Airpower and the Expeditionary Trinity

Emerging Threats, Emerging Locations, and Emerging Capabilities

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Answering the two questions regarding the application of airpower is essential to the modern international security environment. The twin inquiries of how airpower should be applied (doctrine) and to what purpose (strategy) defines and describes the contribution of airpower to international conflict. In light of the role that airpower continues to play in the international security system, it is necessary to articulate a clear strategy for the future of the domain and how best to employ airpower in the associated international security paradigm.

The current threat environment places airpower at an inflection point. The strategy that the Air Force and airpower advocates will become increasingly aimed at what might be termed an *Expeditionary Trinity*, wherein airpower combats emerging threats, in emerging locations, with both sides employing emerging capabilities to achieve strategic objectives. By discussing the types of engagements in which politicians choose to employ airpower, and by analyzing the character of the current international security system, not only will the Expeditionary Trinity continue to gain in strategic importance, but that airpower—and more specifically the Air Force—will, by necessity, become the preeminent tool in sustaining American national security interests.[1] Equally important, the continued demands of expeditionary operations have serious implications for military readiness and the manner in which the Air Force organizes, trains, and equips Airmen to employ combat airpower.

Interests and Interventions

According to Carl von Clausewitz, the most important task that statesmen and commanders have to accomplish is the proper identification of the "kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something alien to its nature."[2] In strategic terms, one must correctly identify the nature of the conflict to develop and employ a strategy that can logically connect the available means to the appropriate military ways that achieve the desired political outcomes.[3] Failure from the outset to properly identify the nature of a conflict ensures mission failure, as the devised ways will be designed incorrectly.[4] What are sometimes considered second- and third-order effects might rightly be considered failures in strategic planning owing to incorrectly assessing the nature of conflict. A military built for—and employing combined arms—warfare will likely prove ineffective waging irregular combat against unconventional forces.

While the military views the nature of wars according to a spectrum of conflict (see figure) which reflects the level of exertion required to achieve political output-based objectives, an alternate method of viewing conflict is based on the magnitude of a threat aimed at input-based levels of interest. Proposed shortly after the Cold War, political author Donald Nuechterlein's conception of national interests included survival, vital, major, and periphery interests, where survival interests are existential threats that—if they cannot be overcome—are likely to result in the end of a state.[5] Only the War of 1812 and the Cold War represent this type of threat in US history. Below survival are vital threats, those which are so important to political leaders that compromise is unacceptable such as unconditional surrender in World War II or the Civil War.[6] Each of these interests resides clearly in the orange/red major theater war and greater area on the spectrum of conflict and thus represent security threats for which the DOD must always be prepared to address. Below vital are major interests, something that a country considers "important but not crucial to its well-being."[7] Major interests could range from stability in foreign countries to freedom of the seas. Least important to national security are periphery interests, those that do not impact the security of the United States but may be important to private interests.[8] Major and periphery interests lie in the green and yellow area of

the spectrum of conflict, issues that could result in military action, but by and large are not issues directly related to the national security of the United States.
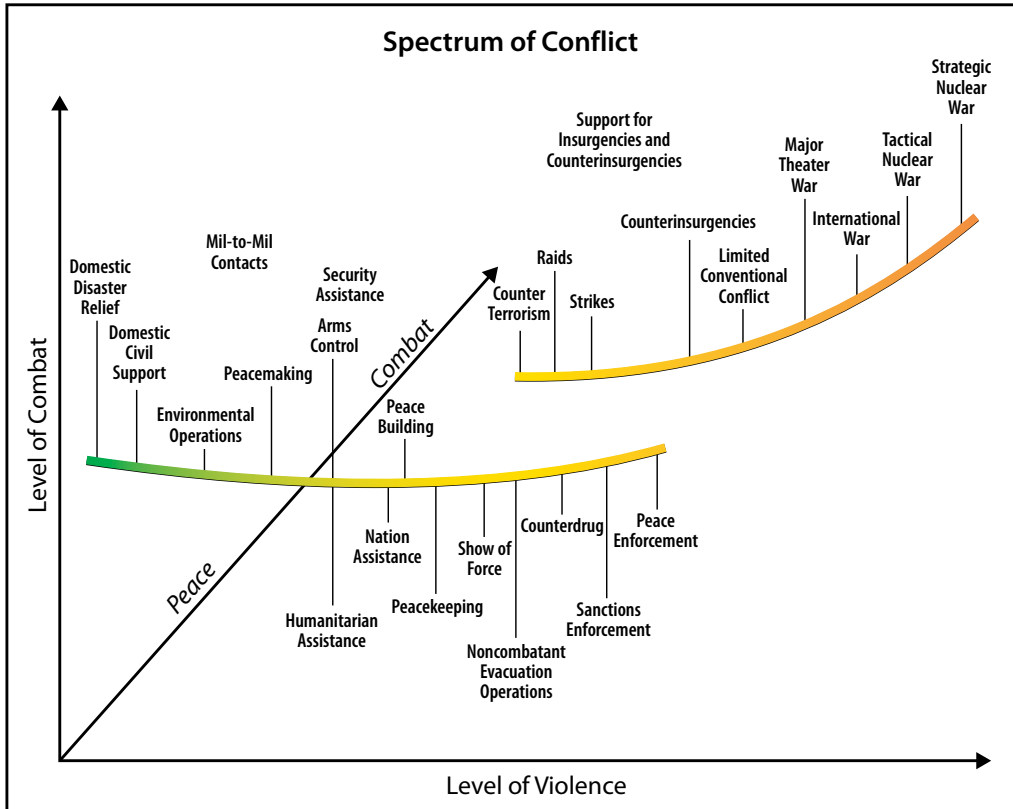
Figure. Spectrum of conflict. (Figure adapted from *Army Vision 2010* (Washington, DC: Headquarters, Department of the Army, n.d.), 5, https://rdl.train.army.mil/catalog-ws/view/100.ATSC/CE5F5937-49EC-44EF-83F3-FC25CBOCB942-1274110898250/aledc_ref/army_vision_2010.pdf)

