

Airpower against the Taliban

Systems of Denial

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Successful organizations can be extraordinarily persistent and creative in denying the obvious, ignoring signals that suggest a need to challenge key strategic assumptions.¹ Military institutions tend to view doctrine as a final destination instead of a point of departure for successful adaptation in a changing environment.² Yet every theory of competition eventually succumbs to new facts, and airpower is no exception. The historical success of airpower makes it difficult to ques-

tion assumptions about what has worked in the past and easy to deny obvious signals in the present that indicate a need to adapt ideas about airpower to ensure its continued success in the future.

Today, after more than a decade of air dominance, the security situation in Afghanistan is deteriorating. Yet, as a Pentagon spokesman stated in January 2016, the Department of Defense leadership was “confident the current plan in place is adequate to deal with the situation in Afghanistan.”³ It is difficult to understand how an “adequate” plan results in a deteriorating security situation that in February 2017 was described as a “stalemate” by the top American commander in Afghanistan.⁴ Although airpower cannot be held fully responsible for the lack of success against the Taliban, the fact that we are not winning does suggest that the joint force in general, and the US Air Force (USAF) in particular, is ignoring information that contradicts long-standing assumptions about the application of airpower. It also suggests that future success will require a new valuation of airpower’s contribution to the achievement of the higher political end the counterinsurgency (COIN) campaign seeks.⁵

One could dismiss all these concerns as irrelevant to the core, strategic mission of the Air Force. Afghanistan is a peripheral conflict. A loss there, though lamentable, will barely register in terms of America’s ability to support key allies and defend itself against its most capable potential adversaries. This is a tempting argument, but it is also a dangerous one. Indeed, research on the competitive effects of what Dr. Clayton Christensen terms “disruptive innovations” suggests that America’s struggles in “low-end” wars should worry the US military.⁶ It should pay attention to the strategies pursued by adversaries who successfully circumvent the huge US technological and operational advantages.

The USAF has gradually narrowed its theory of airpower into a band of specialization and values that creates areas of vulnerability and dysfunction.⁷ This dominant theory focuses on an air superiority and bombing campaign, independently executed by Airmen through centralized control via the air operations center and 72-hour air tasking order (ATO) process.⁸ The theory assumes that this is done in a contested environment against the latest-generation threats. It also focuses on the tangible elements of a combatant’s means to fight; the destruction of aircraft, vehicles, equipment, buildings, bridges, bunkers, and so on.⁹ However, the theory is ill-suited for airpower’s application in low-intensity, irregular, population-centric conflicts that require a focus on the intangible elements of human will.

The USAF’s refinement of its dominant theory of competition into a narrow view of airpower in a large, near-peer conflict can be referred to as the “Cult of the Conventional.” For 15 years, the USAF has conducted an air campaign against the Taliban in Afghanistan. The results (or lack thereof) of this campaign contradict core assumptions of the USAF’s current theory of airpower. Yet the Cult of the Conventional ignores these anomalous outcomes; it twists and bends traditional airpower theory to accommodate circumstances that should lead to far more introspection and analysis. There is no evidence that the Air Force views its struggles in Afghanistan as relevant to its future strategic direction. Instead, the organization’s responses have been predictably protective of core airpower assumptions—systems of denial to strategic anomalies that contradict long-standing assumptions.¹⁰

The Cult of the Conventional treats three aspects of the conventional conflict as doctrinal truths in the Afghan war: the superiority of strike, the acceptability of a risk-averse, defensive approach, and the centralized ATO as the only method of employing airpower. These three ideas may have a place in some wars, but they are ill-suited for airpower's application in unconventional conflicts such as the COIN campaign currently being waged against the Taliban. Bad ideas are an expensive luxury.

This article explores how the Cult of the Conventional is creating strategic risk for the US military. It highlights gaps in airpower employment and argues that the Air Force's continued emphasis on conventional dominance is increasingly irrelevant to the nation's strategic objectives in current conflicts. Finally, this article suggests changes at the tactical, operational, and strategic levels that will prevent the emerging gaps in airpower employment from causing the USAF's experiences in Afghanistan from heralding broader, more serious declines in its strategic relevance.

Organizational Theory

An easy rebuttal to any criticism of the USAF's performance in Afghanistan is to question, not the assertion that it has struggled, but to assert that it does not matter. Afghanistan has been a lamentable, ill-advised venture in building a nation that does not want to be built and whose instability poses no strategic threat to the United States or its allies. It is neither vital or important, and America's difficulties in the war therefore hold no important lessons. However, the theory of disruptive innovations suggests that this response may be foolish.

