Airpower in the 21st Century

Cognitive Lesson Objective:
• Comprehend the background causes for the Global War on Terror (GWOT) and the importance of lessons learned from Operations ENDURING FREEDOM (OEF), IRAQI FREEDOM (OIF), and NEW DAWN.

Cognitive Samples of Behavior:
• State how the terrorist attacks on September 11, 2001 changed U.S. Policy.
• State the objectives of OEF according to the Secretary of Defense.
• Explain how air and space power contributed to mission success in OEF and OIF.
• Identify the emerging military lessons from OEF and OIF.
• Identify the definitive conclusions drawn about air and space power from OIF.

Affective Lesson Objective:
• Respond to the impact the GWOT is having on the evolution of air and space power.

Affective Sample of Behavior:
• Voluntarily participate in classroom discussion.

Affective Sample of Behavior:
• Actively participate in classroom discussions.
A word about the following readings:
These articles must be viewed in the context of the time they were written. If you read an article about WWII you would expect it to be old. As we move further away from OEF and OIF they become of historical nature. We will make every effort to provide articles that provide current status of ongoing operations while maintaining the older articles that provide time specific perspective; otherwise we will lose the history and become focused on current events only.*

Focus On:

DESERT TRIUMPH


Only three weeks after launching the invasion of Iraq, coalition forces found themselves in control of most of Baghdad and battling remnants of shattered Republican Guard divisions and irregulars in the city. U.S.-led ground forces had raced 300 miles from Kuwait to the capital, their path opened up by devastating combat airpower that had shifted back and forth between fixed strategic targets and mobile enemy forces in the field.

On April 9, U.S. Central Command reported that Iraqi forces no longer seemed to be under any kind of central control.

With an emphasis on speed, flexibility, rapid maneuver of ground forces, surgical strikes, and information operations, Operation IRAQI FREEDOM (OIF) was in many ways a demonstration of the “transformational” concepts and technologies championed by the Pentagon leadership.

There are several definitive conclusions we can draw about what happened in Iraq, a few of those themes were prominent:

• It now appears that relatively small but highly mobile ground forces can meet and defeat a larger, entrenched defender, provided the U.S. first establishes and then ruthlessly exploits air and space dominance.

• Information dominance—achieved in large part by a fleet of spacecraft and sensor aircraft roaming the battle space at will—coupled with highly precise, real-time, informed targeting by massive numbers of aircraft, led to rapid victory on the ground.

• OIF showed that a prolonged air war as a set-piece prelude to ground action is not always necessary and that air and space power can indeed be extremely effective in helping ground forces wage urban warfare without inflicting massive collateral damage on civilians.
• Information operations—ranging from dispersal of leaflets to computer network attack—can sharply reduce the need for kinetic weapons.

Gulf War II had all the hallmarks of an “effects-based operation”—speed, precision, and effectiveness enhanced by use of minimum force but backed by the willingness to employ massive force where warranted to mold the enemy’s perception.

In targeting, weapons and aim points were selected with an eye toward producing the desired results with the least number of steps. An attack on one target, for example, might be used to cripple others—such as striking a single pillar that holds up a whole building or a communications relay on which all others depend.

Most of the operational concepts employed in Iraq seemed to work quite well, and they did so in the absence of any new and untried “wonder weapon,” as in past wars.

The ground force in this war was not as large as the one used in 1991 to eject Iraqi forces from Kuwait. However, attacks from the air were more numerous and more intense than those mounted in Operation DESERT STORM. On March 19 (local Baghdad time), the coalition conducted preparatory attacks against about 1,400 aim points, including strategic targets in three major cities as well as attacks on air defenses, runways, suspected missile launch sites, and command and control nodes. The main attack began March 20. Yet all this was accomplished with far fewer aircraft than were deployed in Desert Storm.

** Strikes in Five **

Thanks to quick action on the part of the combined air operations center in Saudi Arabia, coalition aircraft would, in some cases, strike emerging targets in as few as five minutes after detection. After the fourth day of war, air attacks shifted dramatically from fixed targets to mostly moving, fielded targets, said DOD officials.

The ground force marshaled to drive Iraq from Kuwait in 1991 totaled about 500,000 American troops. The force assembled by Gen. Tommy R. Franks, Central Command commander, to take Iraq from Saddam Hussein amounted to some 230,000 U.S. personnel at the outset (rising to about 340,000 after three weeks). Only 125,000 of those were in Iraq itself. This ground force was arrayed against an Iraqi force initially numbering about 400,000 and ranging in skill from well-trained Special Republican Guards to untrained militia conscripted at gunpoint.

In 1991 Gen. H. Norman Schwarzkopf the coalition commander used six weeks of heavy firepower attacks to blast away half of the enemy’s combat capability before ground forces even engaged. Franks, by contrast, launched his ground assault before his full air campaign. This was done in an attempt to achieve tactical surprise and thwart Saddam’s forces before they could destroy oil wells and wreck port facilities.
Franks also decided to rush toward Baghdad, engaging Iraqi military when necessary but largely bypassing major cities along the way. At the same time, he used airpower to destroy the infrastructure of Saddam’s power in the capital. He aimed to quickly decapitate the regime and thus leave Iraqi troops with the unpalatable choice of disorganized resistance or outright surrender.

“The Iraqi military, as an organized defense in large combat formations, doesn’t really exist anymore,” Central Command’s air chief, USAF Lt. Gen. T. Michael Moseley told reporters on April 5. “We really do have air supremacy over this country.”

**Scanning the “Kill Boxes”**

The air element was directly responsible for a critical strategic goal—making sure the war did not spill over onto other countries. From the outset, combat aircraft were patrolling “kill boxes” in southern and western Iraq, searching for—and in some cases finding—theater ballistic missiles that could be used against Iran, Israel, Kuwait, Saudi Arabia, or Turkey. One F-15E crew reported definitively destroying a Scud missile launcher, a weapon expressly forbidden to Iraq under UN resolutions.

The coalition weapon of choice for targets in Baghdad was the Joint Direct Attack Munition, a munition guided by Global Positioning System satellite signals. The accuracy of the weapon was described by a bomber wing commander as “to within one bomb’s length.” (A 2,000-pound JDAM is about 12 feet long.) Thousands rained down on Baghdad, producing a spectacular show of force as regime headquarters and Saddam’s Presidential palaces went up in clouds of smoke.

The might of modern airpower was used with devastating effect against Iraqi mechanized forces massing just ahead of the Americans on the roads to Baghdad. Flushed from their defensive positions around Baghdad to meet the approaching spearhead, Iraqi armor was spotted by Joint STARS radar aircraft and quickly chewed up by Air Force A-10s, F-15Es, F-16s, and other coalition fighters. The preferred weapon to destroy the Republican Guard armored vehicles on the move was the A-10’s fearsome 30 mm Gatling gun, which was incorporated for just such a purpose when the aircraft was designed 30 years ago. Other weapons used to pick off the Guard were the infrared-guided Maverick missile, laser guided bombs, and the Sensor Fuzed Weapon.

Rather than engaging in massive tank battles, coalition ground forces encountered mostly burning hulks on their drive north, courtesy of airpower.

**Sowing Doubt, Suspicion**

A major psychological campaign was also conducted, with 37 million leaflets showered down on Iraqi troops beginning more than a month in advance; in an effort to convince them they could not win and that they would be spared if they surrendered. The U.S. also gambled that most of the Iraqi people had had enough of their leader and would welcome coalition forces as liberators. In addition, the U.S. leadership hoped to sow
doubt and suspicion within the Iraqi regime, saying that it was in touch with generals who
planned to defect or surrender, always speaking of Saddam’s reign. Before Operation
IRAQI FREEDOM even began, Iraqi air defenses and command and control capabilities
in southern Iraq had been substantially degraded. An Air Force expeditionary unit
commander reported that B-1B bombers had been operating over Iraq for weeks prior
to “G-Day” and “A-Day,” the beginning of the ground and air elements of the campaign,
respectively in the past tense and of a successful coalition invasion as virtually a fait
accomplish.

In the fall of 2002, as tensions mounted, other American and British patrol airplanes,
covering the northern and southern no-fly zones, pursued “vigorous” retaliations, one
U.S. general reported, against Iraqi air defenses and communications nodes when the
Iraqis fired on coalition aircraft.

Having read the leaflets and seen that air defense sites that kept their radars on too long
were promptly destroyed, air defense operators would only emit briefly, then break down
and move to new locations, one official said.

“If they’re constantly moving, they aren’t a threat,” he said. “We are achieving the desired
effect of denying them a chance to operate. It really doesn’t matter right now if we destroy
them, as long as we can go wherever we want with any platform we want.”

He added that Iraqi forces had fired anti-aircraft missiles but nearly all “were unguided.”

The start of the action was characterized by extraordinary flexibility. When intelligence
pinpointing the location of Saddam and his senior leadership on March 20 came to
American forces, Franks ordered an attack on the location. Two USAF F-117 stealth
fighters, flying silhouetted against a full moon and with no jamming or fighter support
whatever, struck the target with four EGBU-27 laser guided bombs. The bombs hit just
four hours after the pilots had been roused from their cots and handed imagery of the
target on their way to their aircraft.

Following the four penetrating bombs were more than 40 Tomahawk Land Attack Missiles,
fi red from ships in the Persian Gulf and the Red Sea, completing destruction of the target
both above and below ground. Even three weeks later, it was not clear whether Saddam
and his lieutenants had been killed in that first raid.

U.S. goals in Iraq were laid out by Defense Secretary Donald H. Rumsfeld in a March
21 press conference in which he listed the tasks to be performed in order of importance.

“Our goal is to defend the American people,” Rumsfeld said, “and to eliminate Iraq’s
weapons of mass destruction and to liberate the Iraqi people.” It was later discovered
that Iraq did not in fact possess weapons of mass destruction.
Specific Objectives

Coalition military operations were focused on a number of specific objectives, Rumsfeld said. These he listed as, first, “to end the regime of Saddam Hussein by striking with force on a scope and scale that makes clear to Iraqis that he and his regime are finished.

“Next, to identify, isolate, and eventually eliminate Iraq’s weapons of mass destruction, their delivery systems, production capabilities, and distribution networks. Third, to search for, capture, and drive out terrorists who have found safe harbor in Iraq. Fourth, to collect such intelligence as we can find related to terrorist networks in Iraq and beyond. Fifth, to collect such intelligence as we can find related to the global network of illicit weapons of mass destruction activity. Sixth, to end sanctions and to immediately deliver humanitarian relief, food, and medicine to the displaced and to the many needy Iraqi citizens. Seventh, to secure Iraq’s oil fields and resources, which belong to the Iraqi people, and which they will need to develop their country after decades of neglect by the Iraqi regime. And last, to help the Iraqi people create the conditions for a rapid transition to a representative self-government that is not a threat to its neighbors and is committed to ensuring the territorial integrity of that country.”

Two weeks later, Rumsfeld said he demanded nothing less than “unconditional surrender” of the Saddam regime.

To accomplish all this, the plan—called 1003V—had gone through many iterations and refinements over the last year, according to Gen. Richard B. Myers, Chairman of the Joint Chiefs of Staff.

Rumsfeld said the off-the-shelf plan for an invasion of Iraq—originally dubbed 1003—“was inappropriate” for the effects desired by the Bush Administration. That plan had called for more troops than the Pentagon leadership wanted to use, department officials said. It also left Saddam Hussein with too much opportunity to execute a “scorched earth” plan that would destroy Iraq’s economic viability, specifically, its oil wells and pumping capability. The U.S. wanted to use the revenue from that oil wealth to pay for the reconstruction of Iraq and give a new government there a chance to get quickly on its feet.

Franks and his staff rebuilt 1003 several times, each time relying on fewer troops and faster action.

When it was noted that the new plan seemed to have many of the features Rumsfeld has been touting for two years—chiefly, fewer, more mobile ground troops—Rumsfeld insisted, “It’s Tommy Franks’s plan.” He added that it had been “washed through” the Joint Chiefs and regional commanders, all of whom had embraced it as “excellent.”

The plan emphasized preserving Iraq’s economic assets and civilian infrastructure and preventing civilian casualties. It appeared, according to former Secretary of State James A. Baker III, to be a blueprint to “win the peace” after winning the war.
The leaflets dropped on Iraq urged Iraqi troops not to fight for a doomed regime and instructed them on how to safely surrender when coalition troops arrived. The leaflets also warned that any Iraqi forces following orders to use chemical or biological weapons would be found and prosecuted as war criminals. Other leaflets implored Iraqis not to destroy their own oil wells, since this resource constituted their future livelihoods.

To guarantee the safety of the oil wells, Special Operations Forces moved in before hostilities began and perched near the wells to disarm any bombs planted on them. While many of the oil wells were indeed rigged with explosives, only seven of the several hundred wells in Iraq were actually blown.

“Shock and Awe”

The Pentagon leadership expected that the ferocity of air attacks on Saddam’s facilities in Baghdad and elsewhere, coupled with swift ground force movement in southern Iraq and a perceived hatred of Saddam would cause Iraqi forces to surrender en masse and welcome the coalition as liberators.

Military officials placed stories with the media warning that a thunderous opening attack would “shock and awe” the enemy into believing that resistance was futile. The phrase “shock and awe” came from a 1996 white paper by Harlan K. Ullman, advocating a fierce and fast campaign of bombing and swift maneuver to “enervate” an enemy and bring about quick capitulation. The strategy might help offset reduced numbers of ground troops and other forces, Ullman wrote.

Ullman later said the bombing seen in Baghdad, while impressive, was not what he’d had in mind. AF CSAF General Moseley said, “Shock and awe has never been a term that I’ve used.”

“Did we withhold a large punch?”, asked Moseley. “We withheld some targets based on the initiation conditions, and based on where the surface forces were, but that’s the right thing to do anyway.”

Moseley said that, though relentless and devastating fire had been brought down on fielded forces and regime targets, the key goal was “to absolutely, totally minimize the collateral damage and absolutely, totally minimize the effect on the civilian population, so that as much of this infrastructure can be returned back to the Iraqi people after the liberation so that they can get themselves as fast as possible back to a functioning society.”

So strong was the emphasis on avoiding civilian damage whenever possible that Moseley had some crews drop inert bombs—those using a guidance kit but with just a weight where the explosive should be—to achieve, through mere kinetic effect, the specific destruction wanted. He also ordered pilots to return with their bombs if they could not properly identify their targets, and many did.

“We’ve trained to this and spent a lot of time worrying about this,” Moseley said. “We are very, very sensitive to not creating a mess inside Baghdad.”
Turkish Surprise

Franks’s plan called for first sending in the 230,000 ground troops, followed by a flow of reinforcements. Should the fighting not go as well or swiftly as intended, new forces would continue to arrive in theater. “Should they not be needed, the flow could be turned off,” Franks said.

Myers explained that the ground force was to move first, without the prelude of an air campaign, to preserve the element of surprise.

“How do you protect tactical surprise when you have 250,000 troops surrounding Iraq on D-Day?” Myers asked at an April 1 Pentagon press briefing. “Well, you do it by starting the ground war first, air war second.”

Because of the unexpected March 20 opportunity to strike Saddam and his lieutenants, G-Day was moved up one day, as was A-Day, the start of intensive air attacks on regime targets in Baghdad, Mosul, and Tikrit. Ballistic missiles—with or without weapons of mass destruction—were priority targets.

It was essential that Saddam not be allowed to launch missiles at Israel, which had pledged to retaliate if attacked, as it had not done in 1991. For this, coalition aircraft were deployed into kill boxes over southern and western Iraq, where mobile missiles had been detected previously.

