

CONFLICTING GUIDANCE: ANALYZING THE ROLES AND
RESPONSIBILITIES OF THE AIR FORCE NUCLEAR COMMAND,
CONTROL, AND COMMUNICATIONS CENTER (AFNC3C)

BY

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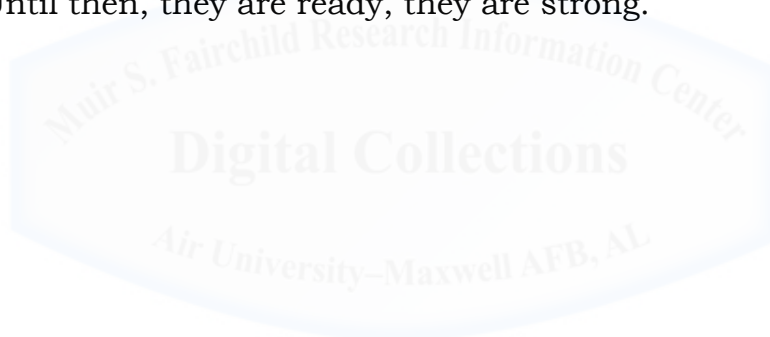
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Additionally, it is imperative to recognize the men and women of our nuclear forces for their hard work and dedication. For those who stand watch in underground capsules, in alert facilities awaiting the sound of the klaxon, or those who troll quietly in ocean depths unknown to both you and I, thank you. For it is the bravery and strength of these select few who stand watch, willing to act should the United States need them. Until then, they are ready, they are strong.



ABSTRACT

The Air Force Nuclear Command, Control, and Communications Center (AFNC3C) activated on 1 October 2016 as a provisional Primary Subordinate Unit (PSU) to Air Force Global Strike Command (AFGSC). Per the direction of Program Action Directive (PAD) 16-01, the AFNC3C was to have oversight and responsibility for the organize, train, and equip (OT&E) mission of AFNC3 and the NC3 Weapon System for the AF while serving under the authority of the AFGSC/A6 Director. However, on 3 April 2017, the AFNC3C stood up under a different organizational construct. The commander of AFGSC, General Robin Rand gave Command of the AFNC3C to Colonel Mark Jablow with the understanding that the AFNC3C would be the focal point for Air Force NC3. The idea was clear, but fully executing that order has been challenging. Examination of the guidance in PAD 16-01, AFGSC Capstone Concept of Operations (CONOPS), AFGSC Instruction 10-602, General Rand, and the AFNC3C, found that none of these agree as to who should own what AFNC3 roles and responsibilities within the command. One could assume it belongs to the AFNC3C; however, the guidance assessed in this study suggests that others do not share this assumption. Through a comparative analysis, the author provides a chronological description of the problem highlighting the divergence in guidance and how each divergence has manifested into confusion in roles and responsibilities within AFGSC and tensions between the AFGSC A-Staff and the AFNC3C. Supported by additional Air Force Instructions and personal interviews across AFGSC and the AFNC3C, the author shows that clearly written guidance matters. For without clearly written guidance, the mission could fail, and failure of the NC3 mission is not an option.

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CHAPTER 1

Introduction

On alert since 1962, US nuclear forces have been the leading narrative in why the world has yet to see another world war. In an open forum during his visit to Air Command and Staff College (ACSC) in 2017, Air Force Chief of Staff (CSAF) General David Goldfein claimed that “since the integration of nuclear weapons, no two nuclear countries have gone to war...we have not seen anything close.”¹ But the weapons themselves are only part of the equation. Today’s nuclear deterrent must provide the President options that mitigate risk across a range of adversaries and scenarios. In doing so, US nuclear forces must protect against cyber and space intrusions in modernizing and sustaining the infrastructure and the architecture that supports the command and control (C2) networks governing the authority and release of US nuclear weapons.²

To ensure a safe, secure, and effective nuclear deterrent, US nuclear forces rely on the Nuclear Command, Control, and Communication (NC3) system. Providing a survivable and resilient communications path between the President and his or her nuclear forces while in support of the National Leadership Command Capability (NLCC), the NC3 system ensures successful transmission of the President’s order to execute or terminate nuclear weapons operations. The NC3 system “includes interconnected elements composed of warning satellites and radars; communications satellites, aircraft, and ground

¹ General David L. Goldfein (lecture, Air Command and Staff College, Maxwell AFB, AL, 2 February 2017).

² Headquarters United States Air Force, *Flight Plan for the Air Force Nuclear Enterprise* (Washington, DC: Department of the Air Force, June 2013), 5-6.

stations; fixed and mobile command posts; and the control centers for nuclear systems” providing an integrated, flexible, secure, responsive, and enduring capability in a highly stressed nuclear environment.³

During peacetime and crisis, the NC3 system performs five crucial functions: detection, warning, and attack characterization; adaptive nuclear planning; decision-making conferencing; receiving Presidential orders; and enabling the management and direction of forces.⁴ While nuclear weapons are critical to US National Security, they provide no deterrent value without the NC3 system that ensures their execution via the President’s nuclear order transmitted to US nuclear forces.

According to the 2018 Nuclear Posture Review (NPR), the United States must have an NC3 system that provides control of U.S. nuclear forces always, even under the enormous stress of a nuclear attack. While once state-of-the-art, the NC3 system is now subject to challenges from both aging system components and new growing 21st century threats.⁵ For example, a 2010 communications failure that occurred at F.E. Warren AFB, WY began to reveal the weakened state of the NC3 system and put in motion an effort that will serve as the central theme of this paper.

Nine hours after the replacement of a weapon system processor circuit card, located inside a Launch Control Center (LCC) at F.E. Warren AFB, a series of system malfunctions occurred that briefly inhibited the communication between the Missile Combat Crews (MCCs) and their fielded missiles. Only minutes went by where connectivity was uncertain and within the hour, Launch Control Centers (LCCs) unaffected by the surge restored full command and control. “This event is when we realized

³ Department of Defense, *Nuclear Posture Review* (Washington, DC: Department of Defense, January 2018), xiii.

⁴ DoD, *NPR*, xiii.

⁵ DoD, *NPR*, xiii.

how big the [NC3] problem actually was,” said Lt Gen (Ret.) Kowalski, former Commander of Air Force Global Strike (AFGSC/CC). But it would take nearly five years for the Air Force to fully understand the size of the problem and begin to develop a plan to fix it. However, the LCC malfunction was only a symptom to a much larger problem that began nearly 25 years before.

At the end of the Cold War, Strategic Air Command (SAC) stood down and the missions of the nuclear enterprise scattered across the Air Force. As a result, the Air Force placed long-range bombers under the care of Air Combat Command (ACC) and ICBMs eventually under the watchful eye of Air Force Space Command (AFSPC). The reorganization of the Air Force was partially in response to a larger effort to “enhance the effectiveness of military operations and to improve the management and administration of the Department of Defense (DoD)” set in place by the Goldwater Nichols Act of 1986.⁶ The Air Force’s reorganization in the early 1990’s, while positive towards the overall communication and integration of the services across the DoD, led to changes that would have major implications for the nuclear enterprise in the coming decades.

In 1991, the Air Force completed a reorganization resulting in its re-designation of Air Force Communications Command (AFCC) as the Air Force Command, Control, and Communications Agency (AFC3A), which in 1996, the service transformed into the Air Force Communications Agency (AFCA). In operation for over 30 years, AFCC had spanned the globe in providing communications support to every MAJCOM, theater, and warfighter. AFCC had proven so capable that they began to take the lead of management and control of SAC communications systems critical

⁶ Goldwater-Nichols Department of Defense Reorganization Act of 1986, H.R. 3622, 99th Cong., (1 October 1986).

to the nuclear mission. Born out of the Army Airways Communication System (AACS) dating back to the 1940s, AFCC provided critical management, oversight, training, and procedural disciplines to the systems that enhanced US national security. The communications mission was so critical, that the Williams Report of 1960 identified having a single manager, or single command oversee its mission was priority:

The USAF was not organized to be immediately responsive to and compatible with the Defense Communications Agency/Defense Communications System. It was apparent that the Air Force needed to establish a central manager for its segments of the Defense Communications System. Command communications organizations operated closed networks in many configurations. In some cases, communications units were assigned to each echelon of command. In others, communications units were assigned to the higher headquarters as a complete group. These variations did not stem from unique conditions in the commands involved, but rather from personal preferences of those at command levels. If true systems management were to be applied, centralization of all communications networks should be the objective; thus, a single manager was essential.⁷

Following the reorganization of the Air Force in the early 1990s, the Air Force struggled to maintain management and oversight of NC3, finding themselves on the heels of an atrophied NC3 system. The AF had de-centralized the ownership of US nuclear forces and dispersed them by platform across multiple MAJCOMs within the AF. The NC3 systems attached to each platform followed, and what had once been of great importance to the United States seemed to take a back seat in priorities to war brewing in the Middle East. A decade of small conflicts would follow, setting the stage for a global war against Violent Extremist Organizations (VEOs), locking down the United States and other nations

⁷ Cora J. Holt and Linda G. Miller, *Air Force Communications Command Chronology, 1938-1988* (Scott AFB, IL: Air Force Communications Command), 56.

for nearly two decades of continued conflict. As such, nuclear programs suffered. Budgetary cuts and low prioritization would be the primary reasons behind the degradation of the Nuclear Enterprise (NE) and leading to the atrophy of NC3. But the communications failure at F.E. Warren AFB demanded change and in 2015, change began to occur.

It took five years following the F.E. Warren incident before the AF determined that NC3 needed to be a weapon system, led by a single command, with a single manager. The solution came in 2015 by way of the Nuclear Oversight Board and executed by the AF through Program Action Directive (PAD) 16-01, the *Centralized Management of the Nuclear Enterprise*, which made Air Force Global Strike Command (AFGSC) the Lead Command (LC) for NLCC/NC3. In addition, PAD 16-01 directed the stand-up of the Air Force NC3 Center (AFNC3C). The direction given would have worked had AFGSC decided to stick with the proposed organizational structure for the center; however, they chose otherwise. Instead of the having an AFGSC Director take dual hat authority over a functional part of the staff and the AFNC3C, AFGSC chose to make the AFNC3C a separate organization with its own commander and a support staff separate from the Global Strike Command Headquarters.

The decision to make the AFNC3C a stand-alone organization would not have mattered had AFGSC produced a credible document reflecting their divergence from PAD 16-01. Instead, AFGSC produced two more documents that were meant to provide more clarity to what PAD 16-01 had directed the command and the AFNC3C to do. Unfortunately, the AFGSC Capstone CONOPS and the AFGSC Instruction (AFGSCI)10-602, *HQs AFGSC Operational Capability Requirements Management*, introduced confusion and ambiguity concerning the roles and responsibilities tasked to the AFGSC A-Staff and the AFNC3C regarding NC3.

Through multiple on-site interviews and group sessions with branch, division, and directorate level leadership at AFGSC and at the

AFNC3C, a negative undertone presented itself, highlighting the tensions between the AFGSC A-Staff and the AFNC3C. Exacerbating the negativity between the staff and the Center was a corollary problem over guidance to both entities. While most interviewees referenced PAD 16-01 as the source for their organization's roles and responsibilities, there were competing ideas as to who was to be doing what. Some interviewees had either not read PAD 16-01, had taken PAD 16-01 out of context, or there were other factors at work.

The following chapters will examine the problem of conflicting and/or non-existent guidance that has created tensions between the AFGSC A-Staff and the AFNC3C regarding the NC3 roles and responsibilities given to AFGSC. Through a comparative analysis, this paper addresses both the AFGSC A-Staff and the AFNC3C's organizational structures and what each organization believes to be true about its assigned roles and responsibilities.

Chapter 2 examines the AFNC3C in its intended form as described by PAD 16-01 and Air Force Instruction (AFI) 38-101, while introducing the AFGSC Capstone CONOPS as a comparative document for issuing NC3 roles and responsibilities within the command. Internal guidance from PAD 16-01 begins to conflict early on, while the AFGSC Capstone CONOPS suggests supportive functions to the AFGSC A-Staff by the AFNC3C to which they are unauthorized to perform as a Primary Subordinate Unit (PSU) to AFGSC.

Next, Chapter 3 examines the AFNC3C in its current form as described by the guidance from the Commander of AFGSC, AFGSC Instruction 10-602, and an orientation brief received from the AFNC3C Staff; each providing new and conflicting guidance. As decided by the Commander of AFGSC, the AFNC3C became a stand-alone organization as opposed to a center embedded in the Headquarters of AFGSC. Following the commander's decision to make the AFNC3C a stand-alone center, the AFGSC staff published new guidance suggesting a different

structure. By analyzing each organization's roles and responsibilities through the lens of PAD 16-01, AFI 38-101, the AFGSC Capstone CONOPS, AFGSCI 10-602, and the AFNC3C orientation brief in Chapter 4, the ambiguity and uncertainty of what each organization should be doing will be evident to the reader. Further analysis should indicate to the reader the competition for billets going on today between both organizations as the search for clear roles and responsibilities continues. Finally, Chapter 5 concludes the study with a series of implications, recommendations, and future study options that could further this research and open the aperture of the AF to see if similar concerns are prevalent in units across the service.