In *The Innovator's Dilemma*, Dr. Christensen explains how dominant businesses narrow the spectrum of what they value until they only compete in a narrow portion at the top of the market and are irrelevant everywhere else. These organizations seek to outperform their competitors by focusing the qualities of their product into a narrowing band of specialization as they move "up-market" into the top of the spectrum of valuation. This creates gaps at the bottom of the spectrum where they no longer place value and are no longer interested in competing with what they consider low-end products. It is within these gaps that the dominance of established competitors fades until they are irrelevant in the lower end of the market.¹¹

The steel industry in the United States is an example of these concepts of specialization, gaps, and eventual irrelevance. Integrated mills monopolized the steel industry until the 1960s when minimills began producing low-quality steel at a cheaper cost (see fig. 1). The larger producers placed little value on low-quality products and were willing to shed them so they could specialize on higher-quality products that they valued more. As they moved up-market into a narrower band of specialization it created a gap at the bottom that was filled by their minimill competitors. The minimill expansion up-market, on the heels of the integrated mill retreat, continued until the large mills became mostly irrelevant in the production of everything except high-quality sheet steel. The once-dominant integrated mills moved into an ever-narrowing band of specialization at the top of the scale that created vulnerable gaps at the bottom of the market where their products became irrelevant.¹²

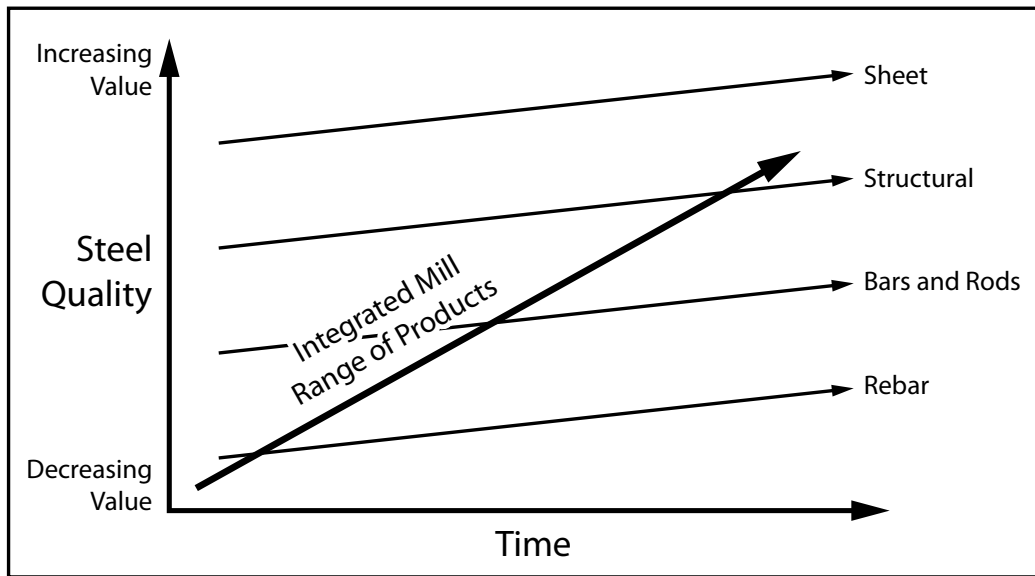


Figure 1. Integrated steel mill valuation scale¹³

Although Dr. Christensen uses principles from business, the framework he describes applies to all competitive organizations, especially those with a dominant position in their markets. The USAF is just such an organization. The Air Force has maintained virtually unchallenged dominance for more than a quarter-century. During that time (and much like the integrated steel mills), the USAF has moved up-market into a narrowing band of specialization at the top of its value scale, one that focuses on the most dangerous scenarios such as near-peer conflicts. This creates gaps in aircraft, missions, and operating concepts at the bottom that can lead to its strategic irrelevance in the most likely scenarios like those waged in Iraq, Afghanistan, and Syria in the past 15 years.

A value scale for airpower might be divided into the following seven categories: operating concept, manned aircraft, remotely piloted aircraft, control type, control mechanism, command relationships, and environment (see fig. 2). The extremes of the scale indicate what the USAF values most and least. The most desirable use of airpower (what the USAF values most) is an air superiority and bombing campaign in a contested environment, independently executed by Airmen through centralized control. A dichotomy exists between the type of conflict the USAF is focused on fighting and the type of conflict it actually fights, a dichotomy between the Cult of the Conventional toward the top of the valuation scale and the reality of current irregular conflict toward the bottom.

The aircraft and operating concepts at the bottom of the scale indicate what the USAF values least and is willing to shed as it specializes on higher-quality products that it values more.¹⁴ The manned MC-12 unarmed ISR platform is no longer in the USAF inventory.¹⁵ Remotely piloted, unarmed, tactical ISR platforms are no longer

in the USAF inventory.¹⁶ The “low-end” A-10 single-mission ground attack platform was temporarily saved from no longer being in the USAF inventory by Congress but will eventually be replaced by the “high-end” multirole F-35 as the premier USAF CAS platform.¹⁷ As the USAF moves up-market into a narrower band of specialization, it creates a gap at the bottom in low-end irregular conflict where these platforms are still relevant. Much like the minimill advance on the heels of the integrated mill retreat, organizations other than the USAF provide many of the low-end aircraft used on the battlefield (with the exception of the A-10).¹⁸

	Operating Concept	Manned Aircraft	Remotely Piloted Aircraft	Control Type	Control Mechanism	Command Relationship	Environment
Increasing Value ↑	Conventional Warfare	F-22 F-35	Strategic intelligence, surveillance, and reconnaissance (ISR)	Centralized	Theater air operations center (AOC) ATO	Independent	Contested
	Air Campaign	LRSB					
Decreasing Value ↓	Ground Campaign close air support (CAS)	Legacy Fighter Bomber	Tactical Armed ISR	Centralized	Unit Level	Supported Supporting	Uncontested
	COIN	A-10	Tactical Unarmed ISR				
	Irregular Warfare	MC-12					

Figure 2. USAF valuation scale

Although the conflict in Afghanistan has demanded airpower that is lower on the valuation scale, the USAF remains fixated on the ever-narrowing band of specialization at the top that more closely aligns future conflict with the Cult of the Conventional. The most significant aspect of this move up-market is not the pursuit of high-value, highly-specialized missions, airframes, and operating concepts at the top of the scale, but the vulnerabilities and risk of irrelevance that it creates at the bottom. With predominantly high-end capabilities, the USAF solution to airpower problems will tend to be high-end as well, even when a low-end solution is sufficient. This is partially why highly capable, multirole F-16s are constantly airborne in Afghanistan tasked to provide the support a low-end ScanEagle unarmed ISR platform is capable of providing.