Franks also deployed Patriot missile batteries with the new PAC-3 missile, which intercepted a few of the missiles that Iraqi forces managed to launch in the first few days of the conflict. It is thought that the launched missiles were either al Samoud or Soviet–made Frog weapons, smaller than the longer-ranged Scuds.

Franks’s plan called for a sweeping action in the north, with tanks and mechanized infantry advancing from Turkey. When Turkey withheld permission to stage the forces or permit strike sorties to originate on its soil, the plan shifted. USAF C-17s deployed airborne forces that seized the northern airfield of Bashur, where airlifters began bringing in vehicles and supplies to reinforce them. (This airlift included the first-ever battlefield insertion of an M1A1 tank, by C-17.) Turkey did allow overflight by U.S. aircraft, especially badly needed aerial tankers.

U.S. troops, in particular Special Operations Forces (SOF), joined Kurdish rebels to apply pressure on Mosul in northern Iraq. As in Afghanistan, they worked closely with aircraft overhead, which delivered precision strikes on enemy forces. The effect was that small SOF groups, enhanced by indigenous forces and backed up by airpower, virtually substituted for a brigade of first-line troops.

In the north, American SOF elements and airpower forces attacked terrorist camps, one of which was found to harbor what appeared to be a primitive chemical/biological weapons factory.
In the west, near the Jordanian border, Special Forces took Iraq’s H-2 and H-3 airfields, using them to mount more Scud–hunting raids and to serve as resupply points. Tactical C-130 transports operated from these airfields shortly after the war began, resupplying coalition troops throughout Iraq.

In the south, the advance set a blistering pace, so fast that Army and Marine units seemed to have outrun their supply lines. At several points, tip-of-the-spear units reported running low on ammunition. They were resupplied by nonstop convoys as well as combat airdrops from C-17s and C-130s.

After a week’s fighting, the coalition ground advance slowed, causing many to speculate that it had been stopped by Iraqi resistance, had outrun its supply lines, or was too thinly spread out to be able to protect its flanks. In reality, it was preparing for the next push and allowing airpower to attack the Republican Guard elements that had moved out of Baghdad and its environs to meet the coalition ground force. Airpower quickly targeted and destroyed most of the Republican Guard.

Saddam’s forces did not fight a brilliant defense. They failed to use the terrain to their advantage, leaving major bridges—instead of blowing them up—over the Tigris and Euphrates Rivers for the coalition to use. Saddam also used his least-dependable forces as his first line of defense and then put his best Republican Guard forces out in the open with no air cover.

By April 7, ground units had taken Saddam International Airport, closed off all major highway entrances and exits to the city of Baghdad, made several excursions in force through the city, and captured two of the Presidential palaces. A supplies-laden C-130 Hercules landed and took off from the airport, now renamed Baghdad International Airport.

The Republican Guard had ceased to exist as a large, coherent fighting force and was reduced to resistance in small groups, which the Pentagon characterized as “militarily insignificant.” And the U.S. was preparing to install the first elements of a transitional government.

Iraq’s air defense system had proved ineffective. Its constituent parts were either knocked out prior to full hostilities or were moving too frequently to mount any meaningful threat. Only one coalition aircraft was shot down by enemy fire, while accidents, including friendly fire, brought down several others during the first three weeks. Many Iraqi aircraft were destroyed on the ground, and none were launched against coalition forces.

Air Force and other coalition aircraft were based at 37 locations, including the Gulf Region, Diego Garcia in the Indian Ocean, Eastern Europe (particularly Bulgaria and Romania), the UK, and Whiteman AFB, MO.

By the end of the first 21 days, fewer than 100 Americans had been killed by enemy fire.
Bombs for a Tyrant

During daylight hours on April 7, CENTCOM received information from human intelligence that put Saddam and his closest aides in a particular compound in the northwest portion of Baghdad. Officials fed the target data to a B-1B bomber, orbiting nearby. The bomber crew loaded the coordinates into four GBU-31 bunker-buster bombs equipped with GPS guidance. Within 12 minutes of the order, the bombs struck the structure, leaving a crater 60 feet deep.

CENTCOM later said it did not know if Saddam had been killed in the strike but that, if he had been present, he would have sustained more than just simple injuries. The next day, U.S. forces reported that resistance seemed to lack any central control at all.

Real-time imagery from Predator and Global Hawk unmanned aerial vehicles patrolling over Baghdad aided close air support provided by AC-130 gunships and a range of aircraft, from fighters to bombers, using JDAMs.

“If you can give me a specific location in there, we have the means to hit it with precision,” a Pentagon official said. “And I mean, we’ll ask, ‘Which window?’ ”

Coalition leaders pointed to astonishing gains over the previous three weeks, highlighted by the jubilation in Baghdad as residents toppled statues of Saddam Hussein.

Though the war was over, the fighting was not. Officials declined to be specific about what conditions would lead them to declare victory.

For the most part, they said, the coalition’s military action would end when resistance stopped and a new Iraqi government, composed of Iraqis, had been set up.

A Pentagon official said he himself was awed by the swift results of the campaign.

“Fifteen years ago, we were starting to talk about this Revolution in Military Affairs,” he said. “We used to be bothered by the nighttime. Now we love the night—we can operate in it, and we get some protection from it. We used to be bothered by the weather. While we would like to have clear weather, if it’s cloudy or foggy or there are obscurants like smoke or haze, that’s OK, now. We can still strike with precision. We have 24/7, real-time imagery of the target. This is just unbelievable, but the proof of it is out there.”

He added, “I never thought we would be here so soon.”
A CHRONOLOGY OF KEY EVENTS

(All dates are Baghdad time.)

March 19. Coalition aircraft conduct strikes to prepare the battlefield; Special Operations Forces move into southern Iraq to secure border gun positions and protect oil wells.

March 20. Two USAF F-117 stealth fighters and six U.S. warships attack leadership targets of opportunity about 5:35 a.m. in Baghdad. About 45 minutes later (10:16 p.m. EST, March 19) in Washington, D.C., President Bush announces to the American people that operations in Iraq have commenced. The Senate passes a resolution backing the operation, 99–0. Coalition ground forces move from Kuwait into Iraq at 8 p.m., marking the start of G–Day, the ground campaign.

March 21. At 9 p.m., coalition air forces commence nearly 1,000 strike sorties, marking the beginning of A–Day, the air campaign. The House passes a resolution backing military operations, 392–11. Coalition forces seize an airfield in western Iraq, advancing 100 miles into Iraq.

March 25. British forces secure the port city of Umm Qasr, opening a key route for humanitarian supplies.

March 26. USAF C-17s air-drop some 1,000 Army paratroopers and USAF personnel into northern Iraq to open a northern front and secure the airfield at Bashur.

April 3. U.S. ground forces take Saddam International Airport, just 10 miles from Baghdad. Coalition air strikes continue to pound the Republican Guard and provide close air support for ground troops.

April 7. British forces secure Basra. U.S. forces push into Baghdad.


April 16. CENTCOM officials declare end of major combat action.

Even though major ground and air combat operations only lasted a month, the U.S. military would remain in Iraq for the better part of the next decade.
Focus On:
AIRPOWER IN AFGHANISTAN

How a Faraway War is Remaking the Air Force


Turning Point

On Dec. 28, 2008, a group of schoolchildren were walking past a military checkpoint in the eastern Afghanistan province of Khost, hard by the unsettled border with Pakistan. Suddenly, a suicide bomber drove his sport utility vehicle toward them and detonated a huge cargo of explosives. The enormous resulting blast killed 14 children and two adults and wounded 58 others.

It was a devastating outrage, but, in Afghanistan, not an exceptional one. This incident closed out a bloody year in which well more than 6,000 persons in Afghanistan perished in war- and insurgency-related violence. “The brutality and disregard for human life by terrorists is sickening,” remarked the commander of NATO forces in that nation, U.S. Army Gen. David D. McKiernan.¹

All signs suggest that this is only going to get worse, and perhaps much worse. The war for Afghanistan is at a major turning point, as is the development of airpower as a key weapon in the prosecution of that war.

Long gone is the relative calm seen in the years immediately after the first phase of Operation Enduring Freedom in late 2001 and early 2002. The enemy’s use of roadside “improvised explosive devices”—IEDs—has expanded, rising to 3,276 in Afghanistan for the year 2008, a 45 percent increase over 2007.² Suicide bombings have become commonplace. The Taliban, which early in this decade lost control but never went away, has stepped up the violence. It has fallen back on a long-standing network of support that permeates the Pashtun population of south and east Afghanistan. The Taliban also taps the illegal poppy-growing trade for financing. It subcontracts suicide bombings and other such work to al Qaeda. The net result is the full-scale resumption of struggle for the control of Afghanistan.

The war in Afghanistan no longer is the kind of war that the U.S. waged in 2001. In the last three years, it has become the main front for an evolving style of airpower employment.

This change has not happened by accident; there has been a fundamental shift in the context of the war. “The enemy decided to show up,” explained Air Force Lt. Gen. Gary L. North, who since late 2005 has served as the combined force air component commander (CFACC) of U.S. Central Command.³ In this capacity, North has been overseeing the air war in Afghanistan along with all air operations for Iraq and other areas of Central Command’s theater.
In Afghanistan, the enemy is a mix of insurgent Taliban, al Qaeda, and other Islamic elements, as well as big-time drug lords and other criminals. Opposing them are the forces of a U.S.-led coalition of nations, a separate but related force of NATO allies, and a growing Afghan National Army.

From the beginning, the coalition’s military units have done their full share of the serious fighting in Afghanistan. They operate under the name of Operation Enduring Freedom (OEF). They tend to be found mostly in the disturbed south and east of the country, regions in which the Taliban is strongest and most deeply entrenched.

The NATO military units, operating as the International Security Assistance Force (ISAF), have taken over security in many sections of the country after beginning their mission at UN direction. The UN guidance, set out in September 2007 in the form of Resolution 1776, calls for the force to disarm militias, reform the justice system, train a national police force and army, provide security for elections, and give assistance to others seeking to rein in the burgeoning narcotics industry.

The OEF/ISAF fight is being carried out by a powerful, mostly Western conventional military force. Afghanistan at the end of 2008 was a theater for some 55,000 foreign troops, with more on the way for 2009. Sandbagged firebases support ISAF activity. Everything from 155 mm howitzers to MRAPs (mine-resistant ambush-protected vehicles) are on the ground. Each week, overland logistics systems deliver tons of supplies and millions of gallons of fuel to main operating bases.

However, a substantial recent increase in OEF and ISAF forces, firepower, and operations, by itself, has not been sufficient to solve the insurgent problem. “Victory ... is not a foregone conclusion,” warned one airman who recently observed operations there. In this emerging atmosphere of growing struggles with tenacious and ruthless enemies, Western airpower in general and USAF force in particular have come to prominence. Airpower has carried a huge share of the fighting in Afghanistan and as a result, it has had to evolve to meet the needs of the battle.

What stands out first is the upswing in air strike activity. In the entire year of 2005, when the war was in a kind of lull, the coalition carried out only 176 strikes in which aircraft actually employed munitions. Over the 12 months of 2008 that just ended, the number soared to 3,369. “Most people focus on the number of bombs dropped as a quantification of our missions,” North pointed out. “It’s a lot more than that.”

Indeed it is. “Airpower plays a vital role in dismounted or mounted maneuvers through hostile areas,” said Army SSgt. Chris Summers, a targeting NCO with the 2-506th Battalion operating in Afghanistan. “When CAS is on station, it greatly reduces the threat. If we do get hit, only a handful [of enemy troops] will be brave enough to fire, knowing [aircraft are overhead].” In addition, tactical resupply of forces now is done largely with precision airdrop.
From airlift to fire support to intelligence-surveillance-reconnaissance (ISR) activities, the full abilities of modern airpower have been brought to bear. They are needed to allow anti-Taliban forces to cope with the constant adaptation demanded by the many tasks of the Afghan war.

Afghanistan has changed airpower, too, functioning like a huge and permanent battle lab for fine-tuning the interaction of air and land forces in many situations. Runways have been extended to host more strike aircraft, airlifters, and helicopters. Airpower based in-country has increased and will expand again and again in years to come.

The employment of airpower in Afghanistan already has gone through many phases over the past seven and a half years of fighting. Hard lessons in air and ground cooperation have been followed up with impressive strides in new tactics and equipment.

Airpower tasks have multiplied. In fact, the air war in Afghanistan has become the scene of innovation—sometimes jaw-dropping innovation—for nearly every weapon system. Before the war in Afghanistan, few if any would have pictured operations during which:

- The fighter force’s use of strafing and rocket attacks would be viewed as the techniques of choice to break ground engagements.

- Unmanned aerial vehicles such as today’s Predator and Reaper aircraft would carry out a hybrid ISR-and-close-air-support role, stalking and attacking individuals emplacing IEDs on a road or otherwise engaging in hostile acts.

- Heavy B-1B bombers would routinely carry out passes at near-treetop level with afterburners, separating troops in contact from the enemy without dropping a single explosive weapon.

- A Navy aircraft carrier, positioned in the northern Arabian Sea, would send one strike fighter squadron to Iraq while using the others to carry out patrols and fulfill joint tactical air strike requests in Afghanistan.

- Two C-17 airlifters, acting autonomously, could together drop a massive 80,000-pound load of supplies directly and precisely to forward troops in remote areas using only the GPS satellite-guided Joint Precision Airdrop System.

Yet all of this, and much, much more, has in fact taken place.

Today, airpower is providing a level of lethal fire support to dispersed ground forces on a scale that far exceeds anything ever before seen in the annals of air and land component cooperation. The same is true of airlift support. Yet what makes the Afghan air war so singular in nature is not only the volume of air strikes or airdrops. It is also the precision, persistence, and sophistication of the effort that stands out.
For example, nearly all routine resupply of land forces in tactical fighting positions today is carried out via the use of precision airdrop, which in 2008 totaled more than 16.5 million pounds, most in Afghanistan. For emergencies, airdrop aircraft sitting alert simply load whatever the land force needs and take off in under an hour. By the same token, overwatch, fire support, and close tracking of hostile forces have become something close to routine in this air war. All aircraft, manned or unmanned, now carry targeting pods. Close to 100 percent of all weapons carried and employed by aircraft in Afghanistan are of the precision type. Fully 100 percent of close support and ISR aircraft are sure to take off equipped with a video downlink. The Afghan air war has become a truly digital air war, achieving unprecedented levels of precision and finely tuned control.

Today, Afghanistan is the main airpower front in the global war on terrorism. Afghanistan exceeds Iraq as the scene of actual weapon releases. The air war in Afghanistan has, in short, evolved into a prime arena for air and ground operations in a low-intensity airspace environment.

Actually, the upswing in air operations, though apparent to all by 2007, began in mid-2006. ISAF forces extended their mission to providing additional security in hot spots and attempting to stem the revitalization of Taliban support. "In Afghanistan, on occasions in 2006 and 2007, the frequency of requests from British ground forces for close air support came close to that in Normandy in 1944," concluded a Royal Air Force study of the war.

There is no denying that the security situation in Afghanistan continues to deteriorate and to confront the United States and its allies with severe challenges. Victory will require a huge new effort, with no assurance of success even then. The Congressional Research Service, in a recent report on the war by analyst Kenneth Katzman, summed up the situation this way: "There is no agreement on the causes of the deterioration—reasons advanced include Afghan government corruption; the absence of governance in many rural areas; safe haven enjoyed by militants in Pakistan; the reticence of some NATO contributors to actively combat insurgents; and the slow pace of economic development."

