The Changing Face of the War Fighter

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fter the Chinese antisatellite missile test in 2007 and Russia's successful flight test of an antisatellite missile in May 2016, space no longer remains an uncontested mission area for any spacefaring nation.¹ Similarly, the attack on the Pentagon's e-mail server, which affected approximately 4,000 Department of Defense (DOD) employees, shows that cyberspace networks—like space—are also areas of conflict that require special attention.² These and many other instances suggest that the Air Force must now consider space and cyberspace as domains of combat and all Airmen operating in those arenas as war fighters. The challenge now lies in adapting the Air Force and its space and cyberspace Airmen to a warfighter mind-set. By realigning our functional major commands (MAJCOM), divesting regional MAJCOMs, revamping training/deployment constructs, and updating policy and doctrine, we can ensure that the war-fighter mind-set is instilled in our Airmen.

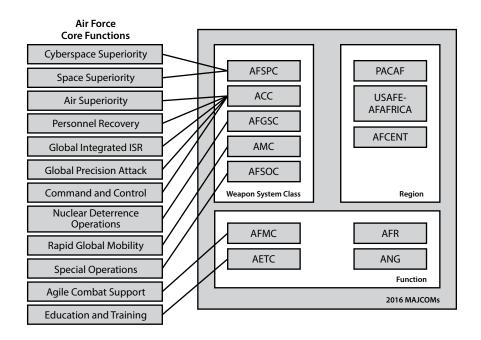
For many years, the United States flew satellites with little concern of possible threats to our control of the mission area. Other countries simply could not afford to operate in space, let alone contend with the United States for control. Because of the decrease in launch and satellite costs, the competition has caught up, nation-states' space capabilities have increased, and US military forces are now feeling the ramifications of competing for space control. Similarly, another highly contested domain—cyberspace—poses a serious threat to Air Force missions. Tools and techniques available on the Internet allow individuals without a formal educational background to easily learn the ways of hacking. These innovations make it simpler and cheaper to stage a war.

Because of the limited cost of combat in both of these new mission areas, for the foreseeable future, the United States will have to face increasingly capable adversaries bent on circumventing our space capability and exploiting our cyber vulnerabilities. To counter near-peer advances and challenges, the DOD must set out to find "third offset" capabilities to regain the US military advantage lost through the proliferation of technology (developed, stolen, and/or shared). The Air Force must also develop a strategy to meet these problems and threats and to ensure that our Airmen understand that they are competing in a real war zone. By positioning ourselves realistically to confront such issues, the Air Force will continue to sustain the war-fighter mind-set.

To stage our strategy, we look to insights from our commanders. The secretary of the Air Force and chief of staff have provided strategic direction in four documents: America's Air Force: A Call to the Future; Air Force Strategic Environment Assessment 2014–2034; "Global Vigilance, Global Reach, Global Power for America"; and the Air Force Future Operating Concept: A View of the Air Force in 2035.³ Each document outlines a dynamic, ever-changing national security threat environment that requires the Air Force to adapt its five core missions (air and space superiority; global integrated intelligence, surveillance, and reconnaissance [ISR]; rapid global mobility; global strike; and command and control) into a more integrated, agile, technology-driven, and multidomain service. By the year 2035, the Air Force's core missions will have evolved into adaptive domain control, global integrated ISR, rapid global mobility, global precision strike, and multidomain command and control. The change in the Air Force's core missions calls for an examination of the service's current MAJCOM structure to see if it can realistically complete the new missions as presently organized.

Historically, the Air Force MAJCOM structure evolved from conflicts in World War II and the Cold War and were based on weapon-system class, mission areas, and region (fig. 1) to meet the demands of direct military force-on-force. This organization greatly benefited US national security interests and resulted in our successes during the Gulf and Afghan wars. However, given our fielded forces' performance, our enemies will most likely confront us and our allies in more indirect ways (space, cyber, and terrorism) rather than direct military force-on-force. Similarly, unless a major conflict or a significant geopolitical change alters the world order of the last 30 years, Russia, China, North Korea, and Iran are the new threats to our nation's security, with radical Islam continuing to morph from one terrorist group to another. According to *America's Air Force: A Call to the Future*, tomorrow's operational agility demands flexible, integrated multidomain operations; superior decision speed; dynamic command and control; a balanced capability mix; and performance-optimized teams. The question remains as to whether the current structure of the Air Force can attain this operational agility.