The danger of the Conventional Cult's move up-market is that it will achieve high-end tactical air dominance, yet neglect the opening gaps in irregular conflict at the low end in Afghanistan and ultimately lead to airpower's strategic irrelevance against the Taliban. Crucially, these low-end gaps are exploitable, not only by irregular adversaries in peripheral conflicts, but by *any* adversary seeking to impede the achievement of US strategic goals.

The Cult of the Conventional enables the USAF to maintain a system of denial that ignores information contradictory to long-standing assumptions and accepts three fallacies as truth: *the superiority of strike, the primacy of loss-prevention, and the sanctity of the ATO.*

First Fallacy: Whack-a-Mole (The Superiority of Strike)

The air operations center (AOC) provides combatant commanders with what airpower does extremely well: the ability to move things, watch things, and destroy things. With its joint integrated prioritized target list, joint target coordination board, battlefield coordination detachment, as well as air tasking stages dedicated to target development and weaponeering, the AOC is optimized for a 72-hour cycle of targeting enemy air forces, air defenses, ground forces, and infrastructure through a conventional air campaign—the AOC and the combat aircraft it controls are optimized to strike.

Conventional bombing campaigns focus on eliminating the tangible elements of a combatant's means to fight—the destruction of people and things. Irregular, population-centric conflicts focus on the intangible elements of human will, such as fear, honor and interest, and on the influence of culture, religion, history, social factors, and so forth. In one of the authors' experience while commanding an operations group in 2014–15 at Bagram Air Base (AB), Afghanistan, the AOC was attempting to win the hearts and minds of the Afghan population by having fighters constantly airborne to minimize the time to strike.¹⁹ The AOC assessed airpower's success through measures such as the hours of close air support (CAS) flown, the number of requests for CAS filled, the number of bombs dropped, the number of hits achieved, response time to a troops-in-contact situation, and whether or not the tactical ground commander's intent was met. These are all measures of success for achieving subordinate, tangible ends, but they are grossly incomplete measures of achieving a higher end focused on the population's intangibles.²⁰

In Afghanistan, despite 15 years of conflict that suggest otherwise, the USAF continues to view fighters, bombers, and their ability to strike as the solution to a population-centric competition for influence for which they are ill-suited, and to assess their employment through measures that are largely divorced from the strategic requirements of the war, focusing on tactical execution instead.²¹

A COIN campaign will always face problems that can be addressed by airpower's ability to move things and watch things. But airpower's third strength, the ability to destroy things, is only a solution while insurgents operate like a conventional force. Once they “go irregular” and meld with the population, it is very difficult to kill our way to victory. The cocked hammer of constant fighter coverage appeals to the Cult of the Conventional and the superiority of strike, but it often lacks utility in a war among the people where the higher-level political ends are most important.²² The fighter and its ability to strike is still the preferred CAS solution for a conventional problem that can be solved by tangible destruction, but in an irregular competition over the intangibles that influence people, it is often not the *right* solution.

Asserting the relevance and necessity of airpower in low-intensity conflict is not a denial of the higher-end utility of airpower. It is simply an attempt to slow the USAF's retreat from missions and capabilities that are most needed by the nation in the wars that it actually fights. Airpower theory must return to an understanding of the changing character and constant nature of war. The USAF's approach to the Afghan war indicates a fundamental error, viewing the wrong aspects of war as unchanging and giving insufficient attention to those elements of war that actually endure.

War has always been a human endeavor; people fight today for fear, honor, and interests just as they did in the age of the Athenian historian Thucydides 2,500 years ago.²³ Since its invention a century ago, airpower, writ large, has remained an enduring part of war, but its employment is subject to changing circumstances. If the subordinate end of striking the enemy's means does not achieve the higher end of influencing the people's will, then we have merely confused activity with accomplishment and ensured that our conventional dominance will ultimately be strategically irrelevant. The USAF approaches war in the way that it prefers, while denying its enduring political nature.

Airpower in Afghanistan will remain in the morass of tactical execution with success defined by measures of performance until there is a higher, comprehensive strategy to lift it out.²⁴ To be strategically relevant in Afghanistan, airpower must move beyond "whacking the next mole to pop out of its hole" or viewing strike by high-end assets as the preferred airpower solution to a population-centric problem. Instead, airpower advocates must not deny the obvious signals that strike, ISR and airlift are only relevant when they achieve an effect among the population that fosters support for the Afghan government, emboldens the resolve of Afghan forces, or deters the Taliban from further action. The ability to strike will continue to have a fleeting role to play in Afghanistan, but 15 years of overmatch has so far contributed to nothing more than a stalemate and suggests that superb high-end strike capability is an incomplete solution in a low-end conflict. If the coalition's application of all forms of airpower is not laser-focused on the political end that the COIN campaign seeks, then this strategic disconnect will render irrelevant the coalition's tactical dominance.