Hence the year 2009 brings a turning point not only in the conflict itself, but most likely in the American approach to it. President Barack Obama, during the Presidential campaign, singled out Afghanistan for early and renewed attention within his new Administration. "We must refocus our efforts on Afghanistan and Pakistan—the central front in our war against al Qaeda—so that we are confronting terrorists where their roots run deepest," he wrote. "Success in Afghanistan is still possible, but only if we act quickly, judiciously, and decisively."

The President certainly realizes that much is at stake. NATO must nail down a victory in the war against terrorism in Afghanistan, and airpower has to help. This report is a double investigation of how the battle space in Afghanistan has evolved and how airmen have led the way in adapting to and mastering that battle space.
Shadow War

Back when it all started, though, it was far from obvious that the fighting in Afghanistan would flare up again, or that forces of airpower would have to surge along with it.

The United States and its coalition partners began Operation Enduring Freedom with a series of air strikes on Oct. 7, 2001. It was the first blow in the global war against terrorism following the attacks on the United States on Sept. 11, 2001, and it soon produced a stunning success. The Air Force’s B-52, B-1, and B-2 bombers demonstrated the unique merits of long-range precision strike. Together, aircrews and ground units learned the art of rapid retargeting in response to air controllers working with special operations forces engaged with the enemy. Navy carrier battle groups clustered in the northern Arabian Sea to provide air superiority over the battle space. The Air Force’s new C-17 airlifters began almost immediate delivery of military cargos and humanitarian aid to the Afghan people in remote areas. Over it all was a massive USAF-led ISR effort. All of it aided by a continuous stream of USAF KC-135 and KC-10 aerial refueling support.

Initial planning for air operations was managed by then-Lt. Gen. Charles F. Wald, 9th Air Force commander and CFACC. In November 2001, then-Lt. Gen. T. Michael Moseley took over as 9th Air Force boss and CFACC.

With just a few hundred U.S. and coalition forces on the ground, airpower became the deciding force pushing allied Afghan forces to victory against the Taliban. Major cities, long held by Taliban forces, in short order began to fall like dominoes. “Those population centers toppled as the result of a combined arms team: U.S. airpower and a combination of special forces and Afghan troops,” observed Gen. John M. Keane, then the Army vice chief of staff. By December 2001, Taliban control of Afghanistan effectively was at an end.

By early 2002, the American war in Afghanistan looked all but over. Military operations settled into a pattern of intelligence collection and searches for al Qaeda and Taliban remnants and, of course, keeping up the dragnet for Osama bin Laden, al Qaeda’s leader. U.S. complacency would occasionally receive a jolt, such as the reverses suffered in Operation Anaconda in March 2002. For the most part, however, Afghanistan appeared to be on the right track. In July 2002, the Afghan Loya Jirga, or national assembly, appointed Hamid Karzai to be Afghanistan’s interim head of government. Free elections in October 2004 confirmed Karzai as the nation’s first President.

In reality, the Afghanistan war was merely entering a period of hibernation lasting through 2005 and into 2006. During the first months of this lull, two very different problems were starting to take root, with consequences seen today. Problem one was the reconstitution of surviving Taliban elements into a political and military force. Problem two was the bifurcation of the Afghan military mission into parts controlled by the U.S. (which was OEF) and by NATO (which was ISAF). NATO’s entry into the war in December 2001 created a dual mission. Over time, the NATO stabilization missions would grow far more complicated than member nations foresaw, and the Taliban would return to frustrate international efforts to put a permanent end to Afghanistan’s years of conflict.
After the first phase of OEF, the Taliban was down, but most assuredly not out. The quick U.S.-led victory actually left many Taliban at large and spread through the 25-million strong Pashtun community in the Texas-sized nation. Oddly enough, the quick military rout that swept the Taliban from power in fall 2001 may have laid the groundwork for the Taliban’s eventual return. OEF was designed to chase out the Taliban, and that’s what it did—without killing or capturing a sizeable number. Successful coalition operations in the north and around Kabul drove waves of Taliban and al Qaeda out of towns and cities. Many went south toward Kandahar and Helmand, and east toward Pakistan. Other melted into the mountains. They fled in small groups leaving not much trace of their numbers. Others moved out of Kandahar itself as the pressure increased.

Central Command saw the movement but counted it all toward the good. “We see evidence that a great many people of the non-Afghan type are working very hard to get out of Kandahar,” opined Army Gen. Tommy R. Franks, the commander of Central Command at the start of OEF. While there was unease about the escape into the hinterland of so many enemy fighters, few American leaders seemed overly concerned about the long-term impact on stability in Afghanistan. Secretary of Defense Donald H. Rumsfeld noted, “There are people, undoubtedly, who have hidden in back rooms and in homes.” The implication was that, some day, these “defectors” could just as easily switch sides again. Still, this was not seen as a huge or unmanageable threat.

Politics amongst Afghans complicated the situation, too. The leaders of the Northern Alliance, a loose ethnic-Tajik-dominated confederation of warlords and militias formed in 1996 to oppose Taliban dominance, were often quite willing to let the Taliban fighters surrender en masse and walk away. The aftermath of an intense battle at Kunduz provided an example of this laissez-faire attitude. Franks estimated there might be 2,000 to 3,000 Taliban and al Qaeda fighters in the fray, and described Kunduz as “heavily infested...with some of the more hard-core people.” However, the Taliban contingent at Kunduz petitioned the Northern Alliance to arrange a surrender and safe passage for foreign fighters. On Nov. 20, 2001, the Northern Alliance halted operations at Kunduz to allow three days of negotiations. In the end, only about 1,000 Taliban surrendered to the Northern Alliance, and many of those quickly went free. Meanwhile, across the border in Pakistan, President Pervez Musharraf made it known that he was looking out for Pakistanis who had been fighting with the Taliban. He wanted those who had been defeated and captured to be released and returned to their native country.

DOD leaders were well aware of the problems of completing the destruction of the Taliban or even of gauging the size of the surviving remnant. As Franks said: “The Taliban is not destroyed as an effective fighting force from the level of one individual man carrying a weapon. ...We'll continue to do our best to eliminate that force of the Taliban. The secretary has previously referred to this as 'draining the swamp.'” The Taliban fighters had options, and these made matters difficult for American military leaders. Rumsfeld said: “They can go across a border and wait and come back. They can drop their weapons and blend into the communities. They can go up in the mountains in the caves and tunnels. They can defect—join the other side—or change their mind, go back.” Rumsfeld later reinforced the difficulty, saying: “There are people in those cities who are hiding and who
are perfectly willing to tie grenades around their bodies, blow up themselves and whoever else happens to be standing around. There are people who have defected who may redefect. There are people who have gone across borders who may come back across borders.”

American officials knew that Taliban elements were fleeing south to sparsely populated areas that were controlled by ethnically compatible Pashtun tribes. However, setting up a vast dragnet to catch fleeing fighters had never been part of the plan. “Where we can positively identify Taliban as such, we are pursuing them,” said Rear Adm. John D. Stufflebeem, a spokesman for the Joint Staff in Washington.

However, Stufflebeem admitted that it was “difficult in the southern part of Afghanistan, west of Kandahar, to be able to positively identify what may be southern Pashtun tribes versus Taliban troops that may be on the move.”

At the time, practically the only U.S. forces on the ground were special operations forces (SOF). They observed the southward flow with little chance of stopping it. Marines arrived at Kandahar in late November 2001 and a formal Army component entered the country about the same time. None of these groups believed Afghanistan was entirely secure. Yet the coalition’s forces did not have an explicit mission to comb Afghanistan from one end to the other. The goal was to topple the Taliban and install a new, transition authority hostile to terrorist safe havens. “Our efforts, of course, will be shifting from cities at some point to hunting down and rooting out terrorists where they hide,” Rumsfeld said in late November 2001. Beyond this, the coalition was also embarking on surveys of more than 40 sites and caves to check for suspected weapons of mass destruction.

Taliban fighters were considered to be refugees, not rulers. “Afghanistan was a reasonably safe haven for terrorists,” Rumsfeld said on Dec. 27, 2001, but now “the Taliban have been driven from power. Their leaders are on the run.” Of course, the country was not entirely free of even the purely military dangers posed by the Taliban or al Qaeda. Only a small fraction of the top leadership was known to be dead or in U.S. custody. Still, most U.S. and coalition officers felt that the major operations in Afghanistan were over, with only mopping up operations left to do.

The glow quickly faded a bit, though. What had been a latent threat became real and only too apparent in Operation Anaconda in March 2002. In this operation, a combined force of U.S. and Afghan ground troops attempted to clear the Shah-i-Kot Valley of the enemy, but were surprised by a bigger-than-expected concentration of al Qaeda and Taliban fighters who put up ferocious resistance. Both sides took casualties with no clear-cut victory for the U.S.

The ground component failed to include air support planning. As then-CENTCOM air boss Moseley explained in a 2003 interview, “The bigger issue is there was never an opportunity to orchestrate and figure out what was needed.” He added, “Had we known this was going to go on, we would have stood up a full ASOC [air support operations center] ... and I would have forward deployed the A-10s for indigenous quick reactions.”

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Airpower in the 21st Century

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Still, whenever coalition forces came into contact with adversaries, the tactical victory almost always went to coalition units. After Operation Anaconda, Afghanistan was relatively quiet for the rest of 2002. Rumsfeld was well enough pleased with the work of the first year of OEF that he could say, in August 2002, “I suspect it would be accurate to say that the security situation in Afghanistan is the best it’s been probably in close to a quarter of a century”—that is, before the Soviet invasion of the nation in December 1979. Franks agreed, saying: “Does that mean everything is just right in Afghanistan? No. To be sure, it is not. But what it does mean is that there is a government in Afghanistan that is trying to move forward to the future, and I think our coalition is pleased to be part of that move.”

It wasn’t that the U.S. ignored the peril. In June 2002, Rumsfeld noted about the Afghan-Pakistan border, “It has been our worry for the last six months that the border’s porous, that people move back and forth going both ways, and that there are pockets of al Qaeda and Taliban that are still floating around on both sides.” However, a month earlier, Rumsfeld had declared, “Notwithstanding the periodic flare-ups, the security situation in the country is generally good and seems to be improving modestly.” That consensus appeared to hold steady.

It was during this period of relative calm and optimism that America’s allies in NATO came on board. Some individual European allies already had deployed into Afghanistan some SOF units and aircraft. However, the alliance did not officially take up its mission in Afghanistan until the UN Security Council approved Resolution 1386, creating the International Security Assistance Force. This happened on Dec. 20, 2001. The goal was to help stabilize and rebuild Afghanistan after decades of war and internal strife.

ISAF’s mission, and NATO’s involvement in it, was at first confined to Kabul, the capital. This was the case throughout 2002 and 2003. NATO operations in Afghanistan placed heavy emphasis on reconstruction and security, while the separate OEF tasking kept up the low-level hunt for terrorists and prosecution of the occasional dustup with the Taliban. “There was an expectation, I think, that as insurgents struggled to recover between 2002 and 2005 that we were on a path more towards state building,” Michael G. Vickers, assistant secretary of defense for special operations & low-intensity conflict, told reporters in 2008, but he added that it had not “materialized in a way that some of our NATO partners expected it would.”

By August 2003, NATO had taken command of the ISAF itself. The U.S.-led OEF continued as a distinct operation separate from ISAF, keeping up the hunt for high-value targets, among other things. Gradually, NATO involvement in Afghanistan grew. The alliance took over responsibility for security in sectors, starting with the Kabul area in spring 2004. The next areas to transfer to NATO control were parts of northern Afghanistan in fall 2004 and western Afghanistan in spring 2005. None of the member nations was prepared for a large conventional fight, and none expected it to come about.

The outbreak of the U.S. war in Iraq in March 2003 tended to further obscure the goings-on in Afghanistan. For most Americans, after the 2003 invasion of Iraq, the war in Afghanistan receded further into the shadows, becoming a kind of side-show. U.S. forces in Afghanistan who died (including those who were killed in action, died of their wounds,
or were categorized as accidents or other deaths) that year numbered 45, down from the 49 fatalities recorded in 2002. Even in 2004 the fatalities total was just 52. Mentions of the war in Afghanistan tended toward the cursory. Numerous other issues—from North Korea’s nuclear weapons drive to the outbreak of avian flu and arrival of Hurricane Katrina dominated American news headlines in most of 2004 and 2005. Above all, of course, the nation’s attention was focused on Iraq.

The political lull in Afghanistan was matched by a relatively quiet period in development and combat employment of airpower. Routine rotations of airpower forces to Afghanistan continued. At first, it was rare for aircraft to expend munitions. Noted one officer: “Aircrews trained in CAS with an emphasis on placing bombs on mechanized fielded forces have been frustrated in [low intensity conflicts] by the lack of ‘valid’ targets and a perception that they are simply ‘drilling holes’ in the sky on the majority of missions.”

For all that, though, the ground forces in Afghanistan were becoming accustomed to relying on close air support as the prime source of backup fire. Overwatch and on-call aircraft sorties allowed the relatively light coalition land forces to move with confidence in high-threat areas. Maj. Gen. Eric T. Olson, commander of Task Force 76 and the U.S. Army’s 25th Infantry Division (Light), commented at Bagram Air Base in August 2004, “CAS is my reserve force.”

Under the surface, however, matters clearly were beginning to heat up. There was unmistakable evidence of residual Taliban and al Qaeda strength. One general officer at Central Command described the military situation in Afghanistan in mid-2004 as a demanding series of “constant operations to go ahead and keep anyone who would think there is a safe haven in Afghanistan, to keep them off balance and again bring them to justice through combat ops.”

Strong links between some Pashtuns and the Taliban were in the process of revival. The insurgents had dusted themselves off and began to look about for opportunities. Not only were many ex-Taliban still in Afghanistan; the fundamental sympathies with them were still in place. Having something to fall back on gave the Taliban the ability to recreate an insurgency. Two scholars writing in the Harvard quarterly, International Security, put matters in these words: “Because of the length of the Taliban regime’s tenure in Afghanistan and its (nonregime) insurgent durability since the start of Operation Enduring Freedom, the Taliban has been more successful than most previous jihadi movements in the region in consolidating and embedding these social changes. Therein lies the danger, because with the exception of the Hindustan Fanatics group of the mid-19th century, most such mad mullah movements of the past have been of such relatively short duration or limited territorial scope that they made little lasting impact on tribal structures and mechanisms.”

At any rate, the Taliban had enough support to reconfigure its political work and begin anew in the military field. By some time in 2005, the Afghan war had entered a new phase. An upward trend in violence would claim 66 American lives (another 32 were listed as accidents/other deaths) by the end of the year. Glowing briefings about the successes of reconstruction and the inexorable march of democracy gave way to more-candid and
sobering assessments of the prospects for violence in different regions. Rumsfeld and President Karzai continued to praise Afghanistan’s “excellent start,” but they also warned of the evils of narcotics trafficking.32

NATO continued to add troops and responsibilities. However, the game on the ground was changing fast. The security landscape of Afghanistan was acquiring all the symptoms of an insurgency. Note that, in this period, coalition forces were driven to undertake Operation Red Wing, which targeted an active IED-making cell in Kunar province. Kunar was the very same area in which, at the start of the war, Taliban forces negotiated a big surrender of forces and therefore seemed to be more or less permanently pacified. Deadly encounters with IEDs became more commonplace—although senior commanders insisted that the Afghan people were good about identifying, locating, and neutralizing these threats.

