The Army’s calculations changed to show increased effectiveness and improved percentages.⁸⁰

The fragmented efforts in the Black Hole and CENTAF/IN only served to dilute the already limited resources and personnel available to accomplish BDA. Each entity had its own process and different source data to conduct BDA. Duplication of effort was rampant. Since each entity had a different set of criteria and idea of how to accomplish BDA, all the other entities distrusted anyone else’s results.⁸¹ As an INO after action report recommended, “One BDA team, under IN, manned, trained, and equipped to the job, is needed.”⁸² Consolidating both operations and intelligence personnel, as well as the limited available resources, under a common doctrine for CENTAF BDA would have proven more effective than the disparate Black Hole and CENTAF intelligence efforts.

Checkmate attempted to assist in filling the BDA gaps through its partnership with Colonel Blackburn’s Airmen and DIA’s imagery analysts. Coupled with the operations Airmen in Checkmate, the analysts had experts to inform them on aircraft and weapons capabilities, which was essential for better BDA. While this arrangement achieved some success, Checkmate had difficulties in providing all of the necessary target, aircraft, munition, and objective information required for the intelligence analysts to accomplish BDA in a timely manner. Additionally, they leveraged gun camera video and MISREPs as well to accomplish their BDA.⁸³ According to Colonel Blackburn,

⁷⁸ Clancy, *Every Man a Tiger*, 470; Glosson, *War with Iraq*, 187; Putney, *Airpower Advantage*, 276–277.

⁷⁹ Glosson, *War with Iraq*, 189.

⁸⁰ Glosson, *War with Iraq*, 197.

⁸¹ Lt Col Sarah L. Cunningham, “BDA,” March 25, 1991, O–9, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁸² Lt Col Sarah L. Cunningham, “DESERT SHIELD/DESERT STORM Lessons Learned,” March 13, 1991, 5–15, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁸³ Olsen, *John Warden and the Renaissance of American Air Power*, 234–237; Oral History of Colonel Jim Blackburn, 123–132; Putney, *Airpower Advantage*, 280–281.

Checkmate's assessments "would be more exaggerated, a little more positive results...[T]here are some cases where Checkmate did some embellishments of the results where it seemed like that was a definitive picture when it wasn't necessarily at all."⁸⁴

Bomb damage assessment, like most other intelligence functions, had not been exercised nor even considered in the pre-war years. Often, exercises simulated BDA because of classification issues, and did not use the same ISR assets intelligence personnel would depend on in a real fight. So, the IC and the military components writ large were unprepared for the enormity of the BDA task. Therefore, Brigadier General Glosson and the Black Hole planners blamed their intelligence counterparts for failing to provide the support they required.⁸⁵ However, the operations planners had an inflated idea of what they would get for BDA, despite Colonel Christon's pre-war warnings to the contrary. According to Putney, "[o]verall, BDA for the air campaign could not keep up with the scope and pace of operations, and its processes lacked synchronization with the air war's execution."⁸⁶

Conclusion

After 38 days, the ground war began. The air campaign had been so successful that coalition ground forces conducted a short 100-hour ground war to mop up the remnants of Iraq's retreating fielded forces. Despite this immense success, relations between intelligence and operations continued to deteriorate even though organizational changes attempted to ameliorate problems. This rancor became the normal state of affairs. Each group expected difficulties in accomplishing wartime activities, such as dynamic targeting, the Scud hunt, and BDA. While the campaign achieved inordinate success, this success was in spite of the negative environment created by intelligence and operations poor climate and communications as well as compartmented activities. The next chapter will offer insights from the three slices of DESERT SHIELD and DESERT STORM intelligence-operations interactions previously discussed.

⁸⁴ Oral History of Colonel Jim Blackburn, 129.

⁸⁵ Dr. Alexander S. Cochran, "EAC Modification, 10 January 1993--16:23--Finding #5: Bomb Damage Assessment," January 10, 1993, Call #K239.04.99, IRIS #0875100, GWAPS Collection, AFHRA, Maxwell AFB AL; Winnefeld, *A League of Airmen*, 270.

⁸⁶ Putney, *Airpower Advantage*, 283.

Chapter 5

Insights Gained

Losers tend to study what went wrong while winners study what went right.
-Unknown

The Gulf War has taken on a life of its own, becoming a centerpiece in post-Cold War airpower thinking. The 38-day air war followed by a 100-hour ground campaign seemed to usher in a new age of airpower predominance. The perceived predominance appeared to deliver on the promises of early airpower enthusiasts—airpower had at last come closer than at any other time in its short existence to achieving a decisive victory almost entirely on its own. The wildly successful outcome of the war appeared to a great many people to justify the nontraditional and inchoate process used to achieve it. The Air Force has generally fallen into this trap and has not looked critically at the Gulf War.

Problems, however, existed at all levels, among and between both intelligence and operations. The preceding pages identified a few thematic categories in which Air Force professionals ought to focus their attention. These overarching themes include the significance of command climate; the importance of effective communication; and the danger of compartmentalization. The following will take these larger themes in turn. It suggests some insights to be gained from the conduct of Gulf War planning and execution in the context of the vital relationship and interaction between intelligence and operations.

Command Climate

In the last several years, the Air Force has focused attention on the importance of command climate in creating effective organizational processes. The issue has risen to such importance that commanders and leaders at all levels will be evaluated on their contribution to creating and maintained a healthy organizational climate on their annual performance reports.¹ According to Lieutenant General Sam Cox, the Air Force Deputy Chief of Staff for Manpower, Personnel and Services, “organizational [or command]

¹ “AF to Mandate Organizational, Command Climate on Evaluation, Feedback Forms,” *Air Force News Service*, December 20, 2013, <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/467802/af-to-mandate-organizational-command-climate-on-evaluation-feedback-forms.aspx>.

climate is defined as the way members in a unit perceive and characterize their unit environment.”² One of the key responsibilities of a commander, the senior leader in a military organization, is to ensure a healthy command climate. The commander sets the tone through the combination of words and actions. This does not mean the commander has sole responsibility for the maintenance of a healthy command climate; subordinate leaders at every level have a responsibility for the part of the organization under their span of control.³ The environment at CENTAF during the planning and execution of the Gulf war provides evidence of how important a healthy command climate is, how detrimental an unhealthy command climate can be, and how subordinate leaders can perpetuate the tone set by the senior-most decision-maker.

Setting the Tone

At the start of the offensive planning initiatives in August 1990, the CENTAF senior staff took their cue from Lieutenant General Horner’s initial reaction to Air Staff planning efforts. Those on the JFACC’s staff understood Lieutenant General Horner’s predilection for dismissing the effort simply based on his irritation that those outside the theater of conflict believed themselves capable of planning *his* air campaign.⁴ When Colonel Warden briefed the initial Checkmate INSTANT THUNDER air campaign plan, Lieutenant General Horner reacted unfavorably to both the officer and the plan. His comments, such as calling the plan “an academic study” and nothing more than a “target list,” gave those CENTAF staff members in attendance the impression that the plan was

² “AF to Mandate Organizational, Command Climate on Evaluation, Feedback Forms.”

³ Colonel David L. Goldfein, *Sharing Success--Owning Failure: Preparing to Command in the Twenty-First Century Air Force* (Maxwell AFB, Ala.: AU Press, 2001), 23, 30; General Bill Looney, *Exceeding Expectations: Reflections on Leadership* (United States: Enso Books, 2012), 59; General Stephen R. Lorenz, *Lorenz on Leadership: Lessonson Effectively Leading People, Teams, and Organizations* (Maxwell AFB, Ala.: AU Press, 2012), 3, 14, 127; Lt Col Jeffrey F. Smith, *Commanding an Air Force Squadron in the Twenty-First Century* (Maxwell AFB, Ala.: AU Press, 2003), 8–9.

⁴ Richard G. Davis, *On Target: Organizing and Executing the Strategic Air Campaign Against Iraq* (Honolulu, Hawaii: University Press of the Pacific, 2005), 81–82; Thomas A. Keaney and Eliot A. Cohen, eds., *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning* (Washington, D.C: Department of the Air Force, 1993), 126; John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington, D.C: Potomac Books, 2007), 175–176; Diane T. Putney, *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991* (Washington: Air Force History and Museums Program, 2004), 120; Richard T. Reynolds, *Heart of the Storm: The Genesis of the Air Campaign Against Iraq* (Maxwell Air Force Base, Ala.: Air University Press, 1995), 84–86, 91–93.

not sanctioned by their commander.⁵ Further, because Lieutenant General Horner made no secret of dismissing Colonel Warden from theater, CENTAF's senior staff concluded the INSTANT THUNDER plan had also been dismissed and it was merely a matter of time before the remaining Checkmate planners would return to Washington.