Assumptions

Before continuing to Chapter I, it is important to highlight assumptions made by the author during this research. First, this paper is for leaders across the Air Force, particularly those within its nuclear community. The study assumes its readers are versed in nuclear operations and familiar with the challenges that have affected the nuclear community over the last decade. Second, the author assumed a "face value" approach in the conduct of the research of this paper. The approach led the author to adopt a "new officer sitting at his/her desk for the first time" and turning to the rules and regulations that govern the organization. This perspective led the author to search for authoritative primary source documents supplemented by interviews to discern differences in organization viewpoints on roles and responsibilities. Finally, this study assumes (and recognizes) the hard work and good intentions of the men and women of AFGSC and the AFNC3C. It is not the purpose of this research to judge or blame the people in the staff or the AFNC3C. This project's design is to provide an assessment of how the Air Force, AFGSC, and the AFNC3C determine what roles and responsibilities are theirs per the tasking of PAD 16-01 and other guidance documents. It is the authors hope that this study will provide

valuable feedback to the men and women leading both organizations to include those who are writing guidance and developing policy.



CHAPTER 2

Standing Up the AFNC3C

In August 2015, the Secretary of the Air Force (SecAF) and Chief of Staff of the Air Force (CSAF) designated Air Force Global Strike Command (AFGSC) as Lead Command (LC) for the NC3 weapon system.¹ To organizationally execute this new role, the Air Force's *Nuclear Integration Directorate* (Headquarters Air Force [HAF] A10) issued Program Action Directive (PAD) 16-01, *Centralized Management of the Nuclear Enterprise*, directing the activation of the Air Force NC3 Center (AFNC3C) as a Primary Subordinate Unit (PSU) to AFGSC. Established on the guidance of Air Force Instruction (AFI) 38-101, PAD 16-01 gives the AFNC3C responsibility for organizing, training, and equipping (OT&E) the NC3 Weapon System, to include oversight of OT&E for the AF NC3 enterprise. Through careful analysis, PAD 16-01 began to reveal divergences in the roles and responsibilities tasked to the AFNC3C and the AFGSC A-Staff. This chapter assesses these divergences and traces differences in implementation to include the AFGSC Capstone Concept of Operations (CONOPS). By analyzing and comparing the content of each document, diverging trends begin to surface that help to explain the heightened tensions and confusion amongst the AFGSC A-Staff and within the AFNC3C regarding the roles and responsibilities for NC3.

As a PSU, the AFNC3C follows the established guidance of AFI 38-101, the central instruction for AF *Manpower and Organization*, which provides explicit direction on what PSUs can and cannot do. Referenced often in this study, AFI 38-101 describes the objectives and principles of

¹PAD 16-01 defines a Lead Command as a MAJCOM, Field Operating Agency (FOA) or Direct Reporting Unit (DRU) that advocates for a system during the systems life cycle.

Air Force organizations. While prescribing various levels and standardized structures for organizations within the Air Force, this AFI outlines procedures for establishing and modifying organizations that are necessary in meeting the requirements set in place by PAD 16-01 and critical to the comparative analysis between the AFGSC A-Staff and the AFNC3C.² Considering the specific allowances of a PSU, PAD 16-01 issues strategic placement of the AFNC3C within AFGSC under the watchful eye of the *Communications Directorate*, AFGSC/A6.

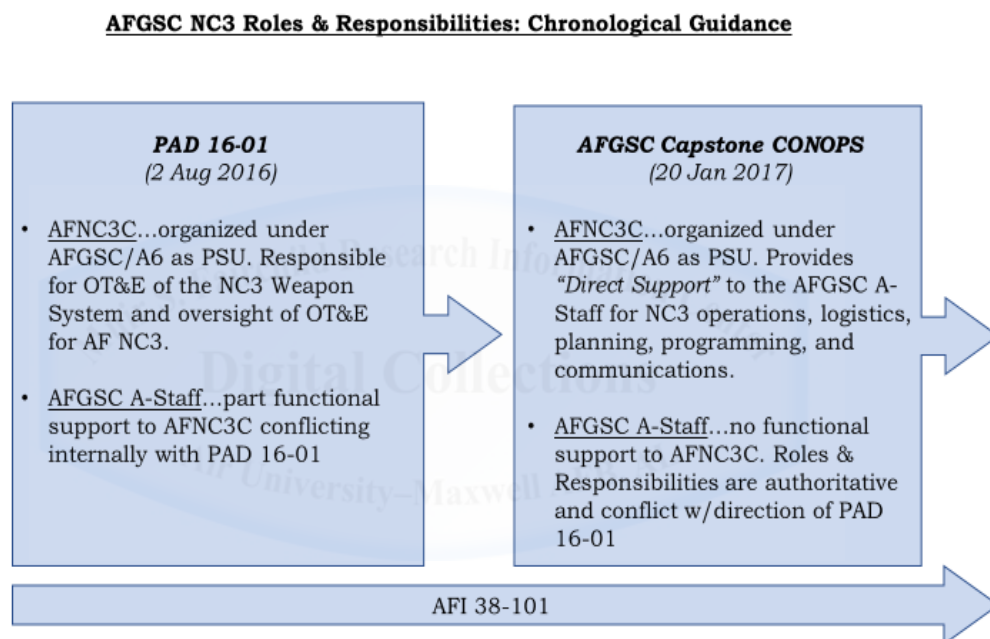


Figure 1: PAD 16-01 and AFGSC Capstone CONOPS Guidance

Source: Author's Original Work

As part of the activation of the AFNC3C, PAD 16-01 gives the Director of AFGSC/A6 full authority to execute the assigned OT&E mission on behalf of AFGSC. The command intended for the AFGSC/A6 to be dual hatted, where in one role the AFGSC/A6 would serve as both

² Air Force Instruction (AFI) 38-101, *Manpower and Organization*, 31 January 2017, 1.

Director of the A6 Staff and as Director of the AFNC3C.³ This clarification is important because having the AFGSC/A6 as the Director of the AFNC3C meets the intent of AFI 38-101, allowing the AFNC3C to report to the commander of AFGSC through an unbroken chain of command.⁴ Chapter 3 and 4 highlight this concept in greater detail and explain why it matters today. Before continuing, it is important to understand how PAD 16-01 initially structured the AFNC3C under the authority of the AFGSC/A6, so that later discussion can show how departure from this starting point led to tensions and confusion in the roles and responsibilities for NC3 within AFGSC.

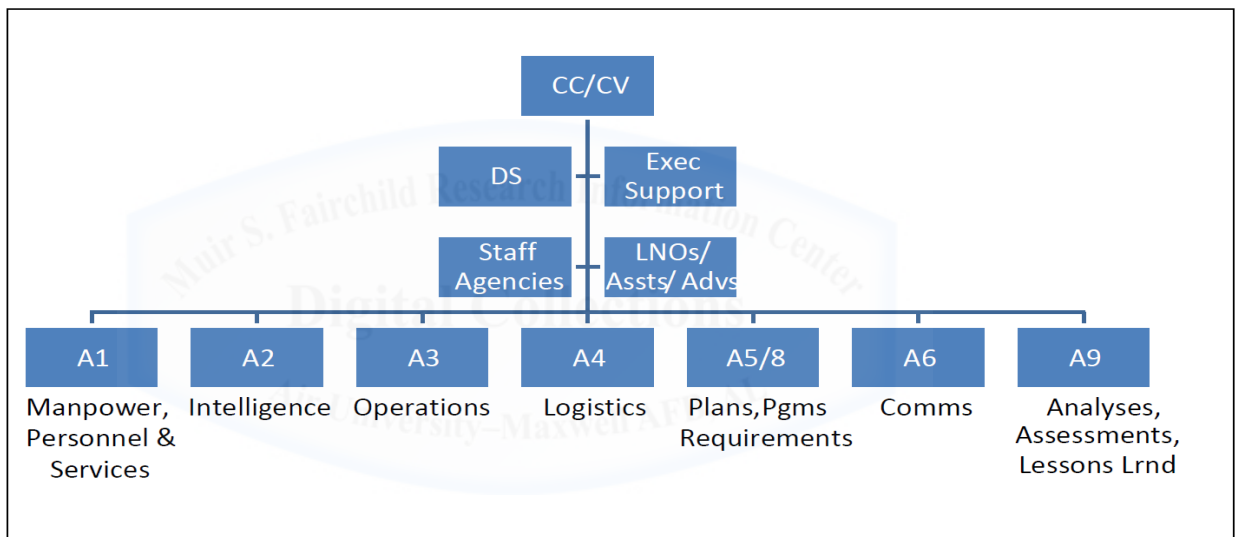


Figure 2: AFGSC Organizational Construct

Source: Major General Michael E. Fortney, Headquarters (HQ) Air Force Global Strike Command (AFGSC) Capstone Concept of Operations (CONOPS) (Barksdale AFB, LA: 20 January 2017), 6.

As a management headquarters with a functionally aligned staff structure, AFGSC was able to take the basic plan and functional staff annexes set in place by PAD 16-01 and build a construct into its existing

³ Program Action Directive (PAD) 16-01, Centralized Management of the Nuclear Enterprise, 2 August 2016, 28.

⁴ AFI 38-101, 12.

organizational structure displayed in Figure 2 above. Specific to the newly defined AF NLCC/NC3 mission, AFGSC began adopting the roles and responsibilities defined in PAD 16-01 to ensure adherence to Higher Headquarter (HQ) direction and implementation of the refocused NC3 mission. This new structure allowed the command to absorb new manpower and personnel into the NC3 Center per the guidance in PAD 16-01. The increase in manning was in part due to NC3 mission sets once owned and operated by Air Combat Command (ACC) and Air Force Space Command (AFSPC). The transfer of billets from other MAJCOMs allowed AFGSC to add additional billets for the AFNC3C, while re-proportioning other billets transferred from ACC and AFSPC throughout AFGSC, based on their specific task functionality. The transferred billets bolstered the command's capacity to support new requirements, allowing a shift in perspectives through the lens of a new weapon system.

AFGSC/A1, the Manpower and Personnel Directorate for AFGSC, was responsible for the activation of the AFNC3C and the management of manpower and personnel across the command. In addition, AFGSC/A1 serves as the primary point of contact for all force development actions resulting from PAD 16-01 to include compliance with all applicable Air Force standards and requirements. AFGSC/A1 synchronizes MAJCOM, FOA, and wing actions pertaining to the command's Force Development activities to include the transition of these functions and responsibilities from one command to the next, along with designated billets and personnel.⁵ This transfer of responsibilities into AFGSC required growth in the size and structure of the command's directorates including the increased responsibilities providing support and oversight for the realignment of AF NLCC/NC3 functions.

⁵ PAD 16-01, 18-19.

Specific to the responsibilities of AFGSC/A1 is the development of a Unit Manpower Document (UMD) for the modified AFGSC A-Staff to execute the expanded OT&E responsibilities associated with PAD 16-01, including the coding of NC3 authorizations on the UMD. The command developed a Programing Plan (PPLAN) to resolve functional alignment, discussed in detail in a later chapter.

Unfortunately, the coding of UMD billets created tensions within the command. AFGSC/A1's role was to "review and validate transferred authorizations to correctly identify nuclear-related billet coding, to include Key Nuclear Billets (KNBs), NC3 codes, and Nuclear Civilian coding."⁶ A key part of this tasking was coding NC3 billets to match the Unit Manning Document (UMD). However, this tasking required careful analysis of each billet coded for NC3 to ensure they had correctly matched Position Descriptions (PDs). PDs and UMDs give great insight into how an organization leverages its workforce for functions within the command. If not correctly managed, these administrative actions can cause confusion in the roles and responsibilities of a unit, negatively affecting the organization's mission. This paper addresses UMDs and PDs later in greater detail, but for now, one must turn to the roles and responsibilities tasked to AFGSC/A6 as the Lead Command Management (LCM) authority for NC3.

According to PAD 16-01, the AFGSC/A6 provided LCM for AFGSC assigned NC3 Systems and LCM oversight for NC3 Weapon System elements that remained with other MAJCOMs. The roles and responsibilities tasked to AFGSC/A6 included cyber-security oversight for all AF NC3 systems, Lead Command (LC) responsibility for enduring/survivable NC2 nodes, as well as coordinating with Joint Staff (JS), Navy, MAJCOMs, DISA, and other appropriate agencies to perform

⁶ PAD 16-01, 19.

its OT&E responsibilities. Executing these roles and missions, the AFGSC/A6 integrates its activities across agencies, combatant commands, and MAJCOMs providing the operational capabilities of AF NC3 systems.⁷ This tasking encompassed the functions of the AFNC3C and its requirement to provide for the OT&E of the NC3 weapon system and oversight of the AF NC3 enterprise. Through the AFGSC/A6, the AFNC3C had full authority and responsibility for NC3. Today, however, the organizational structures of the AFGSC A-Staff and the AFNC3C do not mirror this guidance. The NC3 roles and responsibilities within AFGSC began to diverge immediately following the publication of PAD 16-01 as the PAD tasked the *Directorate of Logistics, Engineering and Force Protection* (AFGSC/A4) with NC3 duties.⁸

PAD 16-01 gave the A4 logistics responsibilities in support of AFGSC-assigned NC3 systems. This support role is consistent with the AFI 38-101 guidance where AFGSC/A4 provides logistical support of AFGSC-assigned NC3 systems to AFGSC/A6 as the LCM for NC3. However, subsequent tasking in PAD 16-01 directs the A4 to exercise lead command and program management responsibilities for NC3 systems on AFGSC aircraft platforms and operational ground equipment, to include the role of lead command focal point for all logistics of AFGSC-assigned NC3 Systems.⁹ While these directed taskings seem logical, they bifurcated the OT&E roles and responsibilities tasked to the A6 and the AFNC3C.