By summer 2005, security conditions had deteriorated to a noticeable degree. Conditions led to a delay in scheduled Afghan elections until the fall. “Let me assure you that the U.S. and coalition forces are going to maintain the initiative and conduct combined offensive operations up to and through the elections,” pledged Army Brig. Gen. James G. Champion, who was with Task Force 76, in August 2005.33 Still, the reassertion of power by the Taliban and other warlords had set up the conditions for the expansion of an insurgency. U.S. and NATO forces found themselves extending their operations in an effort to beef up security in regions where the Karzai government was having little success.

Summarizing the changes in Afghanistan by summer 2005, Champion said that, in the northeast, Kunar and Nangarhar provinces were a new source of concern. Despite reconstruction activities ranging from road building to digging wells, the Taliban influence was back. “The enemy is ... heavily involved in criminal activities such as timber, gem, and opium smuggling, in addition to the ongoing struggle against the government of Afghanistan.” The eastern border provinces also saw increased activity. “The enemy remains focused on conducting harassing attacks against Afghan and coalition forces along the border in Paktia, Khost, and Paktika provinces,” said Champion. “We continuously conduct patrols and operations in this area on the Afghanistan side of the border.”

Even worse was the situation in the southern provinces. The increased responses of coalition forces had brought about deaths of more than 400 enemy combatants there. Problems varied, but all of them indicated an attempt by the Taliban to gain a new grip upon the provinces, especially in the east and south. Nimroz and Helmand provinces were again havens for Taliban drug smuggling activity. At the time, Champion said of the Taliban, “They are becoming more ruthless.”

By the end of the winter season in early 2006, a major new struggle with the Taliban was brewing. U.S. Army Lt. Gen. Karl W. Eikenberry, commander of Combined Forces Command-Afghanistan, noted: “In southern Afghanistan you’ve got areas in which the government of Afghanistan has not up to this point advanced and established a firm presence. It’s within that area of a vacuum that Taliban in certain cases has established a greater area of influence.”34
In the face of this, NATO was preparing to take over responsibility for Regional Command South. It was there—in Helmand, Kandahar, and Oruzgan provinces—where the Karzai government’s influence was low, and the Taliban’s influence and strength was on the rise. British Gen. David Richards, who took over command of NATO/ISAF in May 2006, was blunt in his assessment of America’s handling of the war:

“At the end of 2001, the Taliban were defeated, weren’t they? You know, wonderful work by a lot of people, mainly American and Afghan, and it looked all pretty hunky-dory. … [With] the benefit of hindsight, you know, we thought it was all done, success was there, and we could adopt a sort of peacetime approach to it and didn’t treat it as aggressively as a problem that with the bit of hindsight we should have done. Your forces were doing great work, but they were almost in isolation because army and police, the Afghan army and police, weren’t there to help at that stage. … The Taliban got more confident and realized that it wasn’t yet over and they had this opportunity. … The Taliban exploited it.”

The war was back on. It would deepen and in two years lead to a tripling of the NATO troop presence in Afghanistan.

**Upswing**

It was in this new battle for Afghanistan—fought out in 2006, 2007, and 2008, and continuing without letup in 2009—that airpower would be tested and prove just how far it had come since the earliest months of Operation Enduring Freedom. While the specialized hunt for bin Laden and others persisted, the challenges for airmen widened. Their main task would be to provide tactical support to dispersed ground forces. That support included everything from provision of ISR data and images to close air support for troops in contact and employment of precision tactical airdrops. There has been a major upswing in the action. It was a product of Taliban activity—and of more aggressive OEF and NATO operations, too.

On the Taliban side, the main indicators were grisly and ideological in nature. For example, the Taliban’s maximum leader, Mullah Omar, was calling for a “summer of blood” in 2006 and boasting that Taliban forces would retake Kandahar, just to spite Hamid Karzai. Ultimately the Taliban fomented what two scholars later called an “algebraic increase in violence.” This, they reported, included 139 suicide bomb attacks—a fourfold increase over 2005—and approximately 1,600 bombings with IEDs— triple the number for the prior year.

On the NATO side, the indicators were many and varied, but none stood out more that the ratcheting up of airpower operations. For all of 2005, the coalition’s combat aircraft expended against all Afghan targets just 176 weapons. In 2006, by contrast, the number soared to 1,770 weapons. This tenfold increase was the most open and obvious measure of the accelerating pace of activity by U.S., NATO, and Afghan land forces. In that year, the number of weapons employed in air strikes in Afghanistan surpassed the count for that in Iraq.
The tempo change first became apparent in February 2006. At the combined air operations center (CAOC) in Southwest Asia, the staff of the combined forces air component commander, USAF’s North, still scheduled more routine CAS sorties for Iraq than for Afghanistan. However, in February 2006, the monthly totals of bomb releases in Afghanistan passed those in Iraq for the first time. Said Eikenberry in early May, “It’s fair to say the Taliban influence in certain areas is stronger than it was last year.”

As spring arrived, the count continued to rise, as airpower forces moved to back up ground attacks against the foe. One such action was Operation Mountain Lion, a joint U.S.-Afghan raid launched in April 2006 against a concentration of insurgents in a rural area. “This operation is helping the government of Afghanistan set the security conditions so democratic processes can take root,” explained Air Force Maj. Gen. Allen G. Peck, deputy air component commander for Combined Forces Command-Afghanistan. CAS sorties featuring actual drops of munitions rose to 63 in Afghanistan that month, contrasted with just six for all of OIF.

For airmen, the rise in air strikes also marked a direct outgrowth of two factors. One was improved intelligence. “Between 2005 and 2006, our intelligence got a lot better,” observed North. With more ISR available, the range of activity for air strikes expanded as key targets fell under the coalition’s net. The second factor was the expanding demands of the ground forces themselves. The Afghan National Army was “at a growth point,” North said. As its forays into the remote provinces increased, taking Afghan forces into areas where Taliban concentrations were growing, ANA soldiers saw more contact. “The enemy was more aggressive in meeting the ANA,” North said of this period.

NATO also was ramping up its ground operations. The head of U.S. Central Command, Army Gen. John P. Abizaid, later referred to the “thickening of the NATO force in areas where we hadn’t gone before” and how that activity “certainly turned over a lot of different things.” He itemized them: “No. 1, Taliban. No. 2, a certain amount of well organized criminal and drug groups that cooperate with the Taliban.”

Scheduled close air support sorties supported planned movements ranging from convoys to major assault operations. As the ground force activity increased, so did the presence of and activity of fighters, ISR, and other forces of airpower. June 2006 marked a big leap in effort. In that month, air forces recorded 141 CAS strikes with munitions dropped. That was more than double the May total of 59 strikes, and significantly more than the 17 CAS strikes in Iraq. “We have seen more direct support in Afghanistan that is of a kinetic effect than in Iraq of late,” North said in June. In July, the count rose to 216 strikes and remained above 200 per month for the rest of 2006.

For all that, no one could quite bring himself to declare the obvious—Washington again had a war on its hands. Washington’s focus on Iraq was so strong that Afghanistan could not seriously break into the public consciousness. Probing questions about the increased activity began in earnest in the summer of 2006, but the U.S. and its allies largely deflected them. “Well, I think if you look at the number of terrorists and Taliban and al Qaeda that are being killed every month, it would be hard for them to say that the coalition forces and the Afghan security forces were losing,” Rumsfeld said in July.
2006. He acknowledged the increase in violence but insisted that a large part of it was “seasonal” and was merely a secondary effect of greater pressure being applied by U.S. and NATO forces.

Karzai spoke more willingly of the root causes of rising political violence. “The increase in terrorist activity in Afghanistan, and especially in [certain] parts of the country, has both internal and external reasons,” said the Afghan chief executive. The “internal reasons,” he said, were the weakness of the Afghan police forces in the outlying districts—especially in the country bordering Pakistan—and the “continuation of supply, ideological motivation, training ground, and all that for terrorists and radical elements.”

Into this fluid situation came still more NATO forces. Plans called for ISAF to take over security in the area of the southern provinces of Afghanistan—a hotbed of Taliban activity. Instead of sticking exclusively with the mission of security assistance and reconstruction, America’s allies set about taking on a significant combat test. NATO formally took over the southern Afghanistan mission on Aug. 1, 2006. NATO was moved into a lead position by the outcome of a special conference on Afghanistan held in London in early 2006. The resulting “Afghanistan Compact” established ambitious goals for security, the buildup of the Afghan army, and reduction in narcotics trade. The goals were to be met by the end of 2010. The compact committed NATO’s ISAF to continue strong support for security and to extend provincial reconstruction efforts.

It was a tough assignment from the start, the reality of which could be discerned in ways large and small. For example, a Royal Air Force report noted, “One Danish joint tactical air controller attached to a British Army unit in Sangin for a month in July 2006 requested air support on more than 200 occasions, 82 of which resulted in weapons being released.”

Within days of the formal stand-up, NATO/ISAF was embroiled in events leading to a heavy military push—Operation Medusa. This major operation would produce a heavy dose of air strikes concentrated in the area around Kandahar. The operation caused expenditure of more ordnance in a few weeks than was expended in Iraq during all of that year. With Operation Medusa, NATO forces got more than they bargained for.

Medusa was the Western alliance’s first out-of-area ground campaign since NATO was established in 1949. It was fought out on terrain that was important to the Taliban. Surprisingly, the Taliban on this occasion switched from its normal insurgent tactics to attempt a more or less conventional pitched battle. “This was an offensive operation that was generated by the Taliban and forces who oppose our presence, oppose the Karzai government and decided to engage NATO in perhaps its first real operational ground test in a long, long time,” said U.S. Marine Corps Gen. James L. Jones, who was then NATO’s Supreme Allied Commander Europe and commander of U.S. European Command.

The focus was a pocket of Taliban fighters dug in around what Jones called “the Pashmul pocket,” 30 miles west of Kandahar in the Arghandab valley. The villages there had a reputation for holding off the Soviet military forces throughout the 1979-89 Soviet-Afghan War. The area was also reported to be home base for several hard-core Taliban figures. Special operations forces had conducted sweeps there, but neither the Afghan National
Army nor NATO had a formal ground presence there. Little of the Western reconstruction aid had reached into the area. Perhaps with some of those factors in mind, the Taliban mounted a serious effort to hold positions southwest of Kandahar in Panjwaye and Zhari.

Signs that this might eventuate had been coming in throughout summer 2006. “The Taliban had exploited our arrival to try effectively to deter us from doing our job,” said ISAF Commander Richards in his October 2006 briefing. “That meant that we had to fight, and fight we have.” Canadian forces of the 1st Royal Canadian Regiment swept into the area in late August. Abizaid reported that these Canadian units “put a battle group down in the southern parts of Kandahar that were areas we really hadn’t patrolled extensively.” Almost immediately, they found themselves in an all-night firefight against a concentration of Taliban near Masum Ghar. What happened, explained Canadian Lt. Col. Omer Lavoie, was “the Taliban, seeing our vehicles up on our hill and not liking the idea, decided to launch a fairly significant attack.”

The tactic backfired, spectacularly. NATO forces launched their counterattack on Sept. 2, 2006. First, Canadian soldiers advanced to two interim objectives and opened fire on Taliban positions to draw a response. When the Taliban tried to mount a counter thrust, they were hammered by airpower and artillery. Into the melee swarmed a mix of aircraft typical for Afghanistan operations: U.S. Air Force A-10 attack aircraft and B-1B bombers, U.S. Navy F/A-18E/Fs, RAF GR-7s, and French M-2000s. On Sept. 2, the A-10s and B-1s dropped general purpose bombs, laser guided bombs, and GPS guided Joint Direct Attack Munitions onto the Taliban targets. For good measure, the A-10s strafed with 30 mm cannon and the RAF GR-7s expended rockets.

The Taliban had good ground to defend. As the Canadians described it: “There were interconnected systems of irrigation ditches that look pretty much like a deep, wide trench system. Plus, real trench systems and fortified compounds and tunnels and endless bisecting tree lines and fields of corn and dense marijuana growing so high you could only see the antennae of the Canadian vehicles as they moved around the battlefield.” Here, all signs were that the Taliban wanted to draw the multinational forces into a near-conventional battle, in hopes of inflicting a true defeat but in expectation of at least inflicting painful casualties. A NATO spokesman later told of finding trenches and fortifications that clearly implied the Taliban planned to make a good stand—“bashing their heads against us,” as Richards put it.

They engaged through the day again on Sept. 3 at multiple locations around the Pashmul pocket. The B-1s in the fight would release mixes of 500-pound and 2,000-pound JDAMs. A-10s conducted multiple passes, using laser guided GBU-12s, general purpose bombs, and strafing rounds against the Taliban locations. The air arm laid down a constant curtain of fire support to troops on the ground. “[The] expenditures focused on multiple extremists’ locations, ending the engagement,” noted the day’s mission summary put out by U.S. Central Command Air Forces (CENTAF).
For NATO, the biggest surprise was “the change in tactics, because they decided to stand and fight in a fairly conventional linear sense,” Jones said. The pace of air strikes picked up in response. Strike sorties averaged 38 a day in Afghanistan. Heavy air strike activity continued through Sept. 5. As the fighting slackened off, a Predator UAV and pairs of Navy F/A-18s kept constant overwatch of the area. NATO was taking no chances because, as Jones had said, “the tenacity of the resistance is a little bit of a surprise.”

The Taliban offensive was, indeed, renewed with another ground attack on Sept. 8. As fighting with the Taliban intensified, JTACs on the ground called in Air Force B-1Bs and fighters from the Air Force, Navy, and other coalition services. All of them expended ordnance on targets near Musah Qal’eh and Now Zad. These had a great impact. JTACs reported that the proper placement of a GBU-38 or GBU-12 munition on a target quite often ended the ground engagement.

Through mid-September 2006, Central Air Forces had recorded more than a thousand weapons expended in Afghanistan. The NATO force officially claimed 512 Taliban dead with another 136 captured. Operation Medusa was judged a NATO success.

Still, the leaders of the NATO units quickly reassessed the requirements of their military forces. For example, Operation Medusa caused Canada to send more forces to Afghanistan, as well as Leopard tanks, countermortar systems, combat engineers, and straight-leg infantry. “We’re all aware that conditions have changed,” Gen. Rick Hillier, Chief of the Canadian Defence Forces, said after the battle. “We saw a change in [Taliban] tactics where they really moved from a guerrilla warfare type style, a counterinsurgency, to some conventional techniques.”

True to form, NATO forces and airpower were engaged in other provinces at the same time of Operation Medusa. In Operation Mountain Fury, to name but one example, NATO forces used heavy artillery and attack helicopters to pound insurgent routes in eastern sectors of Afghanistan. Throughout the operations in all regions, NATO forces relied on increased air strikes. The impact of “airpower, especially American, very often made the difference,” a NATO observer later commented.

From the outcome of Medusa, Richards concluded that the Taliban was not a “strategic threat” capable of deposing the regime in Kabul or Kandahar. Conventional military operations by NATO were successful. In fact, the Taliban reverted immediately to other tactics, using suicide bombers and IEDs in the days after the operation concluded. Richards described the outcome of Operation Medusa as producing a Western “psychological ascendancy” over the Taliban. He acknowledged the presence of foreign fighters but judged that “right now al Qaeda is not a big problem here inside Afghanistan.”

However, Operation Medusa erased any doubt that the war in Afghanistan had taken on a new character. Medusa had also brought collateral damage to the villages and stirred the qualms of many partner nations. The intensity of the conventional fight led to a bigger damage footprint. Air strikes drew particular ire in the world press. “There has been
battlefield damage largely because of where the Taliban went," noted Gen. David Fraser, commander of Canadian Forces in southern Afghanistan. He added, “We will go back out there and we will help rebuild that.”