Thus, with Colonel Warden gone, the four Air Staff planners who remained faced a CENTAF staff who believed they received Lieutenant General Horner's guidance and intent loud and clear. Not only had Lieutenant General Horner dismissed the INSTANT THUNDER plan and its creators, but he also provided specific direction to his senior staff on how to use the INSTANT THUNDER concept. Lieutenant General Horner instructed his operations, intelligence, and logistics senior leaders to improve upon the Checkmate concept as they deemed fit, but under no circumstances should that compromise their focus on his number one priority: defensive air operations planning.⁶

Likewise, CENTAF senior staff, including the Director of Intelligence, Colonel Leonardo, communicated the same guidance to their subordinates and in much the same tone as their commander. Colonel Leonardo dispatched his five junior officer targeteers to the nascent offensive planning cell with the explanation that "[Lieutenant General] Horner thought that the [INSTANT THUNDER] plan was dog shit. And that [the Air Staff planners from Checkmate] would be off the Peninsula within a few days."⁷ Hence, CENTAF intelligence Airmen believed they were following the JFACC's lead by providing little to no support to the Checkmate planners.

The Checkmate planners, in turn, became resentful of the poor treatment they received by the CENTAF/IN. Because Colonel Leonardo presented a negative view of the Checkmate planners to the targeteers, the targeteers were less than forthcoming or helpful. The Checkmate planners complained that targeting officers were "slow-rolling and undermining [their] efforts."⁸ At this early point in the planning, CENTAF intelligence Airmen believed their reluctant and limited support was in line with the

⁵ Lt Col Ben Harvey, "Memorandum and Notes," August 17, 1990, Call #CHP-7, IRIS #0871738, AFHRA, Maxwell AFB AL; Reynolds, *Heart of the Storm*, 123.

⁶ Harvey, "Memorandum and Notes"; Putney, *Airpower Advantage*, 128–129, 131; Reynolds, *Heart of the Storm*, 125.

⁷ Oral History Interview of Captain John Glock, interview by Major Sandy Terry, Frank Kistler, and Dr. Mark Mandeles, typed transcript, January 30, 1992, 14, Call #TF4-8-153, IRIS #0872552, GWAPS Collection, AFHRA, Maxwell AFB AL.

⁸ Putney, *Airpower Advantage*, 136.

commander's priority—continued primary focus on the defensive air option. All of the animosity developed at this early stage compounded into distrust between the intelligence officers and operations planners that affected their ability to work together once the JFACC's priorities shifted to the offensive planning effort.

Establishing Priorities

Because Lieutenant General Horner did not have a senior CENTAF staffer to spearhead an offensive planning effort, he hired Brigadier General Glosson to lead a compartmented offensive planning cell. Bringing Brigadier General Glosson on board could be perceived as a modification of Lieutenant General Horner's priorities for the CENTAF staff. Hiring a general officer to lead the offensive planning effort in and of itself could indicate elevated importance, especially since the defensive planning effort continued to be led by a field grade officer (Colonel Crigger). Nonetheless, Lieutenant General Horner did not communicate overtly an alternative message to his staff indicating a change in priority. At this early juncture, he probably had not yet made the mental transition, evidenced by a few items associated with the direction Lieutenant General Horner initially provided.

First, Lieutenant General Horner's original direction to Brigadier General Glosson was to build a retaliatory plan and associated ATOs to provide an air response option if Saddam Hussein acted irrationally. Within a week of beginning the planning, Brigadier General Glosson and the Air Staff planners produced a retaliatory plan and the requisite ATOs to meet this first requirement on August 28. Lieutenant General Horner likely understood the importance of an offensive plan, but believed providing a retaliatory option was secondary in immediate importance to the ongoing defensive planning.⁹

Second, in order to build a retaliatory option, Lieutenant General Horner was not amenable to reducing the amount of CENTAF staff engaged in defensive planning. His initial direction to Brigadier General Glosson was that available personnel for the offensive planning cell was limited to the four remaining Air Staff planners and any other personnel Brigadier General Glosson wished to bring in from deployed or stateside units. With the short timeline associated with Brigadier General Glosson's initial planning task,

⁹ Tom Clancy, *Every Man a Tiger* (New York: Putnam, 1999), 266–267; Davis, *On Target*, 84–85; Putney, *Airpower Advantage*, 132–133, 136–137.

he was limited to the Air Staff planners. Even without other personnel readily available to populate the new planning cell, Lieutenant General Horner thought the Checkmate planners could stay to provide the INSTANT THUNDER briefing, and then depart the theater.¹⁰ In this sense, Lieutenant General Horner had not yet decided to expend additional resources on offensive planning because his priority lay elsewhere.

Finally, the JFACC's priority was defensive air options. Lieutenant General Horner understood the inherent danger of invasion posed by Iraqi ground forces poised along the Saudi border in Kuwait. According to Lieutenant General Horner, "We were faced with 27 divisions and no ground forces, so we were busy doing a defensive campaign...Quite frankly, we could not have issued speeding tickets to the tanks as they would have come rolling down that interstate highway on the east coast. It was an opportunity the Iraqis did not take, but every night we'd get more forces, and we'd sit down and get a game plan of what we'd do if we came under attack. Later we were able to add more heavy forces, and the point where the issue is no longer really in doubt was when we got the 24th Infantry Division there with their tanks."¹¹ The lead elements of the 24th Infantry Division did not arrive until August 27 and the entire force was not in place until September 12. Incidentally, the August 27 arrival of 24th Infantry Division roughly correlated to Brigadier General Glosson's retaliatory plan briefing to Lieutenant General Horner on August 28. With ground forces arriving, a retaliatory option completed, and defensive planning continuing apace, Lieutenant General Horner likely felt better able to shift some focus to offensive campaign planning.

While Lieutenant General Horner never communicated alternate guidance to his senior staff to ensure they understood any adjustment to his previously stated priorities, the resources available to the Black Hole planners increased appreciably. Brigadier General Glosson "commandeered everything in sight...[including] a number of CENTAF staff [Lieutenant General] Horner had specifically told him *not* to touch."¹² Lieutenant General Horner's unspoken authorization in allowing this to go on indicates that he had shifted his priority from the defensive planning effort led by Colonel Crigger to Brigadier

¹⁰ Clancy, *Every Man a Tiger*, 266–267; Davis, *On Target*, 84–85; Lt Gen (ret) Buster Glosson, *War with Iraq: Critical Lessons* (Charlotte, NC: Glosson Family Foundation, 2003), 14–16, 25; Putney, *Airpower Advantage*, 137–138.

¹¹ Quoted in Putney, *Airpower Advantage*, 131–132.

¹² Clancy, *Every Man a Tiger*, 268.

General Glosson's offensive planning effort. Moreover, Brigadier General Glosson garnered the lion's share of CENTAF's augmentee manning—" [h]e stole every high-quality person who showed up to augment [Colonel] Jim Crigger's CENTAF staff. [Brigadier General] Glosson would grab them, take them into his conference room, and tell them they were going to win the war by themselves, and if they told anyone what they were doing, he would personally rip their lips off their faces."¹³ Similarly, this indicates the tides had turned in favor of the Black Hole's efforts.

Despite this shift evidenced by the increase in manpower, Lieutenant General Horner likely did not have to explicitly communicate a change in priority to his senior staff. The considerable resource increase for the Black Hole probably made the case on the JFACC's behalf. At this point, however, unenthusiastic and inadequate support from intelligence Airmen damaged their relationship with the operations planners. As the Black Hole gained prominence with Lieutenant General Horner and established its own external intelligence support conduits, there was little CENTAF intelligence could do to repair the relationship. This fact was reinforced by the few intelligence resources and capabilities available to offer the Black Hole planners. By the start of the war, the bad feelings ran so deep that Brigadier General Glosson appeared to reinforce and sanction behaviors perpetuating the dysfunctional intelligence-operations dynamic. This was evidenced in rhetoric from the planners indicating they did not need CENTAF intelligence to dictate operational actions—operators could do it all themselves.¹⁴

Lieutenant General Horner understood the unhealthy dynamic, but failed to intercede successfully to change it. There were likely a few things at play here. First, he hired Brigadier General Glosson to lead CENTAF's offensive planning efforts. As such, Lieutenant General Horner had delegated much of the day-to-day staff relations and expected Brigadier General Glosson to handle it.¹⁵ Second, Lieutenant General Horner understood that Brigadier General Glosson often broke glass, but ultimately the junior

¹³ Clancy, *Every Man a Tiger*, 268.

¹⁴ Oral History Interview of Brigadier General Buster Glosson, typed transcript, June 1, 1992, 15, Call #TF6-25-368 V.2, IRIS #0872937, GWAPS Collection, AFHRA, Maxwell AFB AL; Oral History Interview of Colonel George Souza, interview by Mark Mandeles, typed notes, December 31, 1991, 3, Call #TF4-8-153, IRIS #0872552, GWAPS Collection, AFHRA, Maxwell AFB AL; Oral History Interview of Major Sandy Terry, typed transcript, April 4, 1992, 10, Call #K168.051-89, IRIS #1187419, Operation DESERT SHIELD/DESERT STORM Oral History Collection, AFHRA, Maxwell AFB AL.

¹⁵ Putney, *Airpower Advantage*, 287.

general got results. Lieutenant General Horner appears to have prioritized staff outcomes over staff processes because the impending conflict demanded it.¹⁶ Finally, Putney asserts “[Lieutenant General Horner’s] leadership and management style was to work around” the problems and strife, instead of addressing them directly to fix them.¹⁷ Thus, these factors combined and resulted in the JFACC’s tacit acceptance of the status quo—an unhealthy command climate. Because operational results remained favorable, the CENTAF Commander was not driven to intervene to change the dynamic and improve the process.