Second Fallacy: "11 Goalies" (Preventing a loss is more important than a win.)

Fighters are constantly airborne in Afghanistan to support COIN operations, counterterrorism operations, and provide self-defense of forward operating bases. Although base defense seems like a valid reason to pull sorties away from the other two campaigns; in reality, it is another example of an active system of denial. The rules of engagement make it extremely unlikely that a fighter will be able to engage a hostile target around the perimeter of an operating base even when tasked to defend it.²⁵ Although F-16s were airborne over the Bagram airfield providing base defense CAS during multiple rocket and improvised explosive device attacks from 2014–15, they were not able to employ a single bomb or bullet in response.²⁶ Ironically, base defense is where superb strike capability could be most beneficial, yet it is where strikes are least likely to occur. The Cult of the Conventional views fighters orbiting over a base as a way to do something to defend against the Taliban, but

the rules of engagement (ROE) greatly reduce a fighter's ability to do more than just observe what is unfolding on the ground. Fighters, with their superb capacity for speed and firepower, provide only the illusion of support to friendly forces at risk as long as the rules severely restrict their ability to engage.

The combination of base defense sorties and restrictive ROEs is like a soccer team with 11 goalies blocking the goal. Our aversion to risk and focus on preventing the other team from scoring makes it increasingly difficult for us to support the two campaigns that could seize the initiative and consolidate strategic and political gains. The "11 goalies" obsession with defense at the expense of offense misunderstands the character of the war the Taliban is waging. Regardless of leaders' statements regarding the end of US combat operations in Afghanistan, if the Taliban wants to keep fighting, then the war will not end.²⁷ Our ROEs must reflect reality. We do not make ourselves successful simply by asserting our success.

The idea of fighters circling overhead a base may soothe forces on the ground and appeal to the Cult of the Conventional, but it is only the illusion of support if self-imposed rules prevent them from providing any more support than that provided by a tethered balloon with a fancy camera. On a team with all 11 players lined up in front of the goal so that they are doing "something," the most we can hope for while we run out the clock is a tie game with both sides achieving nothing. Unfortunately, the Taliban does not believe the 11 goalies fallacy and is still trying to win.

Third Fallacy: ATO über alles (The ATO is the only bridge across which airpower shall pass.)

The Cult of the Conventional makes it much easier to believe the fallacy that centralized control and a single ATO is the only way that airpower can be employed. The idea of the ATO, above all else, or "ATO über alles" suggests that the doctrine of centralized control and the tasking order process are the ultimate refinement of airpower doctrine and must be followed regardless of its applicability in a changing environment.

Created 40 years ago as part of the AirLand Battle operating concept to fight outnumbered and win against Soviet maneuver forces in a competition for terrain, the 72-hour air tasking cycle was designed for an environment that would remain relatively predictable for the duration of its OODA (observe, orient, decide, and act) loop. Today, in Afghanistan, the air tasking cycle is not responsive enough for the dynamic scenario of an enemy blending with the population and choosing when to emerge with lethal contact.²⁸ Crucially, the three-day cycle is ill-suited for supporting special operations forces (SOF) on a very short timeline in a competition for influence over a population.²⁹

SOF are the only forces focused on something other than self-defense in Afghanistan. When it comes to providing airpower to coalition forces, SOF is the "only show in town."³⁰ Yet, SOF requests for support must compete with conventional forces that request fighters to fly base defense sorties or orbit overhead providing fighter presence; two missions that demonstrate activity but accomplish very little. Although

almost all air-to-ground engagements in Afghanistan are in support of SOF missions, the single air tasking process attempts to fill as many requests for support as possible from both conventional and SOF on a lengthy timeline that is much longer than the SOF OODA loop. The result is gross inefficiency, with aircraft returning to base in Afghanistan still carrying their bombs well more than 90 percent of the time.³¹

The fallacy of ATO über alles ignores CAS control processes that do not comply with the cult's traditional view of CAS to large maneuver forces. Although fighters in support of SOF are centrally controlled and executed, electronic warfare aircraft in support of SOF are not. EC-130 electronic warfare aircraft are conventional forces that have a place-holder in the ATO, but the details of if they will fly and what their mission will be is determined by SOF during their nightly SOF air allocation meeting just before mission execution. CAS could follow a similar template that would provide conventional fighter support to SOF and operate within the SOF OODA loop as opposed to requiring SOF to adjust to a 40-year old conventional process that delays the timeline. Airpower must move beyond the outdated doctrine of just maximizing the number of hours flown or the number of CAS requests filled and focus instead on providing support to forces based on the effect they are trying to achieve as it relates to the higher purpose of the campaign. Also, it must focus on accomplishing this with the shortest possible OODA loop.