At this point, the view of USCENTCOM boss Abizaid was that the Taliban did not represent “a mortal danger” to the Karzai government. Yet he added, “Certainly at this stage in the campaign, we’d hoped to be at the point where we were doing more development and less fighting.” Year-end tallies underscored the fact that the allies were in for a hard slog. In Iraq, air strikes totaled 229 for the entire calendar year of 2006. In Afghanistan, the number for the same period was 1,770 strikes. Other applications of airpower such as low passes, shows of force, and, most of all, strafing, were not included in these counts.

To get a sense of the new importance of strafing, consider the experience of Carrier Air Wing 7 embarked on USS Eisenhower. This air wing from Nov. 6 to Nov. 14 flew 190 sorties in support of coalition ground forces in Afghanistan. In all, they logged 51 strafing passes, many of them dipping as low as 2,000 feet AGL. Also key to their work was the expenditure of 26 flares as called for by ground controllers. Their totals of 51 laser-guided GBU-12s and 27 GBU-38s rounded out a busy month and accounted for a sizeable fraction of the air component’s total of 201 weapons expended.

During the first week in action, Air Force and Navy fighters strafed insurgents firing at coalition forces. They dropped laser-guided and satellite-precision GBU-38s on personnel sites, compounds, and weapons caches. They linked with controllers on the ground via ROVER (remotely operated video enhanced receiver) sets, streaming real-time video between cockpits and ground controllers’ laptops. They delivered close air support in close visual range to troops under fire—Type I CAS. They delivered laser guided bombs and GPS weapons on targets from medium altitude and skinned near the ground at speeds over 400 mph on multiple strafing passes. When the friendly forces requested them, they shot flares at low altitudes to press insurgent forces into breaking off engagements. They delivered close air support for ground troops medically evacuating a wounded soldier in close proximity to the enemy.

One mission in mid-November stood out. Insurgents ambushed a patrol of friendly forces and pinned the patrol down in the open. The fighter that was called in to help emptied its gun in four consecutive, low-level strafing passes to give friendly forces the covering fire needed to move to a secure position.

The operations of 2006 amounted to a caution to the resurgent Taliban that massing forces against NATO forces did not pay off and was most unwise. “Every time the enemy has massed in this past year, they have suffered devastating defeats in large numbers and yet produced no or little to no casualties in the ISAF forces,” commented Army Maj. Gen. Benjamin C. Freakley, commander, Task Force 76. In fact, it well suited the alliance to keep the fight in Afghanistan more in the nature of a running battle. The more the Taliban forces moved, the better the chance for focusing air assets on them.
In January 2007, Afghanistan was in the throes of a winter war pause that normally lasted through May. With NATO engaged in the action, however, there was no drop-off. Air strikes employing weapons (other than 20 mm and 30 mm strafing) still totaled 178 in January 2007 and 163 in February. NATO was prepared for continuing its comprehensive mission. “We have been into more valleys and remote locations in the last year than probably in any area since this began in 2001,” said Freakley.

Increased Taliban activity was greeted with yet more airpower. Air strikes would double during 2007, but this was just one indicator of a more comprehensive effort to generate more dispersed ground force operations throughout Afghanistan. The air activity was linked directly to the surge of operations on the ground. “From 2006 to 2007 we doubled the amount of weapons released because of deliberate [ground] operations,” said North.65

On March 6, 2007, NATO launched Operation Achilles.66 A force of nearly 5,000 NATO soldiers and 1,000 Afghan troops struck against an insurgent concentration in northern Helmand province after Taliban clustered there in February. From March through the end of May, NATO forces carried out several missions. In one of these actions, Royal Marines cleared a Taliban concentration near the Kajaki hydro-electric dam.

In March, air strikes ramped back up to a total of 310. Combat aircraft such as the F-15E did everything from watching over convoys to providing shows of force for fire bases and delivering a big punch when needed. Events of March 30 revealed just how versatile a big aircraft such as the B-1 bomber could be in close support. A convoy vehicle broke down, and a B-1 performed a low-pass show of force to warn insurgents not to advance. Nearby, another convoy was taking small-arms fire until the B-1 arrived to perform another show of force; the Taliban broke off and fled. Next, the B-1, switching to its ISR mode, spotted insurgents near Nuresanr and alerted a JTAC of their location. (North said, “The Sniper pod on the B-1 is amazing.”) Then the B-1 switched back to providing armed overwatch for yet another convoy.67

The Taliban, too, were trying to increase their firepower. “We have intercepted weapons in Afghanistan headed for the Taliban that were made in Iran,” the Chairman of the Joint Chiefs of Staff, Marine Corps Gen. Peter Pace, reported in April 2007.68 He described them as mortars and C-4 explosives, linked to Iran because of their markings. “We do not know with the same clarity we know in Iraq who is delivering those weapons or who is involved,” Pace said. The Taliban did not, however, follow through on claims that it would launch another major offensive like the one seen in Operation Medusa. Instead, suicide attacks and IED emplacements rose.

Thus, there was all the more reason for U.S. and NATO forces to press hard to find and clear Taliban concentrations in the most dangerous provinces of Afghanistan.
Teamwork

By 2007 and 2008, American and allied airpower in Afghanistan handled the increased operational tempo of the war and provided direct action and support of all kinds, at all levels. In these years, the war in Afghanistan had reached its turning point. So had the role and employment of airpower.

In Operation Anaconda in March 2002, airpower had helped U.S. and other forces on the ground prevail against an unexpectedly large concentration of Taliban and al Qaeda forces fighting from prepared positions on craggy peaks. The tactical performance of air and land forces in the crisis had been superb. Yet all agreed the preplanning and coordination between air and land forces had been woefully lacking. Five years later, air and land component relationships had changed. As combat in Afghanistan increased, the workings of air and land power there grew increasingly joint and coordinated, with airmen working to bring more sophisticated applications to the fight. It was one of the more remarkable of the war’s many developments.

How, in fact, does the CAS system work? It was running smoothly as the principal operations of 2007 began. North explained, “Our No. 1 calling is TIC—troops in contact.” When NATO forces are engaged, the top priority “is to put an airplane overhead,” North added. Putting an airplane overhead begins with the ISR resources assigned to Afghanistan. Operational summaries showed that, in a typical case, six or seven aircraft would support each day’s operations there. The full suite of resources from Air Force Compass Call C-130s to Navy E-2C Hawkeyes might fly on any given day. Signals intelligence, electronic intelligence, and images would flow back to tactical and higher headquarters. Predators and later Reapers provided increasing amounts of full-motion video to keep track of ground force activity.

ISR tasking for imagery such as full-motion video most often followed tips from other sources. Ground forces might call in such a tip, or other signals intelligence might provide the cue. Lt. Col. Michael Downs, an ISR specialist, wrote of the process for Central Command’s theater: “For instance, a ground unit might receive a [human intelligence] tip indicating presence of the enemy in a certain location. To confirm the tip, a battalion may request ISR support from the CFACC to locate that activity.” Tips often gave the imagery platform a better shot at finding the item of concern. Hence, the increased activity of ground forces tended to generate an upswing in requests to survey particular areas.

For close air support, the ticket for getting airpower overhead was a place on the Joint Tactical Air Strike Request. The task of fulfilling those requests would begin days before the strike was needed. The CAOC assigned aircraft on a routine basis to patrol the skies of Afghanistan. Many USAF and coalition fighters were now based at airfields like Bagram in Afghanistan. Air Force A-10s and F-15Es as well as RAF GR7s were the principal platforms working out of local airfields. France, the Netherlands, Italy, and other NATO allies also rotated fighter and other strike aircraft in and out of Afghanistan under NATO
auspices. B-1s continued to operate from a base in another country. Navy F/A-18s from an aircraft carrier in the North Arabian Gulf often joined the daily patrols, depending on CAOC allocations across the theater.

Air planners next aligned potential sorties to ground force maneuver plans. In the planning phase with ground operators, air commanders coordinating the tasking order first synchronized with preplanned ground force action, such as a convoy movement or major combat events. For Afghanistan, USAF co-located its 455th Expeditionary Wing commander with the land component’s two-star combined joint task force (CJTF) commander. “They sit side by side and work together every day,” North said. He characterized it as a “very good tactical and operational relationship—based on trust, faith, and confidence.”

Having the air and land components working hand in hand was essential to meet the diversity and volume of joint tactical air strike requests. While close air support and ISR aircraft flew routine schedules based on anticipated need, “an awful lot of ad hoc” requests came in, according to North. Activity at a contingency operating base or forward operating base would often feature a relatively small movement of forces, creating what North termed an “unplanned” troops-in-contact situation—the primary driver of air strike requests. (“We never really plan to have troops in contact,” he noted.) TICs generated the lion’s share of air strike activity. “Sometimes they turn a corner and get shot at,” North said of the small unit activity. Other times, ground forces may have an intelligence tip from one of many sources and “they want to bring airpower to it,” he said.

Requests for support flowed through the theater air control system (TACS), which was used to find and contact the nearest airplane compatible with the radio frequency of the JTAC on the ground. “Then they are off and running,” North explained. “As quickly as they can talk to the JTAC, they can start working the solution.”

Typically, JTACs are the masters of close air support. Several recent advances have made their product that much more precise and rapid. One is digital CAS. Digital CAS is a loose grouping of systems having the same aim: to extend reach of aircraft to the exact spot at which ground forces need air support or air strikes. With digital CAS, much of the transmission of location data is automated and displayed for multiple users.

The innovative ROVER was one of the first new systems to link aircraft displays to a backpack ground terminal. With this kind of lash-up, an aircraft could send down full-motion video of a target area. More recent developments include the addition of Falcon View, a system capable of integrating GPS and laser designation data. The Digital Precision Strike System is another addition; it replaces voice-transmitted delivery of location data. JTACs also have the ability to tap into a secure Link 16 tactical data link and send location data and other information for troops in contact. A portable air support operations center gateway extends battlefield reach beyond line of sight and offers an uplink to aircraft equipped with a situation awareness data link (SADL) or Link 16. This shortens the kill chain, reduces human error and improves situational awareness for
pilots, aircrew members, and tactical air control party (TACP) members, said MSgt. Dave Howard, a TACP who leads the field’s modernization efforts at Electronic Systems Center, Hanscom AFB, Mass.\textsuperscript{70}

The new systems bring data to those who usually need them most—the JTACs and the forces on the ground. The CAOC also makes certain that all aircraft flying have a video downlink. As a result, “the JTAC at the [tactical operations center] can clear Type II CAS,” said North. He said this greatly increases efficiency and added, “They can gain [positive identification] and clear collateral damage estimates to allow weapons release.”

In the past, groups of Army Special Forces or Army Rangers usually would take a JTAC with them on the way to an objective. However, the expanding number of conventional forces in Afghanistan changed requirements for the JTACs, placing a premium on their being able to handle multiple engagements, for example. Now, a JTAC sitting in the tactical operations center might be able to shape the battle more quickly than would be the case were he out in the field.

JTACs by nature prefer to be out with the Army. “A lot of guys really hate staying back and not being out on the objective with the Army,” said MSgt. Thomas Gorski, a JTAC instructor with the Air Force’s 6th Combat Training Squadron.\textsuperscript{71} However, a JTAC located in the TOC often has better situation awareness due to the digitized resources at his fingertips. “Conventional brigades have so much going on and we can’t be everywhere at once,” noted Gorski. Having that breadth of capability at the TOC greatly increases flexibility for the ground forces.

For example, a JTAC there may roll data from a joint fires observer into a decision for Type II CAS. Lt. Col. Red Walker, director of operations for the 6th CTS at Nellis AFB, Nev., explained that, for Type II or Type III CAS, accurate data from the JFO may be the piece needed to allow for an air strike.\textsuperscript{72} (The decision rests firmly with the JTAC.) In contrast, situation awareness for the JTAC on dismounted maneuver can be much more limited, and thus the chance of gaining air support could be slimmer. Consequently, ground commanders often want the JTAC in the tactical operations center. “It all depends on the Army’s intent,” said Gorski.

By mid-summer 2007, the extent of the military challenges in Afghanistan had become everywhere apparent. In one bloody attack, Taliban forces killed 24 civilians.\textsuperscript{73} NATO responded with an air strike that inadvertently killed seven Afghan children.\textsuperscript{74} On June 22, Afghan officials announced the deaths of 25 more civilians who had been caught in the warfare between NATO and Taliban forces.\textsuperscript{75} Taliban fighters had launched an attack on a British outpost under cover of darkness then fled into the residential area of Chora. The ensuing small arms battle was backed up with close air support. NATO forces reported the strikes had killed insurgents; Afghan officials claimed civilians died, too. “This past week has been very tough,” said Christopher Alexander, the deputy special representative of the United Nations Secretary General in Afghanistan. He added: “I’ve seen the reports. In the Chora attack, the Taliban literally slit the throats of men, women, and children and burned the bodies, but there was also close air support that killed civilians.”
News on the fighting in Afghanistan still rarely made headlines, at least in comparison to Iraq. This reflected, in large part, the clandestine nature of ongoing operations. Also contributing was the fact that the fighting had spread to so many different areas in so many provinces; this made it hard for newsmen and others to trace the course of the battle as a whole. What did in fact tend to break through to the public were the most tragic instances of civilian casualties. As a result, the conflict in Afghanistan was becoming best known for such spectacular events. Many were caused by the Taliban—suicide bombings and detonation of IEDs. Others were events involving NATO and coalition use of force. The media’s fascination with casualty counts had to be seen, at least in part, in light of the lack of any other way to measure what was going on in the war.

Airpower in particular came in for frequent criticism. In late June, U.S. Army Brig. Gen. Joseph L. Votel, deputy commanding general for operations of Combined Task Force 82, shed light on the actions of ground forces calling in air strikes. Correctly, he put the onus on the Taliban. Votel expressed utmost concern and responsibility for avoiding civilian casualties. Those that did occur, he said, “are caused principally by insurgents who are initiating activities in the direct proximity of villages or where civilians are located.” He went on: “That, of course, makes it very, very difficult for our forces who are operating out there, because they do have a responsibility to respond. They have a responsibility to protect themselves and their forces.” Votel emphasized that U.S. and NATO air and ground forces followed very strict procedures designed to limit collateral damage.

For its part, the Taliban had no such qualms. Votel pointed out that about 60 percent of the IEDs emplaced by the Taliban and their associates killed Afghan civilians rather than Afghan or foreign military forces. Votel granted that some did inflict casualties on NATO—but the proportion was small enough to make the tactic “barbaric” in his words. Nor was the air strike which had resulted in the deaths of children quite what it appeared on the surface. Votel explained that it had in fact been a significant raid. “With respect to that operation, we did capture a number of insurgents ... and have brought them in for questioning,” he said. Beyond this, “there were several others that were killed as a result of that [operation.] We did not necessarily get all the individuals we were going after in that particular operation, but we continue to work that very, very hard.”

North emphasized that the airpower forces on duty in Afghanistan have made good use of the data streams available to them. Digital sharing through Link 16 gave “tremendous situation awareness in the F-15, A-10, F/A-18, and coalition aircraft,” he observed. The general described how the pilots of aircraft sitting on ground CAS alert could call on the Link 16 data coming back from other sources as soon as they were scrambled. With such data, they could get a pretty good picture of how the troops-in-contact situation was unfolding.