Communication

A key theme in the previous discussion on command climate is the importance of communication in setting the tone, whether healthy or unhealthy. Often, as then-Colonel David Goldfein argues in his book *Sharing Success—Owning Failure*, “in almost every case [of problems or failures]...a breakdown in communication at some point is causal.”¹⁸ Thus, effective communication is often heralded as the cornerstone for success, while “ineffective communication is often worse than no communication at all.”¹⁹ The experience of the CENTAF staff during Gulf War indicates intelligence-operations communication problems plagued the planning and execution of the air campaign. Ineffective communication hampered the ability of CENTAF staff to gain a shared vision and build effectual working relationships between the CENTAF intelligence Airmen and operations planners. The communication deficiencies, both physical and immaterial, led to workarounds by the planners to gain the intelligence and support required to plan and execute the air campaign.

Building Relationships

In order to improve its own intelligence support, the Black Hole built relationships with external entities and established alternate communications networks when existing internal channels were unsatisfying. Brigadier General Glosson and his Black Hole planners eschewed internal relationships with CENTAF intelligence in favor of more fruitful external relationships with entities such as the JCS/J-2 and Checkmate.

¹⁶ Clancy, *Every Man a Tiger*, 267–269.

¹⁷ “DESERT SHIELD/Storm USCENTAF/STRATFOR After Action Report,” March 25, 1991, 15–11, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 311.

¹⁸ Goldfein, *Sharing Success--Owning Failure*, 31.

¹⁹ Smith, *Commanding an Air Force Squadron*, 105.

Building relationships with external organizations and creating the workarounds to leverage them allowed the Black Hole to solve its own intelligence shortfalls. The Black Hole was uninterested in sharing their sources and intelligence to address greater CENTAF deficiencies or improve CENTAF intelligence support.

From the first, Brigadier General Glosson and his planners failed to establish a solid internal relationships with CENTAF/IN. In truth, their initial introduction to CENTAF intelligence leaders provided the impression of little capability and even less desire to support planning efforts. Colonel Leonardo explained all of the reasons and limitations, including manning, systems, and resources, for *not* supporting Brigadier General Glosson's planning effort rather than what CENTAF intelligence could do. As an alternative to presenting the impression that CENTAF intelligence wished to support the planning, Colonel Leonardo indicated exactly the opposite.²⁰ Granted, some of this attitude stemmed from the belief that Lieutenant General Horner had given the CENTAF staff clear guidance on his priority of defensive planning. Nevertheless, Colonel Leonardo's response was not interpreted as "yes, if given the requisite resources and direction." Brigadier General Glosson interpreted Colonel Leonardo's response as "no, because we cannot as currently resourced and do not want to anyway."

The CENTAF intelligence directorate's failure to communicate intelligence to the Black Hole was captured in F-117 pilot Major Robert Eskridge's anecdote regarding the pull versus push CENTAF intelligence system. He explained, "[I]t would always seem to be a pull-system rather than a push. It was always [Brigadier] Gen[eral Glosson's] favorite quote...He would say 'What about this?' 'Oh, yes, sir, this happened yesterday or the day before' and you could see [Brigadier] Gen[eral Glosson] go—'Don't you think I would like to have known that?'"²¹

A specific example of this occurred when Brigadier General Glosson and Lieutenant Colonel Deptula received a report from the Pentagon detailing the Iraq integrated air defense system. They both found the report enlightening, as it described the system in detail and provided ideas of the best way to target it. After reading the

²⁰ Glosson, *War with Iraq*, 18, 25, 33–34; Olsen, *John Warden and the Renaissance of American Air Power*, 187–188; Putney, *Airpower Advantage*, 137–138.

²¹ Oral History Interview of Major Robert Eskridge, interview by Technical Sergeant Theodore J. Turner, typed transcript, March 1, 1991, 9, Call #K168.051-84, IRIS #1187411, Operation DESERT SHIELD/DESERT STORM Oral History Collection, AFHRA, Maxwell AFB AL.

report, Brigadier General Glosson questioned the CENTAF/IN representative to the Black Hole about the report and whether the lieutenant colonel knew about it, to which he answered in the affirmative. Incredulously, Brigadier General Glosson asked why the report had not been forwarded to the Black Hole by CENTAF/IN. The lieutenant colonel responded that the Black Hole had not requested it.²² Putney quotes Lieutenant Colonel Deptula complaining, “You had to ask for the right information. Ask for updates on the order of battle, chemical [weapons] capable airfields, Scuds, location of Republican Guards—all would go unfilled until the second or third requests.”²³

The Black Hole planners desired a push intelligence system—one designed to provide the right intelligence, to the right planner, at the right time. Increasingly, however, they believed the only way to get intelligence was to pull it out of CENTAF/IN, or better yet, bypass CENTAF/IN for more reliable sources.²⁴ Given the lack of enthusiasm and ineffectiveness, Brigadier General Glosson did not advocate up the chain of command for manning, systems, and resources to assist CENTAF intelligence fulfill their theater and air component intelligence roles. He sought out other support relationships instead.

The most successful relationships for the Black Hole were those established with an external organization and individual—Checkmate and Rear Admiral McConnell—for intelligence support. Both Checkmate and Rear Admiral McConnell satisfied intelligence requirements that the CENTAF intelligence officers were either unable or unwilling to fulfill. In the earliest days after Colonel Warden departed Riyadh, Checkmate provided intelligence support to Lieutenant Colonel Deptula and the other exiled planners. In the absence of CENTAF/IN support, Checkmate became the lifeline for planning until Brigadier General Glosson arrived and established additional external resources.²⁵ Similarly, Brigadier General Glosson understood the need to establish

²² Putney, *Airpower Advantage*, 165–166.

²³ Putney, *Airpower Advantage*, 166.

²⁴ James R. Clapper, Jr., “Desert War: Crucible for Intelligence Systems,” in *The First Information War: The Story of Communications, Computers, and Intelligence Systems in the Persian Gulf War*, ed. Alan D. Campen (Fairfax, Va: AFCEA International Press, 1992), 84; Edward C. Mann, *Thunder and Lightning: DESERT STORM and the Airpower Debates* (Maxwell Air Force Base: Air University Press, 2004), 153–156; Putney, *Airpower Advantage*, 165–166.

²⁵ Memorandum entitled “CENTAF/IN After Action Report and Lessons Learned, Attachment 3: INT - Targets” by Colonel Richard S. Rauschkolb, 25 March 1991, typed report, pg. O-6, Call #TF4-62-598, IRIS

external relationships with intelligence agencies and did so on a brief trip back to Washington before the war began. He later lavished praise on Rear Admiral McConnell saying, “[he was] invaluable: [Rear Admiral McConnell] *will never know how important he had been and will be to our overall success* (emphasis in original).”²⁶

Creating Workarounds and Sharing Intelligence

Of all of the issues that plagued CENTAF intelligence in its relations with the Black Hole, it was the Black Hole’s workaround in communicating with external intelligence entities that caused almost universal indignation. Intelligence officers complained in their after action reports that “[f]requently, there was direct communications from Washington, including a [Brigadier] Gen[eral] Glosson-[Rear] Adm[iral] McConnell connection.”²⁷ The regular follow-on line of argument expressed in this case by targeteer Lieutenant Colonel Talbot was that there was

no problem with intelligence being provided from Washington where there is an abundance of analysts and data bases galore and first rate communication. I do however, take exception with the manner in which it was provided to CENTAF. The intelligence should have been provided to CENTAF intelligence so it could be examined in light of intelligence gathered within the [area of responsibility] and judged in light of the current and expected situation in the Commander’s guidance. This was not the case. It completely bypassed CENTAF/IN...Parallel distribution of the information to both intelligence and Combat Plans would have been much preferable to having been caught by surprise all too often.²⁸

In general, CENTAF intelligence officers expressed frustration about not receiving the intelligence information flowing into the Black Hole from Checkmate or the JCS/J-2. They instead found out about new intelligence when the planners needed additional information for planning or targeting. The CENTAF intelligence officers understood they had few resources and poor communications to get better intelligence in theater.

#0872719, in the GWAPS Collection, AFHRA, Maxwell AFB AL; Oral History Interview of Capt John Glock by Maj Sandy Terry, Frank Kistler, and Dr. Mark Mandeles, 30 January 1992, typed transcript, pg. 58, Call #TF4-8-153, IRIS #0872552, in the GWAPS Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 144.

²⁶ Glosson, *War with Iraq*, 84.

²⁷ Memorandum entitled “Deputy Chief of Intelligence/Director of Combat Intelligence After Action Report” by Colonel Jeff Hage, 25 March 1991, typed report, pg. 1-2, Call #TF4-62-598, IRIS #0872719, in the GWAPS Collection, AFHRA, Maxwell AFB AL.

²⁸ Memorandum entitled “Dissemination of Intelligence from Washington Directly to the Combat Planning Function” by Lt Col F. L. Talbot, 25 March 1991, typed report, pg. 3-27-3-28, Call #TF4-62-598, IRIS #0872719, in the GWAPS Collection, AFHRA, Maxwell AFB AL.

