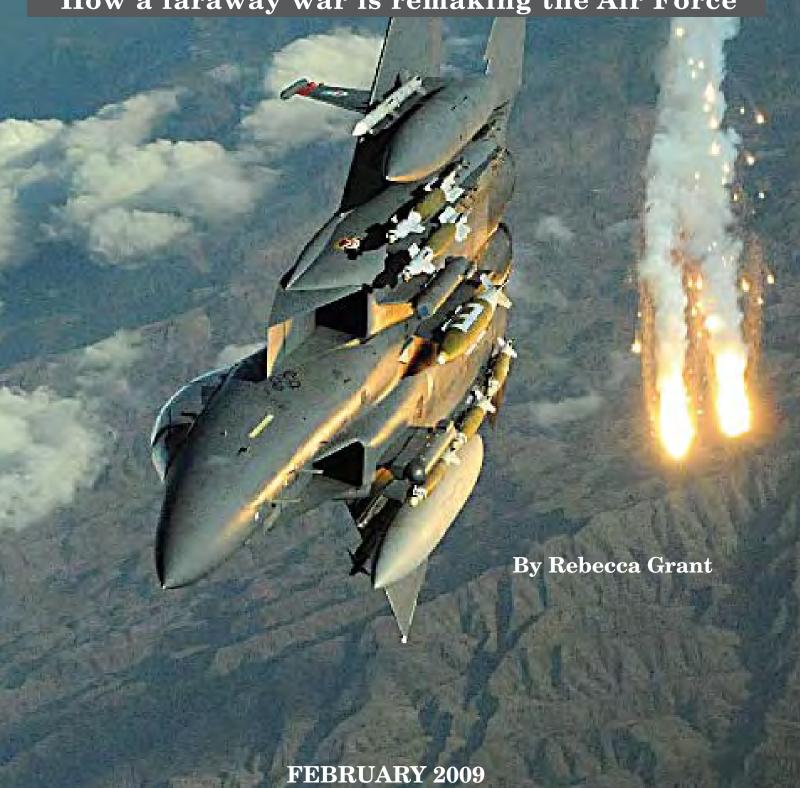
## AIRPOWER IN AFGHANISTAN

How a faraway war is remaking the Air Force



A MITCHELL INSTITUTE SPECIAL REPORT



#### **Brig. Gen. Billy Mitchell**

On September 12, 1918 at St. Mihiel in France, Col. William Mitchell became the first person ever to command a major force of allied aircraft in a combined-arms operation. This battle was the debut of the US Army fighting under a single American commander on European soil. Under Mitchell's control, more than 1,100 allied aircraft worked in unison with ground forces in a broad offensive—one encompassing not only the advance of ground troops but also direct air attacks on enemy strategic tar-



gets, aircraft, communications, logistics, and forces beyond the front lines.

Mitchell was promoted to Brigadier General by order of Gen. John J. Pershing, commander of the American Expeditionary Force, in recognition of his command accomplishments during the St. Mihiel offensive and the subsequent Meuse-Argonne offensive.

After World War I, General Mitchell served in Washington and then became Commander, First Provisional Air Brigade, in 1921. That summer, he led joint Army and Navy demonstration attacks as bombs delivered from aircraft sank several captured German vessels, including the SS Ostfriesland.

His determination to speak the truth about airpower and its importance to America led to a court-martial trial in 1925. Mitchell was convicted, and resigned from the service in February 1926.

Mitchell, through personal example and through his writing, inspired and encouraged a cadre of younger airmen. These included future General of the Air Force Henry H. Arnold, who led the two million-man Army Air Forces in World War II; Gen. Ira Eaker, who commanded the first bomber forces in Europe in 1942; and Gen. Carl Spaatz, who became the first Chief of Staff of the United States Air Force upon its charter of independence in 1947.

Mitchell died in 1936. One of the pallbearers at his funeral in Wisconsin was George Catlett Marshall, who was the chief ground-force planner for the St. Mihiel offensive.