In Afghanistan, many aircraft at any given time are airborne, seeking to carry out preplanned roles dictated by joint tactical air strike requests. Their goal was to get to the area and make contact with the JTAC in order to fill the request within a specified amount of time. Commanders obviously declined to say exactly what that time goal was. However, North said of the strike aircraft response time: “Characteristically, it is well inside the time...
allocated to have the aircraft with the JTAC.” The presence of experienced aircrews is an advantage in this respect. “These guys rove their allotted airspace and go to it time and time again,” North said of those air crews flying CAS sorties in the theater today. “Our aviators know it like the back of their hands.”

The presentation of data in the cockpit was of a quality to facilitate the limitation of collateral damage. “Every plane, manned or unmanned, has a targeting pod,” said North. “Scope presentation on the pods sizes circles” sufficient so that “we can clear for clear field of fire,” explained North. In essence, the clarity of images delivered by the pods would allow crews to see the presence of persons other than the targeted insurgents. Similarly, the use of a programmable fuse allowed the aircrew in a cockpit to select a delayed setting that would help to contain blast impact. “You can use a 500-pound bomb and delay the fuse 10 to 15 milliseconds and bury the bomb,” North said of this technique. A weapon that penetrated the surface would create a much smaller blast effect.

The airman and the soldier on the ground had become co-equals in the execution of an air strike. In fact, the ground commander on the scene had the final say in any such air attack. “There is not a weapon dropped without the ground commander’s final initials to validate and certify that we have [positive ID], we know what we want to drop on,” North said.

However, there was one principal exception to the dominance of ground forces in air tasking, and that was in the prosecution of dynamic and time-sensitive targets. These often were strikes aimed at insurgent or terrorist leadership. It could take days to collect the intelligence for such a strike. In that case, the CAOC kept the lead due to the tight link with the ISR division. The fusing of various intel sources for final, actionable intelligence tended to rest with air component assets.

It was during this period that USAF perfected a new system for precision airdrop. Sporadic airdrops formed into a steady pattern in the second half of 2005. Early in the year, for example, three C-130s dropped 68,000 pounds of drinking water in support of a civic aid mission. July 2005 saw a handful of smaller troop resupply drops. By autumn of that year, however, it was common for aircraft to drop 40,000 or 50,000 pounds of troop resupply to forces in eastern, central, or southern Afghanistan.

The year 2006 brought about the real expansion in both the numbers and magnitude of airdrops. The mission was shifting from emergency to routine resupply. However, the danger of making these drops was intensifying as a result of the surge of Taliban insurgent activity. “Back in 2006, we were doing a lot of [cargo drops] within anti-aircraft artillery and small-arms range,” said North, and aircraft sometimes took battle damage. The growing threat was starting to put aircrews and aircraft at risk. North urged Air Mobility Command to speed up the development and delivery to Afghanistan of the joint precision airdrop system (JPADS).
Later that year, C-130s began employing this highly accurate system, major components of which had been developed by both the Air Force and the Army. The key to the system’s precision is an airborne guidance unit that can steer the parafoil along a planned trajectory, making adjustments in flight as necessary. A C-130 airlifter flew the first combat JPADS drop in Afghanistan on Aug. 31, 2006. For airmen, JPADS improves survivability by permitting higher altitude airdrops above many types of ground fire. Accuracy was excellent. Cargo typically landed in “an area the size of a football field,” according to North.

C-17s began making combined JPADS and Screamer drops in May 2007 in Afghanistan. (A “screamer” is a steerable bundle of container delivery systems, guided by GPS.) “The system was amazing to watch,” said SSgt. Derek Howard, the crew’s evaluator loadmaster. “When the bundles departed the aircraft and the chutes deployed, you could instantly see them turning in what appeared to be a formation as the guidance system began steering the bundle directly over the drop zone.” As an official Army statement made plain, JPADS “has saved soldiers lives by offsetting ground convoy requirements and reducing rotary wing sorties intended for airdrop operations.”

It should not be, but perhaps is, necessary to point out that none of this can legitimately be described as “airpower lite,” as is sometimes heard. Fighting and defeating hard-core, bitter-end Taliban and al Qaeda fighters in Afghanistan’s forbidding terrain has required a broad spectrum of airpower tactics, forces, and units. “Lots of times, in the mountains ... the folks are dug in,” explained North. “You drop munitions until you get the effects desired. Sometimes it takes a lot to get the effect. Sometimes it takes only one bomb.” Overall, he added, “We have met the enemy, and we have had fantastic results.”

Miles to Go

Airpower met the growing needs of NATO forces in Afghanistan through 2008 and into 2009—and a good thing. At the start of the era of President Barack Obama, the new Commander in Chief, the war showed no signs of a slowdown. There could be no letup in the employment of airpower or any lessening of its central role in the ground scheme of maneuver. It looks as if Washington is in for a long fight.

Over the preceding year, operations continued at a high tempo. “We did 78 airdrops in one month,” North said. The year’s total would climb to 16.5 million pounds of supplies delivered by precision airdrop in the theater, most of it in Afghanistan. “Clearly, we’re forecasting 2009 to have much more,” said North of the airdrop requirements.

By June of 2008, statistics indicated that enemy attacks were still going up, compared with 2007. “We’ve had about a 40 percent increase in kinetic events,” said U.S. Army Maj. Gen. Jeffrey J. Schloesser, the commander of Combined Joint Task Force-101 and commanding general of the 101st Airborne Division, defining those events as “literally the number of enemy attacks that we’ve had on our coalition and Afghan partners.” The insurgency was not only growing but also changing in character. As Schloesser explained it, the enemy force now comprised a mix of several groups—not just a Taliban drawn from
a fairly narrow slice of Afghanistan but also Taliban (which means “students”) of Pakistan, other Pakistan insurgent groups, and other Afghan insurgents such as the Haqqani group. On top of this were the terrorist outfits such as Lashkar-e-Taiba, native to Kashmir. “Clearly al Qaeda’s involved in some cases,” reported Schloesser and added: “You’re seeing a mix on the battlefield. In some cases there are communications between two or three groups. In some cases they are working together very loosely, trying to achieve what I would call battlefield effects, and we are focused on them.”

For airmen, a major task in Afghanistan was trying to sift through terrain and populations to identify insurgent forces and patterns of movement. The increase in ISR operations provided the capability to use either a wide aperture or narrow focus, depending on need. Need for imagery may comprise electro-optical views, synthetic aperture radar images, and, of course, full-motion video. For airmen, the central task was keeping a theater watch while organizing assets to focus down to detail as tight as a single individual.

All ISR aircraft played their part in feeding the information fight. “Global Hawk is shooting tremendous amounts of shots per day,” noted North. Both organic UAVs and Tier I Predator and Reaper systems contributed to doubling the amount of full-motion video. Full-motion video remained in high demand both for intelligence gathering and for overwatch and battle management for forces on the ground. Predator and Reaper crews typically worked both planned collection and local on-call tasking. “Troops on the ground will report a contact and we will get our eyes there as quick as possible,” said Maj. Rick Wageman, a Predator pilot deployed to Bagram as part of the local launch and recovery team for the unmanned systems in Afghanistan.

Elsewhere, flights of Air Force E-8C Joint STARS aircraft built detailed pictures of movement within areas of interest. By transmitting the picture to multiple grounds stations, the Joint STARS crews added to joint force situation awareness. “We work with the Army from the corps level all the way down to the company level, integrating the ground movement picture from the joint terminal attack controller to the brigade tactical operations center,” said USAF Lt. Col. Mack Easter, commander of 7th Expeditionary Air Command and Control Squadron.

Stars of the ISR war remain Predator and its updated kin, the Reaper. “We’re using Reaper as a multirole platform for both ISR and weapons,” said North. In a late 2008 briefing in which he offered narration of a Predator video, Army Maj. Gen. Michael Tucker described the daily role of ISR. Tucker said: “If you look closely, there are two men in the middle of the road in the center of the video. The one on the lower left is moving up and down. He has a pickax, digging a hole in the center of the road. Another gentleman is standing to his right. These IED emplacers were identified using various other detection systems that we had cross-cued.” Tucker went on, “And then we used a Predator to strike.” The IED work crew went up on a silent blast.

Another prime role for airpower reflected an almost traditional CAS mission: “danger close” delivery of ordnance to troops about to be overrun. In Afghanistan, they tended to be small groups, but the fighting was no less fierce.
Take the case of a SOF team inserted into the mountainous terrain of Nuristan province in April 2008. These U.S. troops dropped in from helicopters at dawn and soon found themselves facing a prepared enemy with plenty of ammunition. As Army Capt. Kyle M. Walton told the Washington Post, “All elements were pinned down from extremely heavy fire from the get-go.” The team carried small arms and grenade launchers. However, their main source of heavy firepower during the running battle came from aircraft overhead.

It took the SOF team and its Afghan allies seven hours to move themselves and their wounded down the slopes to an area in which helicopters could land and pull them out. They called in airmen to drop 2,000-pound bombs 350 yards from their positions, using the black smoke of the blasts to cover their movements. “Every time they dropped another bomb, we would move down another terrace until we had basically leapfrogged down the mountain,” Army MSgt. Scott Ford told the Washington Post. At one point, insurgents were firing from positions just 25 yards away. In that case, the blast of another 2,000-pounder allowed the Americans to move away.

The demands of engagements such as this one exerted a major effect on the scheduling and use of aerial tankers. In situations such as this, tankers were sent forward to support aircraft in need of refueling. “If something’s going on,” explained North, “we’ll just move the tanker overhead.”

By North’s estimation, the longest day for NATO combat forces came on July 10, 2008, when they and the Taliban engaged in a 60-hour-long troops-in-contact battle at Wanat in northeast Kunar province. In this dustup, a group of soldiers from the 173rd Airborne Brigade Combat Team were heading back to a small contingency operations base when they were ambushed. Their firebase was really nothing more than some berms. Enemy forces surged and pulled them into hand-to-hand combat. “Manned, unmanned, Navy, Air Force,” every asset available began to deliver fire support and overwatch, said North and added: “If air had not been there, the entire firebase would have been overrun. There were a lot of weapons dropped dangerously close.” Army joint fires observers did much of the initial work. When a Predator arrived overhead, it enabled a JTAC at the TOC to call the strikes.

August brought another unusual mission. At the request of one of the provincial reconstruction teams, NATO had taken on the task of moving a massive turbine for construction on the Kajaki hydro-electric dam. This was in an area that British forces had cleared of Taliban resistance in 2007. Now, it was time to rebuild. But the turbine had to travel on the ground from Kandahar at only about three miles per hour. The route travelled “right through the heart of bad-guy territory,” North said. Moving the turbine was NATO force leader McKiernan’s top priority. From Aug. 28 to Sept. 2, 2008, coalition airpower helped ensure safe transit for the convoy and its giant cargo. Of course, the slow-moving convoy was just too tempting for the Taliban to resist. “Lots of air strikes, killed lots of enemy trying to mass,” said North.
Again and again, such activities demonstrated the ability of highly refined and carefully targeted airpower to support diverse ground force operations. Plans have been laid for increasing the pace of activity in Afghanistan. For airmen, a big concern is adding to the Afghan air bases’ capacity to handle more forces. The burden reaches across Air Force specialties. Security forces are in constant demand, as are explosive ordnance disposal specialists, combat engineers, contracting officers, and special RED HORSE construction units. “There is no shortage of building requirements,” said North.

Remade

The demands of the war in Afghanistan have done more than harden the Air Force. They have, along with the war in Iraq, helped produce a different kind of Air Force.

The Sept. 11, 2001 terrorist attacks sparked direct military action against Taliban-controlled Afghanistan, which had become a safe harbor for al Qaeda. Determined to eliminate this persistent threat to American security, the U.S. assembled a coalition to unseat the Taliban government and, on Oct. 7, 2001, launched Operation Enduring Freedom. Later, U.S. forces joined up with NATO units under the ISAF umbrella. Allied airpower, and the U.S. Air Force specifically, was at the heart of that response. More than seven years on, what has happened to that force?

The Air Force has constantly changed and adapted to provide the kinds of sophisticated capabilities needed for fighting a strange war in Afghanistan. In the process, this combat-hardened organization has become an Air Force unlike any other. What had been a Cold War force garrisoned at large U.S., European, and Asian bases is now an expeditionary force. For most of its members, packing up and setting up is a way of life—the only way they have known.

While the changes wrought by this war are many and varied, there are five that stand out. Each is at the core of operations today. All are having a profound impact on the current Air Force and its role in joint operations and will continue to do so well into the future.

Precision. Laser guided weapons debuted in Vietnam and won popular acclaim in the 1991 Gulf War, yet USAF sent into battle in Desert Storm only about 150 fighters that could self-designate laser guided bombs. Technological improvements have accelerated, and the Air Force now fields an enormously powerful and versatile precision force. In 2003, USAF fighters in theater had the ability to employ precision weapons with laser or GPS satellite guidance. Most important, the ubiquitous Joint Direct Attack Munition was a combat-proven asset. B-52s and B-1s often carried a mix of weapons to give air controllers a choice. After its debut in 2004, the new 500-pound JDAM became the weapon of choice to support ground forces fighting in urban areas.

However, Afghanistan also has taught that it’s time to think of precision in combat support airdrop, as well as strike. The joint precision airdrop system debuted in Afghanistan. The system—a joint effort between the Army and the Air Force—allowed aircraft to drop cargo more accurately, from much higher altitudes, and at greater speeds. After August 2006, the war saw a surge of precision airdrops staged in support of coalition and special
operations forces in Afghanistan. This is a major development in airpower, one that opens up new possibilities for deploying forces with a lighter footprint and for conducting relief supply missions in more places.

**Nonlinear battlespace.** No longer does the Air Force always operate from secure, garrisoned bases situated well behind front lines. The Air Force and Army, for example, agreed in 2005 to change the division of labor so that the Air Force is responsible for defending its own overseas air bases, as is the case in Afghanistan. Mess halls, cargo facilities, even ramps and taxiways presented tempting, presurveyed targets. The perimeter at Bagram Air Base in Afghanistan was a problem from the start and saw terrorist attacks at or near the front gates. Air Force security forces have gone on the offense to keep the perimeter and gate secure.

The fact that any airman may be in harm’s way led to an increase in expeditionary combat skills that begins now in basic training. Fitness, firing weapons, and small unit discipline are recognized as essential qualities for every airman in an emergency situation. Afghanistan has helped to put paid to the idea of predictability. Airmen know that they will usually have to operate in unpredictable and unsettled settings. The Air Force wants to train more security forces for specialized expeditionary combat skills and procure everything from mine-resistant vehicles to new handguns and body armor for the nonlinear battlefield. All of this is intended to increase the individual airman’s chances of surviving conventional attacks on the ground, in so-called “outside-the-wire” missions.

**Unmanned air systems.** The MQ-1 Predator and the newer, more capable MQ-9 Reaper have left a big mark in Afghanistan. It is safe to say that none of the new medium- and high-altitude UAVs were even a glint in the eye of top generals during the Cold War. Despite years of experiments and research, it took most of the 1990s for the Air Force to develop Predator into a capable platform. The high-altitude Global Hawk emerged from the 1990s to play a dominating reconnaissance role in Afghanistan in 2001 and beyond. The hours flown in search of Taliban and al Qaeda, and in supplying full-motion video for ground forces, have convinced all but the most skeptical of their utility—at least in uncontested airspace. The Air Force is fully committed to UAVs and has redoubled Predator and Reaper crew production, accelerated acquisition, and stood up new units for the mission.