Airlift control is also susceptible to the ATO über alles fallacy. Centralized control on a global scale of strategic airlift C-5 and C-17 aircraft through the AOC, and ATO is viewed as the only acceptable method of control for airlift of any type. But the strategic airlift OODA loop of the global transportation process is not responsive enough to support the very short OODA loop required of tactical C-130 airlift in the dynamic Afghan environment supporting SOF. Airlift requirements that are known ahead of time are adequately met by the current airlift process, but pre-planned, partnered operations with US SOF and Afghan forces are planned and executed on a very short timeline that the strategic airlift process is ill-suited for. The air expeditionary task force commander in Kabul has operational control authority over C-130 aircraft in Afghanistan and could make decisions on a very short timeline. However, the decisions as to what cargo the aircraft will carry, when they will take off and land, where they will fly, and which air strips they will operate out of are made in accordance with the three-day air tasking cycle 1,300 miles away in the AOC in Qatar. This further delays the airlift tasking process and often SOF are well within the conventional OODA loop and have passed the AOC's deadline by the time SOF have the details of what they need conventional airpower to do. If SOF cannot guarantee that they will have conventional air support as they develop their plans, they simply modify the plan to make-do with SOF-only air assets, which extends execution timelines and increases risk. Retaining decision authority at the AOC over forces that a general officer in Afghanistan has operational control authority over undermines the spirit of an air expeditionary task force commander trusted by the theater combined joint force air component commander as the face of airpower in Afghanistan. It denies the expeditionary commander a seat at the decision-making table with other commanders in the operating area and needlessly extends the tactical airlift OODA loop.³²

The USAF is also ignoring airlift successes that do not comply with the Cult of the Conventional. Before 1999, all US Southern Command intratheater, tactical airlift operations of C-130 and C-27 aircraft were not centrally controlled or centrally executed by a three-day air tasking process in a theater AOC. Before the closing of Howard AFB, Panama, the execution of all Central and South American tactical airlift sorties were delegated to an O-6 at the wing in Panama and operated on a 12-hour cycle controlled at that level. Using the successful Panama example as a template, authority could be delegated to the air expeditionary task force commander in Afghanistan for tactical intratheater operations. SOF airlift support could be controlled by the expeditionary air wing at Bagram AB outside of the ATO process. It could be directly coordinated with the SOF air component staff across the street at Bagram within the SOF OODA loop as opposed to coordinating with the AOC 1,300 miles and a time zone away.

The ATO process is far from meeting the needs of an adaptive organization designed to out-ODA the enemy. A more adaptive approach is to shorten the CAS and airlift loop by pushing decision making further down the chain of command closer to the point of execution. The Cult of the Conventional's ideas about command are going in the wrong direction; rather than seek more centralization in the dynamic, unconventional environment at the lower end of the USAF valuation scale, it should seek less.

Airpower Axioms for Irregular Conflict

The strategic irrelevance of airpower in Afghanistan does not just increase risk in that conflict. Irregular warfare exposes low-end vulnerabilities in American air dominance that may eventually migrate "up-market," posing significant risks in more lethal wars. The Air Force can resist the Cult of the Conventional by focusing on the six axioms for the use of airpower in irregular warfare.

1) *Tactical airpower dominance is only relevant in irregular conflict when it achieves political ends.* Unclear political objectives set military forces adrift in a sea of strategic ambiguity that allows tactical execution to become an end unto itself.³³ This is not just a USAF challenge but one for sister services and the coalition writ large. How airpower is measured is critical. Maximizing the number of hours flown or number of support requests filled are measures of performance that are irrelevant unless their purpose is tied to the achievement of higher-level effects that directly support political objectives. Military leaders may not be able to set the political objectives in Afghanistan, but they can adapt the employment of airpower to align better with the objectives that civilian leaders give them. Military leaders can ensure that every choice about the use of airpower in Afghanistan first answers the question, "To what end?" Those requesting and providing airpower must understand that it should only be applied when it goes beyond mere activity and supports strategic ends.

In population-centric conflicts such as the one waged in Afghanistan, people are the battlefield and civilians are the targets, not to be destroyed as traditional targets in a conventional competition for terrain, but to be influenced in a competition for their hearts and minds to achieve political ends.³⁴ If the application of advanced

weapon systems that leads to air dominance does not ultimately achieve a favorable effect among the population then it is irrelevant. Airpower's superb capacity for destruction with aircraft constantly airborne waiting to strike may rarely be the solution in a competition for influence. It is not always the use of advanced weapon systems that matters, but the effect they achieve among the people.³⁵

2) *When fighter aircraft are used, it should be in a manner that capitalizes on their strengths of speed and firepower.* Although the Cult of the Conventional views fighters as the solution to most air power problems, other platforms are better suited to orbit for extended periods and better suited to provide the ISR so critical in irregular conflicts. Lethal engagement, for which fighters are so well suited, is rarely required in this environment. Sustaining a constant orbit of fighters ready to strike requires significant air refueling and maintenance support and the vast majority of the time accomplishes nothing. Squandering the mission-capable status of fighters and air refuelers simply to be airborne when nothing is happening on the ground puts in jeopardy the readiness of these assets when they are truly needed. Fighters should be held in reserve in a short-notice alert posture on the ground unless the firepower of their strafe or 500 lb. and larger weapons is actually needed.

3) *Population-centric conflicts require aircraft, missions, and operating concepts at the bottom of the USAF valuation scale more than those at the top.* Ground forces in Afghanistan may not always have a need to destroy things with advanced weapons, but they have a constant need to move things and watch things. Their ability to maintain situational awareness of what is happening around them, to know where the Taliban is operating, who its key leaders are, and what they might do next and to have the mobility to respond to that information is critical. As the USAF moves up-market, it is shedding the dedicated CAS and unarmed tactical ISR air assets that ground forces need most. Ironically, as the USAF sheds ISR platforms such as highly capable MC-12-manned ISR aircraft, the US Army is taking them over.³⁶ Perhaps ground forces have a better view of what airpower should contribute in a successful COIN campaign. The Army's interests are certainly focused at the bottom of the USAF valuation scale. Recalling the disruption of integrated steel mills, the Air Force should think twice about ceding low-end missions to other services.