To determine whether the Air Force can achieve this vision, one must look at developments of the Space Enterprise Vision (SEV) and possible development of a Cyber Enterprise Vision (CEV); one highlights the capabilities of the Air Force structure while the other all too clearly demonstrates its faults. The SEV required the holistic review of classified and unclassified space system planning. This information was then integrated into a single SEV across platform classes (regardless of organization) to outline where the Air Force should go with space capability development. Such is not the case with the CEV, however. Because the Air Force, DOD, and world at large all interact in cyberspace, the Air Force faces an immense challenge. Any thoughts of structuring a single cyber vision quickly break down because of integration issues arising from the current weapon-system-based organizational structure of the MAJCOMs. Thus, the failure of the Air Force to develop a CEV indicates that it cannot complete the new missions proposed with the current MAJCOM structure.



ISR - intelligence, surveillance, and reconnaissance

AFSPC - Air Force Space Command

ACC - Air Combat Command

AFGSC - Air Force Global Strike Command

AMC - Air Mobility Command

AFSOC - Air Force Special Operations Command

PACAF - Pacific Air Forces

USAFE / AFAFRICA - United States Air Forces in Europe / US Air Forces Africa

AFCENT - US Air Forces Central Command

AFMC - Air Force Materiel Command

AETC - Air Education and Training Command

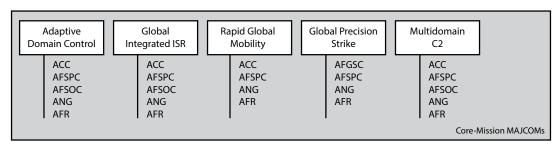
AFR - Air Force Reserve

ANG - Air National Guard

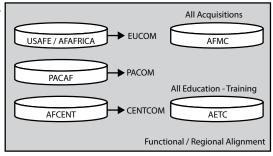
Figure 1. 2016 Air Force MAJCOM organizational structure with core functions

To fulfill the missions proposed in the *Air Force Future Operating Concept*, the service must reorganize and realign the current MAJCOM structure to synchronize the five core missions across capabilities, staffs, and expertise. Doing so will make the idea of war and its application real to our Airmen. To realize a 2035 end state, the Air Force must go beyond the current MAJCOM structure by asking whether it is organized to attain its 2035 vision. Imagine an adaptive-domain-control MAJCOM that develops capability across air, space, and cyber whereby doctrine is written as an integrated solution, requirements are defined across multiple-domain platform classes, and budgets are advocated as an integrated solution across multiple-domain systems on behalf of a core mission. To meet the Air Force's 2035 vision, address the MAJCOM organizational problems, and ingrain the war-fighter spirit into our troops, this article proposes a core-mission MAJCOM realignment.

By 2035 the service will need to consolidate and realign the current MAJCOM organizational structure from 12 to 9 MAJCOMs if it wishes to fully realize the secretary and chief's vision and allow for better integration of war-fighter capabilities. This concept proposes five core-mission MAJCOMs, one acquisition MAJCOM, and retention of the Air Education and Training Command, Air National Guard, and Air Force Reserve MAJCOMs in their current forms (fig. 2).



- · Transition to five core-mission MAJCOMs to organize, train, and equip.
- Integrate current MAJCOM staffs into core-mission MAJCOMs.
- Continue to integrate ANG and AFR MAJCOMs across all Air Force commands.
- O&M MAJCOMs: change operational control to COCOMs as forwarddeployed forces; treat NAFs as JTF HQ with wings.
- Merge required MAJCOM functions into COCOM; pull residual support functions back to core-mission MAJCOMs; eliminate redundancies.
- · Move all AF acquisition back to AFMC.
- · Keep AETC unchanged.



12 to 9 MAJCOMs 5 Core-Mission MAJCOMs – 1 Acquisition MAJCOM – 1 Training MAJCOM – 1 GUARD/1 RESERVE MAJCOM

ACC - Air Combat Command

AFSPC - Air Force Space Command

AFSOC - Air Force Special Operations Command

ANG - Air National Guard

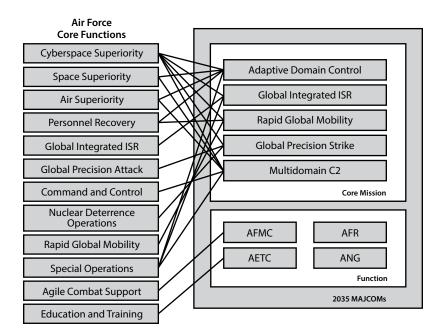
AFR - Air Force Reserve

ISR - intelligence, surveillance, and reconnaissance AFGSC - Air Force Global Strike Command C2 - command and control O&M - operation and maintenance COCOM - combatant command NAF - numbered air force JTF - joint task force HQ - headquarters AFMC - Air Force Materiel Command AETC - Air Education and Training Command USAFE / AFAFRICA - United States Air Forces in Europe / US Air Forces Africa PACAF - Pacific Air Forces AFCENT - US Air Forces Central Command **EUCOM - US European Command** PACOM - US Pacific Command CENTCOM - US Central Command