Since 9/11, the most common use of the US military is of the low-threat nature, and this represents a perpetuation of military employment rather than a deviation from historical norms. According to the Congressional Research Service, since 11 September 2001, there have been 73 instances of the employment of US armed forces overseas.[9] By generously including each successive use of force authorization for Iraq and Afghanistan (as opposed to counting the entire 16-plus years in Afghanistan as a singular use of force), 50 uses are for low-threat to national security engagements from the left side of the spectrum of conflict, and 23 uses for Iraq and Afghanistan. This two-to-one ratio for low-threat engagements only increases if one chooses any alternate date in US history as far back as 1798.[10] The regular pattern of employment of US armed forces is for intermittent periods of vital interstate war-

fare (World War I and II, Korea, Vietnam, and the Gulf War) surrounded by low-threat conflict at the level of major national interests. The fact that American politicians have chosen to employ the military element of national power most frequently on major interest issues at the low end of the spectrum of conflict does not imply that conventional warfare between near-peer states and the vital or survival level of interests should be discounted, but rather that a military that is both effective and efficient requires honest appraisal of both the most dangerous and the most likely uses of force in conflict. Short of invasion, which hasn't occurred in the United States since 1812, states choose when to engage in war, and American politicians choose to engage primarily in low-spectrum conflict.

In the context of defining the operational environment, low-threat conflict should be considered permissive. For the sake of this article, a permissive operating environment is considered one in which US forces have freedom of action to conduct missions across domains. A permissive environment does not mean that forces are entirely secure, only that employed components (air, land, or maritime) can conduct operations at a time and place of their choosing. Permissive operating environments are a defining factor of what expeditionary operations have become.

The evolution of the expeditionary Airman could not have been foreseen when the original air expeditionary force (AEF) concept was being developed and implemented in the 1990s. The AEF was a construct designed in a unipolar international security setting, with early contingency response groups designed to transition from the battlefield to the airfield rather than a dirt patch to expeditionary operations.[11] As envisioned, an AEF would represent prepackaged airpower capabilities of 30–40 aircraft from units that had trained and deployed together previously, ready to provide regional combatant commanders, then known as regional commanders-in-chief, "rapid, responsive, and reliable airpower" tailored Air Forces.[12]

In operations such as Northern and Southern Watch, squadrons would deploy according to predefined schedules, conduct operations, redeploy, and reconstitute as a unit to air bases manned by either individually deployed or permanent party members such as Inçirlik Air Base, Turkey. By 2016, the only remaining vestige from the 1990's conceptual model is that flying squadrons deploy together (but not with other units with whom they have trained) on cycles, sometimes. For most of the expeditionary Airmen engaged in operations around the globe, however, deployments are single endeavors by single Airmen, so much so that by 2016, the incoming Air Force chief of staff, Gen David Goldfein, criticized the habit of individually deploying Airmen as inhibiting unit cohesion and mission effectiveness.[13] Although the officers that crafted the AEF model recognized in advance that the construct would represent a "journey, not a destination," the direction that expeditionary airpower evolved was not, and likely could not have been, anticipated in the relatively stable unipolar world in which the AEF was created.[14] In contrast to known threats in recognized locations with a traditional force structure (for example, the Iraq and Middle East traditionally combined an arms warfare approach in the Gulf War), expeditionary operations have evolved emergently, neither solely responsive nor continually proactive, but often a combination of both simultaneously.