**ABOUT THE MITCHELL INSTITUTE:** The General Billy Mitchell Institute for Airpower Studies, founded by the Air Force Association, seeks to honor the leadership of Brig. Gen. William Mitchell through timely and high-quality research and writing on airpower and its role in the security of this nation.

**ABOUT THE AUTHOR:** Dr. Rebecca Grant is an airpower analyst with nearly 20 years of experience in Washington, D.C. She is a Senior Fellow of the Lexington Institute and president of IRIS Independent Research. She has written extensively on airpower and serves as director, Mitchell Institute, for the Air Force Association.

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By Rebecca Grant

FEBRUARY 2009

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### AIRPOWER IN AFGHANISTAN



An Air Force A-10 attack aircraft takes off from Bagram Air Field, Afghanistan, in December 2008. Note C-130 transports on the ramp. Both aircraft have been key to US operations in the war against the Taliban and al Qaeda. (USAF photo/SSgt. Samuel Morse)

#### I. 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, US Army Gen. David D. McKiernan.<sup>1</sup>

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 de-

vices"—IEDs—has expanded, rising to 3,276 in Afghanistan for the year 2008, a 45 percent increase over 2007.<sup>2</sup> 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 US 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 US Central Command.<sup>3</sup> 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 US-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 latest 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. (See "Understanding the Power of the Poppy," p. 11.)

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

#### NOTES

- 1. US Army Gen. David D. McKiernan, commander, International Security Assistance Force, "Commander ISAF condemns suicide attack on Afghan civilians," NATO release, Dec. 28, 2008.
- 2. "Afghan roadside bombs hit record in 2008," Tom Vanden Brook, *USA Today*, Jan. 25, 2009.
- 3. Author interview with Lt. Gen. Gary L. North, commander of Air Forces Central/9th Air Force, Jan. 9, 2009.
- 4. ISAF Troops Placemat, Jan. 12, 2009.

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. (See "Concerns About 'Single-Point Failure," p. 12.)

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.<sup>5</sup> 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.<sup>6</sup> "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 pre-

**NOTES** 

5. Air Force Lt. Col. Michael Pietrucha, "Here Be Dragons: Off the Edge of the Chart in Afghanistan," Oct. 31, 2008.

6. "TACPs Provide Vital Link Between Pilots, Ground Troops," SSgt. Andrea Thacker, Air Forces Central News Team, Dec. 30, 2008.

Long after al Qaeda's Sept. 11, 2001 attack in New York, the ruins of the World Trade Center towers were still smoldering. More than 3,000 died in New York, Washington, and Pennsylvania, igniting a war that is in its eighth year. (USN photo/J01 Preston Keres)



Afghanistan, as the map shows, is a landlocked nation in a rough neighborhood. It affects the interests of two great powers—China and India—and two regional powers—Pakistan and Iran—as well as its five "stan" neighbors to the north. Just beyond them lies Russia. (Staff map/Zaur Eylanbekov)



cision, 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.<sup>7</sup> 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.<sup>8</sup>

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 Con-

**NOTES** 

7. "2004-2008 Combined Forces Air Component Commander Airpower Statistics," US Air Forces Central, Dec. 31, 2008.

8. Royal Air Force, "Airpower in an Uncertain World," Part 15 (http://www.raf.mod.uk/role/airpoweruncertainworld.cfm).

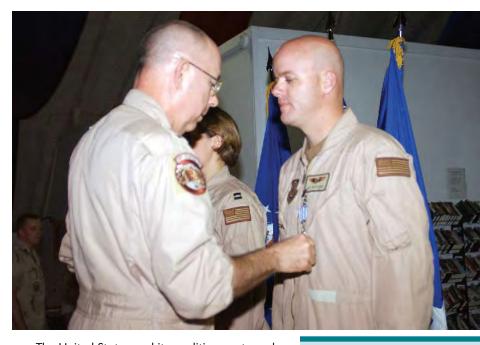
gressional Research Service, in a recent report on the war by analyst Kenneth Katzman, summed up the situation this way: "There is no agreement on the causes of the deterioration—reasons advanced include Afghan government corruption; the absence of governance in many rural areas; safe haven enjoyed by 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. 10 "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.

