In 2001, the U.S. military, aided by indigenous forces, swiftly toppled a Taliban government responsible for providing sanctuary to al Qaeda. In 2003, the Iraqi military disintegrated in the face of a devastating demonstration of American power that ended the regime of Saddam Hussein. America showcased its unique ability to project power over vast distances to achieve substantial results. Unfortunately, those initial victories were short-lived. As the security situations deteriorated in both Iraq and Afghanistan, the United States became engaged in longer term irregular conflicts. American and allied militaries struggled to adapt their doctrine, training, and technology to counter an elusive foe. While ground forces relearned and incorporated counterinsurgency (COIN) lessons, Airmen explored how airpower’s flexibility, responsiveness, and bird’s-eye view of the battlefield could respond to those lessons.

This reexamination of airpower revealed several enduring principles. Most important is that Airmen must gain airspace control, so the full advantages of rapid mobility, intelligence, surveillance, and reconnaissance (ISR), and precision strike are available to the commander. At higher altitudes, the adversary generally ceded control, but at lower altitudes, control could be contested. By controlling the air and space over Iraq and Afghanistan, the air component was able to transport thousands of personnel, drop supplies to isolated units, evacuate wounded, gather real-time intelligence, and conduct precision strikes to disrupt and destroy insurgent forces. In addition, air and space control allows Airmen to conduct train, advise, assist, and equip missions for indigenous air forces and to strengthen civil aviation infrastructures necessary for national sovereignty and economic growth. These lessons have been a staple of airpower employment since its inception, and they remain relevant today and in the future.

**Airpower Performance in Counterinsurgencies**

Airmen made their first foray into COIN operations shortly after the invention of the airplane. In 1913, France employed aircraft to put down an uprising in Morocco, and in 1916, the United States used a squadron of aircraft during General John Pershing’s expedition into Mexico to capture Pancho Villa.
Various irregular struggles continued throughout the interwar period and escalated following World War II. In each instance, airpower’s unique capabilities—speed, flexibility, and reach—helped to counter insurgent movements using rapid mobility, ISR, and aerial attack.

**Rapid Mobility.** Military operations of every kind are highly resource dependent. When these resources are required in a timely manner, in distant locations, strategic airlift assets are the delivery method of choice. Similarly, once the resources reach the theater of operations, the job is rarely done. In these situations, the speed, range, security, and flexibility of air mobility make it a vital component of any joint operation.

**Intertheater Airlift.** An obvious advantage of airpower is its ability to transport a substantial amount of troops and materiel into a theater of operation in minimum time. This characteristic of airpower is true in all types of conflict. In 2001, airlift accounted for 97 percent of the cargo carried into theater for Operation Enduring Freedom. Since that time, intertheater airlift has been responsible for the transportation of nearly 9 million passengers, 3 million tons of cargo, and almost 500,000 sorties in U.S. Central Command. This massive mobility effort has been instrumental in recent U.S. successes in Iraq and will remain a fundamental advantage for operations in Afghanistan.

**Intratheater Airlift.** In most COIN operations, poor ground transportation networks, inhospitable terrain, and rampant insecurity necessitate the use of airpower to quickly deliver fuel, food, equipment, and security personnel to trouble spots throughout the region, in essence providing a critical logistical and maneuver element for friendly forces. In fact, airpower’s intratheater airlift mission has played a pivotal role in several COIN operations, and may arguably be airpower’s greatest contribution to the counterinsurgency effort.

An excellent example is the current struggle between the Colombian government and the Revolutionary Armed Forces of Colombia (FARC). Government forces have experienced several setbacks since the conflict began in 1966. At one point, the FARC had substantial power and was even able to mount successful conventional attacks against government forces. In recent years, however, Colombia has made significant headway against the insurgency, and the FARC is believed to be almost entirely incapacitated. The dramatic turn of events occurred because of a change in the Colombian political environment combined with substantial assistance from the United States. Supported by military advisors, the Colombian military underwent an aggressive program to professionalize its force, but a professional force can do little if it cannot reach the insurgents in the rugged Colombian terrain. To overcome this obstacle, the Colombians significantly increased their air mobility capacity. Now, Colombia possesses the third largest UH-60 Blackhawk fleet in the world. Airpower and increased mobility gave the Colombian government the decisive advantage needed to deny the insurgent force any kind of sanctuary. Today, the FARC no longer poses a realistic threat to Colombia’s governance.