Figure 2. 2035 Air Force MAJCOM realignment concept

To transition regional/mission-area-class MAJCOMs to core-mission MAJCOMs. the Air Force should integrate the commands' staffs into appropriate core-mission MAJCOM staffs. Three of the five core-mission MAJCOMs (Adaptive Domain Control, Global Integrated ISR, and Multidomain Command and Control) would integrate staff elements of Air Combat Command, Air Force Space Command, and Air Force Special Operations Command. The Adaptive Domain Control Command would integrate across air, space, and cyberspace "to achieve varying levels of domain superiority over adversaries seeking to exploit all means to disrupt friendly operations."5 The Global Integrated ISR Command would develop doctrine and plans to enable "leaders to make informed decisions at a superior decision speed to help ensure freedom of action, maintain deterrence, contain crises, and achieve operational success" (emphasis in original).6 The Multidomain Command and Control Command would focus on organizing, training, and equipping "forces to ensure the ability to conduct effective multi-domain operations." For the remaining two core-mission MAJCOMs. Air Mobility Command and Air Force Global Strike Command would become Rapid Global Mobility Command and Global Precision Strike Command, respectively, while integrating staff elements from Air Force Space Command. Rapid Global Mobility Command would employ "a balanced capabilities mix of manned, remotely operated, and autonomous assets to support operations in both contested and uncontested environments" (emphasis in original).8 Space launch would consolidate under this command. The fifth core-mission MAJCOM, Global Precision Strike Command, would "maximize operational agility against advanced adversaries" by integrating "multi-domain global precision strike [capability] using a balanced capabilities mix of forces in collaboration with joint and multinational partners" (emphasis in original).9 Any future space-on-space strike capability falls under the umbrella of Global Precision Strike Command. Figure 3 displays a possible realignment of core functions to this proposed core-mission MAJCOM realignment; however, if

the Air Force pursued this type of construct, further core-function-alignment analysis would be necessary.



ISR - intelligence, surveillance, and reconnaissance

C2 - command and control

AFMC - Air Force Materiel Command

AETC - Air Education and Training Command

AFR - Air Force Reserve

ANG - Air National Guard

Figure 3. 2035 Air Force MAJCOM organizational structure with core functions

As for acquiring integrated systems and capabilities, all Air Force acquisition should fall under Air Force Materiel Command to better "align with partners to develop interoperable, adaptive domain control capabilities through aviation, space, and cyberspace enterprise development, advocacy, training, and combined acquisition programs." In addition to consolidating acquisition, prudent organizational alignment of multidomain acquisition within Air Force Materiel Command would drive integrated acquisition for core-mission solutions and capabilities.

Regarding the Air National Guard, Air Education and Training Command, and Air Force Reserve, they would continue to perform their current missions to educate, train, and integrate across all Air Force commands. If the service were to pursue this MAJCOM realignment, then further analysis and work would be necessary to properly align US-based numbered air forces and wings across the five core-mission

MAJCOMs. However, physically relocating numbered air forces and wings would be unnecessary.

The further we align our mission to the MAJCOMs and make our defense strategy a practical reality for our Airmen, the more we ingrain the war-fighter spirit and combat readiness into our troops. With the new MAJCOM structure, integration and technology will drive the Air Force's ability to fight and win our nation's wars and low-intensity conflicts. Integration of weapon systems and people will establish a culture of "my mission" rather than "my weapon system," helping ensure propagation of the war-fighter mind-set. Integrated capabilities (air, space, and cyber) to support core missions will develop from inception instead of piecemeal among weapon-systemclass MAJCOMs (the current MAJCOM structure). Flexibility is necessary here because air, space, and cyberspace technologies advance at disproportionate paces. Air and space have much longer development cycles and fewer companies developing technologies than does the cyberspace industry. Within the information technology industry, commercial technology advances at a much faster pace than can ultimately be delivered by any defense contractor developing cyber solutions, oftentimes rendering weapon systems unintentionally obsolete on delivery. There are simply myriad cyber companies developing new technologies and techniques not even dreamed of when the DOD and Air Force established requirements and/or released a contract for a specific capability or weapon system procurement.