#### **II. 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.



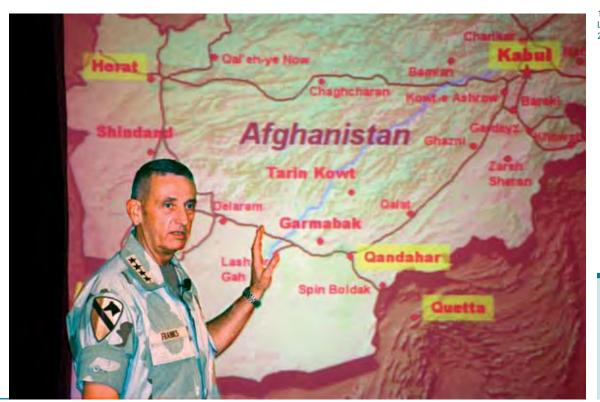
The United States and its coalition partners began Operation Enduring Freedom with a series of air strikes on Oct. 7, 2001. It was the first blow in the global war against terrorism following the attacks on the United States on Sept. 11, 2001, and it soon produced a stunning success. The Air Force's 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

USAF Lt. Gen. Michael Moseley (I) pins a DFC on TSgt. James Pittman. In November 2001, Moseley took over as commander of Central Air Forces. As the "air boss," he played a major role in the early air war in Afghanistan. Moseley became USAF Chief of Staff in late 2005. (USAF photo/Amn. Bridget Rapp)

#### **NOTES**

9. Kenneth Katzman, Congressional Research Service, "Afghanistan: Post-War Governance, Security, and US Policy," Nov. 26, 2008.

10. Barack Obama, "Renewing American Leadership," *Foreign Affairs*, July/August 2007



US Army Gen. Tommy Franks, commander of US Central Command, formulated and ran the war in its first year. Franks was well aware of the problems of completing the destruction of the Taliban or even of gauging the size of the surviving remnant. (DOD photo/R.D.



During Operation Anaconda in March 2002, a combined force of US and Afghan ground troops attempted to clear the Shahi-Kot Valley but met furious resistance from al Qaeda and Taliban fighters. Airpower helped the US-led force prevail in the battle across the craggy mountain peaks, but both sides took casualties. (DOD photo)

**NOTES** 

11. Gen. John M. Keane, Army vice chief of staff, quoted in Kim Burger interview, *Jane's Defence Weekly*, Jan. 30, 2002.

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 US 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,



Aeromedical evacuation has played a major role in Afghanistan. Here, medics carry a US civilian contractor onto an Air Force C-130 airlifter during a temporary stop at Balad Air Base in Iraq. (USAF photo/MSgt. Scott Wagers)

in short order began to fall like dominoes. "Those population centers toppled as the result of a combined arms team: US airpower and a combination of special forces and Afghan troops," observed Gen. John M. Keane, then the Army vice chief of staff.<sup>11</sup> 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. US 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 US (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 guick USled 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.12 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." 13 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." 14 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. (See "Learning to Live With Pakistan," p. 24.)

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." <sup>15</sup> 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." <sup>16</sup>

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.<sup>17</sup> However, Stufflebeem admitted that

#### **NOTES**

- 12. Gen. Tommy R. Franks, US Central Command commander, DOD press briefing, Nov. 27, 2001.
- 13. Donald H. Rumsfeld, Secretary of Defense, DOD press briefing, Nov. 27, 2001.
- 14. Franks, DOD press briefing, Nov. 15, 2001.
- 15. Rumsfeld, DOD press briefing, Nov. 15, 2001.
- 16. Rumsfeld, Nov. 27, 2001.
- 17. Rear Adm. John D. Stufflebeem, Joint Staff spokesman, DOD press briefing, Nov. 14, 2001.



