

Views and hyperlinks expressed herein do not necessarily represent the views of The Judge Advocate General, the Department of the Air Force, or any other department or agency of the United States Government. The inclusion of external links and references does not imply any endorsement by the author(s), The Judge Advocate General, the Department of the Air Force, the Department of Defense or any other department or agency of the U.S. Government. They are meant to provide an additional perspective or as a supplementary resource.

Enhancing Multi-Domain Command and Control:

Attorneys and Paralegals Join the Fight in Exercise BLUE FLAG 17-1

BY COLONEL MICHAEL LEWIS, MAJOR RODNEY GLASSMAN, MAJOR TRENTON WHITE, AND CAPTAIN JOHN KALIS

The Chief of Staff of the Air Force (CSAF), [General David Goldfein](#), recently wrote:

“While we dominate the air, space and cyber domains today, our adversaries have invested heavily in technologies to deny us the superiority we have come to rely upon.... We will need to integrate real-time information from a variety of sources—some non-traditional—and evaluate that information as fast as systems can process it. If an enemy blocks actions in one domain, we quickly ‘call an audible’ to change the plan and attack or defend from another. Future multi-domain operations will be high velocity, agile, and joint by their very nature.”^[1]

There is no place where General Goldfein’s words ring truer than in the Air Force’s Air and Space Operation Centers (AOCs). Placed in strategic locations around the world, from Al Udeid Air Base, to Joint Base Elmendorf-Richardson in Alaska, AOCs put into practice the multi-domain integration and communication called for by the CSAF, all day, every day. AOCs are in constant need of skilled operational legal advisors for missions as various as homeland defense, nation state partnership, and fighting terrorism. In the words of [Lieutenant General Mark D. Kelly](#), “An ops-savvy JAG is worth their weight in gold.”^[2]

An ops-savvy JAG is worth their weight in gold.



Download Document: Enhancing Multi-domain Command and Control... Tying It All Together, https://www.af.mil/Portals/1/documents/csaf/letter3/Enhancing_Multi-domain_CommandControl.pdf

In 2017, [Air Combat Command \(ACC\)](#), under the leadership of its Staff Judge Advocate, then Colonel, now [Brigadier General Sharon Shaffer](#), embarked on the development and implementation of its inaugural Advanced Air Operations

Law Course (AAOLC). This course, hosted by the [505th Command and Control Wing](#) (505 CCW), Hurlburt Field, Florida, brought together over 45 Air Force JAG Corps attorneys and paralegals. It is the second step of a four-step training pipeline envisioned by ACC to cultivate skilled operations law attorneys and paralegals. The first step of the pipeline is an introductory operations law course. These types of courses are offered by [The Air Force Judge Advocate General's School](#), [Naval Justice School](#), and [The Army Judge Advocate General's Legal Center and School](#). Once a judge advocate (JAG) has completed a basic level course, they then can attend the AAOLC. The third step in the pipeline is participating in Air Force exercises before the final step of taking on a subject matter expert role in subsequent exercises. Several of this year's AAOLC participants were selected to participate in the two-week BLUE FLAG 17-1 exercise at Davis-Monthan Air Force Base (DMAFB), Arizona. Multiple organizations at DMAFB were involved, including the [612th Air Operation Center](#) (612 AOC) as well as [12th Air Force](#) (12 AF/AFSOUTH). The 12 AF/AFSOUTH organization complimented AOC operations by focusing on Air Force Forces (AFFOR) challenges in the exercise, such as care and feeding of Airmen, supplies, and military justice issues.

The scenario integrates active duty, guard, and reserve components of the Army, Navy, and Air Force in order to **simulate major combat operations.**

For BLUE FLAG exercises, a scenario is developed over a 24-month period in advance of the exercise. The scenario integrates active duty, guard, and reserve components of the Army, Navy, and Air Force in order to simulate major combat operations. It is up to the people in the AOC to make use of their command and control assets and resources to overcome enemy movements and aid our allies. The exercise scenario was designed by the 505 CCW, with input from the commander of 12 AF/AFSOUTH, as well as the Navy's 4th Fleet (NAVSOUTH), and utilized fictitious nation states and

military organizations as part of the scenario. The 505 CCW develops exercise scenarios that provide realistic replication of forces, plans, procedures, intelligence capabilities, and threats for the planned theater of operations.