Similarly, Afghanistan is plagued with a vast landscape of inhospitable terrain that hampers central government and International Security Assistance Force (ISAF) efforts to defeat insurgent forces. The current ISAF strategy to project central government influence throughout the country requires an enormous amount of intratheater airlift, and without it the operation would...
be severely hampered. Since 2006, coalition Airmen have airdropped over 64 million pounds of cargo, with over half of that in 2009 alone as ISAF expanded its reach into southern Afghanistan. This effort is aided by an intricate air mobility system that transports government and military personnel to multiple locations on a daily basis, and an aeromedical evacuation process that has saved thousands of lives. Since 2009, Air Force rescue forces have been credited with 1,781 saves and over 5,000 assists while evacuating coalition personnel and Afghan civilians for medical care. This critical, lifesaving mission assures Servicemembers that medical assistance is more responsive than at any time in history, and demonstrates our commitment to the local population.

Intelligence, Surveillance, and Reconnaissance. As the unprecedented demand for remotely piloted aircraft and other ISR assets indicates, intelligence in a counterinsurgency is paramount, and airpower provides a highly capable—if not the most capable—collection method. In fact, airpower's ability to obtain a three-dimensional picture of the battlefield dates to its infancy. Unsure of exactly what to do with the new technology in the early 1900s, battlefield commanders first employed aircraft as artillery observation platforms and for intelligence-gathering. Although the priority for aircraft changed after commanders realized airpower's utility as an offensive force, the importance of intelligence collection continued. Today, the ability of space, cyber, and air assets to collect and distribute battlefield situational awareness is a prerequisite to success in any conflict.

In Afghanistan and Iraq, aircraft such as the RC–135 Rivet Joint and Combat Sent, U–2 Dragon Lady, MQ–1 Predator, MQ–9 Reaper, RQ–4 Global Hawk, MC–12 Liberty, and several nontraditional platforms provide around-the-clock ISR coverage. The Airmen flying these platforms find, track, and target the insurgent command structure. They provide real-time intelligence to appropriate command centers, and more important, to the small unit leader on the ground—often through a direct link. The capability of these Airmen is immense. America's air warriors operate over large
areas and often monitor targets for hours or even days. Since 2008, airborne ISR assets have been tasked with over 1 million targets, provided support in over 800 troops-in-contact situations, assisted in the capture of more than 160 high-value individuals, and identified over 1,000 possible improvised explosive devices. These ISR assets provide the continuous coverage necessary to protect American and coalition forces while ferreting out insurgents hidden among the population.

The ISR effort is amplified by the multitude of space assets supporting operations in the region. In the late 1950s, the French had to rely on a carefully planned infrastructure of radio relay stations to pass messages between isolated outposts in Algeria. Today, the United States and coalition allies harness the power of space-based systems to extend our communications network across the globe. Combined with imagery, intercepted communications, and the global positioning system (GPS), coalition forces have the most up-to-date information available to precisely target insurgents—a unique advantage they enjoy due to American airpower.

**Precision Attack.** Counterinsurgent strategies generally seek to target either the insurgent or his acceptance among the population. Current U.S. and coalition strategy emphasizes protecting the population. Once insurgents are isolated, firepower is brought to bear, and airpower is capable of focusing the appropriate amount of firepower in a minimum amount of time.

During the French involvement in Algeria, airpower played a significant role in every facet of the COIN operation. Like many other COIN conflicts, air transport and ISR were a fundamental part of the process. However, some of the most notable contributions came from aerial strikes. Confronted by foreign safe havens that supported the insurgency through air, sea, and land routes, the French air force controlled the airspace over Algeria, interdicted maritime-based support, and patrolled the extensive
border areas with Tunisia and Morocco to strangle insurgent supply lines. This operation eventually starved the insurgency of the personnel, weapons, and supplies necessary to continue military operations. Internally, the French air force prepared landing zones, provided close air support, and executed direct attacks against insurgent forces. These actions, in combination with ground efforts, substantially reduced and dispersed internal insurgent forces and kept additional forces in Tunisia and Morocco from entering the country.

Like Algeria, precision attack plays a substantial role in operations in Iraq and Afghanistan. The ability to loiter over the battlefield, respond to ground personnel in need of assistance, and track and eliminate insurgents makes airpower an absolutely essential part of these operations. Coalition air forces are able to provide this counterinsurgent strike capability because of the technological advances in precision engagement. Small diameter bombs, GPS- and laser-guided munitions, and special weapons systems such as the AC–130 gunship bring discrete and proportionate firepower where and when it is needed.