The Expeditionary Trinity's Who and Where: Emerging Threats and Locations

From the counterinsurgency in Iraq through the surge in Afghanistan, to the Arab Uprising, al-Qaeda in the Arabian Peninsula or the Islamic State, airpower remains the first and often enduring response to emerging threats and, as the recent examples of Sirte and Mosul demonstrate, can prove effective when combined with ground-based special operations forces. The fact that airpower is the politically preferred military means to combating emerging threats is not in and of itself surprising; airpower has always enjoyed a shorter response time over land and maritime powers as well as a reduced risk of US casualties. What is surprising is how emerging threats and emerging locations have worked in concert to demand airpower persistence where previously only airpower projection was required.

In the last decade, expeditionary airpower operations have typically focused on nonstate actors or weak states. Organizations such as the Taliban, various al-Qaeda affiliates across three continents—the Islamic State, Boko Haram and others—have been the predominant target of airpower operations, with occasional efforts against weak states such as Libya adding variety. Because weak states can collapse quite suddenly, frequently creating the vacuum necessary for nonstate actors to arise, the use of force against nonstate and weak state actors is a characteristic of emerging locations. The Arab uprisings of 2011 illustrate this point precisely, where a revolution in Tunisia rapidly expanded to encompass all of North Africa and the Sahel. Everywhere in the region that weak states collapsed, including Libya, Mali, Mauritania, and others, emerging threats have flourished, with al-Qaeda in the Islamic Magreb (AQIM) and the Islamic State spreading as far as Western and sub-Saharan Africa following the trail of collapsing states.[15] By the fall of 2016, only in Tunisia did a stable government rule, and even the Tunisians are under assault from AQIM, Islamic State in Iraq and Syria, and homegrown terrorists, with dozens of attacks grabbing international attention.[16]

As weak or collapsed states are often without large foreign support, in geographically isolated areas where the government is unable to effectively control contested regions, in many cases violent extremist organizations (VEO) represent threats to major (important, but not crucial) interests rather than vital, and assuredly not survival, to US national security and are therefore perfect targets for expeditionary airpower. Furthermore, where VEOs are concerned, one of the chief difficulties in defeating threats in the expeditionary environment is the fleeting nature of success. An organization defeated in one location can quickly reconstitute in another location, or even as another organization, demanding yet more American effort to suppress the VEO. The ability of VEOs to rapidly reconstitute using modern multimedia recruiting methods from virtually any ungoverned location requires an ever-increasing demand for building partner capacity (a core military mission) in new locations with the hope that weak states can eventually secure their territory without American military assistance.

While VEOs pose the most recognizable emerging threats, they are certainly not alone. In the last several years, emerging threats have included disease outbreaks, cyberattacks, natural disasters, and humanitarian crises, with some of these other types of emerging threats leading directly to increased threats from VEOs. The West

African Ebola outbreak of 2014 was quickly assessed as a rapidly emerging threat to US security interests, and necessitated an expeditionary military intervention delivered with airpower to austere locations to mitigate the threat.[17] Refugee crises from natural disasters and war represent threats to regional security and global security when VEOs can operate in uncontrolled areas and export violence. The inherent flexibility of VEOs, combined with modern methods of mass communication, means that any strife can swiftly go from localized violence to global violence. Whereas in the post–Cold War security environment, failing states such as Somalia or Rwanda remained largely confined to the single or immediately surrounding states, in the post-9/11 security environment, the collapse of Libya becomes an immediate and unanticipated security threat to the entirety of North Africa and Europe.

Precisely because emerging locations arise rapidly and in unexpected areas, a chief advantage of airpower in preparing for conflict in emerging locations is the margin of error in selecting operating base locations. Whereas an early incorrect basing decision can have strategic consequences down the road, the range of airpower increases the likelihood that basing locations will remain relevant longer, allowing planners to create airbases in strategic locations and knowing that future emerging threats will likely occur within airpower strike range.[18] In the African theater, one can witness real-time the importance of basing decisions as US Air Forces Africa (AFRICOM) continues to expand according to the emerging threats moving swiftly across the continent. While the primary AFRICOM mission of building partner capacity remains paramount, the command is also steadily increasing airpower available to combat emerging threats.

If the pattern of regional combatant commands establishing expeditionary operating locations continues to follow emerging threats, then it is extremely possible that the next frontier for expeditionary airpower will be Southeast Asia, where the Islamic State is making inroads from Thailand south through the Philippines, and every state in between.[19] Because the nation states of Southeast Asia enjoy more stable governments than those of Africa, western airpower might not be necessary to meet the emerging threats, but whether western states or Southeast Asian states meet the threat, emerging capabilities will play a critical role.