As the LCM for NC3, the A6 should have unified lead command designation for AFGSC over NC3. This tasking would include logistic

⁷ PAD 16-01, 71.

⁸ AFGSCI 10-602 calls the AFGSC/A4 the *Logistics, Installations, and Mission Support Directorate*. The title given to AFGSC/A4 in this sentence was given by the AFGSC Capstone CONOPS published three months earlier by the AFGSC Staff. Both titles are given within documents published by AFGSC but do not agree with each other.

⁹ PAD 16-01, 53-54.

responsibilities for the NC3 Weapon System and overall oversight of the AF NC3 enterprise as previously tasked to the AFNC3C by PAD 16-01. The ‘equipping’ piece of OT&E implies logistics. Specific logistical tasks listed in PAD 16-01 include the facilitation of technical order (TO) validation and verification while developing policy for maintainer training, qualification, inspection, and exercise activities. Tasks also include providing independent supply chain sustainment analysis and assessment processes by refining, maintaining, and interpreting challenges for AFGSC-assigned NC3 systems.¹⁰ The bifurcation of these responsibilities led to confusion, followed by organizational tensions, or *dualing* as this paper will brand it, when multiple organizations carry out roles and responsibilities that are the same, or similar in nature. Where PAD 16-01 creates divergence in the roles and responsibilities tasked to the command, the AFGSC Capstone CONOPS widens the divergence from PAD 16-01 and AFI 38-101 in the guidance it attempts to provide for the command regarding NC3.

As an example, the Capstone CONOPs defines the AFNC3C as “the USAF's Center of Excellence for the NC3 weapon system providing support to National Senior Leaders for the execution of global nuclear forces,” by providing operational, logistical, planning, programming, and communications support to applicable MAJCOMs and “direct support” to the AFGSC A-Staff enabling the NC3 OT&E mission across the AF.¹¹ The “direct support” element of this definition does not comply with AFI 38-101 where it directs that a PSU cannot provide support functions for its parent headquarters.¹² In addition, the PAD does not include language directing a supporting role for the center. This divergence from organizational directives coupled with the bifurcation of roles and

¹⁰ PAD 16-01, 55.

¹¹ Fortney, 18-19.

¹² AFI 38-101, 12.

responsibilities between the A4 and A6 confuse rather than clarify the mission of the AFNC3C and its alignment within the AFGSC/A6.

In addition, the AFGSC Capstone CONOPS direction conflicts with the guidance in PAD 16-01. The CONOPS gave roles and responsibilities to two of the command's directorates, the A3 *Operations* and A5/8 *Plans, Programs, and Requirements* (AFGSC/A5/8) that directly conflict with duties tasked in PAD 16-01. For an example, the CONOPS tasked the A3 with responsibility for operations, training, exercises, testing and evaluation of all Air Force nuclear command and control (NC2) capabilities and to oversee NC3 training and quality assurance (QA) requirements.¹³ In addition, the CONOPS gave the A5/8 command lead and office of primary responsibility (OPR) for the NC3 Weapon System Team (WST).¹⁴ PAD 16-01 tasked the AFNC3C with these duties.

The taskings by AFGSC Capstone CONOPS to both AFGSC/A3 and AFGSC/A5/8 clearly diverge from the tasks directed by PAD 16-01. In fact, PAD 16-01 did not provide any specific direction for AFGSC/A5/8. Instead, PAD 16-01 directed HAF/A5 to resource properly the NC3 WST with personnel and expertise.¹⁵ Similarly, the PAD did not direct tasking to the A3 regarding NC3 training. Here, too, one sees the bifurcation of duties because of *dualing* guidance in the CONOPS and the PAD, where AFGSC has diverged from its compliance with AFI 38-101 and PAD 16-01.

Global Strike Command's Capstone CONOPS should be just that – a capstone document that should have integrated AF guidance; instead,

¹³ Fortney, 15-16.

¹⁴ The purpose of the NC3 WST is to synchronize the sustainment and modernization efforts of the AF NLCC/NC3 weapon system. The WST will achieve this through advocacy, policy, guidance, management, and oversight of the operational readiness and survivability of NLCC/NC3 systems. The NC3 WST is chaired by the AFGSC A6 and membership includes divisions from A1, A2, A3, A4, A5, A6, A8 A9 and SE (Fortney, 44).

¹⁵ PAD 16-01, 67.

it led to divergence in tasking. The AFGSC/A4 received lead command authority for logistics for NC3; it should have had a support relationship under the A6 as the AFNC3C director. Likewise, the command delegated operational and planning responsibilities to its A3 and A5 without establishing a supporting relationship to the AFNC3C within the A6. As a result, the command set in motion a divergence within its staff regarding the roles and responsibilities of the AFNC3C. Per AFI 38-101 and PAD 16-01, the AFNC3C should be the focal point for all NC3 issues AF wide.

The efforts by the AFNC3C and the AFGSC A-Staff have been tireless and worthy of great praise as both organizations work daily to better understand the complexity of NC3 and the weight bearing on the AF if done incorrectly. In Chapter 2, the author discussed the organizational construct of the AFGSC A-Staff and how the original design of the AFNC3C existed as part of AFGSC/A6. Highlighting the roles and responsibilities of each directorate, this chapter revealed the design and balance of today's AF MAJCOMs, specifically AFGSCs. However, the AFGSC Capstone CONOPS proves that people can interpret information differently and sometimes poorly. In Chapter 3, the study will focus on the AFNC3C and how its organization looks today. Building on the AFNC3C's organizational structure today based on the AFI, PAD, and CONOPS, Chapter 3 will incorporate three more sources of guidance and changes to the organizational structure of the AFNC3C that further the divergence in roles and responsibilities of NC3 within AFGSC.

CHAPTER 3

Modifying the AFNC3C

The stand-up of the AFNC3C on 3 April 2017 did not follow the guidance of PAD 16-01 and the AFGSC Capstone CONOPS. Instead, the center stood-up as a separate organization, removed from the AFGSC A-Staff and placed under the command authority of an Air Force colonel. While the reason behind making the center a separate organization is unclear, a representative from HAF/A1 confirmed that the Commander of AFGSC made the decision.¹

In addition, the day after the center stood up, Global Strike Command issued AFGSCI 10-602, which provides guidance to AFGSC A-Staff directorates on their operational roles and responsibilities for Air Force NC3. While it may have been the hope of AFGSC to clearly identify the roles and responsibilities for each organization, we shall see that the instruction did not clarify guidance, nor did it provide rationale explaining the standup of the AFNC3C as a stand-alone organization. Further, it did not explain the center's PSU relationship with Global Strike Command. Understanding the requirements placed on the AFNC3C as a PSU is important as these constraints are just the beginning of the challenges affecting the relationship between the AFGSC A-Staff and the AFNC3C.

As discussed in Chapter 2, a PSU performs part or all of the designated mission within the organization.² Global Strike Command could have stood up the AFNC3C as a stand-alone organization had the command made the center a direct reporting unit to the Commander of

¹ Interview with Staff Officer at Headquarters Air Force (HAF)/A1, 2 February 2018.

² Air Force Instruction (AFI) 38-101, *Manpower and Organization*, 31 January 2017, 12.

the major command – the parent organization.³ Today, however, the AFNC3C reports directly to the Vice Commander of AFGSC (AFGSC/CV) and not the commander.⁴ This reporting structure dilutes the center’s “full authority to execute its assigned mission” in a command structure that has its NAF commanders, A-Staff directors, and key support staff element directors reporting directly to the AFGSC/CC.⁵ While the AFNC3C Commander is not a director within the A-Staff under this construct, he or she must compete as an unequal rival with other directors for funding and resources in general and, specifically, in managing and oversight of the AFNC3 OT&E mission. This organizational structure is troublesome and has had negative impacts on the AFNC3C’s ability to execute its roles and responsibilities.

This chapter examines the changing guidance and expectations for the AFNC3C that have resulted from three inputs to the center’s understanding of its roles and responsibilities. First, there is guidance from the AFGSC/CC, General Robin Rand, which appears clear and definitive. Unfortunately, the day after the commander issued his guidance, the staff at Global Strike Command issued its instruction, AFGCSI 10-602, which served to add an additional layer of confusion to the NC3 roles and responsibilities within the command. Finally, the center provided an organizational brief that reflected what it thinks it should be doing with the NC3 roles and responsibilities for Global Strike Command and the Air Force. Summaries of the three inputs are below in Figure 3, to include summaries of the core documents and sources used in this study. Based on the inputs above and the summaries below,

³ AFI 38-101, 12.

⁴ Interview with Colonel Mark Jablow, (Commander of the Air Force NC3 Center), 5 January 2018.

⁵ AFI 38-101, 12; Major General Michael E. Fortney, *Headquarters (HQ) Air Force Global Strike Command (AFGSC) Capstone Concept of Operations (CONOPS)* (Barksdale AFB, LA: 20 January 2017), 10.

assessments have shown that the confusion and tension between the A-Staff and the center continues, leaving the Air Force without the single point of contact for NC3 originally envisioned months ago.

Source	Guidance
PAD 16-01 (2 Aug 2016)	AFNC3C under A6 authority w/responsibility for NC3 Weapon System OT&E and oversight for AF NC3 enterprise. Divergence of NC3 roles and responsibilities begins to develop between the A6 and the A4 per the PAD contradicting what the AFNC3C was tasked to do.
AFGSC Capstone CONOPS (20 January 2017)	Assigns NC3 responsibilities to the A3 in addition to suggesting the AFNC3C serve in a “direct support” role to the AFGSC A-Staff.
AFGSC/CC Guidance (3 April 2017)	Directed the stand up of the AFNC3C as an organization separate from the Headquarters staff, and commanded by an Air Force O-6. The center serves as the “focal point for NC3.” In addition, the AFGSC/A3 and A6 merged into a single directorate under one director.
AFGSCI 10-602 (4 April 2017)	Assigns NC3 responsibilities to the A3, A4, A5/8, and the A6, contradicting the initial guidance from the PAD and the guidance from the AFGSC/CC.
AFNC3C Orientation Brief (27 November 2017)	Lead “focal point for NC3” where the center is responsible for the OT&E mission of the NC3 Weapon System and oversight for the OT&E mission of the AF NC3 enterprise. In addition, the AFNC3C is working to satisfy all command guidance by establishing “direct support” functions to the Headquarters' A-Staff.

Figure 3: NC3 Source and Guidance Summary

Source: Author's Original Work

General Rand provided guidance to the command that clarified his intent to have the center serve as the single point of contact for Air Force NC3. On 3 April 2017, he communicated this intent with the official standup of the AFNC3 Center. Subsequently, he stated in an interview with a prominent defense publication that the AFNC3C was the “single point of contact” for NC3 while serving as lead “advocate for the modernization of the NC3 system.”⁶ The author confirmed this guidance in an interview with General Rand just days prior to the general’s interview with the periodical, *National Defense*.⁷ Unfortunately, what

⁶ “Exclusive: Interview with Gen. Robin Rand, Head of Air Force Global Strike Command,” *National Defense*, 14 November 2017.

⁷ Interview with General Robin Rand (Commander of Air Force Global Strike Command), 8 November 2017.

seemed clear and decisive at the MAJCOM commander level proved anything but at the staff and center levels.

AFGSCI 10-602, published on 4 April 2017, provides no mention either of organizational shifts within the command or that the Commander of Global Strike Command stood up an Air Force center as the focal point for service NC3. To clarify, AFGSCI 10-602 only establishes headquarter directorate responsibilities. The instruction, making no mention of the center, is a good thing in that it suggests the command has divorced itself from the center belonging to the A6. However, roles and responsibilities reflected in the instruction suggest otherwise.

Borrowed from the AFGSC Capstone CONOPS, Figure 4 below most accurately depicts the organizational structure portrayed within AFGSCI 10-602. What the figure cannot capture, and what is not clear per the instruction, is how the center fits into the structure. Per the direction of the PAD, the center belongs to the A6 director, but that changed per AFGSC/CC's guidance when he made the center a stand-alone organization. Additionally, the A3 and the A6 merged on 1 April 2017. Considering the 4 April 2017 date stamp, AFGSCI 10-602 was incorrect at publication. Other issues emerge considering the roles and responsibilities tasked to the center by the PAD, the CONOPS, and the commander. It is here the discussion departs from the organizational structure suggested by the instruction and begins disaggregating the bits and pieces of guidance within the instruction.