This ability to bring firepower to bear throughout battlespace gives U.S. and coalition forces a distinct asymmetric advantage over the insurgents. Often insurgents are able to shape the fight by avoiding direct confrontation with conventional forces. This means government forces must “take to the streets,” conduct extensive clearing missions, and secure areas after they are cleared. This kind of operation is manpower intensive. However, it is much more difficult for insurgent forces to mitigate the asymmetric advantage of airpower. Orbiting overhead, Airmen are able to find, identify, track, and kill insurgents, and this capability constrains insurgent operations. The deadly firepower they bring allows commanders to prosecute time-sensitive targets, such as high-value individuals, and provides for the timely protection of ground forces under attack. Since 2004, over 200,000 close air support sorties have been flown in Iraq and Afghanistan as part of this protective airpower umbrella, and coalition aviation has dropped 22,000 munitions in support of established COIN objectives. By doing this day after day, Airmen protected the lives of countless U.S. and coalition troops, while at the same time furthering coalition interests in the region.

Unfortunately, collateral damage and civilian casualties are a reality of war. However, despite the media’s focus on airstrikes, airpower has rarely been the cause. In fact, the Taliban is responsible for the vast majority of the attacks on Afghan civilians. According to the National Counterterrorism Center, terrorist attacks in Afghanistan were responsible for 6,796 casualties in 2009. Comparatively, ISAF actions accounted for 657 casualties, and only 78 of those were attributable to airpower. The reality is that between 2007 and 2009, nearly 14,500 air-to-ground weapons releases occurred in Afghanistan and less than one-tenth of one percent resulted in civilian casualties. That is a record of unmatched precision, and the result of tireless efforts to reduce noncombatant casualties. These efforts have paid off. From 2008 to 2009, the number of civilians killed or wounded by air-to-ground munitions dropped 71 percent, and numbers for 2008 decreased 31 percent over 2007.

Train, Advise, Assist, and Equip. While many of airpower’s contributions derive from increased mobility, ISR, and precision attack, another significant advantage is the development of military and civil aviation structures. By assisting in these areas, Airmen ensure a troubled government is able to protect its sovereignty and create an interconnected hub of economic growth.

Military Aviation. Typically, a counterinsurgency requires a substantial number of ground troops to secure the country from internal threats—something many developing
nations cannot afford. However, as in the case with Colombia, a smaller, highly skilled ground force complemented with a capable air force can significantly reduce the cost.

Furthermore, most nations cannot ignore the state-level threats that lurk just outside their borders. Unless a larger country is guaranteeing its safety, a developing state must have the ability to protect itself from would-be aggressors. One way to deter external threats is to invest in a sufficiently capable air force. Relative to its neighbors, Israel fields a fairly small active duty military. The Israelis offset this by having a significant reserve force and a highly credible and capable air force—arguably one of the best in the world. While not every developing nation needs, or should seek, an air force as capable as Israel’s, a reputable air force helps deter aggression. A nation emerging from instability or a protracted insurgency will be expected to defend its borders and that is difficult without a credible air force.

Iraq and Afghanistan will be no different. Even if both governments prevail internally, it is likely they will still face an external security threat. Each country borders other nations that, while they may not challenge national sovereignty directly, may attempt to coerce them militarily. With these competing challenges to national sovereignty, it is essential that each country has a credible and capable air force that can defend against internal and external threats. The U.S. Air Force contributes to this effort through its foreign internal defense mission.

In Iraq, the “train, advise, assist, and equip” mission facilitated Iraqi air force development by acquiring 106 aircraft, training 7,200 airmen, and transitioning ownership of air bases in four locations. This commitment to Iraq’s air development will continue in the future as it improves its ability to monitor its airspace, control aircraft within it, and defend its territory through ground-based air defense systems and a multirole fighter.

A sustainable Afghan air force is a much more challenging problem. Riddled by years of internal conflict, Afghanistan’s air force must be built step-by-step in a country still racked with instability. This means that Afghans must focus on guaranteeing internal security: transportation of government officials to outlying areas, rapid deployment of security forces to disrupt insurgent operations, and the swift evacuation of casualties. Currently, much of this capability is provided by Mi-17/35 helicopters and C–27 transports, but as the Afghan air force matures, it must acquire additional lower cost transport, training, and close air support aircraft. Coalition airmen are working diligently to make this happen while devoting considerable time to develop a professional cadre of officers and enlisted personnel to lead and maintain such an air force.

Civil Aviation Development. An interconnected civil aviation infrastructure underpins the global economy and has become the hallmark of a developed nation. In 2008, air transport accounted for 3.4 percent of the world’s gross domestic product, and goods traded by air were valued at 35 percent of total global exports. Taking advantage of this market requires the technology and infrastructure to operate safely, and those developing countries capable of meeting the safety standard have seen substantial economic benefits—usually resulting in double-digit returns on investment.