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 US 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 root-

This photo, taken in the first days of the war, shows the devastation done by US precision bombs to a row of MiG fighters and a cargo aircraft at Herat Field in Afghanistan. All three USAF heavy bombers—the B-1, B-2, and B-52—saw action in the war. (DOD photo)

In Afghanistan, troops on the ground (or on horseback) usually carried GPS and other devices to help focus airpower attacks on the enemy. Together, air crews and ground units learned the art of rapid retargeting in response to air controllers working with special operations forces. (DOD photo)

#### **NOTES**

- 18. Donald H. Rumsfeld, Secretary of Defense, DOD press briefing, Nov. 27, 2001.
- 19. Rumsfeld, DOD press briefing, Dec. 27. 2001.
- 20. Author interivew, Gen. T. Michael Moseley, Air Force Chief of Staff, June 25, 2003
- 21. Rumsfeld, DOD press briefing, Aug. 15, 2002.
- 22. Gen. Tommy R. Franks, US Central Command commander, DOD press briefing, Aug. 15, 2002.

Hamid Karzai, shown here meeting with troops, was selected to be interim head of government by the Afghan national assembly in July 2002. Free elections in October 2004 installed Karzai as the nation's first President. (US Army photo/Spc. Michael Zuk)



ing out terrorists where they hide," Rumsfeld said in late November 2001.<sup>18</sup> 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." 19 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 US custody. Still, most US 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 US 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 US.

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."<sup>20</sup>

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.<sup>21</sup> 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."22

It wasn't that the US 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." 25

By August 2003, NATO had taken command of the ISAF itself. The US-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 US 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. US 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.<sup>26</sup> 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."<sup>27</sup>

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 US Army's 25th Infantry Division (Light), commented at Bagram Air Base in August 2004, "CAS is my reserve force."<sup>28</sup>

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

#### NOTE

- 23. Donald H. Rumsfeld, Secretary of Defense, editorial board with *Washington Post*. June 3, 2002.
- 24. Rumsfeld, DOD press briefing, May 1, 2002.
- 25. Michael G. Vickers, assistant secretary of defense (special operations & low-intensity conflict), Defense Writers Group, Feb. 6, 2008.
- 26. Operation Enduring Freedom killed in action/died of wounds statistics from Defense Manpower Data Center, as of Jan. 3, 2009.
- 27. Lt. Col. Phil Haun, "Quick-Look: The Nature of Close Air Support in Low Intensity Conflicts," *Air and Space Power Journal*, fall 2006.
- 28. Maj. Gen. Eric T. Olson, commander of Combined Joint Task Force 76 and the US Army's 25th Infantry Division (Light), quoted in "Quick-Look: The Nature of Close Air Support in Low Intensity Conflicts," Air and Space Power Journal, fall 2006.

Franks visits troops at Bagram in August 2002. At this time, Franks was saying, "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. (DOD photo/Army Spc. Eric Hughes)





An armed MQ-9 Reaper unmanned aerial vehicle taxis on a runway in Afghanistan. UAVs became stars in the war. Predators and later Reapers provided increasing amounts of full-motion video to keep track of ground force activity. (USAF photo/SSgt. Brian Ferguson)

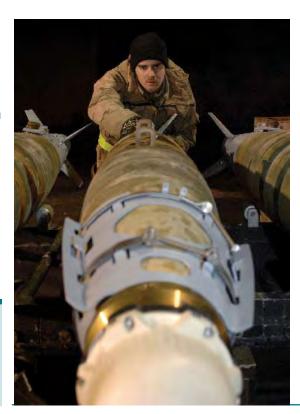
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- 29. Maj. Gen. John F. Sattler, Central Command director of operations, DOD press briefing, May 28, 2004.
- 30. Thomas H. Johnson and M. Chris Mason, "No Sign Until the Burst of Fire: Understanding the Pakistan-Afghanistan Frontier," *International Security*, Vol. 32, No. 4 (spring 2008), p. 41-77.
- 31. OEF killed in action/died of wounds statistics from Defense Manpower Data Center, as of Jan. 3, 2009.
- 32. Donald H. Rumsfeld, US Secretary of Defense, and Afghanistan President Hamid Karzai, press conference in Afghanistan, April 13, 2005.
- 33. Brig. Gen. James G. Champion, deputy commanding general for operations and intelligence, Combined Joint Task Force 76, DOD press briefing, Aug. 4, 2005.