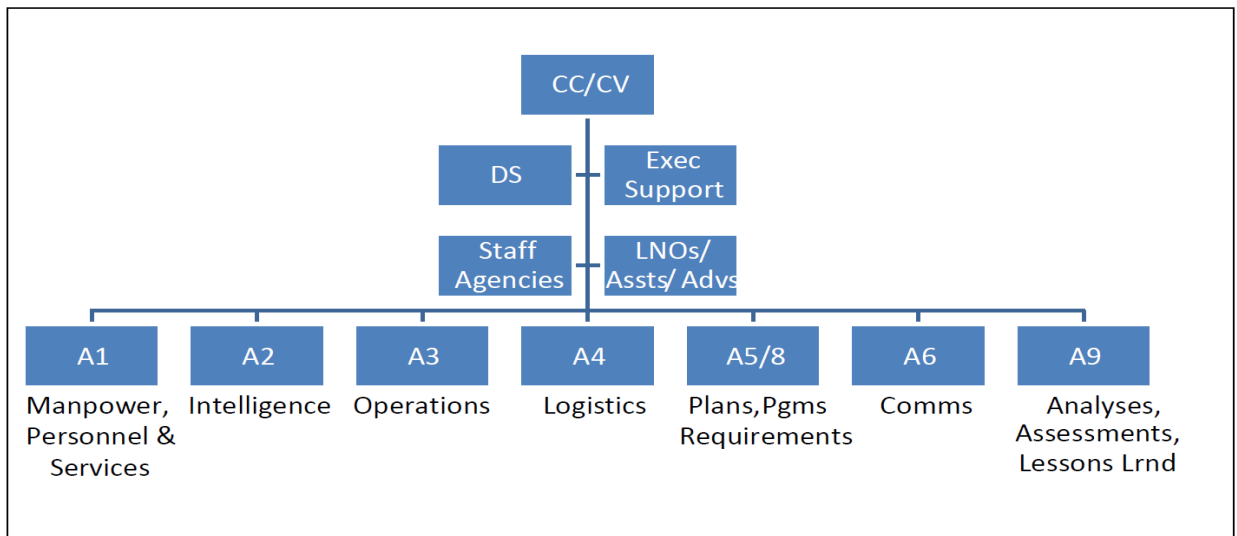


Figure 4: AFGSC Organizational Construct

Source: Major General Michael E. Fortney, Headquarters (HQ) Air Force Global Strike Command (AFGSC) Capstone Concept of Operations (CONOPS) (Barksdale AFB, LA: 20 January 2017), 6.

AFGSCI 10-602 divides NC3 roles and responsibilities between the command's A-Staff directorates that both conflict and support the guidance given by the PAD. As an example, the PAD distributes NC3 initiatives only to the A4 and A6, while the instruction places NC3 roles and responsibilities within the A3, A4, A5/8, and the A6. While this is within the authority of the command to do, these taskings provided by the instruction do not support the guidance from the PAD, which gave the center the responsibility for OT&E of the NC3 Weapon System and oversight responsibility for the OT&E mission for the Air Force NC3 Enterprise.

The responsibilities provided by AFGSCI 10-602 closely align with the responsibilities provided by the CONOPS, both differing from the instruction within the PAD. There are slight nuances and a few unknowns, though it appears as if the instruction and the CONOPS are largely in agreement. As an example, the AFGSCI 10-602 assigns to the A3 the lead role in developing, documenting, and issuing tactics for the command's NC3 weapons system. The instruction directs the A3 to

provide the CONOPS for any weapon system for which AFGSC serves as the Lead Command. This direction includes the responsibilities to coordinate across directorates for manpower to operate and maintain the [NC3] weapon system and to assist the A6 with configuration management and configuration oversight.⁸

The instruction complements the CONOPS in assigning NC3 roles and responsibilities. For example, while the CONOPS does not share in the same specificity of the instruction, it does indicate that the A3 is responsible for operations, training, exercise, testing and evaluation of *all* Air Force nuclear command and control capabilities.⁹ This guidance, enhanced under the instruction, is at odds with the direction of the PAD, which assigned many of these responsibilities to the A6 and the NC3 center that the PAD envisioned within the A6. However, the PAD's guidance authority shifts once the commander provides new direction with the stand-up of the center making it the focal point for Air Force NC3. The instruction, however, fails to comply with commander guidance.

Like the guidance in the PAD, the Commander of Global Strike Command sought to make the AFNC3C the focal point for AFNC3 management and oversight; however, the instruction significantly diverges from his guidance.¹⁰ For example, AFGSCI 10-602 makes the A4 *the focal point* for the overall corrosion control and prevention programs for AFNC3. The instruction specifically allots this logistics and installation support function to the A4, conflicting with the guidance in the PAD, which gives responsibility to the center for OT&E of NC3. In addition, this duty assignment by the instruction deepens the gap

⁸ Air Force Global Strike Command Instruction (AFGSCI) 10-602. *Operations: HQ AFGSC Operational Capability Requirements Management*, 4 April 2017, 5.

⁹ Fortney, 15.

¹⁰ AFGSCI 10-602, 6.

between the commander's intent and what the A-Staff believes to be its NC3 roles and responsibilities. In essence, the functions established by AFGSCI 10-602 run counter to an Air Force directive as well as the MAJCOM commander's guidance and intent. The divergence and dilution of NC3 roles and responsibilities across the A-Staff has been counterproductive and troublesome. This divergence in duties has created challenges when working to coordinate throughout the command and the Air Force. The guidance in the instruction makes it difficult to solve NC3 issues because it perpetuates a structure that does not consolidate NC3 management and oversight within a single Air Force focal point. Even the physical location of these activities adds to the NC3 challenge as the command has spread its A-Staff within several different buildings. The goal of creating a single AFNC3 focal point continues to be an elusive one.

The AFGSCI 10-602 struggles to provide any positive traction in the resolution of the bifurcation of NC3 roles and responsibilities across the command. Gradually the command lost focus of the directives within the PAD and failed to adjust to meet the Commander's guidance. Although instruction intended to provide clarity regarding the roles and responsibilities for NC3, the local guidance fell short. This bifurcation of duties forces the center to balance between the AFGSC commander's intent and compliance with local instructions. To best understand this divergence in guidance across the command, it is necessary to understand the roles and responsibilities the AFNC3C believes it "owns" within Global Strike Command.

To achieve successfully its new roles and responsibilities, the AFNC3C established a "mini-MAJCOM" structure consisting of five main divisions: Governance and Training (NG), Communications (NC), Logistics (NL), Operations (NO), and Plans and Programs (NP). In addition to the five main divisions, the center established a Director of Staff Division (DS) to support the center and the Commander with personnel

and administration management. Figure 5 illustrates the organizational structure of the center. The center's mission within this division structure seeks to ensure national leadership has a survivable, secure, and resilient communications paths for issuing nuclear orders to the warfighter.

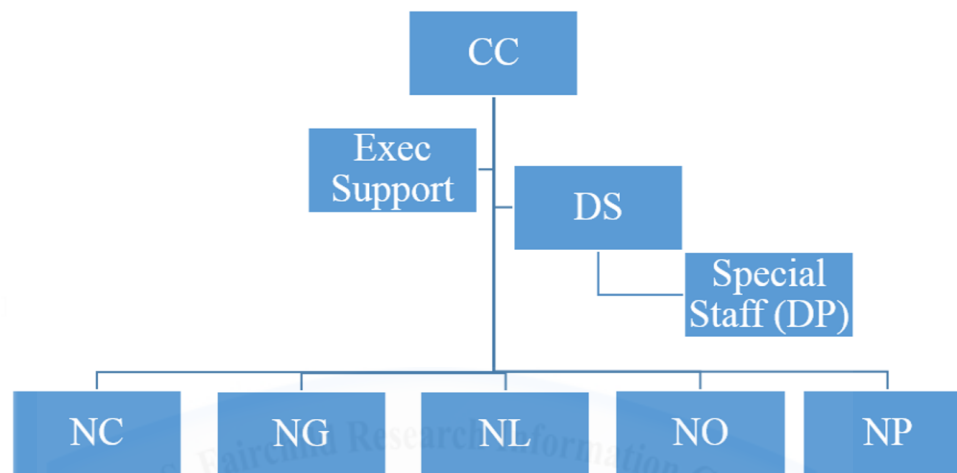


Figure 5: AFNC3C Organizational Structure

Source: Air Force Global Strike Command Instruction (AFGSCI) 13-501. Nuclear, Space, Missile, Command and Control, [unpublished draft], 4.

There are, however, some flaws in the center's configuration. As stated previously, the center design violates Air Force Instruction compliance directive which forbids "direct support" functions from a PSU to the MAJCOM. However, the Global Strike Command Instruction and the AFNC3C Orientation Brief establish "direct support" relationships. From our earlier discussion, the reader should recall that the term "direct support" stands for a "codified relationship requiring an organization to support another specific organization, authorizing the supporting organization to answer directly to the supported organization's request for assistance."¹¹ The center's Orientation Brief,

¹¹ Program Action Directive (PAD) 16-01, Centralized Management of the Nuclear Enterprise, 2 August 2016, 120.

unfortunately, continues many of the “direct support” relationships found in the AFGSCI 10-602.

For example, the AFNC3C Orientation Brief says AFNC3C/NO is in direct support to AFGSC/A3 for NC3 training and readiness along with C4 and cyber operations.¹² In reality, the A3 should be in direct support of the center for the NC3 elements and serve as in a coordinating role for the C4 and cyber operations activities. In addition, the brief says AFNC3C/NC provides direct support to the AFGSC Nuclear Chief Architect (AFGSC A3/6) with expertise, technical support, configuration oversight, and even chairs, on behalf of the AFGSC/A3/6 the AFGSC/NDO Architect Review Board.¹³ To support directive (the PAD) and guidance (AFGSC/CC), the A3/6 would provide direct support to the center, which would have the role of Nuclear Chief Architect for NC3 activities, and the Staff would serve as the backup chair on behalf of the center, if required. These examples illustrate how far the command has diverged from the original PAD directives and from the commander’s guidance and intent of 3 April 2017. While misinterpretations of regulations are understandable, the A-Staff and the center are well off the compliance mark when the goal is to produce a focal point for Air Force NC3 roles and responsibilities. If we look at other descriptions regarding each division’s roles and responsibilities as briefed to the author in November 2017, we find additional divergence and perception problems emanating from the Orientation Brief.

As detailed in its Orientation Brief, the AFNC3C/NC is to serve as the *Communications Division* within the center. As such, it is tasked to provide LCM of assigned AF NC3 systems by supporting and ensuring it

¹² Air Force Nuclear Command, Control, and Communications (AFNC3C), *Orientation Brief*, 28 November 2017, 109.

¹³ AFNC3C, 83.

successfully manages NC3 system requirements, lifecycle planning, sustainment and resource management.¹⁴ Through its three branches, the brief tasks the AFNC3C/NC with providing continued NC3 Weapon System configuration management and quality assurance in order to provide the POTUS, SECDEF, CJCS, and other senior leaders a viable communications network for C2 across the spectrum of conflict.¹⁵ In addition, the brief sets the expectation that the AFNC3C/NC will author the AF NC3 Roadmap and strategic vision that supports NC3 Weapon System program initiatives to include the system's end-to-end engineering and validation.¹⁶

In analyzing the PAD 16-01 and the AFGSC Capstone CONOPS, LCM of NC3 is not a role tasked to the center. In fact, according to these two documents the role of LCM still belongs to AFGSC/A6. However, the A6 no longer exists as an independent directorate, having merged with the A3 in the spring of 2017.¹⁷ If only the PAD and the CONOPS directed the command's activities, then merging these two directorates would place the roles and responsibilities formerly assigned to the AFGSC/A6 under the authority of the AFGSC/A3/6. However, the direction of the AFGSC/CC to make the center the single focal point for NC3 should have clarified this issue across the A-Staff and the center.

In the command's A4, similar divergences exist. Coincident to the PAD's tasking of A4 per the PAD, AFNC3C/NL provides logistical support and expertise for weapons system maintenance, sustainment, and supply for NC3 systems aboard AFGSC proportioned aircraft, including the ICBM force and the Mobile Command and Control Centers (MCCC).

¹⁴ AFNC3C, 59.

¹⁵ AFNC3C, 71.

¹⁶ AFNC3C, 68 & 77.

¹⁷ Coincidentally, the former AFGSC/A6 director retired on 1 April 2017 just as the A3 / A6 merger occurred at Global Strike Command.

The NL division also advises senior staff on logistics sustainment and modernization issues impacting NC3 systems. It accomplishes these activities in partnership with HAF/A4L and other outside organizations by communicating accurate demands, prioritizations, and forecasts to ensure maximization of parts and equipment availability.¹⁸ In addition, but not limited to, the NL's specific roles and responsibilities include oversight for modification programs, configuration management, technical orders (tech orders), and more.¹⁹

This shared tasking, however, only adds to the divergence and confusion regarding NC3 efforts. During the author's second visit to the AFNC3C in January 2018, the center briefed that several challenge areas exist. One challenge area is the management of tech order for the NC3 Weapon System. The A4 *was* responsible for managing and maintaining T.O.s for NC3 systems prior to the command establishing NC3 as a Weapon System and the AFGSC/CC standing up the AFNC3C as an independent command. What remains problematic is the fact that on one hand, the PAD, CONOPS, and AFGSCI reflect the tasking of these NC3 roles and responsibilities to the AFGSC A-Staff. On the other hand, the Commander of Global Strike Command directed that the center serve as the Air Force focal point for all NC3 issues, which we see reflected in the center's Orientation Brief. Again, we see confusion between the A-Staff and the center as each entity believes it has responsibility for this aspect of the NC3 mission. In essence, both the HAF and AFGSC staffs have not adjusted published implementation guidance for the NC3 enterprise to meet the intent of the AFGSC/CC. Where roles and responsibilities may seem unclear, one example exists as promising evidence of support to the governance role of the AFNC3C.

¹⁸ AFNC3C, 87 & 100.

¹⁹ AFNC3C, 91.