They wished to be incorporated into the Washington intelligence distribution because they knew it would make them more effective for Lieutenant General Horner and the Black Hole planners.

After establishing alternate communication channels, however, the Black Hole had no need to work at their relationship with CENTAF intelligence. They had robust networks of organizations in Washington providing reliable intelligence in a timelier manner than in theater intelligence could. The lack of an effective relationship hurt CENTAF/IN more, since they were effectively cut out of the campaign planning and targeting process. Because there was no fusion or collaboration with the Black Hole, the planners failed to incorporate theater-based intelligence support requirements into the OPOD.²⁹ Pushing the system in this way may have actually helped improve the available theater resources. Instead, intelligence support requirements were not planned in advance as they should have been, leading to CENTAF/IN and the Black Hole to be unprepared once the war kicked off. Improvements began right before the war when intelligence officers began to repair their relationship with their Black Hole counterparts through developing mutual understanding via better communication.

The operations workarounds for intelligence data had another negative effect on CENTAF intelligence. Because the planners did not demand that the theater intelligence network work to provide the needed intelligence, albeit perhaps slower at least at first, CENTAF/IN never had the impetus to stress the system and fix it properly to respond. It became a vicious cycle. Without forcing the intelligence system to work, the more the planners went around it, the less responsive it was. In essence, the workarounds intended to ameliorate capability and resource deficiencies, actually killed the intelligence system CENTAF ultimately depended upon. Had intelligence representatives resided in the Black Hole spaces prior to December, intelligence personnel could have avoided some of the contributory problems caused by geographically-separated work spaces.

²⁹ "COMUSCENTAF Operations Order Offensive Campaign--Phase I," September 2, 1990, Call #K178.81-122, IRIS #1129249, AFHRA, Maxwell AFB AL; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 126; John Andreas Olsen, *Strategic Air Power in DESERT STORM* (London: Frank Cass, 2003), 135; Putney, *Airpower Advantage*, 144, 188; James A. Winnefeld, *A League of Airmen: U.S. Air Power in the Gulf War*, Project Air Force (Santa Monica, CA: Rand, 1994), 221.

Compartmentalization

Communication, as discussed in the prior section, is critically important, but far more difficult when geographically-separated. Another aspect to this is the issue of compartmentalization for security purposes. Both the IC and operations have mechanisms for keeping capabilities secret—most require separate facilities requiring additional clearances and read-ins for entry. Compartmentalization serves relevant security purposes, but during the Gulf War it also functioned to keep intelligence and operations planners physically separated from the very beginning of the planning effort.

Geography Matters

From the start, physical co- or dislocation of intelligence and operations planners provide various examples of the importance of spatial arrangements for effective communication. When Colonel Warden began planning within Checkmate, his team did not include intelligence Airmen to conduct the target system analysis and production required for planning. Once requested, the Assistant Chief of Staff for Intelligence, Major General Clapper dispatched his senior targeteer on the staff, Colonel Blackburn, to support the effort. Initially, Colonel Blackburn and his ten subordinates supported the Pentagon planning from their geographically-separated offices at Bolling Air Force Base. In the matter of a couple of days, however, Colonel Blackburn moved his targeting activities to the Pentagon and operated out of the Checkmate spaces.³⁰ By collocating the intelligence target development and operations planning enterprises, the intelligence Airmen were involved in the ongoing planning discussions. Intelligence and operations Airmen maintained regular and continuous communication throughout the planning process, enabling more effective collaboration. Understanding the air campaign's objectives, they could both anticipate as well as quickly react to the planning progression.

In contrast, once the INSTANT THUNDER plan transitioned from Washington to Riyadh, geographic separation hindered intelligence and operations communication and,

³⁰ James R. Blackburn, Jr., "What AF/INT Did during the War or Air Staff as a Warfighting HQ" (briefing slides, Washington D.C., 1991); Davis, *On Target*, 68; Keaney and Cohen, *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*, 122; Olsen, *Strategic Air Power in DESERT STORM*, 103; Oral History of Colonel Jim Blackburn, interview by Col Edward Mann, Lt Col Suzanne Gehri, and Lt Col Richard Reynolds, typed transcript, April 21, 1993, 25–30, Call #K239.0472-73 Copy 1, IRIS #0876239, Desert Story Collection, AFHRA, Maxwell AFB AL; Putney, *Airpower Advantage*, 47–50; Reynolds, *Heart of the Storm*, 32–33.

in turn, collaboration. With the planners in the JFACC's conference room and the targeteers in the tent SCIF, intelligence and operations Airmen lacked regular contact throughout each duty day.³¹ The distance between the conference room and the tent may have only amounted to a 15-minute walk, but the distance could not have been greater if the two workspaces were located on different continents. According to Major Sandy Terry, a B-52 liaison officer in the Black Hole, he "found very quickly on that first night that I was one of the few guys who ever walked out to the SCIF, one of the few operators. The intel[ligence] guys stayed out there, and the operators stayed in the building."³² The spatial barrier became insurmountable, negatively impacting intelligence-operations integration because it denied the intelligence and operations planners the regular and daily contact required to build effective relationships and mutual understanding. Continuous and consistent contact was especially important given the dynamic nature of the planning process in those early days.

This truism manifest itself in CENTAF/IN's inability to lead-turn intelligence support requirements. The intelligence officers did not sit alongside their operations counterparts and therefore did not have the necessary situational awareness on planning discussions and decisions. This was because of two distinct but related issues. First, the Black Hole's external intelligence conduits provided intelligence that was not shared with CENTAF/IN. Without those intelligence streams, CENTAF/IN was unaware and unprepared to support operations. Often intelligence officers learned about intelligence used to make decisions from planners when they requested clarification, target coordinates, or imagery.³³ Second, the Black Hole maintained its own target list without

³¹ Dr. Alexander S. Cochran, "EAC Modification, 10 January 1993--17:05--Finding #32: Operations and Intelligence," January 10, 1993, Call #K239.04.99, IRIS #0875100, GWAPS Collection, AFHRA, Maxwell AFB AL; Lt Col Holder and Captain Perrin, "Historical Overview on the Development of the Productions Division (CENTAF/INP)," March 25, 1991, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Commander Daniel J. Muir, "DESERT STORM: A View from the Black Hole," *Proceedings*, October 1991, 85; Oral History Interview of Captain John Glock, 10; Oral History Interview of Major Sandy Terry, 11; Putney, *Airpower Advantage*, 134; Lt Col F. L. Talbot, "Geographic Separation of Targets and Combat Plans," March 25, 1991, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

³² Oral History Interview of Major Sandy Terry, 10.

³³ Putney, *Airpower Advantage*, 285; Colonel Richard S. Rauschkolb, "CENTAF/IN After Action Report and Lessons Learned, Attachment 3: INT-Targets," March 25, 1991, O-6, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL; Lt Col F. L. Talbot, "Dissemination of Intelligence from Washington Directly to the Combat Planning Function," March 25, 1991, 3-27, Call #TF4-62-598, IRIS #0872719, GWAPS Collection, AFHRA, Maxwell AFB AL.

collaborating with CENTAF/IN. So when planners requested clarification, target coordinates, or imagery, they had likely not been privy to the original intelligence inputs.³⁴

The lack of communication on the target list or last-minute mission changes denied CENTAF/IN's ability to task supporting imagery collection—both in support of pre-strike planning as well as BDA. Especially in regard to BDA, results might be delayed by the ineffective communication because with a target change, the intelligence staff had to submit a new ISR collection request.³⁵ The intelligence directorate was constantly reactive rather than proactive, causing significant frustration in both intelligence and operations camps. Therefore, no matter how conscientious intelligence officers were in anticipating support requirements, they were still often caught flat-footed. This perpetuated the operations planners' view of the CENTAF intelligence staff as uninterested, ineffectual, and uncooperative.

For their part, Brigadier General Glosson and planners understood the importance of geography to effective communication—they wanted to maintain their close proximity to the JFACC. Brigadier General Glosson understood Lieutenant General Horner's early skepticism on the INSTANT THUNDER concept. Thus, Brigadier General Glosson likely calculated the need to maintain constant contact with the JFACC to both anticipate and react to changes in priorities and guidance.³⁶ In this way, the senior planner could best ensure a relevant and survivable offensive plan in the hostile CENTAF environment. In short, the planners traded collocation to their intelligence support for proximity to the JFACC.

The situation improved palpably in December 1990 when Captain Glock moved into the Black Hole planning spaces permanently. With this simple change, the consistent interaction increased the likelihood of regular and more effective communication. The move, however, was too little too late, according to Captain Glock.

³⁴ Oral History of Colonel Jim Blackburn, 47–49; Oral History Interview of Captain John Glock, 34.

³⁵ Clancy, *Every Man a Tiger*, 370–371; Davis, *On Target*, 228; Glosson, *War with Iraq*, 154–155; Oral History of Colonel Jim Blackburn, 47–49.