The Air Force has given the Reaper an “attack” designation, signifying, as much as anything could, how far unmanned systems have come. Reaper is that “lightweight fighter” needed for the best mix of airpower. Autonomous air refueling is being pursued in large part to extend the already impressive endurance of unmanned vehicles. UAVs have been normalized within the Air Force. They are part of the Total Force; leaders make efforts to ensure their crews have a normalized career path; upgrades and spirals continue improvements in effectiveness. Yet the future of unmanned forces will require effective Air Force stewardship to ensure the force of tomorrow continues to improve and meet evolving requirements. Predators and Reapers operate today in benign airspace. Future UAV missions may have to contend with hostile and defended airspace. It’s not the same.
**ISR fusion.** It is difficult to assign a term to the revolutionary fusion of intelligence-surveillance-reconnaissance products that now constitute daily fare in air operations centers. Even Adm. Michael G. Mullen, Chairman of the Joint Chiefs of Staff, struggled to describe the impact of the “whole ISR piece” on current operations. What’s clear is that USAF has been at the core of a series of revolutions in the ability to fuse ISR into a powerful weapon.

In Afghanistan, the need for uninterrupted tracking of individuals, such as terrorist ringleaders, led to rapid fusion of numerous information sources. Never before have airmen been able to produce a comparable real-time product for commanders. A suite of products and tactics is responsible. The fusion offers commanders such a powerful tool that none will deploy or operate without this ISR picture in the future. Better ISR has an amplifying effect, such as when JTACs can use it to control multiple airstrikes at the call of forces on the ground.

**Cooperative targeting.** The Afghanistan War, with its vast operational spaces and small, widely dispersed and highly exposed forces, has exerted a mighty influence on the way USAF provides close air support for soldiers, marines, and commandos. Insurgent and urban battles have honed air and ground cooperation like never before.

The air component has become the soldier’s deadliest guard dog, literally following patrols to provide ISR or air attack as needed. The laptop-based ROVER system, developed in the war in Afghanistan, allows airmen and ground controllers to share a real-time video picture of a target they are tracking. This allows for stunning efficiency. Gains like this have occurred before, of course. Today’s strategy hinges on air-ground integration. Effective backing of deployed U.S. and allied ground forces around the world is key to repositioning a much reduced U.S. force overseas.

For all the transformation that’s taken place, there is still a lengthy to-do list coming straight from combat experience in the Middle East. Afghanistan is a big part of that. The Air Force will continue to change because of that conflict.

**Conclusion**

Staying the course will take fortitude and a little luck. Americans may well grow weary of the effort in Afghanistan. They will not be alone; Afghans, too, could well wear down and throw in the towel. While that is not considered a high likelihood within policy-making circles, it is not out of the question, either.

“This war has gone on for seven years,” Afghan President Karzai grumped in late 2008. He said: “The Afghans don’t understand anymore how come a little force like the Taliban can continue to exist, can continue to flourish, can continue to launch attacks. With 40 countries in Afghanistan, with entire NATO force in Afghanistan, with entire international community behind them, still we are not able to defeat the Taliban.”
Afghanistan in 2009 was at a turning point. Three years of intensifying operations backed by highly refined airpower had taken NATO and U.S. forces ever deeper into the struggle for control in key provinces.

With a big reinforcement planned, NATO and U.S. forces had their work cut out for them. The solution lay beyond Afghanistan’s borders, of course. “It’s not possible to solve the challenges internal to Afghanistan without addressing the challenges, especially in terms of security, with Afghanistan’s neighbors,” said Army Gen. David H. Petraeus, the head of U.S. Central Command and architect of recent combat successes in Iraq.87 “A regional approach is required.”

Army Gen. Bantz J. Craddock, NATO’s Supreme Allied Commander Europe and also head of U.S. European Command, confirmed in January that the effort in Afghanistan could use more forces. Security “has to be in place before the rest can happen,” he said.88 “We have to be able to implement our strategy. One, clear out the insurgents; two, hold; three, build. We are clearing. We don’t have enough to hold to allow the build.”

Building capacity with the Afghan National Army shapes up as a key element of the strategy, too, but Craddock estimated it would take at least three years to increase their capacity to a sufficient degree. “We can’t afford to wait three years,” he said. As a result, more U.S. forces will have to fill out the strategy. Craddock expected them to focus on the southern provinces. “We’ve got to have a greater density of forces to be able to hold those communities,” he said.

One thing remained certain. Airpower in all its forms had the advantage of three years of intensified combat building on nearly a decade of activity in Afghanistan. It was an edge proven to enable victory from firefights to theater surveillance. As North put it, “Our asymmetric advantage is we fly and the enemy doesn’t.”
Focus On:

ABERRATIONS IN IRAQ AND AFGHANISTAN


During the past decade of war, the Air Force did not have to fight for control of the air. That is not normal.

Aerial combat was a prime feature of U.S. major warfare throughout the 20th century. From 1918, when a U.S. Airman scored the first aerial victory, through 1999, U.S. Airmen shot down some 17,500 enemy airplanes. These included 624 in World War I, 15,800 in World War II, 894 in Korea, and 137 in Vietnam.

The 1990s wars against Iraq and Serbia were smaller, but U.S. pilots still shot down 48 aircraft—39 Iraqi and nine Serbian aircraft.

At the turn of the century, however, air-to-air combat vanished. The U.S. since 2000 has waged two major wars, one in Iraq and one in Afghanistan, but no pilot became an ace. Indeed, no one notched even a single aerial victory credit.

Airpower played significant roles in both of these recent wars, but fighting for air superiority was not one of them. There were no air battles at all.

The total absence of aerial combat so far in the 21st century has led some to claim that its day is gone forever, that expensive air superiority fighters and highly trained pilots are no longer necessary. This view is almost certainly wrong.

Why has air combat not played a role in the wars in Afghanistan or Iraq? The answer: Those wars were aberrations. War in the future probably will once again require the U.S. to fight for air dominance—and not enjoy it from the beginning.

The first aberration occurred in Afghanistan.

On October 7, 2001, Washington launched Operation ENDURING FREEDOM against the Taliban regime of Afghanistan, the protector of Osama bin Laden and his al Qaeda terror organization. It was a mismatch in the air. The Afghan Air Force was so small that it did not even merit an entry in the annual Jane’s All the World’s Aircraft for the years 1999 to 2002.

Without its own aviation industry, Afghanistan had long depended on other nations, particularly the Soviet Union, for its aircraft. During the 1980s, as Moscow warred against the Afghan people, guerilla fighters became adept at using small surface-to-air missiles against airplanes.
A Plinking Campaign

During the 1990s, the emphasis within Afghanistan was on land combat between various local entities, of which the Taliban was one. What was left of the old Afghan Air Force was divided among the factions vying for control of the country. Spare parts to keep aircraft functioning were in short supply, and flying training was extremely limited.

By 1996, Taliban fighters had conquered all but the far north of the country, but their share of the surviving Afghan Air Force was small and weak. One estimate put the Taliban air force at eight MiG-21s, eight Su-22s, several transports, and about 12 helicopters.

Whatever the true numbers—and the estimates varied wildly—many were simply out of service, and only a handful of pilots remained.

U.S. military planners never once worried about the Afghan aviation arm as aerial opposition. Indeed, the Afghan threat was far less than what U.S. pilots faced every day enforcing the “no-fly” zones over Iraq.

However, those officers planning the Afghan war did have some concern the Taliban might pack aircraft with explosives and fly suicide missions into U.S. military encampments. Thus, when the U.S. struck Afghanistan, its military leaders were determined from the outset to establish uncontested control of the air.

Among the 31 targets hit on the first night of the air war were Taliban airfields and aircraft. Air bases known to be harboring MiG-21 and Su-22 airplanes were Shindand AB and Mukurin AB. They were put out of commission.

Afghan air defenses were largely destroyed on that first night. Even so, for seven consecutive days after the first night, U.S. Airmen took part in an “aircraft plinking” campaign, the goal of which was to destroy, finally and to a certainty, every last enemy military aircraft and helicopter in Afghanistan.

The Pentagon did not officially announce the death of the Taliban air force until Oct. 25. In reality, the Afghan air arm had ceased to exist weeks earlier.

No Taliban aircraft got airborne to contest the coalition onslaught. In fact, no Taliban aircraft got airborne at any time in the entire campaign. U.S. pilots had no opportunity to shoot down enemy airplanes. The Taliban had few to begin with. What few they did have were crushed within hours, even minutes.

Destruction of what little existed of the Taliban air defenses was so complete the United States was able to employ, at a very early stage in the campaign, slow-moving and low-flying helicopters, transports, gunships, and remotely piloted vehicles. These aircraft would have been too vulnerable to use in this fashion had the enemy possessed or retained an air force of even minimal effectiveness.

The second aberration came 17 months later, in Iraq.
President Bush launched a war to topple the despotic and dangerous regime of Saddam Hussein, who had for years threatened his neighbors and who had defied United Nations inspectors seeking evidence of the manufacture of weapons of mass destruction.

Pilots of USAF aircraft entering Iraqi airspace at the opening of Operation IRAQI FREEDOM on March 19, 2003, could not be sure the Iraqi Air Force would be as impotent as the Afghan Air Force had been. After all, 12 years earlier, the Iraqi Air Force had been one of the most powerful in the entire region.

Iraq’s air arm had fought well during the brutal 1980-88 Iran-Iraq War. Early in the decade of the 1990s it was one of the largest air forces in Southwest Asia, with well over 700 fixed wing combat aircraft. Iraq had purchased new and capable fighter aircraft, including MiG-29s from the Soviet Union and Mirage F1s from France. Baghdad had improved its air bases, increasing the size and number of runways and taxiways and constructing hundreds of hardened aircraft shelters.

That rather formidable Iraqi Air Force, however, ran into a buzzsaw. It was called the United States Air Force.

In Operation DESERT STORM—the Gulf War that unfolded between January 17 and February 28, 1991—USAF pilots shot down 37 Iraqi aircraft—32 airplanes and five helicopters. USAF and coalition aircraft also destroyed 254 additional Iraqi aircraft on the ground. Aircraft such as F-111s and F-117s, armed with laser and television guided bombs, destroyed 141 Iraqi aircraft in their shelters and another 113 in the open.

Counting airplanes that were flown in desperation to Iran, Baghdad lost 407 fixed wing airplanes—more than half its prewar force.

The effect was devastating and long-lasting. The once-powerful Iraqi air arm went into a long disintegration as a true fighting force—a fact that became only too apparent 12 years later.

In the 2003 war, not one Iraqi warplane attacked the U.S. and coalition forces advancing on the ground toward Baghdad. Complete aerial supremacy contributed to the quick victory that toppled the regime of Saddam and placed U.S. and coalition military forces in the enemy capital in less than one month.

Desert Strike

Even earlier, during the 1990s, the U.S. was aware of the drastically weakened condition of the Iraqi Air Force. During those years, the U.S. and its coalition partners enforced no-fly zones over northern and southern Iraq.

Saddam rarely launched aircraft to challenge United States aircraft patrolling the UN-sanctioned no-fly zones over Iraq. Some cases, however, did arise.

At the end of 1992 and beginning of 1993, American F-16 pilots using advanced medium-range air-to-air missiles shot down two more Iraqi airplanes when they mounted challenges.
In 1996, Iraqi troops advanced under the northern no-fly zone and seized the Kurdish city of Irbil. In response, the U.S. opened Operation DESERT STRIKE. During that operation, USAF B-52s launched 13 cruise missiles against Iraqi military targets, including air defense and radar installations.

Another result of the Iraqi offensive in the northern no-fly zone was the extension of the southern no-fly zone northward from 32 degrees north to 33 degrees north latitude. This further restricted the space where the Iraqi Air Force could operate or train.

Iraqi flights were restricted also by another factor. During the late 1980s, Saddam had sent 19 of his Soviet-made combat aircraft to Yugoslavia for refurbishing but was not able to get them back because of United Nations imposed economic sanctions on Iraq after its invasion of Kuwait. In September 1995, the UN Security Council had voted to extend sanctions against Iraq that had been in place for five years. As a result, worn-out Iraqi airplane parts could not be easily replaced, resulting in fewer operational warplanes.

Fearing attempted coups, the Iraqi dictator periodically purged his military leadership, including some of the high-ranking officers in the Iraqi Air Force. Saddam wanted Iraq’s military to be led by those unquestionably loyal to him. As a result, the Iraqi Air Force lacked the leadership it needed to revive itself.

Saddam’s refusal in late 1998 to allow UN inspectors to continue their work in Iraq prompted another set of U.S. and allied air attacks on Iraq. During Operation DESERT FOX, the United States and Britain bombed Tallil Air Base and destroyed several Iraqi remotely piloted aircraft that had been converted from trainers, presumably to deliver chemical or biological weapons.

All of these factors further weakened the tattered remnant of the Iraqi Air Force that had survived the Gulf War. And that remnant wasn’t much; in 2002, the Iraqi inventory totaled 267 aircraft, only 124 of them fighters, some small fraction of which were even combat-ready.

The Most Expensive

When the United States invaded Iraq in 2003, the Iraqi Air Force did not show up. It failed to generate a single sortie. Allied air and ground forces operated without any opposition in the air.

This striking absence of Iraqi Air Force opposition allowed the U.S. Air Force to use its relatively vulnerable aircraft—A-10s and AC-130 gunships, for instance—without much fear they would be shot down.

In the years since the start of the Afghan and Iraq wars, technological advances have made it possible for remotely piloted aircraft to detect and destroy enemy forces on the ground, even if those targets are moving. Pilots on the ground in Nevada have performed air strikes against enemy targets on the other side of the world in Afghanistan and Iraq.

These capabilities tempt some to believe manned fighters are no longer necessary.
However, remotely piloted aircraft are relatively slow and easy to shoot down. They are no match for faster, better armed, and more durable manned fighters that would be more likely to shoot them down than the other way around.

Future wars might well involve opponents with much more powerful air forces than those of Afghanistan and Iraq. Former enemies such as China and Russia, for example, are currently developing fifth generation fighter aircraft with stealth technology.

Air forces with such technology might challenge U.S. control of the skies over battlefields. The skies themselves would be battlefields, with fighter aircraft clashing for control of the air.

If the enemy ever gained air superiority, the dynamic of combat would change immediately. Control of the air is the sine qua non of victory in modern warfare. A powerful enemy fighter force, if not countered by a powerful U.S. fighter force, would destroy other allied aircraft such as transports, helicopters, ISR aircraft, and remotely piloted aircraft.

In terms of national policy objectives, modern fighter aircraft are extremely expensive. The lack of modern fighter aircraft, when war comes, would be even more expensive.
Upon his induction as chief of staff in October 1997, General Michael E. Ryan faced the daunting task of bringing the USAF into line with the realities of the post–Cold War era. One of these realities was that the USAF was the smallest Air Force since its founding in 1947, yet the nation’s strategy of selective engagement dictated that it be ready to fight and win two nearly simultaneous major theater wars, while maintaining its commitments to a growing string of seemingly permanent small-scale contingencies. In Ryan’s words, “…we had done Desert Storm, Somalia, Bosnia, and it looked like a never-ending chain of these things was going to occur…it didn’t look like there was any end.” The mismatch between resources and requirements was forcing the men and women of the USAF into a lifestyle characterized by high operations and personnel tempo at the expense of family life. Drops in Air Force retention rates and recruitment indicated that the situation—if allowed to go unchecked—could reach serious proportions. As he took his position as chief of staff, General Ryan knew he had to act quickly and decisively, and so he implemented several initiatives to relieve the stress of operations tempo on his force.