The Cult of the Conventional and belief in the Whack-a-Mole fallacy make it easy to deny there is any airpower solution other than an advanced aircraft constantly overhead ready to strike. Ironically, the Taliban has survived for 15 years without an air force or air defenses. Although not popular with the USAF writ large, lower-end CAS and ISR platforms are sufficient in the Afghan environment, and their lower cost makes possible an increased number of them as opposed to fewer, more expensive, high-end platforms that present an irrelevant tactical overmatch. The Afghan Air Force is providing its own CAS with the low-end A-29 light-attack aircraft.³⁷

4) *The choice of weapon and the rules for its use must be in harmony.* The violent nature of war and the risk to forces that goes along with it can be partially mitigated, but never controlled; there will never be a zero-risk, armed conflict. War is violent, lethal, and sometimes unpredictable—war is war. Fighters are exquisitely capable of delivering lethal effects, but applying them where there is zero tolerance for risk cancels out their strengths, and attempts to make them something they are not. Like dusting fine china with a velvet-covered hammer, in employing fighters

with inappropriate ROEs, we have managed to make two mistakes: first, picking the wrong tool for the job, and then using it in the wrong way. It suggests that we are ignoring the obvious, that we are handicapping fighters to the point that they only provide the illusion of support, and that we are mistakenly dictating rules the Taliban doesn't follow. If the rules do not allow fighters to engage, then a fighter orbiting overhead is not the correct response to the question "airpower to what end?"

5) *Dynamic, cross-domain, irregular conflicts require airpower control alternatives with a shorter OODA loop than the 72-hour ATO process.* The unpredictability of dynamic environments require leadership that decentralizes control, delegates authority, and empowers the shortest possible OODA loop executed through decisions made at the lowest acceptable level.³⁸ Cross-domain interaction that shortens the OODA loop between SOF ground forces and conventional air assets supporting them requires less focus on the management of things and more on the leadership of people, less on centralized control of a process in a predictable environment and more on empowering subordinates with the freedom to determine their own actions that rapidly adjust to change and meet the commander's intent in a dynamic one. Uncertainty is the nature of war. Seeking tight control and extended OODA loops only works in a stable environment where the future is predictable. We all want to avoid "black swan" surprises of an unforeseen event by seeing what it will be before it exists.³⁹ However, this is simply not possible. It's wrong to use tight control when the OODA loop extends beyond the shortened uncertainty horizon of a dynamic environment. We cannot control that which is not controllable. Airlift control in Panama before 1999, SOF control of their own air assets, and EC-130 aircraft support to SOF are templates that demonstrated success in dynamic environments and should be used for future adaptation of the air control processes in unconventional conflicts.

In Afghanistan, the USAF should provide CAS and airlift support to SOF in the most agile, flexible manner, with the shortest possible OODA loop even if it distributes authority and control and is different than the operating concept of any other AOC or theater.⁴⁰ Current doctrine must be viewed as a common point of departure on the road to adaptation, not as the final destination on the road to dogma conceived 40 years ago. USAF introspection about airpower control must embrace a spirit of inquiry that is open to new ideas rather than a rigid grip on the past that is not.

6) *Irregular conflicts require agile transitions between high-end and low-end solutions.* If the USAF continues to move up-market and shed low-end capacities, its high-end dominance in a conventional fight against an adversary's means risks becoming increasingly irrelevant in the current unconventional conflicts to influence the people's will. Although unpopular in the USAF, as evidenced by its reluctance to support them, low-end solutions are sufficient to achieve the political objectives required in population-centric conflicts. The USAF should approach what it values and the type of conflict it is prepared to wage not as a "this or that" binary choice between most dangerous and most likely, but instead as this *and* that blend between high-end and low-end solutions.

Fixating on high-end solutions with the assumption that high-end, multirole capacity ensures low-end applicability also assumes that high-end capability will be used where low-end capability once was. It assumes, for example, that a high-end aircraft like the F-35 will be deployed to dusty, austere locations like Afghanistan to

constantly orbit overhead waiting to strike in the manner low-end aircraft like the A-10 that it will replace currently are. It assumes that high-end armed ISR platforms will be used where low-end, unarmed ISR platforms once were. It assumes that an air tasking cycle measured in days will continue to meet the time constraints of SOF operating on a decision cycle measured in hours. Until the assumptions of this nature are proven valid, the USAF should seek both high-end and low-end capability and focus aircraft, missions, and operating concepts on agile transitions between the two based on the current situation. It should seek the adaptability to operate across the spectrum of the valuation scale for airframes and operating concepts in the most effective manner that is tailored to each unique environment even though that solution may not work in other theaters or conflicts.⁴¹ The alternative is to retreat up market much like integrated steel mills in the 1960s until the USAF has created gaps at the low end to be filled by other organizations or to remain open and increase the likelihood of tactical dominance overshadowed by strategic irrelevance in low-end conflicts like Afghanistan.