A1C Ryan Thompson, working at Bagram AB, Afghanistan, aligns strakes with lugs on a GBU-38 Joint Direct Attack Munition. Precision weapons have often provided the key to success in this war. (USAF photo/MSgt. Demetrius Lester)

a safe haven in Afghanistan, to keep them off balance and again bring them to justice through combat ops."<sup>29</sup>

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.<sup>31</sup> 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.<sup>32</sup>

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 US 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.<sup>33</sup> Still, the reassertion of power by the Taliban and other warlords had set up the conditions for the expansion of an insurgency. US 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.



Poppies are the source of much of the political support for the Taliban and other insurgent forces, and thus is fueling the renewal of violence in Afghanistan.

The reasons go deep in the land and history of Afghanistan. According to the CIA, Afghanistan's 32 million people have an average life expectancy of just 44 years. Women bear more than six children on average but suffer infant mortality rates more than 150 per 1,000 live births. Only 43 percent of Afghan men can read, but they are extremely literate compared to Afghan women, only 12 percent of whom can read.

The country's entire gross domestic product for 2007 was just \$35 billion—about one-20th the size of the Pentagon budget. Not included in the official GDP is an estimated \$4 billion in revenue from poppy production, which has long been grown in Afghanistan for the opium trade. Poppies thrive even in the poor soil and dry conditions. A hectare of poppies can bring \$4,600 per year compared with only \$390 for a hectare of wheat.<sup>1</sup>

Trade in poppies to produce opium has dominated power and politics in the region for centuries. What's alarming is that poppy production is increasing. The CIA judged that 2007 brought a 17 percent increase and a near record in poppy production even during a dry growing season.

Afghanistan is the basic source of 90 percent of the world's opium. It comes primarily from Helmand province, so it's no surprise that Taliban activity thrives in Helmand where the poppy chain of production and smuggling requires regular pay-outs to the Taliban. "The Taliban say we are doing the jihad, and you are making money so you should support us," one smuggler explained to *The Guardian*.<sup>2</sup>

A poppy farmer described for *The Guardian* the intertwined

interests that conspire to keep poppy farming profitable. He said: "The Taliban benefit from the poppy because the farmers pay them taxes. And when the government destroys the fields, the people support the Taliban." Sometimes the farmers pay officials not to carry out poppy destruction on their lands. "Two years ago we paid them so they only destroyed two jeribs [one acre] of my land," said this farmer.

It's hard to say if NATO can put a stop to the poppy trade. What's imperative, however, is to decrease the flow of funds to the Taliban. NATO identified the problem several years ago. "The Taliban's primary source of funding is, we're absolutely confident now, opium poppy, which, incidentally, for good Muslims is completely out of order," said Britain's Gen. David Richards, shortly after he took over NATO's International Security Assistance Force in 2006.<sup>3</sup>

According to Adm. Michael G. Mullen, Chairman of the Joint Chiefs of Staff, "Additional forces, when they flow, will certainly make it much more challenging in the south for narcotics, for those that are in that business, than it is right now." As Afghan President Hamid Karzai said in September 2006: "Poppy is one thing that we must fight, and fight effectively." 5

NATO adopted a counternarcotics policy for Afghanistan in October 2008, but NATO partners may choose whether or not their forces participate. US law has also prohibited use of some funds for aerial spraying.<sup>6</sup>

"We asked for authority for NATO to be able to attack facilities, labs, where the value is added from poppies to opium to heroin, the laboratories and the facilitators, the traffickers," said Army Gen. Bantz Craddock, NATO's Supreme Allied Commander Europe and commander, US European Command. "We were granted that authority."