The concept needed to relieve the stress of the increasing operations tempo—in General Ryan’s sights—was an expeditionary force; a force that would alleviate if not solve the Air Force’s internal problems, but also one that would express to the nation what the Air Force was and how it operated. To some the task was daunting, but his predecessor and many others had already poured the footings of the concept by beginning development of expeditionary forces for employment in Southwest Asia and elsewhere. Certainly General Ryan was not hesitant to step out; as General Richard B. Myers said, “He was not afraid to set course on a new heading.” General Ryan’s new course for the Air Force was the Expeditionary Aerospace Force (EAF): A new way of doing business that improved predictability and stability in personnel assignments and furnished the Service with a powerful management tool to more efficiently align its assets with needs of the war fighters—the regional combatant commanders.

During the planning period, General Ryan was most interested in the impact that EAF would have on his people. In his words, “This was about family. If the family is disgruntled because the [Service] member has no predictability in his life, they’re going to walk.” The regular schedule of EAF rotations aimed to give the families predictability in their lives as well as to provide the combatant commander with a superb air component. Additionally, General Ryan expected EAF to address the issue of taking care of the families at home. If one member of a team is gone, the family copes alone. If the whole team is deployed, the families enjoy a synergy of support from within as well as from without. “So there is an element of effectiveness on the line and one on the home front…you go in teams.” The last essential part of the plan was making sure the Air Force clearly defined how
the EAFs would reconstitute after they returned from a rotation. A stand down period was implemented at the beginning of each cycle in order to express General Ryan’s philosophy that both man and machine needed time to recover after returning home.

With the goal to improve predictability and stability for his Airmen and families, and after almost two years of planning development, the EAF structure began operations on schedule on 1 October 1999 when EAFs 1 and 2 deployed. EAF was an idea whose time had come, and as one historian noted, “Few changes introduced by an Air Force chief of staff have flowed as smoothly through the corporate process as did the EAF.” Role modeling and mentoring, as well as the tenets of leadership and followership—heavily seasoned with common sense—flavored General Ryan’s leadership style as he served the USAF and his nation, yet his strongest leadership skills can be found laced throughout the implementation of EAF. According to his successor, General Jumper, General Ryan’s strongest leadership skill was his selflessness. “Mike Ryan is the one who inspired [people] and then backed them up completely.”

When originally designed this innovative program was entitled Expeditionary Air Forces (EAF.) Today we call it Air Expeditionary Force (AEF.) Since its inception there have been several changes to the program although the basic premise remains: build a program that will meet the needs of the combatant commander while also taking care of the people by providing predictability and stability for Airmen and their families.
Focus On:

JOINT FORCE MULTIPLIERS

America’s Airmen Transition to the Resolute Support Mission

By Maj Gen Jake Polumbo, USAF and Mr. Wesley Long, USAF. Reprinted by permission from the Air and Space Journal. March - April 2014

A nonstandard force of Airmen, both individual augmentees (IA) filling positions on joint manning documents and joint expeditionary tasked (JET) Airmen, is deployed to Afghanistan, helping transition the nation from current combat operations to the Resolute Support mission. This transition focuses the North Atlantic Treaty Organization’s efforts more squarely on enabling Afghan forces to provide security for their nation through “training, advising and assisting.” Airmen supporting the joint force through individual augmentation are long-standing and predate the current Operation Enduring Freedom mission. However, support to the joint force also includes a sizeable number of Airmen who are individually tasked, trained, and deployed to conduct missions not always within their core skill sets. The US Air Force’s support to the joint fighting team in Afghanistan is as varied as it is important. Most Air Force support is provided by standard units conducting normal missions within their core capabilities. For the most part, these standard-force Airmen prepare, deploy, and operate as a unit. Requirements for JET Airmen, on the other hand, have evolved from what was once considered a temporary solution to offset other services’ manpower shortfalls to a permanent element of the Global Force Management Allocation Plan. This means that filling JET taskings will remain a consideration long after Afghanistan when the Resolute Support mission is terminated, and Airmen will continue to under-take them with professionalism and pride. As we transition to a new phase of operations in Afghanistan, now is the time to identify hard lessons won on the battlefield while acknowledging outstanding achievements and contributions to the joint force by nonstandard forces.

Sustaining the Joint Force

Across the board, Airmen contributed magnificently in the past dozen years around the globe. When it comes to Afghanistan, though, our nonstandard forces faced numerous challenges during their predeployment preparation and on the battlefield as they integrated into unfamiliar units without the benefit of their normal Air Force support structure. Identifying the challenges faced by our Airmen and working to provide solutions are a fundamental aspect of leadership. The processes to train, prepare, and deploy JET and IA Airmen have evolved over the years. Those predeployment challenges and solutions are well cataloged.
As a former commander of the 9th Air and Space Expeditionary Task Force–Afghanistan (9 AETF-A), I witnessed the impact of these challenges and implemented corrective actions. At the same time, I was proud to observe the determination and powerful capability of our JET and IA Airmen firsthand. The battlefield experiences of our Airmen are critical as we move forward into the next phase of the Afghanistan campaign.

**Integration Begins with Training**

Since JET and IA deployments are individually tasked and still not as widely understood as standard air expeditionary force deployments, it is necessary to discuss basic background information on the historical progression of JET deployments. The original JET Airmen filled “in lieu of” (ILO) taskings to solve US Army manpower shortfalls in support of Operation Iraqi Freedom in 2004. All of these ILO taskings required some level of predeployment training since the Airmen chosen had to conduct missions outside their basic core skills. Moreover, because the ILO Airmen had to integrate into Army units on the battlefield in Iraq, they needed to understand all of the unit differences between Air Force and Army operations. The Army was responsible for providing this training then and does so today.

In the chief of staff of the Air Force's memorandum “Joint Expeditionary Tasking Term” of 4 December 2008, Gen Norton Schwartz created the term JET and applied it to all Airmen who fill jointly sourced solution requests for forces to “emphasize our contribution to the fight with a single term that reflects our esprit and mission.” These JET and IA deployments have supported Operations Enduring Freedom, Iraqi Freedom, and New Dawn. However, key general characteristics of all of these deployments remained largely unchanged through the years. That is, as Airmen are individually tasked from across the Air Force, they attend predeployment training provided by the US Army for combat and mission skills. They then deploy and assimilate into joint or sister-service units widely dispersed across the battlefield. The commanders of these units exercise tactical control (TACON) of the JET and IA Airmen.

**Deployment Across the Area of Operations**

At the height of operations, the Air Force had more than 4,200 JET and IA Airmen deployed to a large number of combat locations in Iraq and Afghanistan. Today, approximately 1,700 JET and IA Airmen are deployed in Afghanistan at more than 50 operating locations (see the figure below), with about one-third of those locations having fewer than five Airmen assigned. The challenge of commanding Airmen in such a low-density and scattered environment seems obvious, especially when depicted against the map of Afghanistan’s sparse infrastructure. In addition, JET and IA Airmen are deployed throughout the US Central Command area of operations in support of other contingency operations; furthermore, if history is an indicator of the future, they will continue to deploy around the world in support of geographic combatant commanders.
As the commander in Afghanistan, I retained administrative control (ADCON) and operational control (OPCON) of all JET and IA Airmen assigned to US Air Forces Central Command (USAFCENT) in the Combined Joint Operating Area–Afghanistan. A basic responsibility of a commander is ensuring the well-being of his or her Airmen. The 9 AETF-A commander has command authority over all Airmen assigned, both standard and nonstandard forces.

Caring for and Tracking Airmen in the Fight

In a memorandum dated 31 May 2009, USAFCENT commander Gen Gary North established JET air expeditionary units in Afghanistan with the primary intent of providing specified ADCON over all deployed JET and IA Airmen. Although not stated in the memo, his primary intent was to prevent the possibility of a “lost patrol.” In other words, to ensure accountability, all Airmen would have and know the Air Force commander in their chain of command. In turn, all commanders would know and track the Airmen under their command.

By 2010 the 466th Air Expeditionary Group (466 AEG) and its three squadrons were activated to assume this responsibility in Afghanistan. However, when I assumed command of the 9 AETF-A in 2012, the 466 AEG had been scaled down to only one squadron—the 966th Air Expeditionary Squadron, which moved to the Transit Center at Manas, Kyrgyzstan, in an effort to reduce the footprint of Airmen in Afghanistan. This initiative, necessary at the time, significantly reduced the commander’s battlefield circulation capability and degraded direct outreach to each JET and IA Airman.

Airmen’s lack of direct access to their service’s chain of command caused problems. The first indication of the difficulty was the increase in complaints made by Airmen after they had returned to their home stations. These complaints included incidents of basic and sexual assault. The fact they were not reported until after the Airmen redeployed was unacceptable and indicated a deficiency within the chain of command.

Two actions were taken to correct this deficiency. First, under the authority of the USAFCENT commander, I implemented what is now known as the Airman Blue Line Program (ABLP) as the primary mechanism to define the roles and responsibilities of the ADCON and OPCON command authority and to establish a clear chain of command for each JET and IA Airman. The intent was to create an unbreakable but flexible “blue line” as a link between Airmen and the US Air Force while they were deployed to another service’s unit. The ABLP clearly assigned responsibilities of each participant at every level of command, from the Airman all the way to the USAFCENT commander. Today the ABLP is briefed to all JET and IA Airmen as they go through predeployment training and again when they in-process at deployed stations in-theater.
Second, I reactivated the 466 AEG and returned squadron-sized elements to Afghanistan. This action had multiple benefits. It not only enhanced unity of command and effort within the 9 AETF-A but also increased the number and effectiveness of routine battlefield circulations. Having a group in place allowed the O-6 commander to be on par with most of the commanders of the TACON units where the JET and IA Airmen were assigned.

The solutions to these challenges were found in basic Air Force doctrine and other guidance, but the lesson we learned is key for future operations. Moreover, the implementation required advocacy at the highest level since adding the manpower back on the books in Afghanistan was counter to the joint force commander’s intent. Most importantly, the cost of inaction was not acceptable due to the potentially adverse impact on our Airmen.

CMSgt Frank Batten, 9 AETF-A command chief, acknowledges that one of the most significant limitations is how JET/IA requests for forces (RFF) are revalidated and/or turned off. He explained that after a position is validated (i.e., the Army has critically manned jobs versus Air Force manning levels), recurring checks should ensure that the RFF is still valid according to the original criteria.

Further, as the TACON commander determines the end of mission, there is no automatic trigger to turn off the JET/IA RFF. During this transition, the Air Force must work with the requesting service to determine when to manage the revalidation and/or drawdown of the JET and IA positions. Additionally, OPCON responsibility currently does not allow the TACON authority to rerole/relocate JET/IA Airmen—potentially a problem if Airmen are being asked to perform a mission for which they are not trained or safely prepared.

**Crucial Asset to Our Sister Services**

Despite these challenges, our JET and IA Airmen continued to prove their superior capability and demonstrate the highest levels of flexibility as they contributed to the joint fighting team. During my many trips throughout the battlefield, I attempted to make contact with as many Airmen as possible. I was continually impressed with the capabilities of all of our JET and IA Airmen. The feedback I received from each of the TACONs was always positive. The most crucial consideration is that our Airmen were integral to supporting the joint force. A news article released by the Department of Defense notes that:

> joint expeditionary tasked airmen have two commanders: an Army commander responsible for their day-to-day missions, and an Air Force commander responsible for their administrative and operational control.

> And both sing the praises of their Airmen.

> Army Lt. Col. Matt Smith, the [former] task force commander . . . [at Forward Operating Base Lightning in Afghanistan], said airmen are crucial in ensuring that the joint and combined services achieve their missions.
“Airmen help fill a critical function in our headquarters and are doing an exceptional job—every one of them,” he said. “One of my greatest fears is if the Air Force leaves us here; our operations run like a charm because of our Airmen.”

The wing commander responsible for all JET airmen in Afghanistan said airmen supporting the joint fight are examples of the Air Force’s “all in” approach to the conflict.

“Mentoring and partnering with the Army, Navy and Afghan forces are crucial to this war effort,” said Air Force Brig. Gen. Steven L. Kwast, [former] 455th Air Expeditionary Wing commander. “Every airman has to be all in; you’ll be more focused on the mission, and you’ll ultimately be a better airman and person. Airmen will do anything [the joint community asks] of us, as long as we’re trained to do the job correctly.”

**Airmen in the Fight**

These Airmen include MSgt Rebekah Virtue, an aerospace medical service technician assigned to a JET tasking with the 157th Combat Sustainment Support Battalion, Bagram Airfield, Afghanistan. As a convoy medic, Master Sergeant Virtue was appointed by the brigade commander to serve as the senior medic over all battalion medics after her leadership abilities and medical skills were highlighted by the battalion command sergeant major. Due to an absence of Army senior enlisted personnel, Master Sergeant Virtue was asked to take on the senior medic role, overseeing 18 combat medics. Her team aided in 175 convoys, expedited 45 aeromedical evacuations, and saw to the needs of 4,248 military members and civilians as well as 159 local nationals. During her deployment, Master Sergeant Virtue and her team provided medical escort coverage for 20,000 miles of outside-the-wire convoy movements and responded to 76 attacks by vehicle-borne improvised explosive devices, half of which resulted in multiple casualties. Master Sergeant Virtue exemplified all of the Air Force core values as a JET Airman, especially “service before self” and “excellence in all we do.”

Our Airmen also led provincial reconstruction teams (PRT), which supported reconstruction efforts and empowered local governments to govern their constituents more effectively. One such team in the region of Paktya, Afghanistan, was the US military’s first PRT. Team members not only assisted, advised, and mentored their provincial partners but also conducted counterinsurgency operations. This effectively culminated more than 10 years of PRT operations in Paktya, resulting in the administration of nearly $60 million in Commanders’ Emergency Response Program funds, the construction of 38 health facilities, and an increase in schools from 24 to 518 and in agricultural projects from fewer than 10 during Taliban rule to over 68 province-wide today. The Paktya area is now home to an estimated 1.2 million residents, up from fewer than 400,000 under Taliban rule. Afghans the world over have returned home seeking a better life for their children and are credited not only with enduring hostile contact with insurgents but also with proudly completing the development of Afghanistan’s first self-sufficient province.
The 466 AEG maintained accountability of all JETs/IAAs in this area 24 hours a day, seven days a week. Deliberate efforts by the group to implement the ABLP made our Battlefield Airmen active sensors who relayed critical contact events back to the group—and thus the Air Force—without prompting and in real time. When one of our combat medics was critically wounded and being prepared for theater medevac without any notice to Air Force leadership, a JET Airman called the group to advise of the situation. As a result, the group was accountable for the Airman to Headquarters 9 AETF-A hour-by-hour with complete status and location as the medevac occurred. Furthermore, they simultaneously certified that both the Air Force Combat Action Medal and Purple Heart were awarded to our hero before leaving for the regional medical center in Germany.

From being entrusted to leading joint and coalition forces and securing hundreds of millions of dollars of equipment, US Air Force JET/IA Airmen—the most invaluable and dynamic aspect of airpower—provided the equivalent of a large combat air wing across the entire country of Afghanistan. These Airmen remain a critical manpower component for the future of the Resolute Support mission, just as they have during Operations Enduring Freedom, Iraqi Freedom, and New Dawn. They are an enduring feature of Air Force support to the joint force worldwide. Challenges remain to ensure the highest level of support to these nonstandard forces, especially as the operations tempo begins to decrease. It is important to continue identifying and understanding the lessons learned from this significant service effort and adapt the Airman Blue Line Program as needed. However, I feel certain that the outstanding individual contribution of these Airmen to the joint force around the globe will continue without fail.

Bibliography

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52. CENTAF airpower summaries for Sept. 3-5 that included operations in Afghanistan on Sept. 3, 2006.
68. Gen. Peter Pace, Chairman, Joint Chiefs of Staff, Defense Writers Group, April 17, 2007.


105. Ibid.


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