AFNC3C/NG is the *Governance and Training Division* responsible for the 4-star Oversight Council and the NC3 Weapon System Team (WST).²⁰ The governance structure provides senior-level executive oversight, strategic direction, and advocacy with a framework to govern, track requirements, resources, and decision-making processes for senior leaders at the DoD, AF, and MAJCOM levels. The NG's role of governance provides the mode for continued guidance, integration, and advocacy for an enterprise-wide leadership and engagement strategy focused on strengthening critical NC3 requirements and modernizing infrastructure.²¹ Additional functional areas include NC3 training and analysis, NC3 Plans and Programs, NC3 Cyber Surety, and the NC3 MAJCOM Communications and Coordination Center.²²

Unlike other AFNC3C divisions, AFNC3C/NG is unique to the AFNC3C and AFGSC in terms of the function it provides. One of the greatest challenges with NC3 was the absence of a sound mechanism to communicate concerns up and down the Air Force chain of command. Both the command and the center praised the management provided by AFNC3C/NG in its execution of governance roles and responsibilities for Air Force NC3 tasks like those identified in the previous paragraph.²³ This praise is telling, considering the AFNC3C/NG division is the only division within the center that does not share a similar function to a pre-existing directorate task. Hence, no tension between the two organizations on governance and the role it plays within AFGSC.

Outside of the NG division, the center faces significant challenges as it attempts to balance meeting commander's intent and satisfying the

²⁰ AFNC3C, 29.

²¹ AFNC3C, 33.

²² AFNC3C, 29.

²³ The author confirmed the tasks and praise for this division from both the A-Staff and other center entities through interviews conducted at Barksdale AFB, LA in spring 2018.

requirements established by local guidance. The center staff believes they have a role in “direct support” to the A-Staff because local guidance directs this function. At the same time, the center is attempting to establish itself per the direction of the AFGSC/CC, while navigating command staff developed requirements. The resulting confusion in roles and responsibilities manifests at times as road blocks, at other times one sees the center and A-Staff at cross purposes and, in most cases, divergence and confusion over tasking and activities.

The following vignette gives insight into the challenges facing the center when it is not, in practice, the focal point for NC3, nor an equal as part of the AFGSC staff structure. In this case, a simple thing like placing an item on a meeting agenda is indicative of the challenges the current staff structure at AFGSC produces day-to-day. The Commander of Global Strike Command is the approving official for the NC3 Oversight Council and its agenda. However, anyone who wishes to place an item on this agenda must contact the AFGSC A-Staff for approval and scheduling.²⁴ From a management perspective, this requirement appears to be an unnecessary task for the A-Staff and a potential “roadblock” for the center. If the center is in fact responsible for the OT&E of the NC3 Weapon System and has oversight of NC3 enterprise for the AF, then it should be able to place an issue onto the agenda for the NC3 Oversight Council. In fact, one could argue that the center should have “ownership” of the Council’s agenda and activities. If a task this small requires AFGSC A-Staff approval, what additional authorities does the A-Staff have that should be the responsibility of the center? In fact, additional concerns exist in situations where the AFNC3C seems to have little or no authority to accomplish its tasked roles and responsibilities.

²⁴ AFNC3C, 37.

The AFNC3C/CC is an AF O-6 operating in an environment where rank matters. “I guarantee I would be graded on a pretty strong scale if the CJCS, CSAF, or General Rand were to find out that a NC3 system, or the modernization of a NC3 system, was either not on track, or failing,”²⁵ said Col Mark Jablow, the center commander. But others within the command do not share this same sentiment, adding to tasking misperceptions. As an example, the AFGSC/CC called an AFGSC A-Staff directors meeting this past spring. Considering the AFNC3C’s mission, the Staff should have included the center commander in the meeting. However, a senior leader on the AFGSC A-Staff directed the AFNC3C/CC not to attend as the agenda listed the meeting as a Director’s only meeting. Twice during the meeting, the AFGSC/CC asked why the AFNC3C/CC was not in attendance clearly indicating that he thought the center commander should be present at the meeting. No one responded, to include the senior leader who had directed the AFNC3C/CC not to attend.²⁶ This example is indicative of the tensions that exist between the A-Staff and the center. New organizations require new ways of thinking and new ways of doing things, including the requirement to adopt new guidance for implementation.

The AFNC3C is not accomplishing the full range of tasking to support the NC3 enterprise mission for Global Strike Command and the Air Force. The center is not serving as the single focal point for the Air Force’s NC3 enterprise. The chapter illustrates what happens when policy directives and guidance meet resistance at the organization level and the routine of local instructions and practice take precedence.

Despite clear guidance and intent from the Commander of Global Strike Command, a local instruction, AFGSCI 10-602, diverged from that

²⁵ Interview with Colonel Mark Jablow (Commander of the Air Force NC3 Center), 5 January 2018.

²⁶ Interview with Staff Officer from AFNC3C, 29 March 2018.

guidance and the directives in the original Headquarters Air Force action directive, PAD 16-01. Instead of mitigating a divergence in guidance, the progression of directives, concepts of operation, instructions, and briefings failed to close the gaps between these documents. In Chapter 4, the study provides a comparative analysis examining the roles and responsibilities of the AFNC3C and the AFGSC A-Staff to help us determine the challenges that lie ahead and why many of the tensions in place today are so prominent.



CHAPTER 4

AFGSC A-Staff and AFNC3C Evaluation

The organizational tensions between the AFGSC A-Staff and the AFNC3C exist only in part, due to the interpretation of the guidance, both verbal and written, provided to the AFGSC A-Staff and the AFNC3C. However, because of these interpretations and the nuclear community's cultural reluctance of change, additional tensions exist, creating further disparity in the roles and responsibilities given to AFGSC. This chapter will highlight many of the challenges that plague both organizations and will work to clarify the cause of these tensions as AFGSC works through deciphering the roles and responsibilities tasked and which organization should be doing what.

As seen in both Chapters 2 and Chapter 3, AFGSC and AFNC3C billets are of concern as the characterization of those billets determine what roles and responsibilities the individuals in those billets are to perform. In an interview with an AFGSC Staff Officer, the individual noted that most of the AFNC3C's PDs are wrong, stating that AFGSC leadership did not allow enough time for the staff to create correct PDs for the positions transferred or added to the Center as directed by PAD 16-01.¹ AFGSC leadership gave a week in some cases "to get the PDs out...while there was still significant confusion as to what the [AFNC3C] was supposed to do."² The Staff Officer claimed that 103 of 168 PDs currently in effect list AFNC3C personnel as an AFGSC A-Staff member. Some of these PDs reflect the AFNC3C as their current location, while other PDs specifically list the member as working "on behalf of the AFGSC Directorate head."³ As a PSU, the Center's PDs should show clear

¹ Interview with Staff Officer from AFNC3C, 28 Feb 18.

² Interview with Staff Officer from AFNC3C, 28 Feb 18.

³ Interview with Staff Officer from AFNC3C, 28 Feb 18.

alignment with duties within it and not leave the position with “one foot” in the Center and the other “foot” in the A-Staff. The lack of clear descriptive purpose in the PDs adds to the uncertainty in the roles and responsibilities of the AF NC3 mission within AFGSC, both for the A-Staff and the Center.

In addition to externally acquired billets, positions transferred from AFGSC to stand-up the AFNC3C, as the A6 and A3 merged, further complicated the NC3 roles and responsibilities within the command. Many people that occupy AFNC3C billets today are responsible for the OT&E of the NC3 system that the command previously assigned to its A-Staff. For example, the A-Staff were managing components of the NC3 system associated with other AF platforms. Ostensibly, the NC3 Weapon System is a responsibility of the AFNC3C, which the AF charged to provide it and DoD with survivable, secure, and resilient communications between national leaders and the warfighter.⁴ However, as positions and their tasks changed, the individuals have not. Based on this logic, tensions within the command increased, in part, due to the cultural restraint within the nuclear community, specifically within AFGSC, preventing the necessary change that could help accurately implement the guidance directed by PAD 16-01 as well as the change in organizational structures directed by the AFGSC/CC.

The roles and responsibilities tasked to AFGSC/A6 and the AFNC3C with respect to LCM, OT&E for the NC3 Weapon System, and oversight of OT&E for AF NC3, worked in accordance with AFI 38-101 when the command aligned dual hat authority under the AFGSC/A6 for A-Staff and the AFNC3C. AFGSC structured PAD 16-01’s guidance around this PSU organizational construct, sharing functional

⁴ Air Force Nuclear Command, Control, and Communications (AFNC3C), *Orientation Brief*, 28 November 2017, 8.

responsibilities and leveraging other directorates within the command for their functional expertise. However, AFGSC diverged from this initial plan as it moved from PAD 16-01 to the command's Capstone CONOPS and AFGSCI 10-602. This shift proved to be at the core of confusion that set in to both the command's A-Staff and the AFNC3C. Through the remainder of this chapter, the reader will see how difficult it was (and continues to be) for staff and center to navigate effectively in the roles and responsibilities tasked to them by AFGSC.

The adage "where you stand depends on where you sit" describes a key problem that resulted in practice as an outcome of the divergence in mission alignment. The members of the AFNC3C "sit" in five separate locations across Barksdale AFB LA. This physical separation affects over half of the divisions within the AFNC3C where those assigned to NL, NO, and NP functional areas find themselves embedded in positions across the AFGSC A-Staff, serving as liaisons and subject matter experts (SMEs). One expert at AFGSC observed the following regarding the commands design thinking stating, "The thought was if they were embedded in the directorates, they could support them better than being at the center."⁵

Physically imbedded in the AFGSC A-Staff is certainly advantageous if the role of the AFNC3C were to support the A-Staff; however, that is not the role of the center as a PSU. The physical dispersion of the center has created controversy and confusion over the roles and responsibilities for the NC3 mission within AFGSC and the AFNC3C. Nowhere has the struggle been more real than between those working within AFGSC/A4 and AFNC3C/NL.

⁵ Interview with Staff Officer from AFGSC A-Staff, 2 March 2018.

Annex E of PAD 16-01 directs AFGSC/A4 to assume tasks, providing “logistics responsibilities *in support of* the AFGSC-assigned NC3 systems.”⁶ Conflicting with this guidance is the following paragraph in the annex that gives AFGSC/A4 the authority to *exercise* “lead command and program management responsibilities for...NC3 systems on AFGSC aircraft platforms and... operational ground equipment.”⁷ This guidance is confusing because in one paragraph the PAD directs a *supportive* role for A4, yet in the next it assigns a *lead* role to the A4 for NC3 systems. To further confuse the situation, paragraph 5.4.6 within Annex E tasks the A4 as the “lead command focal point for all AFGSC-assigned NC3 systems.”⁸ This guidance contradicts with the roles and responsibilities given to the A6 as LCM for AFGSC NC3 systems. It appeared that clear guidance came from General Rand during an interview with *National Defense Magazine* in November 2017. In this interview, General Rand stated that the AFNC3C serves as the “single point of contact and advocate for modernization of the [NC3] system.”⁹ However clear this statement seems, the facts on the ground indicated a continuation of the divergence and confusion over NC3 roles and responsibilities.

As an example, earlier this year the AFNC3C Division Chiefs convened a round table to discuss their top five challenge areas. Three of the five challenge areas – technical order management, reporting, and technical training requirements – are tasks most believed PAD 16-01 gave to the AFNC3C to fix. Unfortunately, as discussed above, the PAD guidance diverges from the traditional PSU relationship in the tasks

⁶ Program Action Directive (PAD) 16-01, Centralized Management of the Nuclear Enterprise, 2 August 2016, 53.

⁷ PAD 16-01, 53.

⁸ PAD 16-01, 54.

⁹ “Exclusive: Interview with Gen. Robin Rand, Head of Air Force Global Strike Command,” *National Defense*, 14 November 2017.

assigned to the A-Staff versus the AFNC3C. This bifurcation of responsibilities has two entities within AFGSC – the A4 and the AFNC3C – overseeing the OT&E tasking for the NC3 weapon system. As a result, what was clear at the inception of NC3 tasking to AFGSC has led to confusion between the staff, the center, and the AF.

The struggle of roles and responsibilities between AFGSC/A4 and the AFNC3C/NL also exist because there has never been a physical separation of bodies to handle tasking for NC3 issues. To clarify, when the AFNC3C stood up, many of those working internal to the AFGSC/A4 and other AFGSC A-Staff directorates stayed in place. As a result, 21 of the 25 billets assigned to AFNC3C/NL remain embedded in the AFGSC A-Staff even though the AFNC3C has completed its standup. One can get a sense of this confusing placement from Figure 6 below. Individuals assigned to one organization, while physically located elsewhere, creates challenges for leadership and the individual. Interviews indicate that individuals in this situation are working their “old job” due to proximity, while trying to handle taskings from the center, too. In theory, the chain of command lines are clear; in practice, however, the physical “dislocation” of center personnel has led to blurred lines of authority and responsibility. Having AFNC3C billets embedded within the AFGSC A-Staff affects leadership decisions and tasking authorities across both the A-Staff and within the center.

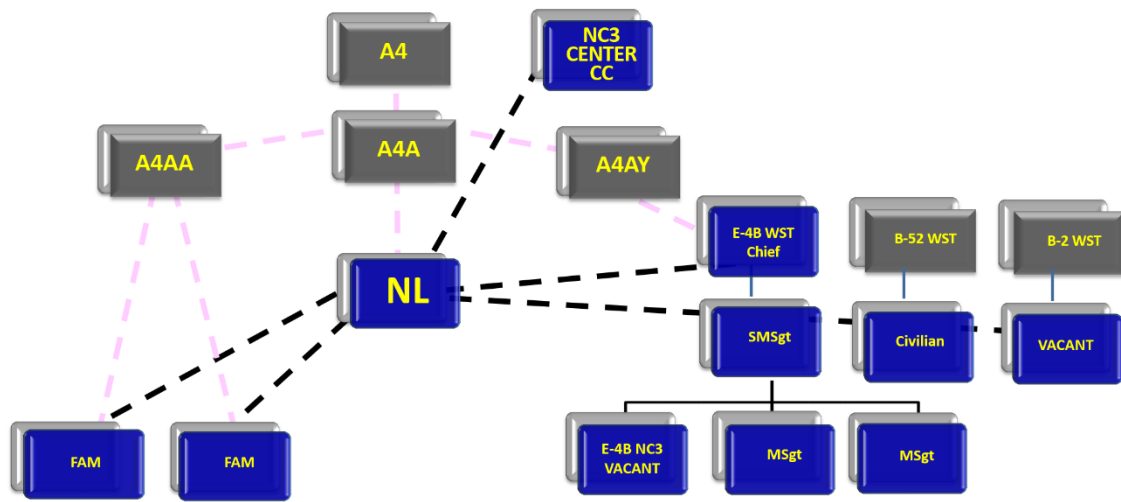


Figure 6: AFNC3C/NL Organizational Chart

Source: Air Force Nuclear Command, Control, and Communications Center (AFNC3C), Orientation Brief, 90.