The How: Remotely Piloted Aircraft's Emerging Capabilities

In the post 9/11 security environment, VEOs purposefully employ a strategy of irregular warfare to mitigate the advantages of American technological superiority and render many modern weapon systems and doctrine that the Air Force had spent decades developing largely irrelevant. Emerging threats and locations demand innovative approaches that focus on capabilities designed to meet threats as they emerge.[20] Emerging threats that can hide among populations remain hidden—until they decide to act—and often gain control of limited amounts of territory. Later these threats must relocate to avoid American airpower which presents new challenges for their own airpower application—all of which the world has seen play out as the Islamic State moves from Iraq and Syria across Africa and Southeast Asia. These factors have demanded persistence in a way airpower was previously incapable of maintaining,

and it is the ascendance of the remotely piloted aircraft (RPA) technology that has enabled this persistence.

While the first video-capable RPA operated in the Vietnam War, it is the nature of the Expeditionary Trinity that required the RPA become the critical component of American (and increasingly foreign) airpower. The ability of various RPA platforms to engage across the three levels of warfare—strategic, operational, and tactical—increases flexibility by combining previously separate roles into fewer airframes. In the American inventory, strategic assets such as the RQ-4, can transit continents and oceans before loitering over targets for almost a calendar day. Meanwhile, the operational flexibility that characterizes the MQ-1 or MQ-9 (each of which can be configured for a variety of tasks and would make previous multirole aircraft, such as the F-16 jealous) allows the assets to conduct purely intelligence, surveillance, and reconnaissance (ISR) missions, strike missions, over watch, or any combination thereof. Even down to the purely tactical, single-role, RQ-11 used in airbase defense, the RPA has become the go-to technology of necessity for airpower employment for a multitude of reasons. Persistence, rapid reaction, minimal host nation support (compared to traditional air assets), reduced production timelines, and an inherent flexibility that is unmatched by manned aircraft are critical aspects of the fragmented and empty battlefield characteristic to expeditionary operations.[21] Combined, these characteristics have made the RPA the most enduring image of expeditionary operations in the last decade, and likely the most critical in the decade to come.

Additional benefits of RPA technology include reduced human risk and less flight limitations based on human physiology.[22] The simple act of removing the pilot can dramatically improve aeronautical performance by removing requirements for pressurization and life support systems, both of which represent critical weaknesses in aircraft. The notorious case of the F-22 grounding because of life support system failures illustrates this point precisely.[23] Range and loiter can also be reduced by designing RPAs from the ground up to operate under specific conditions. Weapons systems designed to operate in permissive environments can focus on fuel efficiency and range in a way other platforms cannot. Thus, even the persistence of the RPA is directly related to the nature of expeditionary operations. The ability to have an RQ-4 on station in less than 24 hours at any spot in the world, with loiter time long enough to conduct persistent ISR gathering, and without any additional air refueling is unprecedented and a uniquely American version of airpower. The time to package and ship the MQ-1 or MQ-9 worldwide on-air mobility assets can be measured in mere days if not hours. When deployed, these same systems can represent the entire kill chain (find, fix, track, target, engage, and assess) with a minimal footprint or basing requirements in a way no manned asset can. For the price of shared ramp space, a couple of hangars, and some living area for less than a hundred people, these RPAs can deliver ISR and kinetic strike capability in a manner which previously required entire forward deployed groups or wings of hundreds or thousands of Airmen.

Equally important to the operational benefits of RPA in emerging locations and against emerging threats is the concept to the combat operations timeline that RPAs have been able to reinvent. While the MQ-1B Predator was employed as early as the Balkan conflict in the late 1990s, the Predator was declared initial operating capability

(IOC) ready as a USAF weapons system in March 2005, and the MQ-9 was declared IOC-ready and shortly after that combat-deployed in October 2007. While the Reaper represents a herculean leap forward in capabilities from the Predator B, a mere two and a half years separated their production, procurement, and employment timeline. Especially compared to the decades it typically takes the Air Force to acquire weapons systems through the normal acquisition process, the RPA concept-to-combat timeline puts greater capabilities in commanders' hands in response to and during existing conflicts rather than in the successive peace. When this timeline is further combined with the plug-and-play nature of RPAs, the capabilities generated are even greater. From improved avionics to engines operating at greater torque to yet more advanced sensor capabilities such as Gorgon Stare, RPA combat capability can be improved as fast as Big Safari can acquire new systems.[24] In the case of Gorgon Stare, the capability went from concept to able-to-tag-and-track vehicles in Afghanistan using new sensor technology in just a few years.[25] In addition to all of the advantages that RPAs possess, the permissive character of the expeditionary operating environment means that even these systems' inherent weaknesses are mitigated by operating in austere locations.