Nations wishing to reap these benefits must first concentrate on improving the domestic
transportation structure. Typically, the aviation infrastructure is the last to develop as a nation evolves technologically; however, this does not need to be the case. In a place such as Afghanistan, where inhospitable terrain, a poor road and rail system, and no navigable waterways exist, it is logical to build an airway system to spur the development of trade and link disparate regions and people. Nearly 85 percent of the 81,000-mile Afghan road network is severely degraded, and a major portion is not sufficiently developed to accommodate even motor vehicles. This is an enormous impediment to economic progress since growth is heavily dependent on the transportation of goods, services, and people to national and international markets. An effective civil aviation infrastructure could complement future road improvements, but the Afghan air system requires near-term work. Short runways, the lack of paved surfaces, and the low number of airports restrict the usefulness of the system and could be improved.

By developing the aviation infrastructure in nations such as Afghanistan, the United States and its allies can provide the connectivity necessary to improve governance and spur economic growth. As the aviation structure matures, it will enable inclusion into the global economic market. In some instances, the necessary assistance may occur after a conflict has ravaged the local economy and infrastructure, and in other times Airmen may be able to assist strategically important states that are floundering but still in control. Either way, there is an important role for Airmen in aviation development.

**The Way Ahead**

The future of irregular warfare may look even more challenging than it does today. Nonstate actors, especially those seeking weapons of mass destruction, will continue to threaten international stability and undermine the global economy. Future adversaries may get access to long-range, precision weapons and advanced information technology, blurring the lines between regular and irregular conflict. In particular, actors will pursue antiaccess and area-denial strategies in an attempt to thwart American military power projection. This will include the use of precision-guided missiles, mortars, and rockets that will place deployed air- and seabases at risk and further challenge our ability to control the air—a foundational requirement in any future conflict. As a result, military forces will increasingly be required to operate in insecure environments. The level of air and space control we have come to expect in Iraq and Afghanistan may not exist in future irregular conflicts. To maintain the asymmetric advantage of airpower that has been so consistently demonstrated over the past decade, the United States will need to focus efforts on overcoming these threats.

Added to this, engagement, building partnership capacity, and allied integration will become increasingly more important as ways to prevent instability and respond to a crisis. The Air Force will continue to maintain the ability to deploy teams of Airmen to strategically important regions to assist with stabilization and to develop a state’s civil aviation infrastructure. In some cases, we will educate and train viable indigenous air forces to higher levels of effectiveness. In other situations, the Air Force will contribute as it has before with rapid mobility, ISR, and precision attack to stabilize a conflict in progress and restore effective governance.

Regardless of the conflict, airpower remains an important element of U.S. military power. It is a national asymmetric advantage. Using the unique capabilities of airpower, Airmen of all the Services can be counted on to adapt to evolving threats and overcome future challenges. We must continue to build upon the
lessons we have learned from previous conflicts and prepare our forces to fight and engage in increasingly contested air, space, and cyberspace environments. As they have throughout our current conflicts, Airmen will rise to these new challenges and, day by day, demonstrate their value as members of America’s joint and interagency team. PRISM

Notes

1 Government Accountability Office (GAO), Defense Transportation: Air Mobility Command Needs to Collect and Analyze Better Data to Assess Aircraft Utilization (Washington, DC: GAO, 2005), 6. Operation Iraqi Freedom, which was initially characterized as a highly conventional conflict, relied heavily on sealift to transport the large quantities of heavy equipment. However, airlift still accounted for 13 percent of the cargo transported into theater.


3 Robert Haddick, “Colombia Can Teach Afghanistan (and the United States) How to Win,” Air & Space Power Journal (Summer 2010).


6 Nontraditional ISR platforms refer to those aircraft primarily designed for precision attack that also have a significant capability to gather intelligence. Examples of this include the B–1, B–52, F–15E, F–16, and in future conflicts the substantial ISR contributions of the F–22 and F–35.

7 While the Front de Libération Nationale (FLN) eventually seized control after Algeria gained independence, many aspects of France’s military COIN operations were extremely successful in minimizing FLN influence while Algeria remained under French control.


11 Ibid.

12 Aviation Foreign Internal Defense is one of the five irregular warfare lines of operation applicable in and outside of a COIN environment.


14 International Air Transport Association (IATA), Aviation Economic Benefits (Montreal, Canada: IATA, 2008), 1–2.