The geographic dispersion of the AFNC3C ill serves Global Strike Command. In earlier discussions, we know that the AFNC3 enterprise suffered because of the scattering of roles and responsibilities across Air Force units and commands. In response, the AF made it clear that a traditional structure would serve to aggregate NC3 roles and responsibilities in an organization that would report directly to an AF MAJCOM commander. The AF developed a center as that focal point for all things NC3 across the AF. However, because of the complexity of the NC3 Weapon System, it is important to look beyond the traditional organizational structures of AF MAJCOMs to see if new and innovative concepts can help bridge the gap across AFGSC, with regards to the roles and responsibilities of NC3.

Another challenge area exists in the roles and responsibilities tasked to AFGSC/A5/8. According to PAD 16-01, the A5/8 ensures the resourcing and expertise of the NC3 WSTs and the Requirements Policy

and Process teams and provides oversight for both teams.¹⁰ This statement gives elements of the OT&E responsibilities to the A5/8, while other guidance indicated that these tasks went to the AFNC3C/NP. In fact, the NP section believes that the support task for the NC3 WST is their responsibility. Additionally, PAD 16-01 gives LC responsibility for requirements oversight to the NC3 WST and the Capstone CONOPS tasks NC3 WST to synchronize the sustainment and modernization efforts of the AF NLCC/NC3 weapon system.¹¹ However, per guidance from AFGSC/CC, the AFNC3C is the focal point for all modernization issues in the AF NC3 enterprise. Again, we see the ambiguity regarding the roles and responsibilities tasked in command guidance to both the AFGSC A-Staff and the AFNC3C that affects the day-to-day tasks assigned to the center.

In an interview with an AFGSC staff officer, the officer observed that individuals assigned to AFNC3C billets embedded in the AFGSC A-Staff were not doing NC3 tasks day-to-day.¹² In fact, the interviewee noted that some AFNC3C embeds were “taskless” because they had not yet received the training required to occupy and effectively function in the new billets. Without proper training, these people could not accomplish tasks associated with NC3 taskings or duties in support of the AFGSC A-Staff.¹³ Today, it is unclear how many people and billets the AF needs to provide OT&E to support the NC3 enterprise, as the A-Staff and center are so intertwined that clear task delineation is nearly impossible within Global Strike Command.¹⁴ This brings up a topic beyond the scope of this paper, and this subject highlights the

¹⁰ PAD 16-01, 67.

¹¹ PAD 16-01, 68.

¹² Interview with Staff Officer in AFNC3C, 31 January 18.

¹³ Interview with Staff Officer in AFGSC A-Staff, 31 January 2018.

¹⁴ Staff Officer from the AFNC3C, Barksdale AFB, LA. To the author. E-mail, 26 February 2018.

complexities (and confusion) surrounding the roles and responsibilities of NC3 within the command.

The divergence and confusion discussed above leads us to examine the role of leadership when working within an embedded organizational construct such as the one for NC3 at AFGSC. The challenge is to determine what leader in the organization should have tasking and/or administrative authority over these “dual tasked” individuals. For example, a situation occurred where an AFGSC member with tasking authority over an employee decided to pursue disciplinary actions against that employee for misconduct. The tasking authority’s disciplinary action created much controversy when the AFGSC member with administrative authority discovered this action occurred without his approval. This challenge in lines of authority, coupled with the fact that the AFNC3C does not have authority over specific NC3 tasks, requires resolution if the center is to serve Global Strike Command and the Air Force as the focal point for the NC3 enterprise.

Standing up a separate unit, with an Air Force military commander, and designating it as the single point of contact for all things NC3 should have the appropriate authority to accomplish its mission. If this authority exists today, communication within the command does not seem to suggest so. To best clarify the roles and responsibilities as presented by PAD 16-01, guidance from within AFGSC should be in place. Unfortunately, the guidance in place does not provide clarity. The guidance that could be most effective to the center and the command remains unsigned 21 months after the implementation of PAD 16-01.

Per the direction of PAD 16-01, Headquarters Air Force (HAF) A10, Assistant Chief of Staff (ACS) for Strategic Deterrence and Nuclear Integration, completed the task of rewriting Air Force Policy Directive (AFPD) 13-5, *Nuclear, Space, Missile, Command and Control for the Air Force Nuclear Enterprise*. Published in June 2017, AFPD 13-5 affirmed

the roles and responsibilities of AFGSC as a MAJCOM; however, it does not provide directorate- and AFNC3C-level detail. In addition, it does not specifically address the roles and responsibilities relevant to NC3 issues at AFGSC. Per PAD 16-01, HAF/A10 is responsible for the rewrite of Air Force Instruction (AFI) 13-550 Nuclear, *Space, Missile, Command and Control for NC3*. The Air Force published the current document in October of 2014 and the AFI provides great insight into the characteristics of NC3 and major contributors to the AF NC3 enterprise. If desired, the Air Force could use the rewrite of AFI 13-550 to clarify the conflicting roles and responsibilities given to AFGSC and the AFNC3C.

AFPD 10-9, *Operations, Lead Command Designation and Responsibilities for Weapon systems*, complements PAD 16-01 and should guide the incorporation of the NC3 structure as a weapon system. Last published in 2007, AFPD 10-9 defines the roles and responsibilities for LCs as they pertain to the weapon systems in both attachments two and three of the document. Considering AFPD 10-9 has not seen a revision since 2007, a rewrite of this AFI could clarify MAJCOM lead command roles and responsibilities for NC3 as a weapon system.

These Higher Headquarters (HHQs) policies and directives articulated in Air Force Instructions require mandatory compliance, although there are ways commanders can request a waiver to deviate from the AFI. With the importance of HHQ guidance understood, it is the MAJCOMs role to ensure their people are properly trained and equipped for the jobs tasked to them. In doing so, one important role of AFGSC, as it relates to NC3, is to ensure it provides clear guidance on the roles and responsibilities of its staff, units, and people. Unfortunately, the command has not provided clarity of purpose for its units regarding the NC3 enterprise.

With conflicting guidance between PAD 16-01, the AFGSC Capstone CONOPS, and AFGSCI 10-602, a programming plan (PPLAN) could be the solution AFGSC needs to clarify the NC3 mission. As “a

coordinated document [that] identifies staff actions and assigns staff responsibilities for defining program objectives,” a PPLAN could provide the clarity needed to lessen the ambiguity and tensions within the command, especially between its A-Staff and the AFNC3C.¹⁵ In fact, producing a PPLAN within 90 days of signing the PAD was one of the directions in PAD 16-01. Unfortunately, 21 months later there is no published PPLAN.¹⁶ The challenge has been time, where a lack of planning and oversight took place in standing-up the AFNC3C.¹⁷ As such, many believe “PAD 16-01 should have never been signed [because] many of the functions assigned to the Center are MAJCOM functions.”¹⁸ Without clarification, one can expect continued tension and confusion within the ranks of the AFGSC A-Staff and the AFNC3C.

In conclusion, tensions and confusion exist today between the AFGSC A-Staff and the AFNC3C due to the ambiguity created by the AFGSC Capstone CONOPS and AFGSCI 10-602, regarding the roles and responsibilities of the NC3 enterprise at AFGSC. If guidance provides direction and one chooses to deviate from that guidance, then the organization making the change should publish a revised document to clarify the decisions made and how those decisions impact the roles and responsibilities of the organization. What seems intuitive to some, is not intuitive to others. AF organizations need to ensure they are in line with the authoritative guidance given and in the absence of that guidance, ensure the standardization of the leader’s direction and ensure proper dissemination across the organization. Without it, organizations deviate to what they know, not what they have heard. In this case, what the

¹⁵ Air Force Instruction (AFI) 10-501, *Operations: Program Action Directives (PADS), Program Guidance Letters (PGLS), Programming Plans (PPLANS), and Programming Messages (PMSGs)*, 8 July 2015, 39.

¹⁶ PAD 16-01, 102.

¹⁷ Staff Officer to the author, email.

¹⁸ Staff Officer to the author, email.

members of the AFGSC A-Staff and the AFNC3C know is PAD 16-01, the AFGSC Capstone CONOPS, and AFGSCI 10-602. With conflicting documents such as these, addressing the challenges facing NC3 becomes difficult and possibly unachievable.



CHAPTER 5

Conclusion

Activated on 3 April 2015, the Air Force NC3 Center is in part an organizational solution to help address the NC3 atrophy concerns within the Air Force. Given responsibility for the NC3 OT&E mission, General Robin Rand stood up the center to serve as the focal point for Air Force NC3. However, tensions between the newly developed AFNC3C and the AFGSC A-Staff suggest there is disagreement in the roles and responsibilities tasked to them. The purpose of this study is to highlight the organizational problem(s) causing the tensions, understand why they occurred, and provide recommended actions to help clarify the roles and responsibilities regarding NC3 within Air Force Global Strike Command and across the Air Force.

To best understand the problem, the author chose a comparative analysis methodology to capture the roles and responsibilities tasked to each organization. PAD 16-01 was the core document providing initial guidance for each organization's responsibilities. Using PAD 16-01 as the baseline and threading in requirements provided by AFI 38-101, the AFGSC Capstone CONOPS, AFGSCI 10-602, guidance from the AFGSC/CC, and the orientation brief received from the AFNC3C, collected evidence began to unfold the disparities in guidance across AFGSC. This paper labels these disparities as *conflicting guidance*, as these documents, along with other supporting data and interviews, served as the backdrop for the study and the central barricade in preventing a clear understanding of the NC3 roles and responsibilities within the command.

PAD 16-01 established the baseline for NC3 roles and responsibilities within AFGSC by giving specific tasks to the command's directorates and the newly established Air Force NC3 Center. Per the direction of the PAD, the center is responsible for the OT&E mission of

the NC3 Weapon System and oversight of the OT&E mission for the AF NC3 Enterprise. However, the PAD begins to diverge on its promise by giving like roles and responsibilities to both the center and Global Strike Command's A-Staff. Published five months later, the command's Capstone CONOPS perpetuates this divergence by placing the center in a "direct support" role to the MAJCOM A-Staff. This guidance conflicts with AFI 38-101 where it states that a PSU, like the center, cannot perform direct support roles and responsibilities. Figure 7 highlights this shift in guidance for the center and the A-Staff.

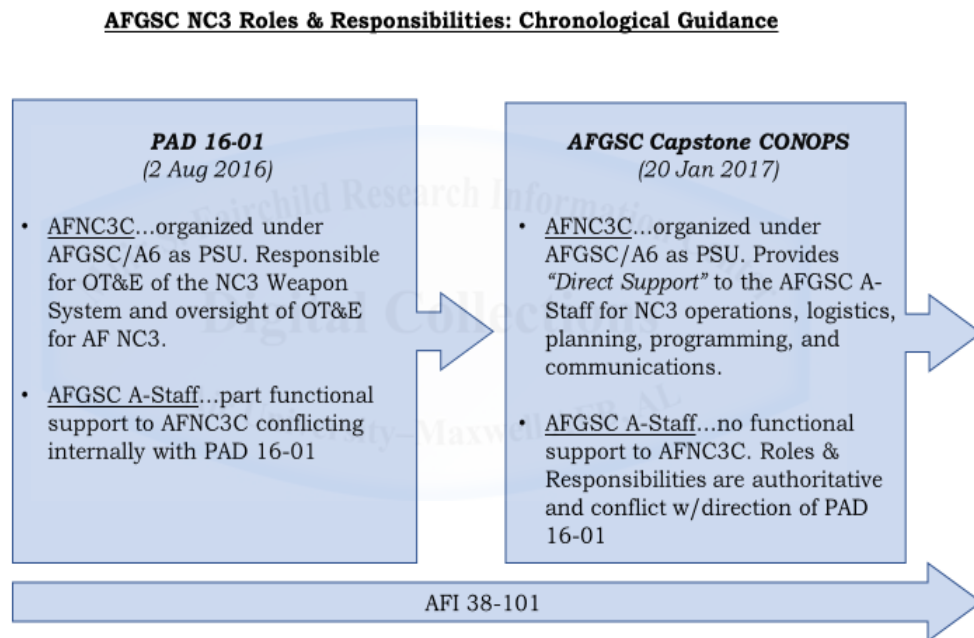


Figure 7: PAD 16-01 and AFGSC Capstone CONOPS Guidance

Source: Author's Original Work

On 3 April 2017, the activation of the AFNC3C as a stand-alone organization created more confusion in the NC3 roles and responsibilities within Global Strike Command. As directed by the AFGSC/CC, the center stood-up under the command of an Air Force colonel and began developing a staff to accomplish the tasks designated to them by the PAD and the AFGSC/CC. Unfortunately, the center today is in a difficult position having to balance between meeting the commander's intent and

adhering to local guidance such as AFGSCI 10-602. Published one day after the stand-up of the center, this local instruction is problematic in many ways: it contradicts the AFGSC/CC's guidance by taking NC3 roles and authorities away from the center and giving them to the A-Staff, while failing to recognize the merger of the A3 / A6 and separate each of the directorates' taskings accordingly.