³⁶ Cochran, "EAC Modification, 10 January 1993--17:05--Finding #32: Operations and Intelligence"; Holder and Perrin, "Historical Overview on the Development of the Productions Division (CENTAF/INP)"; Muir, "DESERT STORM: A View from the Black Hole," 85; Oral History Interview of Captain John Glock, 10; Oral History Interview of Major Sandy Terry, 11; Putney, *Airpower Advantage*, 134; Talbot, "Geographic Separation of Targets and Combat Plans."

He believed the intelligence-operations dysfunction “was beyond fixing” by December.³⁷ If the targeteers and planners collocated sooner, they might have built the relationships and procedures needed to effectively work together.

Instead, the Black Hole planners had instituted a number of other mechanisms to “[do] everything on their own and just didn’t have a need for intel[ligence] in their mind...the approaches were just too different.”³⁸ Distance in and of itself between the two did not doom effective communication. Dislocation did, however, require greater effort from the parties in question to ensure adequate communication and both entities failed to do the necessary work. In the end, distance was contributory to communication failures, but could have been overcome if intelligence Airmen and operations planners had worked to create mutual understanding. Because they did not, the Black Hole turned to external organizations to fill the gaping void in intelligence support.

Green versus Blue Doors

Just as in other planning and execution activities, operations and intelligence security concerns were the primary reason for creating compartmentalized special access work spaces to plan Gulf War. At the first, Colonel Warden and his Checkmate planners had to operate on a need-to-know basis in their INSTANT THUNDER planning. There were concerns offensive air planning might be divulged, not only compromising the plan but also harming on-going diplomatic negotiations.³⁹ Similarly, intelligence activities were compartmented as well, common practice within the intelligence community and often referred to as the “Green Door.” SCI security clearances during the Gulf War were not widely given out to non-IC personnel due to the security sensitivities of collection sources and methods. As the plan developed, keeping the overall operations strategy compartmentalized behind a proverbial “Blue Door” also made sense initially.

By December, though, the planning became less secretive as war appeared more imminent. Nearly all intelligence Airmen had been read-in to the Black Hole SPECAT, but barriers remained in place between those within the Black Hole and everybody else.

³⁷ Oral History Interview of Captain John Glock, 59–60.

³⁸ Oral History Interview of Captain John Glock, 59–60.

³⁹ Clancy, *Every Man a Tiger*, 267–268; Davis, *On Target*, 86; Olsen, *John Warden and the Renaissance of American Air Power*, 128, 140–147; “An Oral History: The Commanders: Schwarzkopf,” *The Gulf War*, January 9, 1996, <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/schwarzkopf/1.html>; Putney, *Airpower Advantage*, 32–36, 137; Reynolds, *Heart of the Storm*, 15.

So, once the war kicked off, all of the SPECAT-driven separation from intelligence as well as the rest of the CENTAF staff should have ended but did not. With the greater workload created by combat operations, widening the individuals involved and gaining buy in for the executed strategy would have ensured fewer problems. Instead, with Lieutenant General Horner's blessing, Brigadier General Glosson wielded his powerful planning and commander roles to keep CENTAF staff members from derailing his overall strategy. If he had opened up and let others in, then he could have educated everyone on the execution strategy. As it was, Brigadier General Glosson did not trust the CENTAF staff and kept the vast majority of CENTAF and intelligence personnel in the dark.⁴⁰

Likewise, the vast majority of the operations planners were never read-in to the intelligence SCI compartment. With the distance between the JFACC's conference room and the tent SCIF, the inability to enter the SCIF unescorted added another barrier to operations planners interacting with the intelligence Airmen. Major Terry relayed, "If you didn't have a SCI, of course, you had to get escorted and all that, but with a SCI you're able to go in. Without a SCI, it would have made it difficult."⁴¹ Ultimately, the SCI restrictions coupled with the SPECAT restrictions kept intelligence and operations separated during the Gulf War, harming relations and interoperability between the two communities. This was especially true since neither community worked to remove the barriers and increase access.

Conclusion

The highly celebrated outcome of the Gulf War has appeared to some historians of the conflict to negate the importance of major process problems between intelligence and operations in planning and executing the war. This thesis identified the significance of command climate; the importance of effective communication; and the danger of compartmentalization as the major thematic categories in which the vast majority of intelligence-operations problems resided. As Colonel Jim Blackburn, the senior targeteer on the Air Staff, observed after the war, "Intel[ligence] is a function of command. If you

⁴⁰ Clancy, *Every Man a Tiger*, 313; Glosson, *War with Iraq*, 129–133, 211, 222; Thomas A. Keane and Eliot A. Cohen, eds., *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part II, Command and Control* (Washington, D.C: Department of the Air Force, 1993), 201.

⁴¹ Oral History Interview of Major Sandy Terry, 11.

want that intel[ligence] support there at the start, get them involved early; get the infrastructure in there to support it. That was not necessarily done so well in [the Gulf War].”⁴² Thus, in this light, the analysis identified the cascading effects of not establishing an integrated intelligence-operations effort at the start. The problems in each thematic category did not ruin the war’s outcome, but certainly affected the Air Force’s ability to seamlessly prosecute its air campaign. The following chapter concludes this thesis and offers thoughts on why studying and learning to improve process matters irrespective of outcome.



⁴² Oral History of Colonel Jim Blackburn, 161.

Chapter 6

Conclusion

We won! Most everything that follows, pales in the light of the fact that we did win. People can argue with the way it was done. I certainly did. But that does not alter the fact.

-Lieutenant Colonel F. L. Talbot, CENTAF Chief of Targets, 1991

Airpower proponents argue the Gulf War demonstrated the importance of modern technology for bringing the promises of the classical airpower theorists, like Giulio Douhet, and Billy Mitchell, to reality as never before possible.¹ In fact, others argued the Gulf War represented “a whole new era of warfare,” due these technological advancements that allowed precision strikes and information dominance.² Commentators like Rear Admiral James Winnefeld asserted, “Airpower has come of age and is an equal partner with the other forms of military power.”³ All of these champions of airpower extol the virtues of the technological capabilities of the Air Force and point to those capabilities as the determinant of success in the Gulf War.

Thus, the successful Gulf War outcome overshadows and validates the process used. While often identifying various problems, these accounts minimize the relative importance of the problems in process and interpersonal relations endemic in Air Force Gulf War planning and execution. This thesis intended to explore these problems and identify insights military leaders might gain to improve the key intelligence-operations dynamic that is the engine of planning and execution process. The Air Force achieved success in the Gulf War *in spite of* significant process deficiencies—deficiencies that in a different conflict, time, place, and context might result not in major success, but in overwhelming failure.

¹ Rick Atkinson, *Crusade: The Untold Story of the Persian Gulf War* (Boston: Houghton Mifflin, 1993), 269; Herman L. Gilster, “Desert Storm: War, Time, and Substitution Revisited,” *Airpower Journal*, Spring 1996, 10, <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj96/spr96/gilster.pdf>; Michael R. Gordon and General Bernard E. Trainor, *The General’s War: The Inside Story of the Conflict in the Gulf* (Boston: Little, Brown and Company, 1995), 473; Keith L. Shimko, *The Iraq Wars and America’s Military Revolution* (New York, NY: Cambridge University Press, 2010), 2–3.

² John Keegan, *The Iraq War* (New York: Alfred A. Knopf, 2004), 142.

³ Rear Admiral James A. Winnefeld, “Joint Air Warfare: Halfway There,” in *Air Power Confronts an Unstable World*, ed. Richard P. Hallion (London: Brassey’s, 1997), 152; Jonathan M. House, *Combined Arms: Warfare in the Twentieth Century* (Lawrence, KS: University Press of Kansas, 2001), 494.

Chapter one revealed the origins of intelligence-operations discord. Many of the later difficulties in creating a positive intelligence and operations planning relationship originated in the poor execution of this endeavor. There was insufficient communication between intelligence and operations planners, exacerbated by compartmentalization of the INSTANT THUNDER planning in the Pentagon. These problems, first revealed in Washington and later in Riyadh, had an inordinate influence on subsequent problems building a cogent intelligence-operations team. Lieutenant General Horner was unhappy about the planning conducted in Washington and transmitted that to his senior staff. This established the unhealthy command climate that ultimately plagued planning and execution.

In the second chapter, the thesis focused on the planning activities emerging from the INSTANT THUNDER briefing to Lieutenant General Horner. His contempt for INSTANT THUNDER was evident to all present and word quickly spread throughout the CENTAF staff. Nevertheless, the JFACC established a compartmented planning cell, the Black Hole, to refine the INSTANT THUNDER base plan into an offensive air campaign. Throughout the CENTAF planning prior to the Gulf War, an unhealthy command climate and inadequate communication combined with the compartmentalization of the plan resulted in the inability of intelligence and operations planners to create a seamless intelligence-operations planning team.

Finally, chapter three continued the story as CENTAF continued planning for impending conflict. Intelligence and operations planners operated in an environment punctuated by mutual doubt and malice. This unfavorable climate became the norm—leaders at all levels did little to improve the situation. Lieutenant General Horner, having realized the toxic situation, initiated organizational changes in an attempt to break down the barriers necessitated by the secrecy of early offensive planning. Organizational changes alone, however, could not undo the months of acrimony between intelligence and operations Airmen. As the Airmen kicked off the DESERT STORM strategic air campaign, the problems of command climate, communication, and compartmentalization endured and transitioned from planning to execution.