With limited to zero evasive capabilities, signature reduction technology, or air package support, current RPA technology requires an almost completely permissive environment to operate. As emerging VEO threats move to occupy and operate in ungoverned areas, they can employ integrated or even minimally advanced air defenses. Even legacy radar assisted antiaircraft technology can be mitigated with the Hellfire missiles adapted to fly on the MQ-1 or MQ-9. Other threats such as shoulder-fired man portable air defense systems typically require close proximity to launching or recovering aircraft and can be defeated merely by avoiding the weapon engagement zone of these systems, easily accomplished by positioning RPA assets in safer states or locations with semistable governments and airfield security, then later operating near VEO activity thousands of miles away. Africa again provides an excellent case study of this very dynamic. VEOs such as the Islamic State's Boko Haram in Nigeria, AQIM, Al-Mourabitoun, and others operating in Africa do so specifically because of the inability of stable governments to prevent them from doing so, but the lack of development that is a hallmark of weak or failing states is equally a hallmark of the type of operating environment in which RPAs can flourish. While current RPAs can effectively dominate the lower spectrum of conflict in permissive environments, it is not clear that future conflicts or weapon systems will enjoy this same freedom of action.

The efficacy of RPAs in a vital-level interstate conflict defined by contested airspace is worth considering. The current platforms of the MQ-1, MQ-9, and RQ-4 are utterly dominant in permissive environments, creating asymmetrical advantages by enabling kill chains and friendly ground forces a superior operating picture. If, however, this asymmetrical advantage is that beneficial, how will RPAs function in a contested environment? Let us for a moment consider hypothetical conflict in Southeast Asia. Given the Chinese drive toward an antiaccess area denial strategy and a USAF highly reliant in recent years on RPA employment, how would these weapon systems fare? While the capabilities of the Predator-C Avenger are yet to be determined, current RPAs would likely be unable to operate in the contested air-

space of a Southeast Asia conflict. Chinese offensive counterair, defensive counterair, and air defense networks could track and engage current US RPAs. Simultaneously, Chinese RPAs would enjoy the benefit of operating in uncontested airspace, having the ability to operate over mainland China inside defense zones. If RPAs do in fact generate an asymmetrical advantage, then their employment might favor adversaries in a near-peer conflict. This possibility must be accounted for in future operations. While RPAs have a demonstrated advantage over manned assets in uncontested and permissive environments, they may well represent a disadvantage in contested and nonpermissive environments. In the Expeditionary Trinity, RPAs are ascendant, but further research and analysis are warranted regarding the efficacy of these systems in contested airspace.

Further enabling RPAs as the emerging capabilities in the space and cyber domains not only make operations possible, but it also facilitates interservice and interagency cooperation and decision making in ways impossible just a decade ago. The ability to provide varying customers with tailored ISR products creates efficiencies and reduces knowledge gaps by delivering information in parallel rather than sequential fashion. Since current RPAs are regressive in the traditional critical aviation concerns of engines, avionics, radar cross section, and maneuverability, the true emergent capabilities are those space and cyber advances that do enable entire kill chains.

Fighting the Expeditionary Trinity: The Expeditionary Airman

The expeditionary operating environment has forced massive cultural changes on an Air Force designed since inception for an interstate war fought in traditional combined arms fashion. Assumptions following the Gulf War that airpower could eventually act as a silver bullet for some conflicts did not change this fundamental characteristic; nor did the original Air Expeditionary Force concept. What changed it was the experiences of officers and noncommissioned officers whom, having spent entire careers waging irregular warfare and various subsets thereof, will represent the most significant change to airpower theory and employment. Indeed, the increasingly divergent experience of expeditionary Airmen from previous generations is what is changing the manner of airpower employment.

The expeditionary Airman represents an almost complete inversion of what the Air Force had come to view as operators (typified by the name operations group) and support personnel (mission support group) during the last several decades. In the expeditionary operational environment, the traditional support Air Force Specialty Codes (AFSC) are the actual forward deployed Airmen, and if pilots are even found at forward operating locations, they are RPA pilots operating launch and recovery elements while most of the mission time is logged from stateside ground control stations. For many of these austere locations, the expeditionary air base squadron (EABS) represents the current construct for forward deployed basing. The EABS purpose is to fulfill a mission of base operations support integration. Each of these squadrons exists to enable expeditionary operations (often with RPAs, but not solely), in many cases, including support for joint and coalition operations. As the

name makes clear, these squadrons are at their core support units. The Airmen who man them, however, are beyond a doubt more closely engaged in operations than previous generations of Airmen, as evidenced by the very training newly created to address the specific issues of current expeditionary deployments.