The AFNC3C developed its own perspective, as seen in its orientation brief from November of 2017, that indicates the center is the command's lead for NC3, while also suggesting it provide support to the MAJCOM A-Staff. It has proven difficult for the center, set up as an independent organization designed to be the focal point for NC3, to balance between this construct and conflicting guidance within Global Strike Command. Unfortunately, the center's approach falls short in addressing the diverging gaps created by the PAD, the CONOPS, the local instruction, and the commander's guidance. The conflicting guidance revealed in this paper should be a concern for any AF unit.

Conclusion 1: From the data presented in this paper, the author first concludes that confusion exists within AFGSC regarding the establishment of a single focal point for NC3. This confusion began with the PAD publishing unclear guidance. Then, Global Strike Command published its CONOPS, further conflicting the roles and responsibilities for NC3 within the command. These constructs diverged from AFI 38-101 regarding the roles and responsibilities of the center as a PSU, and continued (and grew) with the command's publication of AFGSCI 10-602. We see the result of this conflicting guidance in the "less than Air Force focal point" the AFNC3C adopted, as reflected in its November 2017 orientation brief.

Unfortunately, in-place guidance and draft documents suggest that existing confusion of roles and responsibilities could continue. As an example, the draft AFGSC NC3 PPLAN in coordination references the AFGSC Capstone CONOPS as the sole document for updates to AFGSC

roles and responsibilities in support of the AF NLCC/NC3 mission area.¹ As seen in earlier chapters, AFGSC Capstone CONOPS has provided conflicting guidance to what PAD 16-01 directed and cannot be a trusted document until revised or the organizational structure and command authority within the AFNC3C changes. Similar guidance exists through the draft AFGSC NC3 PPLAN suggesting the AFNC3C serves in a direct support role to the AFGSC A-Staff. However, as a PSU the AFNC3C cannot perform such functions per AFI 38-101. It is clear from the AFGSC/CC that the AFNC3C is the focal point of NC3 for AFGSC and should serve as the responsible agent for NC3 OT&E of the NC3 Weapon System and oversight for the entire AF NC3 enterprise. Global Strike Command should ensure written guidance matches commander's intent.

Conclusion 2: This conclusion finds that while the AFGSC/CC provided clear commander's guidance and intent, this direction has not materialized in the command's A-Staff structure or that of the AFNC3C. The PAD 16-01 provided AFGSC's A-Staff directorates direct roles and responsibilities for NC3 with the center embedded within the A6. This guidance anticipated that the AFNC3C would fall under the dual hat authority of the AFGSC/A6 Director. This unfortunately did not occur leading to tensions between the AFNC3C and the AFGSC A-Staff. Over time, Global Strike Command promulgated conflicting guidance from its CONOPS, local instruction, as well as the center. The current development at the headquarters has the AFNC3C providing "direct support" to the command's A-Staff directorates and requiring the A-Staff approval to complete the mission tasked to the center by AFGSC/CC. As a result, the staff and center do not meet the intent and guidance of either AFI 38-101 or the Commander of Global Strike Command. The

¹ Department of the Air Force Headquarters Air Force Global Strike Command (HQ AFGSC) Programming Plan (PPlan), *DN16-01B Nuclear Command, Control and Communications (NC3)_Draft* [unpublished], 12.

division of NC3 roles and responsibilities between the A-Staff and the AFNC3C has diverged from the Air Force expectation that there would be a single focal point established to enhance the AF NLCC/NC3 mission by removing the kind of competing priorities and bureaucratic processes existent within Air Force Global Strike Command today, preventing further atrophy of USAF NC3 systems. These conclusions lead to several recommendations designed to correct these circumstances.

Recommendation 1: the AFNC3C must have full authority over the AF NLCC/NC3 mission areas tasked to them in PAD 16-01 and reflective of the guidance from AFGSC/CC designating the center as the Air Force focal point for the NC3 enterprise. As it stands today, the center has decreased effectiveness in successfully providing national leadership the survivable, secure, agile, and resilient communications path necessary to issue nuclear orders to the warfighter. Propelling today's NC3 system into the 21st Century at the necessary speed of relevance requires a unity of effort not reflected in Global Strike Command's structuring of its A-Staff and the center. The command must reorganize its staff and the center to reflect the primacy of the center and the "direct support" character of the staff regarding the Air Force NC3 enterprise.

Recommendation 2: the command must complete the transfer of "billets and bodies" from its A-Staff to the AFNC3C. Simply stated, the center must have personnel billeted and equipped to accomplish the NC3 roles and responsibilities for the Air Force. To accomplish this recommendation per the commander's guidance, complete the shift of positions, personnel, roles, and responsibilities for the Air Force NC3 Enterprise to the AFNC3C. A signed memorandum by the commander should suffice to initiate the final stages of this transition, though completed and clear guidance should quickly follow reflecting the commander's intent where the guidance produced by AFGSC must be consistent with the guidance from the PAD. This is not to suggest that AFGSC has a requirement to follow each detail of the PAD, but any

divergence must clarify the roles and responsibilities within the command as determined by that change and every change must be consistent with established guidance as to each organization's responsibilities. As discussed earlier, the AFGSC NC3 PPLAN is in draft form and could help clarify the uncertainties between the AFGSC A-Staff and the AFNC3C. Unfortunately, per a recent phone interview with a Staff Officer at AFGSC, the production of the NC3 PPLAN is on hold for an unknown reason, suggesting concerns with the document's content.²

To complete the shift, UMD billets must have clearly written PDs for positions coded as NC3. It is not safe to assume that the roles and responsibilities communicated throughout the command are free of biases, cultural impediments, and authoritative strongholds. Today's battle for resources and manpower is intense and needs careful oversight and management from leaders at all organizational levels. This requires leaders to clearly articulate the roles and responsibilities in organizational PDs and UMDs, so their employees' tasks reflect the organization's mission and vision closely aligning organizational purpose to task.

For example, in an interview with a Staff Officer from AFGSC, the command "has accomplished [a] manpower study, which will help them better organize. It will demonstrate where they need additional bodies and where they may not need other bodies. Secondly the AFNC3C is having its own manpower study in March" which will help accurately determine the tasks being performed by AFNC3C personnel inside the center and those embedded within the AFGSC A-Staff.³ Both studies are of significant importance and will help AFGSC form a foundation of

² Interview with Staff Officer from AFNC3C, 22 March 2018.

³ Staff Officer to the author, email.

requirements necessary to begin building a more resilient, secure, and survivable NC3 deterrent.

Recommendation 3: the command must reorganize itself to provide direct access between the AFNC3C/CC and the AFGSC/CC. Such access assures the center will serve as *the single voice* for NC3 within AFGSC, and the AF writ large. Anything less than the suggested changes above will prolong the atrophy of NC3 and decrease the United States' nuclear capability during peace time and war. To help prevent NC3 from further atrophy, a few of the recommended actions below may be useful.

To facilitate this reorganization, the command must establish supporting relationships between the A-Staff to AFNC3C. The A-Staff is there to support the center, not the other way around. The purpose behind the center gaining full authority over NC3 was to give greater attention and focus to the problems eating away at the foundation of a critical capability. Giving the center unnecessary requirements, and increased levels of authority to coordinate through and operate under, does not equal success. In fact, it perpetuates the atrophy of NC3 by giving the center less authority and increased demands while managing additional levels of bureaucracy and administrative constraint.

Recommendation 4: in establishing a supporting relationship between the center and the A-Staff, the command should consider the increase in grade for the AFNC3C/CC. Center leadership at the Senior Executive Service (SES) or General Officers (GOs) level would communicate well the needs of an organization in an environment strained by money and resources. Because of these challenges, the leader of that organization should hold rank equal to the tasked roles and responsibilities. In fact, the roles and responsibilities tasked to the AFNC3C/CC as an AF O-6, are equal in responsibility to other senior GOs, SESs, and in some cases MAJCOM commanders. In 2015, AFGSC became a 4-Star command for that very reason. The AF had solidified its stake in the nuclear mission by all intents and purposes, though the

rank of the GO leading the organization did not pale in comparison to other AF MAJCOM 4-Stars. AFGSC struggled to compete for money and resources to support the nuclear mission even though DoD senior leaders had placed the nuclear mission high on their priority lists. Multiple world threats were at play and an active war in the Middle East did little to support AFGSC's efforts. While an increased grade in rank for the AFNC3C/CC does not solve every problem, it provides proof to the command that the center is important, and it gives it a seat at the table with increased credibility.

Recommendation 5: Lastly, AFGSC must work closely with Headquarters Air Force (HAF)/A10, the *Strategic Deterrence and Nuclear Integration Directorate*, to ensure entities external to the AF, such as the Navy's E-6B units, understand the roles and responsibilities of the AFNC3C as the focal point for the service's NC3 Enterprise.⁴

Implementing this recommendation includes clarity of purpose for the center regarding its responsibility for the OT&E mission of the NC3 Weapon System and oversight responsibility of NC3 OT&E for the Air Force. Communication is difficult to manage without knowledge of who is responsible for what. Increasing this knowledge and understanding across the AF would benefit the AFNC3C and AFGSC to ensure all NC3 related issues and concerns channel through the center accordingly. While this may take time to impact the shift in coordination, appropriately approved guidance could help gain traction for the center's mission as clearly laid out by the Global Strike Commander. Other interesting outcomes from this study include several implications that could inform future decisions with the Air Force and the DoD.

⁴ The Navy's Boeing E-6B Take-Charge-And-Move-Out (TACAMO) aircraft provide survivable communication links between the National Command Authority (NCA) and US Strategic Forces, specifically the US ballistic submarine fleet.

Implication 1: If AFGSC and the AFNC3C do not close the gaps and divergences existent today, it is unlikely to get a center that is the focal point for the Air Force NC3 Enterprise. The guidance in place today does not provide a clear path forward for NC3 and continues to confuse the staffs of both the Headquarters and the Center in what their tasks are to be. The lack of a published PPLAN to clarify the roles and responsibilities of the AFGSC A-Staff and the AFNC3C, creates many questions. In fact, AFGSC should have begun development coordination on a Programming Plan (PPLAN) within 30 days of signing PAD 16-01.⁵ The PPLAN had a complete-no-later-than (NLT) date of 90 calendar days from PAD 16-01's approval signature. The PPLAN is still in draft form well past the 90-day requirement.⁶ The PPLAN is past its deadline of completion and recent communication with the AFNC3C does not suggest it will be making any progress soon.⁷ The PPLAN and other pertinent documentation could provide clarity on NC3 roles and responsibilities within the command, though they seem to be absent in providing closure to the gaps and divergences of NC3 roles and responsibilities across AFGSC.

Beyond the walls of AFGSC and the AF writ large, there exists other organizations who depend on NC3 just as much as the AF does. The Navy, DoD, Department of Energy (DoE), and other government agencies – to include the White House – each depend on NC3 day-to-day and during stressed environments. So, if the United States' government has such a great dependency on NC3, then why does the AF produce a center with minimal authority and influence across the whole of government? Regardless of the organizational concerns facing Air Force NC3 today, there are voiced concerns from senior policy advisors within

⁵ Program Action Directive (PAD) 16-01, Centralized Management of the Nuclear Enterprise, 2 August 2016, 22.

⁶ PAD 16-01, 102.

⁷ Interview with Staff Officer at AFNC3C, 22 March 2018.

the DoD that would suggest the issues outside of the AF are just as misguided and unsettling. To begin rebuilding a system that has atrophied for nearly 25 years, one must first start with studying an organizational model that goes beyond a center buried deep within a single service.

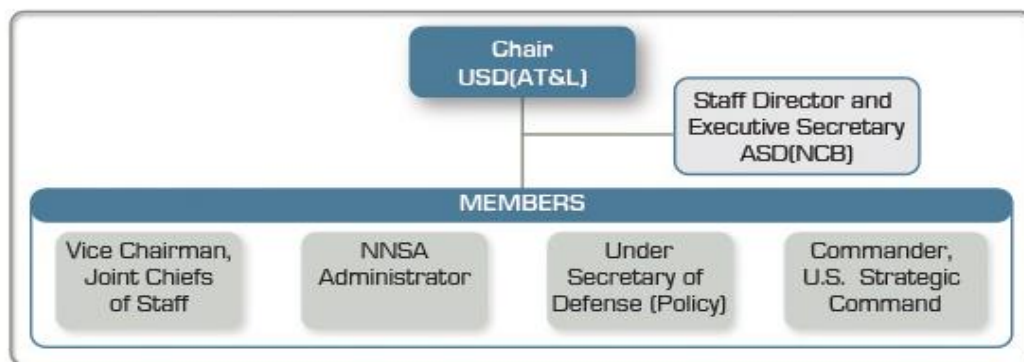


Figure 8: Nuclear Weapons Council (NWC)

Source: Office of the Deputy Assistant Secretary of Defense for Nuclear Matters, Nuclear Matters Handbook 2016, Chapter 5.3.3.