Fifteen attorneys and paralegals from across the total force participated in BLUE FLAG 17-1 at DMAFB, supporting the AFFOR and AOC staff, and demonstrating a substantial commitment from the JAG Corps to training in the operational Air Force. Seven other JAGs and paralegals supported from Barksdale Air Force Base, Louisiana; Hurlburt Field, Florida; and a naval ship off the coast of Jacksonville, Florida. Expanding on knowledge acquired from the AAOLC, attorney and paralegal academics for BLUE FLAG 17-1 contextualized operational employment principles, with the overall vision of providing comprehensive legal support. The exercise also illustrated the benefits of extensive legal support to planning and operations. By embedding legal support into every division and team of the AOC and AFFOR, a multitude of potentially problematic issues were identified early and seamlessly addressed in a manner that enhanced the decision-making of the Combined Force Air Component Commander (CFACC)/Commander of Air Force Forces (COMAFFOR). Furthermore, this network of legal support contributed to the formulation of creative solutions to challenging problems as all AOC and AFFOR personnel could understand legal authorities and limits of action. Finally, the comprehensive legal team fostered an environment of collaborative learning among attorneys and paralegals. This collaborative environment was particularly evident with the integration of paralegals into daily JAG functions, such as drafting rules of engagement (ROE) and crafting special instructions (SPINS) updates, to respond to a fluid battlefield. Paralegals also worked on drafting a comprehensive general order for deployed U.S. forces in a fictitious host nation and managing an exercise-simulated downrange homicide to help the COMAFFOR maintain good order and discipline.

The recent BLUE FLAG exercise provided an opportunity for JAG Corps attorneys and paralegals to develop a deep understanding of AOC operations and to apply that knowledge to a broad array of challenging problems in a

24-hour operations tempo. Additionally, BLUE FLAG provided AFFOR personnel the opportunity to grapple with crucial issues like basing, personnel and equipment deployment, sustainment, and host nation integration. Unlike other types of “flag” exercises (e.g., RED FLAG, GREEN FLAG, SILVER FLAG), BLUE FLAG focuses on the organizational planning, command, and control functions of an AOC. The primary purpose of BLUE FLAG is to test and train battlefield command and control (C2) capabilities by simulating realistic operations. BLUE FLAG exercises are ACC’s foremost large scale, computer-assisted, C2 exercise. This focus makes BLUE FLAG a well-suited venue in which to train toward CSAF’s goal of multi-domain command and control.

AIR OPERATIONS CENTER

In order to better understand the value of exercises like BLUE FLAG, it is important to understand the purpose and function of an AOC. While every AOC is unique, every AOC follows a similar doctrinal structure. The AOC is comprised of hundreds of Airmen that are distributed throughout five divisions: Combat Operations (COD); Combat Plans (CPD); Strategy (SRD); Air Mobility (AMD); and Intelligence, Surveillance, and Reconnaissance (ISR). Each division brings something unique to the fight and, when working together, integrates air, space, and cyberspace power into a lethal weapon against America’s adversaries. Attorneys and paralegals play a vital role to the success of the AOC and comprise a specialized team in the AOC. Attorneys and paralegals are integrated into the different divisions to provide advice and guidance to commanders and division chiefs at a moment’s notice. Constant communication with other attorneys and paralegals throughout the AOC makes the legal team an invaluable asset to commanders and their communications.