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- 1. "NATO in Afghansitan: A Test of the Transatlantic Alliance," Congressional Research Service, July 18, 2008.
- 2. "Life in Helmand, Where Rich Rewards Are Reaped by Poppy Farmers, Police, and Taliban," Ghaith Abdul-Ahad, *The Guardian*, Dec. 22, 2008.
- 3. British Gen. David Richards, commander, International Security Assistance Force, DOD press briefing from Afghanistan, Oct. 17, 2006.
- 4. Adm. Michael G. Mullen, Chairman, Joint Chiefs of Staff, DOD press briefing, Dec. 10, 2008.
- 5. Afghan President Hamid Karzai, DOD press briefing with US Secretary of Defense, Sept. 25, 2006.
- 6. "Afghanistan: Postwar Governance, Security and US Policy," Kenneth Katzman, Congressional Research Service, Nov. 26, 2008.
- 7. Army Gen. Bantz Craddock, NATO Supreme Allied Commander Europe and commander, US European Command, Defense Writers Group, Jan. 9, 2009.



TSgt. Jim Jochum, an Air Force special operations force aerial gunner serving in Afghanistan in 2004, shoves a round into the 105mm cannon on board an AC-130 gunship. (USAF photo/Capt. Denise Boyd)

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

#### **CONCERNS ABOUT SINGLE-POINT FAILURE**

Logistics in war forms the stem for the bloom of victory, to paraphrase Winston Churchill. In land-locked Afghanistan, logistics supply is exceedingly challenging. Any policy options for increased NATO and US capabilities there depend on continued supply of war materiel.

Most supplies going into Afghanistan arrive first at the port of Karachi, Pakistan, and then transit over land routes. The principal route extends 1,200 miles through the Khyber pass, while another reaches into Afghanistan from the south. According to the Pentagon, this route carries 75 percent of supplies and 40 percent of the fuel for forces in Afghanistan. Commercial overseas shippers hold the primary contracts with US Transportation Command for shipment of food, fuel, ammunition, and more. According to TRANSCOM, the shipments do not include sensitive military items. "You're not seeing MRAPs" going through the Khyber pass, said a TRANSCOM spokesman.

However, the demands for fuel, food, and other supplies are heavy.

"I've had a concern about this for months," said Adm. Michael G. Mullen, Chairman, Joint Chiefs of Staff, in December 2008.<sup>2</sup> Even without the recent incidents, Mullen said: "It's a single point of failure for us."

The logistics supply route worked reasonably well until an upsurge of incidents in 2007 darkened the picture. Shippers had frequent reports of confiscated cargo or trucks arriving filled only with sand. For the most part, though, the contract shippers were able to protect the routes. Then in June 2008, a 50-truck convoy was attacked and reports NOTES

stated seven of the drivers were beheaded.

After that, the Joint Staff started exploring in earnest other options for sustaining the effort in Afghanistan. Mullen remarked on the progress and expressed confidence that there was a way to keep the fight going.

In the works is a Northern Corridor route transiting Uzbekistan and Kazakhstan. Informal talks with Russia about the route began in early 2008.

Work on alternate routes came not a moment too soon. In mid-November, insurgents struck a NATO supply depot near Peshawar, destroying about 300 vehicles.

Reacting to the challenge, Pakistan closed the Khyber Pass in late December for a clearing operation to shut down interference. "We want to get rid of them and we mean business this time," said Tariq Hayat Khan, the administrator of the Khyber tribal agency.<sup>3</sup> Supplies to NATO were suspended while Pakistan Army forces used tanks and helicopter gunships to attack insurgent hideouts along the routes. The week-long operation netted 15 people wanted by the government of Pakistan. More than 37 hideouts for insurgents along the supply route were claimed as destroyed.<sup>4</sup>

Pakistan's Army Chief, Gen. Ashfaq Parvez Kayani insisted to Army Gen. Bantz Craddock, NATO's Supreme Allied Commander Europe and commander of US European Command, that the supply problem was "temporal" and more the work of criminals than insurgents. Still, Craddock made clear he wanted flexibility in the vital supply routes.