The expeditionary Airman receives Code of Conduct training, the like of which was previously reserved for aircrew and field craft training from the air expeditionary center that prepares them to conduct operations in uncertain, if not outright, hostile environments while simultaneously building host nation relationships and capacity.[26] The expeditionary Airmen who go off base for contracting, host nation support, intelligence gathering, or base defense do so with armed escorts, Office of Special Investigation support, gunned up, or perhaps all of the above. In all cases, expeditionary Airmen know that, regardless of their AFSCs, they are at all times operating in uncertain environments, with innumerable potential threats to their person, their base, and their mission, forward deployed so that expeditionary airpower can be brought to bear in low-spectrum conflicts.

For many Airmen in the expeditionary operational environment, the first deployment comes with the first tour. At the end of a career, many expeditionary Airmen will have half a dozen or more deployments. For all of these Airmen, the defining characteristic is that they have real-world combat, hostile, and expeditionary experience. The days when deployed Airmen were assigned to massive bases safely ensconced away from enemy lines are as remote as the days when combat flying experience was predominantly the realm of the fighter or bomber pilot. In some expeditionary bases, the only flying operations are conducted by security forces Airmen flying RQ-11 Raven unmanned aerial systems for base defense. These Airmen can log more sorties in a month than many pilots will in a year and more flight hours in a six-month deployment than some Air Forces give their most elite pilots.[27]

Alongside the operational experience that expeditionary Airmen get is an additional and perhaps even more critical skill set. The expeditionary trinity of emerging threats, emerging capabilities, and emerging locations means that combatting VEOs and engaging in low-spectrum conflict is, by its very nature, a coalition and joint endeavor. The expeditionary Airman lives in the joint and coalition environment and often both simultaneously. The Airmen in an Air Force expeditionary reconnaissance squadron located on a US Naval installation in Europe are at all times working through joint planning and regulations, as well as coalition concerns, all in the interest of employing airpower. At some emerging locations, Army forces stage from USAF squadrons colocated with one or more joint allies all working with host nations to execute airpower. In both examples and others around the world, expeditionary Airmen are working operational issues with host nation governments, state department officials, and nongovernmental organizations. The net result is that more Airmen than ever before are learning with and from sister services, coalition partners, and civilian experts on different approaches to airpower and how to wield airpower in defense of national interests. The ability to actually deploy these Airmen will be essential to combat emerging threats.

While the Air Force has made improvements at the operational levels of warfare, such as the creation of expeditionary wings, groups, squadrons, combat communications squadrons, and others to account for the unique demands of the Expeditionary

Trinity without the ability to fully man these organizations with seasoned expeditionary Airmen, the USAF risks placing the proverbial cart before the horse. Expeditionary units that lack critical capabilities because the Air Force cannot provide the necessary Airmen in a timely fashion and are a hindrance to the mission and agency for which the units are designed to support. Recognizing that the role of the Air Force is to organize, train, and equip Airmen for combatant commanders, the character of the Expeditionary Trinity requires fundamentally reevaluating how the Air Force accomplishes these tasks to facilitate expeditionary operations.

By definition, the Expeditionary Trinity demands forces who maintain near constant readiness to respond to threats as they emerge, and wherever they emerge. Readiness implies that any necessary skill set or AFSC is available to deploy on short notice and to any required destination, and providing this capability consistently will demand reconsideration of how the Air Force thinks about readiness.[28] The reality is that the legacy air expeditionary force construct—which was designed in the 1990s to operate in the post-Cold War international security environment rather than the post—9/11 security environment—does not maintain a constant and measurable supply of readily deployable expeditionary Airmen. Instead, the legacy AEF construct is relying on just-in-time training as Airmen head out the door while attempting to pair the appropriate equipment to the appropriate Airmen based on deployment destination.

To have a steady supply of experienced, mobility-qualified Airmen ready to deploy on short notice, this article recommends changes to how readiness status can be achieved and assessed, when and how Airmen receive expeditionary training, and when they are equipped. First, the current model of just-in-time training (which is often not in time and drives both late deployment reporting and involuntary extensions for Airmen already deployed) should be replaced with initial qualification training and recurring training where appropriate. Second, Airmen should be, to the maximum extent possible, equipped to deploy whenever their air expeditionary force cycle window is open, rather than after receiving a tasking. Most importantly, to maximize time spent in readiness status, pay, promotion, and assignments should all be directly tied to readiness as well as performance in the line of duty. After all, in the expeditionary operating environment, an Airman who is nondeployable for any reason has far less utility than an Airman who is deployable.

Training and equipping Airmen before deployment would clearly demand more staff work on the front side, but the return on investment might well warrant the effort. Simply by incorporating expeditionary combat after capture and fieldcraft training into USAF basic training requirements would immediately reduce a month of predeployment hassle every Airman experiences. More importantly, grounding every new Airman in an expeditionary and deployable mindset would help instill readiness status as part of the airpower identity. Similarly, many late deployments could be avoided by providing every Airman an official passport upon graduating from basic military training. Yes, the State Department would initially balk at such a requirement, but the reduction or elimination of rush passport applications should provide sufficient leverage to allow the change. Providing all Airmen mobility gear before their deployment window would likely demand excessive inventory and be a waste of precious resources, but having all Airmen qualify on the pistol

and rifle, attend active shooter training, and complete deployment uniform sheets before AEF windows open are all simple and value-added measures that would dramatically improve expeditionary readiness.