Looking more closely at the various AOC divisions, attorneys in SRD serve an advisory role for the conceptualizing of overall strategy and commander’s vision. The JAGs will be present for meetings with key leaders to understand their optics and make sure the concept of operations ultimately developed adheres to that plan. The JAGs also work with strategy teams to make sure that implementation of the

CFACC’s plan does not violate any treaties, rules of war, or international laws. Lieutenant Colonel Eric Farquar, 612 AOC Operations Assessment Team Chief, said,

“The guidance and strategy team are responsible for analyzing the cradle to grave actions of the AOC in support of the CFACC’s efforts for achieving campaign objectives. JAGs deliver value by helping establish and refine rules of engagement that allow tactical action to meet operational objectives for the Joint Force Commander. To deliver the most value for commanders, Air Force JAGs need to have an operational level of awareness and knowledge to understand what operators require to do their job.”^[3]

Mr. Daniel “Sal” Salgado, 612 AOC Strategy Chief, also understood the importance of a JAG in SRD noting,

“The strategy division leads the Joint Operation Planning Process for the Air Component (JOPP-A) for the CFACC, which means we do crisis action planning for situations that come up. We develop and recommend courses of action (COAs), write the Joint Air Operations Plan (JAOP), the daily guidance (Air Operations Directive) then do operational assessments based on the execution of that guidance. JAGs review high-level documents and advise on developing the plan to ensure what we want to do is in compliance with international treaties and agreements.”^[4]

For BLUE FLAG 17-1, with its focus on multi-domain command and control, two cyber JAGs were brought in for the crisis action planning event to assist in drafting ROE, COAs, and the JAOP. As those plans are implemented, attorneys review and advise at the appropriate level required for decision making and provide guidance that feeds into targeting.

After leaving SRD, the plan is passed to CPD where targets start to be developed. This is where the Air Tasking Order (ATO) cycle begins. This cycle takes a target and gets it

weaponized and packaged for prosecution within 72 hours. Every day COD is executing an ATO. Which means that every day, CPD is in various stages of preparing the next two days of an ATO. In this process, we embed JAGs and paralegals with the Master Air Attack Plan (MAAP) team and the Targeting Effects Team (TET). These legal professionals will review potential deliberate (pre-planned) targets to make sure they are not on a No-Strike List/Restricted Target List (NSL/RTL), they are not an otherwise protected structure, the collateral damage estimate (CDE) will minimize harm to non-military structures or non-combatants, and that the targets fall within Combatant Commander (CCDR) or CFACC guidance. This guidance is found by reviewing published ROE, SPINS, the Air Operations Directive, and any other published targeting guidance. It is the JAG's job to advise the operators of the confines of the law while incorporating the CCDR's and CFACC's guidance. Major Michael "Caveman" Cavanaugh, 612 AOC TET Chief, highlights the legal role in the targeting process, noting,

"The role of TET is to develop CFACC's targeting scheme and maneuver by prioritizing targets based on commander's guidance. JA is integral to that process by ensuring compliance with ROE, Law of Armed Conflict (LOAC), and commander's guidance. By having a JAG embedded within our targeting cell we were able to have discussions, as a team, allowing the opportunity for me to receive recommendations from the JAG as to how best to analyze commander's guidance."^[5]

Developing that prioritized list into a detailed set of weaponized targets falls to the MAAP team. As in TET, the role of the legal advisor in MAAP is crucial. According to Lieutenant Colonel Peter "TIMBr" Johncour, 612 AOC MAAP Team Chief,

"MAAP builds the schedule (Air Tasking Order) for the air battle plan requirements (strikes and collections that need to take place) and pairs them with an asset that can meet the requirements...we work with the JAGs to make sure all effects we are planning are in accordance with ROE updates and LOAC."^[6]

This sentiment is echoed by the 612 AOC CPD Division Chief, Lieutenant Colonel Kevin "Kato" Allred, who connects the legal advisor's role directly to the air crew who ultimately implements the ATO:

"By working with the JAG we can get a target through all the wickets whether it's reviewing CDE, Sensitive Target Approval and Review (STAR) Packages (packages requiring SECDEF or higher review), and making sure we are interpreting ROE guidance into the instructions the air crew will need."^[7]