Identifying these process deficiencies is important due to the invariable aura of infallibility ascribed to the Gulf War air campaign due to a successful outcome attributed

to unprecedented airpower decisiveness. Airpower planning and employment was plagued by ineffective intelligence-operations integration, which hampered airpower coherence short of failure. Because intelligence-operations working relations were at best strained and at worst nonexistent, other factors such as enemy weakness and ineptitude; environmental conditions favorable to an air campaign; and overwhelming military force combined to render poor processes and relationships irrelevant in the successful outcome of the air campaign planning and execution.

Thus, the fantastic success enjoyed by the Air Force cannot simply be attributed to airpower alone. The fact remains that the US-led coalition enjoyed overwhelming forces against the Iraqi military, in what some may deem a “one-sided war.”⁴ The coalition developed an effective plan and executed the plan well against an enemy that some might deem incompetent because it did not fight back in the way anticipated prior to the outbreak of war.⁵ The behemoth Iraqi military machine, oft touted as “the world’s fourth largest army,” failed to engage, pointing to the “near-universal pre-Desert Storm overestimation of Iraq’s conventional military capabilities by American officials and other expert opinion.”⁶ Moreover, “the nature of the enemy, terrain, and weather in the Kuwaiti Theater of Operations was unusually favorable to the application of airpower.”⁷ Wars of the future may not present the US with such a favorable enemy, terrain, and weather match-up. Getting the processes, including effective intelligence and operations planning, right might matter more to a war’s outcome.

The US-led coalition enjoyed a long-lead in period. For over six months, American forces deployed into theater. Resources were unconstrained. They planned and exercised.⁸ If there was one advantage Iraq failed to capitalize on, it was the advantage of time. If Saddam Hussein had invaded Saudi Arabia in August before significant force was present, there was little the coalition could do in response.⁹ Iraq

⁴ Jeffrey Record, *Hollow Victory: A Contrary View of the Gulf War* (Washington, D.C.: Brassey’s (US), Inc., 1993), 6, 62, 78–82.

⁵ Record, *Hollow Victory*, 144.

⁶ Record, *Hollow Victory*, 57.

⁷ Record, *Hollow Victory*, 3–4.

⁸ Tom Clancy, *Every Man a Tiger* (New York: Putnam, 1999), 293.

⁹ Diane T. Putney, *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991* (Washington: Air Force History and Museums Program, 2004), 131–132; Record, *Hollow Victory*, 82–84.

enabled the coalition to deploy, refine, and prepare in ways that other adversaries in the future may not.¹⁰

Two other considerations of less concern during the Gulf War will be essential concerns in the future: precision weapons employment and collateral damage. First, the Gulf War continued the precision revolution from the Vietnam War, but did so on a scale previously unseen. The Gulf War demonstrated the “significant operational and political benefits” gleaned from their effective employment.¹¹ Second and closely tied to precision effects is the subject of collateral damage. Precision weapons employment enables the Air Force to minimize collateral damage and avoid the political backlash from civilian casualties. As Operations ENDURING FREEDOM and IRAQI FREEDOM have demonstrated, the Air Force will be expected to employ weapons ever-more precisely to achieve effects with less aircraft, fewer weapons, and zero collateral damage in wars to come. Precision effects and collateral damage mitigation require good intelligence. For this reason, coherent intelligence-operations integration will be that much more important in the future.

In future wars, the Air Force may not be able to overcome process problems through overwhelming force, favorable terrain and weather, and enemy incompetence as it did during the Gulf War. In personnel and resource constrained environments, the Air Force may not have the mass and depth necessary. Therefore, it is essential to get the process correct to make successful outcomes easier to attain. This includes ensuring healthy command climates, effective communication, and minimal compartmentalization to enable better intelligence-operations integration. Nevertheless, solely focusing on process without regard to outcome is a non-starter. The Air Force is charged with the defense and security of the nation in support of US national interests. This is an outcome that demands unquestioned success every time the Air Force is used—the process exists only to assure this outcome.

¹⁰ Record, *Hollow Victory*, 143.

¹¹ Record, *Hollow Victory*, 135.

Appendix A

Key Individuals

| | | |
|---------------------------------|--------------------------|--|
| Adams, Jimmie | Lieutenant General, USAF | Deputy Chief of Staff for Operations and Planning |
| Alexander, Robert Minter | Major General, USAF | Acting-Deputy Chief of Staff for Operations and Planning |
| Baptiste, Sam | Lieutenant Colonel, USAF | 9 AF Weapons and Tactics |
| Blackburn, James | Colonel, USAF | Air Staff senior targeteer |
| Bush, George H. W. | | President of the US |
| Caruana, Pat | Brigadier General, USAF | USCENTAF Strategic Forces Advisor; 17 AD(P) Commander |
| Chain, John | General, USAF | Commander, SAC |
| Cheney, Dick | | Secretary of Defense |
| Christon, Chris | Colonel, USAF | USCENTAF Director of Intelligence |
| Clapper, James | Major General, USAF | Assistant Chief of Staff for Intelligence |
| Corder, John | Major General, USAF | USCENTAF Director of Operations (after November 1990) |
| Crigger, Jim | Colonel, USAF | USCENTAF Director of Operations (until November 1990) |
| Deptula, David | Lieutenant Colonel, USAF | Black Hole planner |
| Eskridge, Robert | Major, USAF | Black Hole planner (F-117) |

| | | |
|-------------------------|--------------------------|--|
| Glock, John | Captain, USAF | USCENTAF targeteer |
| Glosson, Buster | Brigadier General, USAF | Black Hole Planning Chief; 14 AD (P) Commander |
| Hage, Jeff | Colonel, USAF | USCENTAF Deputy Chief of Intelligence |
| Harvey, Ben | Lieutenant Colonel, USAF | Black Hole planner |
| Henry, Larry | Brigadier General, USAF | USCENTAF electronic warfare expert / augmentee |
| Horner, Charles | Lieutenant General, USAF | Commander, USCENTAF and 9 AF |
| Hussein, Saddam | | President of Iraq |
| Hubbard, William | Colonel, USAF | USCENTAF Deputy Director of Intelligence |
| Jordan, Walter | Major, USAF | USCENTAF Executive Officer to the Director of Intelligence |
| Leonardo, John | Colonel, USAF | USCENTAF Director of Intelligence |
| Lewis, Rick | Lieutenant Colonel, USAF | Black Hole planner |
| Loh, John | General, USAF | USAF Vice Chief of Staff |
| McConnell, Mike | Rear Admiral, USN | JCS J-2 |
| Meier, James | Major General, USAF | JCS Deputy Director for Operations |
| Meyer, John | Lieutenant Colonel, USAF | USCENTAF Strategic Forces Director of Intelligence |
| Moore, Burt | Major General, USAF | USCENTCOM J-3 |

| | | |
|-------------------------------|--------------------------|--|
| Olsen, Tom | Major General, USAF | Deputy Commander, USCENTAF |
| Powell, Colin | General, US Army | Chairman, JCS |
| Rogers, Buck | General, USAF | Deputy Commander, USCENTCOM |
| Rogers, Buck | Major, USAF | Black Hole planner |
| Russ, Robert | General, USAF | Commander, TAC |
| Schwarzkopf, H. Norman | General, US Army | Commander, USCENTCOM |
| Stanfill, Ron | Lieutenant Colonel, USAF | Black Hole planner |
| Talbot, F. L. | Lieutenant Colonel, USAF | USCENTAF Chief of Targets |
| Terry, Sandy | Major, USAF | Black Hole planner (B-52) |
| Tolin, Tony | Colonel, USAF | Black Hole Deputy Chief |
| Warden, John | Colonel, USAF | Director, Checkmate |
| Wilson, Steve | Lieutenant Colonel, USAF | Air Staff officer and initial Black Hole planner |

Appendix B

Glossary of Terms and Acronyms

ADO: Assistant Director of Operations

AD(P): Air Division (Provisional)

ALD(P): Airlift Division (Provisional)

AFIA: Air Force Intelligence Agency

Aimpoint: “[a] point associated with a target and assigned for a specific weapon impact.”¹

ARCENT: Army Forces Central

ATO: air tasking order

BDA: bomb damage assessment

BE: basic encyclopedia

C2: command and control

CAP: combat air patrol

CENTAF: Central Command Air Forces

CJCS: Chairman of the Joint Chiefs of Staff

CINCCENT: Commander-in-chief, CENTCOM

CONOPS: concept of operations

DIA: Defense Intelligence Agency

DMAAC: Defense Mapping Agency Aerospace Center

DPI: Desired Point of Impact is “[a] precise point, associated with a target and assigned as the impact point for a single unitary weapon to create a desired effect” and is otherwise called an aim point.²

DO: Director of Operations

EOB: electronic order of battle

GAT: Guidance, Apportionment, and Targeting Cell

IC: Intelligence Community

IN: 1. Intelligence directorate; 2. The senior intelligence officer of an organization

¹ Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington D.C.: Department of Defense, 2010), 5, 73, 169, http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

² Joint Publication (JP) 1-02, *JP 1-02, Department of Defense Dictionary of Military and Associated Terms*, 5, 73, 169.