<sup>1. &</sup>quot;US Seeks More Supply Routes for Afghanistan," Gerry Gilmore, Armed Forces Press Service, Dec. 31, 2008.

<sup>2.</sup> Adm. Michael G. Mullen, Chairman, Joint Chiefs of Staff, DOD press briefing, Dec. 10, 2008.

<sup>3. &</sup>quot;Pakistan Closes NATO's Khyber Pass Route into Afghanistan," Zahid Hussain, *Times of London,* Dec. 31, 2008.

<sup>4. &</sup>quot;Around the World: Khyber Action Near End," Washington Post, Jan. 2, 2008.

<sup>5.</sup> Army Gen. Bantz J. Craddock, NATO Supreme Allied Commander Europe and commander, US European Command, Defense Writers Group, Jan. 9, 2009.

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. US 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."35



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

#### III. 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 callAir Force A-10 attack aircraft, such as this one dropping flares during a combat patrol over Afghanistan, often get calls from ground forces in need of air support. They can either drop bombs or lay down awesome strafing with 30 mm cannon. (USAF photo/SSgt. Aaron Allmon)

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34. Army Lt. Gen. Karl W. Eikenberry, commander, Combined Forces Command-Afghanistan, radio interview on "NPR Morning Edition," May 10, 2006.

35. British Gen. David Richards, commander, International Security Assistance Force, DOD press briefing from Afghanistan, Oct. 17, 2006.



High above Helmand Province, an Air Force KC-135R aerial tanker refuels a Navy EA-6B electronic warfare aircraft (bottom) and F/A-18 fighter. The Air Force's capacity to gas up the aircraft of all services has been vital in Afghanistan. (DOD photo/Navy Cmdr. Erik Etz)

Two Air Force F-15Es pull away from each other over Afghanistan. Versatility is the key to the effectiveness of these heavyweight aircraft. The F-15E does everything from watching over convoys to delivering a big punch when needed. (USAF photo/SSgt. Aaron Allmon)

#### NOTES

36. Maj. Gen. Benjamin C. Freakley, Combined Joint Task Force 76 commander and commanding general of 10th Mountain Division, DOD press briefing, Jan. 26, 2007.

37. Thomas H. Johnson and M. Chris Mason, "No Sign Until the Burst of Fire: Understanding the Pakistan-Afghanistan Frontier," *International Security*, Vol. 32, No. 4 (spring 2008), p. 41-77.

38. "2004-2008 CFACC Airpower Statistics," US Air Forces Central, Dec. 31, 2008.

39. Lt. Gen. Karl Eikenberry, commanding general, Combined Forces Command-Afghanistan, DOD press briefing, May 10,

40. "Coalition Launches Operation Mountain Lion in Afghanistan," American Forces Press Service, April 12, 2006.

41. Author interview, Lt. Gen. Gary North, CFACC, Jan. 9, 2009.

TSgt. Stephen Thackery, a medic with the 33rd Expeditionary Rescue Squadron in Afghanistan, flew alongside Army troops in this Air Force HH-60 Pave Hawk. Thackery and others helped provide swift medical evacuation. (USAF photo/Capt. Michael Meridith)



ing for a "summer of blood" in 2006 and boasting that Taliban forces would retake Kandahar, just to spite Hamid Karzai.<sup>36</sup> Ultimately the Taliban fomented what two scholars later called an "algebraic increase in violence."<sup>37</sup> 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.<sup>38</sup> 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 US, 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." 39

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 US-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. 41 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 US 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." <sup>42</sup> 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.<sup>43</sup> 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 US 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 2006.44 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 US 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. 45 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 ex-



clusively 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

Army Gen. John Abizaid (r), commander of US forces, meets with Afghan army counterparts in 2006. At this point, Abizaid believed that the Taliban did not represent "a mortal danger" to the Karzai government, but added that "we'd hoped to be at the point where we were doing more development and less fighting." (US Army photo/Capt. Cenethea Harraway)

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- 42. Gen. John P. Abizaid, commander, CENTCOM, Defense Writers Group, Sept. 19, 2006.
- 43. "US Air Strikes in Afghanistan Top 750 for May," Associated Press, June 7, 2006.
- 44. Donald H. Rumsfeld, Secretary of Defense, DOD press briefing, July 11, 2006.
- 45. Afghanistan President Hamid Karzai, DOD press briefing with US Secretary of Defense, July 11, 2006.