It is also during this stage that JAGs working with ISRD and specialized teams provide inputs for non-kinetic targets related to cyberspace, space, electronic warfare, or information operations. In the AOC, these JAGs are read-in on top secret, sensitive compartmentalized information, and applicable special access programs. These JAGs review sensitive targets and targets that are going to be attacked using non-kinetic effects. Advising in this area requires specialized training to understand how the Air Force employs non-kinetic effects and how those effects fit into the guidance and ROEs put forth by the CCDR or CFACC. Those specialized targets are then prioritized with the other targets from the TET and, once the targets are validated, are placed on the ATO and sent to COD for execution. Discussing how legal professional integrate with the ISR domain, Major Sue "Snow" White, 612 AOC ISRD Deputy Chief, stated:

"Our big three functions for the AOC are analysis, ISR operations, and targeting. Typically targeting is where ISR works with the JAG by looking at the restricted target list and no strike list and collaborating on collateral damage estimates to make sure we are not violating LOAC or ROE. We cross check with JAG to make sure we are not going to potentially cause a second or third order effect we are not anticipating. A lot of people, when talking targets, are thinking about kinetics, but having the resource of a JAG is even more important when working to analyze second and third order impact of non-kinetic effects."^[8]

Mr. Salgado predicts that “more and more JAGs with non-kinetic specialties will be necessary in the future.”[9] Mr. Salgado’s prediction about the increasing importance of non-kinetic operational and legal specialists takes on even more significance as the Department of Defense’s (DoD) cyber forces continue to mature. In 2013, after several years of service-specific force development, the DoD was faced with the challenge of how best to use all of the cyber assets being developed by the service components and focus cyber forces in several areas of specialization for critical missions related to a particular combatant commander or country of operations. The DoD’s answer to that challenge was the Cyber Mission Force (CMF),[10] as described in the April 2015 “DoD Cyber Strategy.”[11]

Within the AOC and the ATO process, fully leveraging personnel and technical resources available via the CMF is at the heart of multi-domain C2 in cyber. For AOC planners, utilizing cyber as part of a multi-domain ATO comes with the added complexity of differing preparatory timetables and logistical support requirements for cyber operations versus traditional kinetic operations. Fortunately, this challenge is not insurmountable. In many ways, the challenges of leveraging the CMF for cyber operations are similar to challenges of leveraging space assets within the ATO planning process. The Air Force overcame those challenges via a specialized team within the AOC called the Director of Space Forces (DIRSPACEFOR or DS4) team. Under the DS4, space capabilities have a history of successful integration into the ATO to meet CFACC’s objectives. This DS4 concept was recently applied to cyber via a new specialized AOC team called the Director of Cyber Forces (DIRCYBERFOR or DC4).

At BLUE FLAG 17-1, the exercise paid special attention to the multi-domain integration of kinetic and non-kinetic effects. Consistent with CSAF’s goal of fully integrating all domains of warfighting, BLUE FLAG 17-1 sought to fully integrate cyber and other non-kinetic effects into the daily ATO cycle. BLUE FLAG 17-1 successfully implemented the DC4 concept to present CMF forces as part of a multi-domain solution to address CFACC objectives. The same two

cyber JAGs who attended the crisis action planning event also participated in BLUE FLAG 17-1, with one JAG at Hurlburt Field, FL, with the 505 CCW exercise controllers, and one JAG embedded with the DC4 team at the 612 AOC and advising on the full scope of non-kinetic capabilities for the CFACC. Collectively, these efforts provided a useful model for multi-domain practice integration that the Air Force can apply to other AOCs.

Once the ATO is ready for execution through COD, **the JAG is responsible** for some of the fastest moving pieces of major combat operations: dynamic targets (DT) and time-sensitive targets (TST).