INO: intelligence operations branch

INT: target intelligence branch

ISR: intelligence, surveillance, and reconnaissance

JCS: Joint Chiefs of Staff

JFACC: Joint Forces Air Component Commander

JIC: Joint Intelligence Center

JMEM: Joint Munitions Effectiveness Manual

KTO: Kuwaiti Theater of Operations

Mensuration: “the process of measurement of a feature or location on the earth to determine an absolute latitude, longitude, and elevation.”³

MISREP: mission report

NBC: nuclear, biological, and chemical

NSC: National Security Council

OPLAN: Operations Plan

OPORD: Operations Order

PCPAD: planning and direction; collection; processing and exploitation; analysis and production; and dissemination in regard to ISR forces

PSYOPS: psychological operations

SAC: Strategic Air Command

SCI: sensitive compartmented information is classified information concerning or derived from intelligence sources, methods, or analytical processes, which is required to be handled within formal access control systems. During the Gulf War, these access control systems were established by the Director of Central Intelligence (DCI). In the post-9/11 security environment, the Director of National Intelligence (DNI) is responsible for establishing the formal access control systems.⁴

SCIF: sensitive compartmented information facility

³ Joint Publication (JP) 1-02, *JP 1-02, Department of Defense Dictionary of Military and Associated Terms*, 5, 73, 169.

⁴ “Director of Central Intelligence Directive (DCID) 6/1: Security Policy for Sensitive Compartmented Information and Security Policy Manual” (Central Intelligence Agency, November 4, 2003), http://www.ncix.gov/publications/policy/docs/DCID_6-1.pdf.

SPECAT: Special Category is a caveat that categorizes classified information, some of which have extra need-to-know restrictions or require special access authorizations. There are many such markings stamped or printed (caveats) on classified material, but most are only acronyms denoting special administrative handling procedures. Technically, SPECAT could refer to SCI information, but the term is typically used to denote specially-handled and protected operational data.⁵

SOF: special operations forces

SPG: Special Planning Group

STRATFOR: Strategic Forces

TAC: Tactical Air Command

TACC: Tactical Air Control Center

TEL: transporter erector launcher

USCENTCOM: United States Central Command



⁵ "Security Clearance Frequently Asked Questions," accessed May 11, 2014, http://www.clearancejobs.com/security_clearance_faq.pdf.

Bibliography

Academic Papers

Jackson, Abraham. "America's Airman: David Deptula and the Airpower Moment." Master's Thesis, Air University, 2011.

Articles

Muir, Commander Daniel J. "Desert Storm: A View from the Black Hole." *Proceedings*, October 1991, 85–86.

Books

- Atkinson, Rick. *Crusade: The Untold Story of the Persian Gulf War*. Boston: Houghton Mifflin, 1993.
- Biddle, Tami Davis. *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945*. Princeton, N.J.: Princeton University Press, 2002.
- Builder, Carl H. *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force*. New Brunswick, N.J.: Transaction, 2003.
- Clancy, Tom. *Every Man a Tiger*. New York: Putnam, 1999.
- Clapper, Jr., James R. "Desert War: Crucible for Intelligence Systems." In *The First Information War: The Story of Communications, Computers, and Intelligence Systems in the Persian Gulf War*, edited by Alan D. Campen, 81–85. Fairfax, Va: AFCEA International Press, 1992.
- Cohen, Roger. *In the Eye of the Storm: The Life of General H. Norman Schwarzkopf*. New York: Farrar, Straus, and Giroux, 1991.
- Davis, Richard G. *On Target: Organizing and Executing the Strategic Air Campaign Against Iraq*. Honolulu, Hawaii: University Press of the Pacific, 2005.
- Frostic, Fred L. *Air Campaign Against the Iraqi Army in the Kuwaiti Theater of Operations*. Santa Monica, CA: Rand, 1994.
- Glosson, Lt Gen (ret) Buster. *War with Iraq: Critical Lessons*. Charlotte, NC: Glosson Family Foundation, 2003.
- Goldfein, Colonel David L. *Sharing Success—Owning Failure: Preparing to Command in the Twenty-First Century Air Force*. Maxwell AFB, AL: Air University Press, 2001.
- Gordon, Michael R., and General Bernard E. Trainor. *The General's War: The Inside Story of the Conflict in the Gulf*. Boston: Little, Brown and Company, 1995.
- Hallion, Richard. *Storm Over Iraq: Air Power and the Gulf War*. Smithsonian History of Aviation Series. Washington: Smithsonian Institution Press, 1992.
- House, Jonathan M. *Combined Arms: Warfare in the Twentieth Century*. Lawrence, KS: University Press of Kansas, 2001.
- Keaney, Thomas A., and Eliot A. Cohen. *Revolution in Warfare? Air Power in the Persian Gulf*. Annapolis, Md: Naval Institute Press, 1995.
- Keegan, John. *The Iraq War*. New York: Alfred A. Knopf, 2004.
- Looney, General Bill. *Exceeding Expectations: Reflections on Leadership*. United States: Enso Books, 2012.

- Lorenz, General Stephen R. *Lorenz on Leadership: Lessons on Effectively Leading People, Teams, and Organizations*. Maxwell AFB, AL: Air University Press, 2012.
- Mann, Edward C. *Thunder and Lightning: Desert Storm and the Airpower Debates*. Maxwell AFB, AL: Air University Press, 2004.
- March, James G. *A Primer on Decision Making: How Decisions Happen*. New York: The Free Press, 1994.
- Meilinger, Colonel Phillip S. *10 Propositions Regarding Air Power*. Washington, D.C.: Air Force History and Museums Program, 1995.
- Mitchell, William. *Winged Defense: The Development and Possibilities of Modern Air Power, Economic and Military*. Mineola, N.Y: Dover Publications, 2006.
- O'Connell, Captain Edward P. "A Captain's Perspective on the Gulf War." In *From the Line in the Sand: Accounts of USAF Company Grade Officers in Support of Desert Shield/Desert Storm*, edited by Michael P. Vriesenga. Maxwell AFB, AL: Air University Press, 2002.
- Olsen, John Andreas. *John Warden and the Renaissance of American Air Power*. Washington, D.C: Potomac Books, 2007.
- . *Strategic Air Power in Desert Storm*. London: Frank Cass, 2003.
- Putney, Diane T. *Airpower Advantage: Planning the Gulf War Air Campaign, 1989-1991*. Washington: Air Force History and Museums Program, 2004.
- Record, Jeffrey. *Hollow Victory: A Contrary View of the Gulf War*. Washington, D.C.: Brassey's (US), Inc., 1993.
- Reynolds, Richard T. *Heart of the Storm: The Genesis of the Air Campaign against Iraq*. Maxwell AFB, AL: Air University Press, 1995.
- Schwarzkopf, H. Norman, and Peter Petre. *General H. Norman Schwarzkopf the Autobiography: It Doesn't Take a Hero*. New York: Bantam Books, 1992.
- Shimko, Keith L. *The Iraq Wars and America's Military Revolution*. New York, NY: Cambridge University Press, 2010.
- Smith, Lt Col Jeffrey F. *Commanding an Air Force Squadron in the Twenty-First Century*. Maxwell AFB, AL: Air University Press, 2003.
- Winnefeld, James A. *A League of Airmen: U.S. Air Power in the Gulf War*. Santa Monica, CA: Rand, 1994.
- Winnefeld, Rear Admiral James A. "Joint Air Warfare: Halfway There." In *Air Power Confronts an Unstable World*, edited by Richard P. Hallion. London: Brassey's, 1997.

Briefings

- Blackburn, Jr., Colonel James R. "What AF/INT Did during the War or Air Staff as a Warfighting HQ." Briefing slides, Call #K239.0472-33, IRIS #0876189, Desert Story Collection, AFHRA, Maxwell AFB, AL, 1991.

Electronic Publications

- "AF to Mandate Organizational, Command Climate on Evaluation, Feedback Forms." Air Force News Service. December 20, 2013.