The characteristics of the Expeditionary Trinity predict an ever-increasing demand for deployable Airmen. Each year, several new expeditionary air bases are stood up, each of which requires a full complement of experienced Airmen ready to employ airpower. At the same time, the USAF faces critical manning issues and budgetary considerations. To combat these issues and ensure that the Air Force can meet the demands of the Expeditionary Trinity, serious consideration should be given to a dramatic makeover of the way in which the USAF incentivizes Airmen. Pay should be directly tied to deployable status, with consecutive years on deployable status receiving increasing pay scales. Similarly, rather than reenlistment or retention bonuses, which can never represent a measurable increase in deployable Airmen, bonuses should be tied to deployments. The more Airmen are called away from home station, the more they should be paid, precisely because they are providing more airpower application than those unable to maintain deployable status. Succinctly, the mission is expeditionary airpower employment, not home station training. The notion that two Airmen of similar experience, AFSC, and time in grade should receive the same compensation is nonsensical if one of those Airmen is deployable, and the other is not. There is no real neutral ground; if the Air Force does not incentivize deployable status, then the service has automatically disincentivized maintaining deployable status. When there are neither consequences to losing deployment status nor benefits to achieving and maintaining it, the Air Force is sending the message that deployable status is of passing importance rather than the defining characteristic of being mission qualified.

Conclusion: Expeditionary Trinity and the Character of Airpower

Near-peer conflict at the level of vital or survival interests will necessarily drive how the DOD addresses the ground, maritime, and air domains, and rightly so. However, the DOD cannot ignore the character of the conflicts which politicians have chosen to employ the military element of national power since the inception of the state. Rather than the Cold War security structure where known states (communists) in known locations (Asia and Eurasia) employ known capabilities (conventional forces and possibly nuclear weapons employed in a combined arms fashion) against US interests, the post—9/11 security environment is largely defined by unknown threats (ISIS) acting in unexpected locations (Libya/northern Africa) with emerging capabilities. Airpower must simultaneously be organized, trained, and equipped to engage in continuous expeditionary operations to support major interests while remaining ready for the defense of vital or survival interests against state actors.

National security interests drive military intervention, and for almost three decades after the conclusion of the Cold War, interventions have targeted the low-intensity side of the spectrum of conflict. The Expeditionary Trinity is not going away anytime soon. Pressures that the Expeditionary Trinity place on Airmen, the Air Force, and airpower demand innovative approaches to meeting the challenge. As

the only service truly capable of providing sustained airpower during near indefinite periods of time on very short notice, the USAF cannot expect that other services will step in to meet the demands of the Expeditionary Trinity. More importantly, why would the Air Force want such an outcome? Airpower maintains an inherent comparative advantage in meeting emergent threats in emergent locations with emerging capabilities; the USAF should seek to embrace that role and build toward a culture where every Airman aims to achieve and maintain the ability to deploy on a moment's notice. Creating that culture will be critical to the ability of the Air Force to meet national security objectives and continue to wage war on the low-intensity end of the spectrum of conflict. ✪

Notes

1. While the argument in this article is that the most likely employment of airpower in the coming decades will be in emerging locations against emerging threats, the possibility of near-peer conflict in a conventional combined-arms war remains an important consideration. Conventional conflict will be addressed in the emerging capabilities section and the relationship between permissive operating environments and the emerging capabilities of remotely piloted aircraft.

2. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 88.

3. Colin S. Gray, *The Future of Strategy* (Cambridge, UK: Polity Press, 2015), 10.

4. Hy Rothstein, "Civil-Military Relations and Assessments," in *Assessing War: The Challenges of Measuring Success and Failure*, ed. Leo Blanken et al. (Georgetown University Press, 2015), 18.

5. Donald E. Nuechterlein, *America Recommitted: A Superpower Assesses Its Role in a Turbulent World* (Lexington, KY: The University of Kentucky Press, 1991), 15–20.

6. Ibid.

7. Ibid.

8. Ibid.

9. Barbara Salazar Torreon, *Instances of Use of United States Armed Forces Abroad, 1798–2015*, CRS Report R42738 (Washington, DC: Congressional Research Service, 2015), 1–33.

10. Ibid., 1–33.

11. Lt Col James Spaulding, "Airbase Opening in Force Generation," *Journal of the JAPCC* 4 (2006): 26–29, http://www.japcc.org/wp-content/uploads/japcc_journal_Edition_4.pdf.