Besides aligning to core-mission MAJCOMs, the Air Force Future Operating Concept asks how Air Force forces will evolve and conduct the core missions to help overcome national security challenges in the future. To further establish our war-fighter mentality, we should propose divesting regional MAJCOM headquarters (United States Air Forces in Europe, US Air Forces Africa, Pacific Air Forces, and US Air Forces Central Command) and transferring the staffing for all regional air forces (numbered air forces and wings) to their respective combatant commands (COCOM)— US European Command, US Pacific Command, and US Central Command—as forwarddeployed forces, using our most recent conflicts in Iraq and Afghanistan as organizational examples or starting points. Since United States Air Forces in Europe / US Air Forces Africa, Pacific Air Forces, and US Air Forces Central Command are predominantly operation-and-maintenance commands that do not acquire major weapon systems or develop capabilities, the regional MAJCOM headquarters should merge necessary staff into the regional COCOM headquarters to support the additional force structure responsibilities. This idea does not propose to realign the COCOM organizational structure, and any residual regional MAJCOM staff would come back to the core-mission MAJCOM headquarters.

Needless to say, a structural overhaul like the one suggested above will entail extensive training, which provides further opportunity to instill the war-fighter spirit throughout the force. The Air Force needs to begin training its space war fighters on how to fight in the space domain using war gaming as well as other modeling and simulation efforts that fit into the confines of current space policy and space treaties. The service's space and cyber squadrons should begin forward-deploying as units with other war fighters rather than deploying one or two Airmen at a time. Doing so will enable the entire squadron of space and cyber war fighters to see and feel the effects of their mission as they are conducted. Too often, the Air

Force's space and cyber operators deploy while the rest of their unit remains back at home station, unaware of the conflicts that their fellow Airmen are experiencing. We need extensive training and motivation modules to bridge this gap between our Airmen and to help units understand that the days of supporting space and cyber from the safety of a desk are gone. We are now all war fighters.

Finally, to further instill our war-fighting spirit across the Air Force, the long-term effort requires changes to national space policy and space doctrine, both of which have dictated for years that the United States employ no weapons in space. These policies need to change to allow both offensive and defensive operations there. We must look to the capabilities and possible strategies of our competitors for the space and cyber domains and plan our defense strategy accordingly. Offensively, space weapons should be allowed in space to conduct missions in a contested environment. Their presence will permit the United States to hold aggressors at substantial risk with offensive space weapons, and we as a country can deter an aggressor from damaging or destroying our critical mission satellites.

As we have learned and witnessed over the Air Force's history, the service has always innovated leveraged technologies and been willing to adapt the MAJCOM organizational structure to meet the ever-changing national security environment. By altering our organizational structure to meet the current threat in a real and viable way, we not only encourage but also ingrain the war-fighting spirit into the every-day lives of our Airmen. By aligning our MAJCOMs to best meet the current threats, by establishing intensive training of our troops to bridge the gap between experienced fighter and home-front hero, and by signaling our stance to the world through our national policy and doctrine, the Air Force will instill the right war-fighter mind-set to face the current war.

Notes

- 1. Edward Cody, "China Confirms Firing Missile to Destroy Satellite," *Washington Post*, 24 January 2007, http://www.washingtonpost.com/wp-dyn/content/article/2007/01/23/AR2007012300114.html; and Bill Gertz, "Russia Flight Tests Anti-satellite Missile," *Washington Free Beacon*, 27 May 2016, http://freebeacon.com/national-security/russia-flight-tests-anti-satellite-missile/.
- 2. Tom Vanden Brook and Michael Winter, "Hackers Penetrated Pentagon Email," *USA Today*, 7 August 2015, http://www.usatoday.com/story/news/nation/2015/08/06/russia-reportedly-hacks-pentagon-email-system/31228625/.
- 3. Headquarters US Air Force, America's Air Force: A Call to the Future (Washington, DC: Headquarters US Air Force, July 2014), http://airman.dodlive.mil/files/2014/07/AF_30_Year_Strategy_2.pdf; Headquarters US Air Force, Air Force Strategic Environment Assessment 2014–2034 (Washington, DC: Headquarters US Air Force, 2014); Gen Mark A. Welsh III, "Global Vigilance, Global Reach, Global Power for America," Air and Space Power Journal 28, no. 2 (March-April 2014): 4–10, http://www.airpower.maxwell .af.mil/digital/pdf/articles/2014-Mar-Apr/SLP-Welsh.pdf; and Headquarters US Air Force, Future Operating Concept: A View of the Air Force in 2035 (Washington, DC: Headquarters US Air Force, September 2015), http://www.af.mil/Portals/1/images/airpower/AFFOC.pdf.
- 4. Headquarters US Air Force, America's Air Force, 9; and Headquarters US Air Force, Air Force Future Operating Concept, 47.
 - 5. Headquarters US Air Force, Air Force Future Operating Concept, 18.
 - 6. Ibid., 23.

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- 7. Ibid., 14.
- 8. Ibid., 21.
- 9. Ibid., 29, 30.
- 10. Ibid., 21.



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