Conclusion

The Cult of the Conventional, with its myopic focus on the upper end of the valuation scale and the three fallacious beliefs it promotes, creates gaps at the lower end where airpower runs the risk of becoming irrelevant, and it denies evidence that long-standing airpower assumptions should be questioned. Invalidating this system of denial requires changes at the strategic, operational, and tactical levels. It requires more than just sustaining innovations that only improve current ways of doing things. It requires innovation that does things in new ways and that adjusts the established system of valuation to emphasis those elements that follow the most effective path to a higher end regardless of whether that solution requires high-end or low-end aircraft, missions, or operating concepts. It requires viewing current doctrine as a common point of departure for adaptation and new ways of thinking. It also requires the application of axioms that ensure tactical USAF dominance is strategically relevant and counters the Conventional Cult's fallacies of Whack-a-Mole, 11 goalies, and ATO über alles. ✪

Notes

1. Andrew Hill and Stephen Gerras, "Systems of Denial: Strategic Resistance to Military Innovation," *Naval War College Review* 69, no. 1 (Winter 2016): 109–132.

2. In the 1920s, military leaders denied the waning superiority of the battleship and Billy Mitchell's claims that sea power would be subordinated to airpower or dependent on it even after he demonstrated the vulnerabilities of the battleship to aircraft by sinking the *Ostrfiesland*. "William 'Billy' Mitchell: An Air Power Visionary," *HistoryNet*, 12 June 2006, <http://www.historynet.com/william-billy-mitchell-an-air-power-visionary.htm>.

3. "Pentagon Confident in Afghan Plan despite Troop Death," *The Hill*, 1 January 2016, <http://thehill.com/policy/defense/264837-pentagon-confident-in-afghan-plan-despite-troop-death>.

4. "Trump Advisors Call for More Troops to Break Afghan Deadlock" *New York Times*, 8 May 2017, https://www.nytimes.com/2017/05/08/us/politics/donald-trump-afghanistan-troops-taliban-stalemate.html?_r=0.

5. In 2009, the campaign objectives shifted from a focus on destruction of the Taliban to a focus on the Afghan population. Kenneth Katzman, *Afghanistan: Post-Taliban Governance, Security, and Policy*, Congressional Research Service (CRS) Report No. RL30588 (Washington, DC: CRS, 2016), 25.

6. Clayton M. Christensen, *The Innovator's Dilemma* (New York: Harper Business, 2000), 186–195.

7. Robert M. Gates, *Duty: Memoirs of a Secretary at War* (New York: Alfred A. Knopf, 2014), 239, 248.

8. Alan J. Vick, *Proclaiming Airpower* (Santa Monica, CA: RAND Corporation, 2015), 67–85; and Air Force Doctrine Document 1 (AFDD-1) *Air Force Basic Doctrine*, “The Foundations of Airpower,” states that airpower can simultaneously strike rapidly, unexpectedly, and directly across the adversary's centers of gravity, vital centers, critical vulnerabilities, and strategy. In AFDD-1, “The Foundations of Airpower,” doctrine.af.mil, 27 February 2015, <https://doctrine.af.mil/download.jsp?filename=V1-D22-Foundations-of-Airpower.pdf>; and Air Force doctrine states that airpower must be centrally controlled by Airmen. *Air Force Basic Doctrine*, “The Airmen's Perspective,” doctrine.af.mil, 27 February 2015, <https://doctrine.af.mil/download.jsp?filename=V1-D24-Airmens-Perspective.pdf>.

9. Airpower success against the Taliban and Da'esh is described in terms of the destruction of targets that provide the means to fight. “Combined Forces Air Component Commander, 2011–2016 Airpower Statistics,” US Air Forces Central Command (AFCENT) Public Affairs, 29 February 2016, <http://www.afcent.af.mil/Portals/82/Airpower%20Summary%20-%20February%202016.pdf?ver=2016-11-25-023616-157>.

10. Hill and Gerras, “Systems of Denial,” 109–132.

11. Christensen, *The Innovator's Dilemma*, 89–108.

12. *Ibid.*, 89–108.

13. The figure is the author's adaptation of the figure in the book; *Ibid.*, 104.

14. While Robert Gates was secretary of defense, the Air Force was more concerned about a new bomber and F-22 for future fights than supporting the conflicts it was in. Secretary Gates pressured the Air Force to better support the current conflicts by focusing more on manned and remotely piloted intelligence, surveillance, and reconnaissance (ISR) platforms to include the manned MC-12 ISR platform. In 2014, after Secretary Gates left office, the USAF shed those platforms as it transferred the MC-12 fleet to the Army. Gates, *Duty: Memoirs of a Secretary at War*, 130–133, 239, 248, 319; and “The US Military's King Air 350ER Aircraft: Quietly Effective,” *Defense Industry Daily*, 25 February 2016, <http://www.defenseindustrydaily.com/us-military-orders-more-king-air-350er-aircraft-05165/>.

15. “Beale AFB [Air Force Base] Farewells MC-12 as Spy Plane Moves to Army and SOCOM [Southern Command],” *Flight Global*, 25 September 2015, <https://www.flightglobal.com/news/articles/beale-afb-farewells-mc-12-as-spy-plane-moves-to-army-417153/>.

16. The USAF does not operate the unarmed ISR platforms ground units rely on such as the Scan Eagle, MQ-1 Grey Eagle, or other low-end platforms. Instead, it is focusing on higher-end, strike capable platforms. “US Air Force Terminates Predator Drones. Now You Will Fear the Reaper,” *The Register*, 27 February 2017, https://www.theregister.co.uk/2017/02/27/us_air_force_put_predator_drones/.