- <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/467802/af-to-mandate-organizational-command-climate-on-evaluation-feedback-forms.aspx>.
- “Air Force Pamphlet 14-210 (AFPAM 14-210), USAF Target Intelligence Guide,” February 1, 1998. <http://www.fas.org/irp/doddir/usaf/afpam14-210/part06.htm>.
- “An Oral History: The Commanders: Horner.” *The Gulf War*, January 9, 1996. <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/horner/1.html>.
- “An Oral History: The Commanders: Schwarzkopf.” *The Gulf War*, January 9, 1996. <http://www.pbs.org/wgbh/pages/frontline/gulf/oral/schwarzkopf/1.html>.
- Collins, Joseph J. “Desert Storm and the Lessons of Learning.” *Parameters*, Autumn 1992, 83–95. <http://www.dtic.mil/dtic/tr/fulltext/u2/a529112.pdf>.
- Department of the Air Force. “White Paper: Air Force Performance in Desert Storm,” April 1991. <http://www.dtic.mil/dtic/tr/fulltext/u2/a235941.pdf>.
- “Director of Central Intelligence Directive (DCID) 6/1: Security Policy for Sensitive Compartmented Information and Security Policy Manual.” Central Intelligence Agency, November 4, 2003. http://www.ncix.gov/publications/policy/docs/DCID_6-1.pdf.
- Evans, David. “Air Force Assesses War’s Lessons: Success Shows Need to Support Programs, General Says.” *Chicago Tribune*, March 16, 1991. http://articles.chicagotribune.com/1991-03-16/news/9101240208_1_air-force-iraqi-air-stealth.
- Gilster, Herman L. “Desert Storm: War, Time, and Substitution Revisited.” *Airpower Journal*, Spring 1996. <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj96/spr96/gilster.pdf>.
- Gordon, Michael R. “U.S. Deploys Air and Sea Forces after Iraq Threatens 2 Neighbors.” *New York Times*, July 25, 1990. <http://search.proquest.com.aufric.idm.oclc.org/nationalnewsexpanded/docview/108518712/pageviewPDF/BC7E79D12D4F4B06PQ/211?accountid=4332>.
- Ibrahim, Youssef M. “Iraq Threatens Emirates and Kuwait on Oil Glut.” *New York Times*, July 18, 1990. <http://www.nytimes.com/1990/07/18/business/iraq-threatens-emirates-and-kuwait-on-oil-glut.html?action=click&module=Search®ion=searchResults%20&version=&url=http%3A%2F%2Fquery.nytimes.com%2Fsearch%2Fsitesearch%2F%23%2Fsaddam%2Bhussein%2Bthreatens%2Bkuwait%2F>.
- Joint Publication (JP) 1-02. *Department of Defense Dictionary of Military and Associated Terms*. Washington D.C.: Department of Defense, 2010. http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.
- Murphy, Caryle. “Iraq Accuses Kuwait of Plot To Steal Oil, Depress Prices; Charge Seen Part of Gulf Power Move by Saddam Hussein.” *The Washington Post*, July 19, 1990. <http://search.proquest.com/docview/307282541?accountid=4332>.
- . “Mubarak Tries to Ease Crisis in Gulf; U.S. Activates Fleet as Iraq Threatens.” *The Washington Post*, July 25, 1990. <http://aufric.idm.oclc.org/login?url=http://search.proquest.com/docview/307339470?accountid=4332>.
- Perry, William J. “Desert Storm and Deterrence.” *Foreign Affairs*, no. Fall 1991. Accessed March 1, 2014. <http://www.foreignaffairs.com/articles/47141/william-j-perry/desert-storm-and-deterrence>.

- Schwarzkopf, H. Norman. Interview with Gen. Schwarzkopf on Gulf War Aftermath. Interview by David Frost, March 27, 1991.
<http://usatoday30.usatoday.com/news/index/iraq/nirq053.htm>.
- “Security Clearance Frequently Asked Questions.” Accessed May 11, 2014.
http://www.clearancejobs.com/security_clearance_faq.pdf.
- “To the Brink of War.” *The Long Road to War*. PBS, January 15, 1991.
<http://www.pbs.org/wgbh/pages/frontline/shows/longroad/>.
- US House. *Intelligence Successes and Failures in Operations Desert Shield/Storm*. 103d Congress, 1st Session, August 16, 1993.
<http://www.dtic.mil/dtic/tr/fulltext/u2/a338886.pdf>.

Government Documents

- Department of Defense. *Conduct of the Persian Gulf Conflict: An Interim Report to Congress*. Washington, D.C.: U.S. Government Printing Office, 1991.
- Keaney, Thomas A., and Eliot A. Cohen. *Gulf War Air Power Survey: Summary Report*. Washington, D.C.: Department of the Air Force, 1993.
- , eds. *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part I, Planning*. Washington, D.C.: Department of the Air Force, 1993.
- , eds. *Gulf War Air Power Survey: Volume I, Planning and Command and Control: Part II, Command and Control*. Washington, D.C.: Department of the Air Force, 1993.

Memorandums

- “After Action Report-CENTAF/INP,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Christon, Colonel Christopher L. “Assessment of DESERT STORM Intelligence Operations,” 1991. Call #TF4-8-152, IRIS #0872551, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Clapper, Jr., Lt Gen James R. “Memorandum for the Secretary of the Air Force (Office for Security Review),” May 31, 1994. Call #K239.0472-119, IRIS #0876334, Desert Story Collection. AFHRA, Maxwell AFB, AL.
- Cochran, Dr. Alexander S. “EAC Modification, 10 January 1993--16:23--Finding #5: Bomb Damage Assessment,” January 10, 1993. Call #K239.04.99, IRIS #0875100, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “EAC Modification, 10 January 1993--17:05--Finding #32: Operations and Intelligence,” January 10, 1993. Call #K239.04.99, IRIS #0875100, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Cunningham, Lt Col Sarah L. “BDA,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “Desert Shield/Desert Storm Lessons Learned,” March 13, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “INO-Operations/Intelligence After Action Report,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.

- . “Training-CENTAF,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- “Desert Shield/Storm USCENTAF/STRATFOR After Action Report,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Hage, Colonel Jeff. “Deputy Chief of Intelligence/Director of Combat Intelligence After Action Report,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Harvey, Lt Col Ben. “Memorandum and Notes,” August 17, 1990. Call #CHP-7, IRIS #0871738. AFHRA, Maxwell AFB, AL.
- Holder, Lt Col and Captain Perrin. “Historical Overview on the Development of the Productions Division (CENTAF/INP),” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Rauschkolb, Colonel Richard S. “CENTAF/IN After Action Report and Lessons Learned, Attachment 3: INT-Targets,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Talbot, Lt Col F. L. “DIA Support to CENTAF Targets Division,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “Dissemination of Intelligence from Washington Directly to the Combat Planning Function,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “Geographic Separation of Targets and Combat Plans,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “Inadequate Targets Manning of 9 TIS to Support COMCENTAF,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “INO and INT Cooperation during Desert Shield/Desert Storm,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “Joint Intelligence Processing Center (JIPC) Support to CENTAF Targets,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- . “Local Area Network (LAN) Support to CENTAF Targets,” March 25, 1991. Call #TF4-62-598, IRIS #0872719, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- “Task Force V: Interim Report to the SECAF,” March 4, 1992. Call #TF5-2-64, IRIS #0872779, GWAPS Collection. AFHRA, Maxwell AFB, AL.

Messages

- “COMUSCENTAF Operations Order Offensive Campaign--Phase I,” September 2, 1990. Call #K178.81-122, IRIS #1129249. AFHRA, Maxwell AFB, AL.

Oral Histories

- Oral History Interview of Lt Gen Robert M. Alexander. Interview by Lt Col Suzanne Gehri, Lt Col Richard Reynolds, and Lt Col Edward Mann. Typed transcript,

- June 3, 1992. Call #K239.0472-70 Copy 1, IRIS #0876232, Desert Story Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Lt Gen Robert M. Alexander. Interview by Lt Col Suzanne Gehri and Lt Col Richard Reynolds. Typed transcript, June 3, 1992. Call #K239.0472-69 Copy 1, IRIS #0876230, Desert Story Collection. AFHRA, Maxwell AFB, AL.
- Oral History of Colonel Jim Blackburn. Interview by Col Edward Mann, Lt Col Suzanne Gehri, and Lt Col Richard Reynolds. Typed transcript, April 21, 1993. Call #K239.0472-73 Copy 1, IRIS #0876239, Desert Story Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Lt Col David Deptula. Typed transcript, November 1, 1990. Call #TF6-47-539, IRIS #0873094, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Lt Col David Deptula. Interview by Lt Col Edward Mann and Lt Col Richard Reynolds. Typed transcript, December 10, 1991. Call #K239.0472-83 COPY 1, IRIS #0876260, Desert Story Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Lt Col David Deptula. Typed transcript, June 1, 1992. Call #TF6-25-368 V.2, IRIS #0872937, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Major Robert Eskridge. Interview by Technical Sergeant Theodore J. Turner. Typed transcript, March 1, 1991. Call #K168.051-84, IRIS #1187411, Operation DESERT SHIELD/DESERT STORM Oral History Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Captain John Glock. Interview by Major Sandy Terry, Frank Kistler, and Dr. Mark Mandeles. Typed transcript, January 30, 1992. Call #TF4-8-153, IRIS #0872552, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Brigadier General Buster Glosson. Interview by Technical Sergeant Theodore J. Turner. Typed transcript, October 18, 1990. Call #MISC-122, IRIS #0875001, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Brigadier General Buster Glosson. Typed transcript, June 1, 1992. Call #TF6-25-368 V.2, IRIS #0872937, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Colonel George Souza. Interview by Mark Mandeles. Typed notes, December 31, 1991. Call #TF4-8-153, IRIS #0872552, GWAPS Collection. AFHRA, Maxwell AFB, AL.
- Oral History Interview of Major Sandy Terry. Typed transcript, April 4, 1992. Call #K168.051-89, IRIS #1187419, Operation DESERT SHIELD/DESERT STORM Oral History Collection. AFHRA, Maxwell AFB, AL.