Once the ATO is ready for execution through COD, the JAG is responsible for some of the fastest moving pieces of major combat operations: dynamic targets (DT) and time-sensitive targets (TST). While the JAG on the COD floor is the first line of defense for issues that come up in the execution of the ATO, normally that is not a concern due to the fact that targets on the ATO have already been vetted. DT/TSTs are targets of opportunity that present themselves without the time to be placed on the normal 72-hour ATO cycle. The targets can be high-value individuals or they can be previously unknown troop movements. These targets are placed into a computer application that requires inputs from a variety of players as to how this target will be prosecuted; it is essentially cramming the ATO cycle into hours or minutes.

The JAG plays a huge role in advising whether or not the targets are valid military targets, whether there is positive identification of the target, whether ROE are met, and if the CDE is acceptable. The JAG also addresses the crucial issue of authority delegation. If so delegated, the Chief of Combat Operations (CCO) may have the authority to engage targets. However, if engagement authority has not been delegated, the JAG must be able to immediately tell

the CCO at what level engagement authority rests—be it CFACC, JFC, SECDEF, or POTUS. Sometimes the lines are black and white, such as a mobile surface-to-air site that is targeting U.S. aircraft. Other times these points of analysis can be gray, such as the enemy storing munitions at a local hospital or launching aircraft from a civilian airfield. The COD JAG is constantly checking and referencing the SPINS, ROE, targeting guidance, NSL/RTLs, and LOAC principles. Sometimes this analysis and decision-making can span hours, other times, only a few minutes. When a battle is heated and time is of the utmost importance, it is imperative that the JAG keeps her or his cool and is not afraid to give candid advice in order to preserve the commander’s intent and integrity of battle.

The CCO runs the show on the COD floor and is responsible for the execution of airpower, in whatever form, based upon the CFACC’s guidance. The 183d has a long-standing relationship with 12 AF and the 612 AOC, providing critical personnel augmentation with subject matter expertise during both exercises and real-world operations. The CCO for BLUE FLAG 17-1, Colonel Daniel “Disco” McSeveney is part of the 183d Fighter Wing, Illinois Air National Guard. He spoke to the critical importance of having an attorney on the COD floor:

“[The] Chief of the Combat Operations [CCO]... runs today’s Air War. Entrusted with executing the plan and flexing when the enemy or mother-nature changes our plan. There’s a reason that the JA is next to me. My right hand is my offensive and defensive air operators; and my left hand is my combat JAG, assisting in understanding rules of engagement, legality, and proportionality in all of the domains in which we operate.... JAGs are integral to any operation.”[12]

The AOC is not just an Air Force function. There are also liaisons for the Army Battlefield Coordination Detachment, Naval and Amphibious Liaison Element, Marine Liaison Element, and Special Forces Liaison Element working in the AOC who work with Air Force operators to get the right

package on the right target. Working with operators is an invaluable experience for JAGs and paralegals by allowing us to get outside of our “bubbles” and see how the tip of the spear operates. Colonel McSeveney agrees: “As a commander, I urge JAGs to share their desire to be a part of operational fight with their leadership so that they can see what other members are doing at the operational level of war.”[13] The JAGs and paralegals at BLUE FLAG 17-1 certainly were able to experience that by working alongside over 1200 other players from three different services and almost 170 different units.

Many times operations involve aid and relief efforts.

It should be noted that while BLUE FLAG 17-1 was a major combat operations exercise, there were injects and scenarios that did not involve offensive or defensive operations. This was done because AOCs are force enablers in many ways beyond the scope of kinetic engagements. For AOCs with a designated geographic area of responsibility (AOR) or area of cooperation, many times operations involve aid and relief efforts. For the 612 AOC, its area of cooperation is U.S. Southern Command (USSOUTHCOM), comprising essentially everything in the Americas south of Mexico and in the Caribbean Sea. In times of crisis and global need, AOCs like the 612 AOC at DMAFB are called upon to assist in humanitarian assistance and disaster relief missions. For example, in 2016, when Hurricane Matthew swept through the eastern Caribbean, it left a wake of destruction over countries such as Haiti, Cuba, Jamaica, and several others. By having knowledge of the pending storm, the 612 AOC was able to spring into action to begin coordinating relief efforts, organizing the airspace, and prioritizing traffic in and out of the region. In fact, an entire joint task force was stood up to better enable U.S. forces to respond to this disaster in support of the U.S. Embassy, State Department, and Office of Foreign Disaster Assistance. Because Haiti was still recovering from a devastating earthquake in 2010, significant preparation went into ensuring relief and aid