12. William R. Looney III, "The Air Expeditionary Force: Taking the Air Force into the Twenty-first Century," *Airpower Journal* 10, no. 4 (Winter 1996): 6, http://www.airuniversity.af.mil/Portals/10/ASPJ /journals/Volume-10_Issue-1-Se/1996_Vol10_No4.pdf.

13. Stephen Losey, "Goldfein's Grand Plan: His Priorities Are Right, Former Service Chiefs Say, but Success Could Be Elusive," *Air Force Times* 77, no. 27, 11–13.

14. Donald Cook et al., "Strategic Implications of the Expeditionary Aerospace Force," *Aerospace Power Journal* 14, no. 4 (Winter 2000): 6, http://www.airuniversity.af.mil/Portals/10/ASPJ/journals /Volume-14_Issue-1-4/2000_Vol14_No4.pdf.

15. Anour Boukhars, "How West Africa Became Fertile Ground for AQIM and ISIS," *World Politics Review*, 29 November 2016, http://www.worldpoliticsreview.com/articles/20556/how-west-africa-became -fertile-ground-for-aqim-and-isis.

16. Dalia Ghanem-Yazbeck, *Why is AQIM Still a Threat?*, *Carnegie Middle East Center*, 23 March 2016, http://carnegie-mec.org/2016/03/23/why-is-aqim-still-regional-threat-pub-63121.

17. Amaani Lyle, "Ebola Remains National Security Issue, Official Says," *DoD News, Defense Media Activity*, 24 October 2014, http://www.defense.gov/News-Article-View/Article/603517.

18. Lt Col Denis Stengel, French Air Force, "From Airfield to Airport: Airbase Laydown," *Journal of the [Joint Air Power Competence Centre] JAPCC* 10 (2009): 30–33, http://www.japcc.org/wp-content/uploads /JAPCC_Journal_Edition_10.pdf.

19. Rohan Gunaratna, "New Threat Landscape in Southeast Asia," *Cipher Brief,* 9 February 2017, https://www.thecipherbrief.com/article/exclusive/asia/new-threat-landscape-southeast-asia-1089.

20. Kevin McCaskey, "Constructive Effects: Focus on Capabilities," *Military Review*, August–September 2016, 119–27, http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview_20161031_art018.pdf.

21. Lt Gen Hans-Joachim Schubert, "How Airpower Can Overcome the Phenomenon of the Empty Battlefield," *Journal of the JAPCC* 5 (2007): 20–22, http://www.japcc.org/wp-content/uploads/JAPCC_Jounal_Edition_5.pdf.

22. Col Hans Wolf, German Army, "Do We Still Need 'the Man' in the Cockpit?," *Journal of the JAPCC* 2 (2005): 42, http://www.japcc.org/wp-content/uploads/japcc_journal_edition2.pdf.

23. Elisabeth Bumiller, "Oxygen Problems on F-22 Elude the Air Force's Fixes," *New York Times*, 2 July 2012, http://www.nytimes.com/2012/07/03/us/politics/for-f-22-oxygen-problems-elude-air-forces-fixes.html.

24. Gareth Jennings, "DoD Confirms Gorgon Stare to be Operational in Afghanistan," *Jane's Defence*, accessed 17 December 2105, http://www.janes.com/article/56720/dod-confirms-gorgon-stare-to-be-operational-in-afghanistan (site discontinued).

25. Leon Thompson, "Air Force's Secret 'Gorgon Stare' Program Leaves Terrorists Nowhere to Hide," *Forbes*, 10 April 2015, http://www.forbes.com/sites/lorenthompson/2015/04/10/air-forces-secret-gorgon-stare-program-leaves-terrorists-nowhere-to-hide/.

26. Lorrie A. Arellano, "Air Advisor Academy Consolidates Expertise and Training under the Expeditionary Center," *USAF Expeditionary Center Public Affairs*, 13 July 2015, http://www.expeditionarycenter.af.mil/News/Article-Display/Article/787938/air-advisor-academy-consolidates-expertise-and-training-under-the-expeditionary/.

27. Author interviews with USAF security forces RQ-11 Raven operators forward deployed to US Africa Command revealed Airmen logging more than 50 sorties a month and 300 hours or more in a single deployment. As recently as 2013, the *Wall Street Journal* reported Air Force pilots logging fewer hours than their Chinese or Indian counterparts, and sometimes as few as 120 a year.

28. Todd Harrison, "Rethinking Readiness," *Strategic Studies Quarterly* 8, no. 3 (Fall 2014): 38, http://www.airuniversity.af.mil/Portals/10/SSQ/documents/Volume-08_Issue-3/Fall_2014.pdf.

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