17. “Report: A-10 Retirement Indefinitely Delayed,” *Air Force Times*, 13 January 2016, <https://www.airforcetimes.com/story/military/2016/01/13/report-10-retirement-indefinitely-delayed/78747114/>.

18. Scan Eagle, MQ-1 Grey Eagle, and other low-end platforms are provided by ground forces, not the USAF.

19. Dag Henriksen, *Airpower in Afghanistan 2005–2010, The Air Commander's Perspectives* (Maxwell AFB, AL: Air University Press, 2014), 32, 65, 109, 194.

20. *Ibid.*, 237–240; and Air Force Central Command (AFCENT), “2011–2016 Airpower Statistics,” 2016.

21. Hew Strachan, *The Direction of War* (Cambridge, UK: Cambridge University Press, 2013), 218.

22. Rupert Smith, *The Utility of Force* (New York: Alfred A. Knopf, 2007), 3–8.

23. Robert B. Strassler, ed., *The Landmark Thucydides, A Comprehensive Guide to the Peloponnesian War* (New York: Free Press, 1996), 43.

24. James S Corum and Wray R. Johnson, *Airpower in Small Wars, Fighting Insurgents and Terrorists* (Lawrence, KS: University Press of Kansas, 2003), 425.

25. Airpower can only be brought to bear if it is in self-defense, if there is a positive identification, and if pattern of life has been established that clarifies what the suspect individual had been doing during the period leading up to the event. Henriksen, *Airpower in Afghanistan*, 214.

26. The only bombs dropped within the Bagram AB, Afghanistan, base defense area during this period while the author was the operations group commander at Bagram AB was a preplanned strike

on a weapons cache. The vast majority of successful attacks by the Taliban against Afghan and NATO forces were insider threats with improvised explosive devices (IED) and indirect fires (rocket, mortar, artillery) making up less than 50 percent. Fighters cannot prevent an insider attack and dedicated ISR is more capable of catching an IED or rocket emplacement which leaves fighters with limited utility in the most prevalent attack scenarios; The US Department of Defense (DOD), *Report to Congress: Enhancing Security and Stability in Afghanistan* (Washington, DC: DOD, December 2015), 20–22.

27. In December 2015, almost one year after the declared end of combat operations, six Airmen were killed by the Taliban near Bagram AB. "Six Airmen Killed in Afghanistan Identified," *Air Force Times*, 22 December 2015, <http://www.airforcetimes.com/story/military/pentagon/2015/12/23/six-airmen-killed-afghanistan-identified/77777636/>.

28. Tight controls and assembly-line like processes work best in a stable environment that does not change. A dynamic environment requires responsiveness that tight control and rigid processes tend to suppress; Henry Mintzberg, *The Rise and Fall of Strategic Planning* (New York: The Free Press, 1994), 146–150, 342–343.

29. John Boyd's view was that the competitor with the shortest OODA loop has the advantage. Grant T. Hammond, *The Mind of War, John Boyd and American Security* (Washington, DC: Smithsonian Institution Press, 2001), 123.

30. "Operation Freedom's Sentinel and Our Continued Security Investment in Afghanistan," *army.mil*, 1 October 2015, <https://www.army.mil/article/156517/>.

31. The exact percentage is of a higher classification than this article allows; 90 is a representative number only and it is chosen by the author because it is close to the disparity between sorties flown and sorties with weapons employment.

32. Mike Hostage, "A Seat at the Table, Beyond the Air Component Coordination Element," *Air and Space Power Journal (ASPJ)*, 24, no. 4 (Winter 2010): 20, http://www.au.af.mil/au/afri/aspj/airchronicles/apj/apj10/win10/2010_4.pdf.

33. Strachan, *Direction of War*, 218.

34. Smith, *Utility of Force*, 6.

35. *Ibid.*, 45–46.

36. Drew, "Beale AFB Farewells MC-12," 2015.

37. "Additional A-29s Arrive in Kabul in Time for Fighting Season," *centcom.mil*, 21 March 2017, <http://www.centcom.mil/MEDIA/NEWS-ARTICLES/News-Article-View/Article/1124868/additional-a-29s-arrive-at-kabul-in-time-for-fighting-season/>.

38. Mintzberg, *Rise and Fall*, 167–170.

39. A black swan event is an unexpected and unforeseen event that creates surprise when it suddenly occurs. A black swan event cannot be predicted since that would require foreknowledge of what it is in order to be able to predict it; it would remove the element of surprise, and would thereby make it no longer a black swan. Nassim Nicholas Taleb argues that unknowable black swan events cannot be known until they have already occurred. Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007), 40–42.

40. David Deptula, "A New Era for Command and Control of Aerospace Operations," *ASPJ* 28, no. 4 (July–August 2014), 13, <http://www.au.af.mil/au/afri/aspj/archivepage.asp?id=33>.

41. Germany, Russia, and the United States all had different organizational structures for the control of airpower that changed, based on the type of aircraft they used and how they used them. Michel L. Marshall III, *Clashes: Air Combat over North Vietnam 1965–1972* (Annapolis, MD: Naval Institute Press, 1997), 25–258; and Martin van Creveld, *Air Power and Maneuver Warfare* (Maxwell AFB, AL: Air University Press, 2004), 36, 137–138; and Corum and Johnson, *Airpower in Small Wars*, 433.



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