efforts would be in place as soon as possible. Relief efforts were also focused on other countries with guidance from the AOC through the joint task force. In situations like this, AMD takes the lead for the AOC and works with a Director of Mobility Forces (DIRMOBFOR) to move cargo and crews in and out of theatre. Colonel William “Percy” Percival, former 612 AOC AMD Chief, stated, “JAGs help you keep from speeding by processing legal reviews from [the combatant commander]...with the legal team in the background they help us navigate what we can do. The JAGs leverage their knowledge of SOFA, customs and norms, national-to-nation agreements, diplomatic clearances, and international law.”^[14] By working with the AOC in preparation for Hurricane Matthew, the AOC concept brought coordination to chaos and direction to devastation. Without the direction of the AOC, the massive relief effort that followed could have been a burden to the people of the affected countries rather than a benefit.

By having knowledge of the pending storm, the 612 AOC was able to spring into action to begin **coordinating relief efforts, organizing the airspace, and prioritizing traffic** in and out of the region.

The BLUE FLAG 17-1 exercise presented a comprehensive picture of multi-domain C2. More than 2000 missions were planned, eight ATOs were developed, almost 900 missions flown, and more than 700 targets were struck to include almost 20 dynamic targets and 70 non-kinetic targets. Additionally, thousands of notional troops were moved around in a notional foreign country; millions of pounds of supplies were brought in; thousands of notional American citizens were evacuated from a hostile country; air superiority was established; contested land was returned to UN-recognized borders; and battlefield control was realized thanks to the total force effort and management

of the AOC. As JAGs and paralegals, we can take pride in knowing that we had a hand in planning and executing this exercise and ensuring that it went smoothly. The exercise also underscored the integral part played by JAG Corps professionals in supporting command decision-making and how an integrated JAG or paralegal can be a force-multiplier and enhance multi-domain C2 from whatever level they are involved in. Colonel Daymen Tiffany, 612 AOC COD Chief, highlighted the importance of a JAG’s role in command decision-making: “Every commander I’ve had at the CFACC and Commander-level makes sure the JAG is right beside them to make sure that the right decisions are being made.”^[15] This is exactly the type of multi-domain enhancement that the CSAF had in mind.

The exercise also underscored the **integral part played by JAG Corps professionals...**

How can JAGs best prepare for these new challenges? According to [Brigadier General Bryan P. Radliff](#), Mobilization Assistant to the Commander, 12th Air Force, Air Combat Command, and Commander, Air Forces Southern, USSOUTHCOM, the key is to “exercise, exercise, exercise...there is ample opportunity to build experience prior to assuming combat responsibilities.”^[16] It cannot be overstated that BLUE FLAG 17-1 was an invaluable training experience for all career fields involved, especially JAG Corps professionals. All participants received significant exposure to the AOC and its vast capabilities. In keeping with CSAF’s vision on multi-domain C2, JAGs and paralegals should endeavor to find opportunities to gain incredible operations law expertise by working in an AOC.

ABOUT THE AUTHORS



Colonel Michael A. Lewis, USAF

(B.S., Bentley College; J.D., Boston College) is the Staff Judge Advocate at Twelfth Air Force, Davis-Monthan Air Force Base, Arizona.



Major Trenton M. White, USAF

(B.A., University of Arkansas; J.D., University of Tulsa) is the Chief of Adverse Actions at Twelfth Air Force, Davis-Monthan Air Force Base, Arizona.



Major Rodney B. Glassman, USAFR

(B.S., J.D., University of Arizona) is an Individual Mobilization Augmentee at Eielson Air Force Base, Alaska and Of Counsel at Beus Gilbert PLLC.