Implication 2: If the center becomes the clear focal point for Air Force NC3, its success could serve as a benchmark for changes within the DoD. As the Department of Energy (DoE) governs the nuclear stockpile, so should the DoD govern NC3. The first step was classifying NC3 as a weapon system followed by the creation of the AFNC3C in 2016. However, the AFNC3C has limited capability in terms of scope and reach, where as it could provide much more utility to the joint force and across the DoD by mirroring an organization such as the National Nuclear Security Administration (NNSA). As such, the Nuclear Command, Control, and Communications Defense Agency (NC3DA) could provide a consistent and prioritized sustainment program for all things NC3, beyond AF boundaries, and integrate across all agencies, departments, and organizations worldwide.

Integrating NC3 across the whole of government is reachable if, for example, the N3CDA Director served as a voting member on the Nuclear Weapons Council (NWC) as displayed above in Figure 7. Including both

uniformed and civilian members across the United States' government, the NWC represents the Joint Chiefs of Staff, the Department of Energy (DoE), DoD, and the United States Strategic Command (USSTRATCOM). The NWC is an appropriate forum for NC3 to vet its priorities and present its concerns. Atrophy of our nuclear forces is unacceptable and cannot continue. The NC3DA could re-focus the NC3 mission while protecting its components and its people while laying the footing for a safe, secure, and reliable nuclear C2 system.

This shift in organizational design could serve as a template to encourage balance, order, and standardization, not just for NC3, but across the nuclear enterprise. As policy makers today are bound by directives written for dated systems, lacking in context and understanding, their sentiments filtrate the nuclear enterprise creating confusion and division between ranks. In Simon Sinek's book *Start With Why*, he writes a chapter on clarity, discipline, and consistency within an organization. Creating a tiered structure that encompasses all services, agencies, and organizations responsible for the execution of the nuclear mission will serve these concepts well.⁸ In short, clarity can provide top level down standardization for all users of NC3, discipline will incorporate a regimented training program with quality control of information flow and decision-making authority, and consistency will support a sustained system of people and networks equipped to complete the mission. As mentioned before, the Air Force has made great gains in this arena, but to assume that this information is shared, practiced, and implemented across DoD and other agencies in full transparency is ignorant and acutely false.

⁸ Sinek, Simon, *Start with Why* (New York City, NY: Penguin Group, Inc., 2009), 65.

Implication 3: if the Air Force engages with these lessons of challenges in organizational change, it could influence how the AF develops new organizations. During one of the author's interviews, the interviewee mentioned that AFGSC senior leaders provided little time for supervisors to adjust unit PDs following the stand up the AFNC3C.⁹ The question that immediately comes to mind is why? If AFGSC made the decision to stand up the AFNC3C, one would assume research and analysis occurred justifying the decision to spend millions of dollars towards the center's development. Through that process, billets and tasks were determined along with the roles and responsibilities of the organization. Either this did not occur for the AFNC3C, or a late decision by AFGSC leadership made the purpose behind the development of the AFNC3C seem unclear. A historical look into the development of AF organizations could provide interesting details as to how and why organizations within the AF have developed. This analytical look could provide trends to avoid and provide possible implications for future leaders before pressing forward on an organizational development project possibly doomed to fail before it begins.

Implications 4: studying the design, intent, and use of AF instructions and directives could help the service better understand the use of its instructions to support and inspire innovation, especially when conducting a major command reorganization. Although such a study is beyond the scope and bandwidth of this project, studying the meaning behind today's AF instructions could be of great value to future service innovators. In fact, AF regulations establish the roles and responsibilities which then determine the tasks and authorities necessary for an organization to successfully accomplish its mission. While missions can vary from one organization to the next, the roles and responsibilities

⁹ Staff Officer to the author, email.

established provide clear lanes of operation and authority, allowing a command structured organization such as the military to succeed.

One of two forms establish roles and responsibilities: verbal or written. Verbal guidance, while effective towards immediate action, can lose its effectiveness with time. Recalling verbal guidance is difficult, while waiting minutes, hours, or days to transpose what one recalled can greatly impact the accuracy of that guidance. At the risk of having verbal guidance misinterpreted or miscommunicated, commander's follow-up verbal guidance with written guidance to avoid ambiguity. Guidance can be unclear whether verbal or written, though written guidance establishes a common reference, if written accurately, that can clearly communicate the roles and responsibilities given to an organization to accomplish its mission.

Today, AF publications issue guidance to inform and to assign responsibilities across all AF MAJCOMs, DRUs, FOAs, Combatant Commands, or MAJCOM equivalents. Whether these publications are in the form of an Air Force Instruction (AFI) or Air Force Policy Directive (AFPD), they each provide guidance vital to operation and mission accomplishments.¹⁰ Confusion sets in when both AFIs and AFPDs have **COMPLIANCE WITH THIS PUBLICATION IS MANDATORY** printed in bold on the first page of every publication creating an intent that is unquestionably clear. As an example, AFI 13-550 explains words such as "will", "Should", and "may" where *will* indicates a mandatory requirement, *should* indicates a preferred, but not mandatory requirement, and *may* indicates a suggested, but not mandatory

¹⁰ Air Force Departmental Publishing Office (AFDPO), *Fact Sheet*, 3 January 2018.

requirement.¹¹ The clarity of the use of words is beneficial, though not required in a publication that self-proclaims it is mandatory.

The AF is studying its AFIs today to determine their value and help alleviate the large number of regulations in the AF publication library. Though beyond the volume of publications, how is one to navigate regulation authorities effectively?¹² This study would provide invaluable information for this research, as it could point to a single document as the sole authority for roles and responsibilities for NC3.

SUMMARY

In 1986, no one knew that the Goldwater Nichols Act would have such an impact on AF organizations and that it would be a pivotal point in history where the state of NC3 would begin to atrophy. Divided amongst AF MAJCOMs and attached to other nuclear platforms, the components today that make up the NC3 Weapon System went without sustainment, modernization, or prioritization for over two decades. Based on the idea that the Cold War had ended and the threat of nuclear war no longer existed, US military leaders transferred their focus to a more immediate threat, including violent extremist organizations (VEOs).

Fast-forward several decades and the threat of a nuclear exchange has increased. With North Korean Dictator Kim Jong Un's push to develop a nuclear capable ICBM, China's claim of territory and military advancements in the East China Sea, and Russia's enhanced capability in cyber-attacks, the state of the world is more uncertain today than ever before. With that same uncertainty, comes an uncertainty of war in an

¹¹ Air Force Instruction (AFI) 13-550, Nuclear, Space, Missile, Command and Control, 2 October 2014, 5.

¹² My thesis advisor, Dr Wright, has posed the following use of judgment versus compliance for the Air Force if the service really wanted to empower its innovators. He recommended adopting the following phrase from joint doctrine manuals: "The guidance in this publication is authoritative; as such, this [instruction] will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise."

environment that is unknown and unfamiliar to anyone serving in the Armed Forces today. As such, the US must be prepared for the most degraded environments based on the threats that exist today.

As a result, the US must modernize, prioritize, and sustain NC3 systems to ensure US armed forces and senior government officials can meet desired objectives in tomorrow's fight. As such, NC3 roles and responsibilities need to be clear and appropriately vetted among services, agencies, and departments in support of the whole of government approach to NC3. Today, the AFGSC A-Staff and the AFNC3C have met many challenges in clarifying the roles and responsibilities that PAD 16-01 tasked both organizations to do. Many of the challenges are internal to AFGSC. However, the problem exists far beyond the AF where increased participation from senior leaders across the whole of government is desired. Rather, a secure, resilient, and survivable NC3 system is a necessity.

To ensure the President has a reliable system to command and control US nuclear forces at the time and place of his choosing, the United States must modernize, prioritize, and sustain the NC3 system. The key component to ensuring such a system exists is effectively matching trained and equipped personnel to the roles and responsibilities necessary for NC3 to succeed. However, for NC3 to succeed, the rules and regulations in place today, tasking the roles and responsibilities to the AFGSC A-Staff and the AFNC3C, must be clear and without ambiguity. The challenges today are a result of how the AF writes its regulations, while other influences, such as cultural impediments, biases, and mis-interpretations of HHQ guidance also play a vital role. Either way, there cannot be conflicting guidance in the roles and responsibilities for NC3. As seen throughout this paper, conflicting guidance can prolong organizational efforts to tackle the atrophy of NC3, the original reason the AF established the AFNC3C.

Glossary

Air Force Instruction (AFI) – Orders of the Secretary of the Air Force and are certified and approved at the Headquarters Air Force (Secretariat or Air Staff) level. AFIs generally instruct readers on “what to do,” i.e. direct action, ensure compliance to standard actions Air Force-wide.

Air Force Policy Directive (AFPD) – Orders of the Secretary of the Air Force that contain directive policy statements to initiate, govern, delegate authorities/responsibilities, and/or regulate actions within specified areas of responsibility by Air Force activities.

Center – A named unit that performs a specialized mission. Typically used for a larger function that performs most of its mission at one location and has few subordinate units. However, extremely large centers such as those for sustainment, life cycle management and test may have multiple subordinate units and non-units at several locations.

Concept of Operations (CONOPS) – A verbal or graphic statement, in broad outline, of a commander’s assumptions or intent in regard to an operation or series of operations (PAD 16-01).

Directive Publication—Publication that is necessary to meet the requirements of law, safety, security, or other areas where common direction and standardization benefit the Air Force. Air Force personnel must comply with these publications. All publications in this category carry the following statement: “COMPLIANCE WITH THIS PUBLICATION IS MANDATORY.”

Directorate – A staff element at HQ USAF or major command level. This is a decision-making level which performs a range of related staff functions. Normally, a directorate supervises the activities of divisions and field operating agencies.

Direct Support – A codified relationship (Command directive, MOA, MOU, etc.) requiring an organization to support another specific organization and authorizing the supporting organization to answer directly to the supported organization's request for assistance.

Division – Normally aligned as a staff element in HQ USAF, a MAJCOM, NAF, center, FOA or equivalent. Divisions supervise the activities of branches if the organization is large enough to require branches.

Lead Command (LC) – establishes advocacy for weapon systems during their life cycle and clarifies responsibilities for all using and supporting organizations.

Major Command (MAJCOM) – A major subdivision of the Air Force that is assigned a major part of the Air Force mission. A MAJCOM is directly subordinate to Headquarters United States Air Force.

National Leadership Command Capability (NLCC) – The combination of capabilities, to include; command, control, communications, computer, intelligence, surveillance, and reconnaissance systems, that provide national leadership (regardless of location and environment) with diverse, accurate, integrated, timely, and assured access to data, information, intelligence, communications, services, situational awareness, warnings, and indications from which planning, understanding, and decision-making activities can be initiated, executed, and monitored.

Nuclear Command, Control, and Communications (NC3) – Provides the President with an integrated, flexible, secure, responsive, and enduring system to support the President's authority over nuclear weapon operations. It is comprised of facilities, equipment, communications, procedures and personnel (PAD 16-01).

NC3 System – The combination of capabilities through which Presidential authority for authorized employment and termination of nuclear weapons operations is exercised and through which operational command and control over U.S. nuclear forces is conducted.

NC3 Weapon System – The compilation of AF specific communications systems through which the President exercises Nuclear Command and Control.

NC3 Weapon System Team (WST) – Assumes lead command responsibility for requirements oversight (including weapon system modifications) and System Program Office coordination on current and future modernization programs for the NC3 weapon system.

Nuclear Weapons Council (NWC) - An advisory/approval body established by 10 U.S.C. 179 (reference (h)) to provide high-level oversight, coordination, and guidance to nuclear weapon stockpile activities.

Nuclear Weapon System - A combat delivery vehicle with its nuclear weapon or weapons and associated support equipment, noncombat delivery vehicles, facilities, and services.

Position Descriptions (PD) – A statement of the major duties, responsibilities, and supervisory relationships of a position. In its simplest form, a PD indicates the work to be performed by the position. The purpose of a PD is to document the major duties and responsibilities of a position, not to spell out in detail every possible activity during the work day.

Primary Subordinate Unit (PSU) – A unit that performs part or all of the primary mission of the organization to which it is assigned. The unit reports to the commander of the parent organization and has full authority to execute its assigned mission. A PSU's purpose is to perform part of its parent organization's main mission and not to provide support functions for its parent headquarters.

Program Action Directive (PAD) – A PAD is a Headquarters Air Force (HAF) document that provides strategic level guidance to HAF staff and Major Command (MAJCOM) commanders about how to achieve SecAF and CSAF-directed objectives.

Programming Plan (PPLAN) – PPLANs are detailed planning documents used to implement PADs, PGLs, or individual MAJCOM/Direct Reporting Unit (DRU)/FOA initiatives. This document is written below H-Q USAF-level and is used to initiate and record major actions. A PPLAN is a directive, coordinated document, consisting of a Basic Plan and supporting functional staff annexes, which defines required actions, and outlines the responsibilities for achieving a given program objective. The primary types of actions for which PPLANs are developed include unit activations and inactivations and realignments involving the physical move of people or assets.

System-of-Systems (SoS) - A set or arrangement of interdependent systems that are related or connected to provide a given capability. The loss of any part of the system significantly degrades the performance or capabilities of the whole.

Unit Manning Document (UMD) – The Unit Manpower Document report is a computer-generated product from the Manpower Programming and Execution System (MPES) or Business Objects (BO) business intelligence reporting tool that contains active duty military, civilian, traditional reservists (TR), Active Guard Reserve (AGR), Air Reserve Technician (ART), and Individual Mobilization Augmentee (IMA) authorizations.

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