Captain John W. Kalis, USAF

(B.S., Mount Mercy College; J.D., Ohio State University) is a student at The Judge Advocate General's Legal Center and School, Charlottesville, Virginia.

EXPAND YOUR KNOWLEDGE:

EXTERNAL LINKS TO ADDITIONAL RESOURCES

- **AirForceTV Video:** Multi-Domain Command & Control, https://www.youtube.com/watch?v=WWnozSe2DU4&feature=emb_title
- **Air Force Magazine:** Understanding Multi-Domain Command and Control (Jan 9, 2018), <https://www.airforcemag.com/Understanding-Multi-Domain-Command-and-Control/>
- **BreakingDefense:** 2018 Forecast: Air Force, Space Force Or Multi-Domain Force? (Jan 5, 2018), <https://breakingdefense.com/2018/01/2018-forecast-air-force-space-force-or-multi-domain-force/>
- **C2/Comms:** Air Force looks to transform command and control enterprise (Sept 17, 2017), <https://www.c4isrnet.com/digital-show-dailies/air-force-association/2017/09/18/air-force-looks-to-transform-command-and-control-enterprise/>
- **DVIDS Video:** Blue Flag, <https://www.dvidshub.net/video/524979/blue-flag-17-1>
- **DefenseNews:** How industry's helping the US Air Force with multi-domain command and control (Sept 25, 2017), <https://www.defensenews.com/c2-comms/2017/09/25/industry-pitches-in-to-help-air-force-with-multi-domain-command-and-control/>
- **DoD News:** Air Force, Army Developing Multi-domain Doctrine (Jan 25, 2018), <https://www.defense.gov/Explore/News/Article/Article/1424263/air-force-army-developing-multidomain-doctrine/>

ENDNOTES

- [1] Letter from General David L. Goldfein, Chief of Staff of the Air Force, to Airmen (Mar. 10, 2017), <http://www.af.mil/News/Article-Display/Article/1108931/csaf-letter-to-airmen/>.
- [2] Electronic mail interview with Lieutenant General Mark D. Kelly, Commander, 12th Air Force, Air Combat Command and Commander, Air Forces Southern, U.S. Southern Command, Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [3] Interview with Lieutenant Colonel Eric Farquar, Operations and Assessment Team Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [4] Interview with Daniel Salgado, Strategy Guidance Team Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [5] Interview with Major Mike Cavanaugh, Targeting and Effects Team Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [6] Interview with Lieutenant Colonel Peter Johncour, Master Air Attack Plan Team Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [7] Interview with Lieutenant Colonel Kevin Allred, Combat Plans Division Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [8] Interview with Major Sue White, Intelligence, Surveillance, and Reconnaissance Division Deputy Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [9] Interview with Daniel Salgado, *supra*, at note 5.
- [10] The CMF is composed of teams of operators from across the military service components. The CMF is divided into four major missions: (1) cyber protection teams that defend DoD networks, (2) national mission teams that address national critical infrastructure (i.e., electric grids and other utilities), (3) combat mission teams that are aligned with combatant commanders and support missions in aligned areas of responsibility, (4) and additional support teams that augment the national mission teams and combat mission teams as needed.
- [11] U.S. Dep't of Def., *The DoD Cyber Strategy* (2015), https://archive.defense.gov/home/features/2015/0415_cyber-strategy/Final_2015_DoD_CYBER_STRATEGY_for_web.pdf.
- [12] Interview with Colonel Daniel McSeveney, Commander, 183d Air Operations Squadron at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [13] *Id.*
- [14] Interview with Colonel William Percival, Air Mobility Division Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [15] Interview with Colonel Daymen Tiffany, Combat Operations Division Chief, 612th Air Operations Center at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).
- [16] Interview with Brigadier General Bryan Radliff, Mobilization Assistant to Commander, 12th Air Force, Air Combat Command and Commander, Air Forces Southern, U.S. Southern Command at Davis-Monthan Air Force Base, Ariz. (Apr. 29, 2017).