Air Force Lt. Gen. Gary North speaks to airmen at Bagram. North since late 2005 has served as the combined force air component commander of US Central Command, overseeing the air war in Afghanistan as well as operations in Iraq. (USAF photo/SSgt. Joshua Jasper)



At dawn, a crew chief of the 455th Expeditionary Aircraft Maintenance Squadron marshals an F-15E, which shortly departed Bagram for a patrol over a battle area. (USAF photo/SSgt. Samuel Morse)

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." 46

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

A1C Daniel Morton secures a bomb carried atop the "ram jammer" operated by A1C David Pownell. The two airmen are loading up a B-1B bomber at an unidentified base in Southwest Asia, from which the US launches operations over Afghanistan. (USAF photo/SSgt. Douglas Olsen)

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- 46. Royal Air Force, "Airpower in an Uncertain World," Part 15 (http://www.raf.mod. uk/role/airpoweruncertainworld. cfm).
- 47. Gen. James L. Jones, Supreme Allied Commander in Europe and commander, US European Command, DOD press briefing, Sept. 20, 2006.
- 48. "Operation Medusa: The Battle for Panjwai; Part 1: The Charge of Charles Company," Adam Day, *Legion Magazine*, September 2007.



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 US Marine Corps Gen. James L. Jones, who was then NATO's Supreme Allied Commander Europe and commander of US 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."48

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

| Southwest Asia Airpower Statistics<br>(As of December 31, 2008) |        |        |        |        |        |  |  |  |  |
|---|--------|--------|--------|--------|--------|--|--|--|--|
|   | 2004   | 2005   | 2006   | 2007   | 2008   |  |  |  |  |
| Type of Sortie  |        |        |        |        |        |  |  |  |  |
| OIF CAS Sorties   | 14,292 | 16,924 | 15,676 | 19,554 | 18,423 |  |  |  |  |
| OEF CAS Sorties   | 6,495  | 7,421  | 10,519 | 13,965 | 19,603 |  |  |  |  |
|   |        |        |        |        |        |  |  |  |  |
| OIF Munitions Dropped   | 285    | 404    | 229    | 1,447  | 851    |  |  |  |  |
| OEF Munitions Dropped   | 86     | 176    | 1,770  | 3,572  | 3,369  |  |  |  |  |

**CAS** = Close Air Support

OIF = Operation Iraqi Freedom

OEF = Operation Enduring Freedom in Afghanistan

(Beginning in 2006, OEF includes NATO's International Security Assistance Force)

Source: 2004-2008 Combined Force Air Component Commander Airpower Statistics

aircraft typical for Afghanistan operations: US Air Force A-10 attack aircraft and B-1B bombers, US 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. <sup>49</sup> 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."50 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.51

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 US Central Command Air Forces (CENTAF).<sup>52</sup>

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. 53 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." 54

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

#### **NOTES**

- 49. "CENTAF Releases Airpower Summaries for Sept. 3-5," Air Force Print News release that included operations in Afghanistan on Sept. 2, 2006.
- 50. "Operation Medusa: The Battle for Panjwai; Part 2: Death in a Free Fire Zone," Adam Day, Legion Magazine, November 2007.
- 51. British Gen. David Richards, commander, International Security Assistance Force, DOD press briefing from Afghanistan, Oct. 17, 2006.
- 52. CENTAF airpower summaries for Sept. 3-5 that included operations in Afghanistan on Sept. 3, 2006.
- 53. Gen. James L. Jones, Supreme Allied Commander Europe and commander, US European Command, DOD press briefing, Sept. 20, 2006.
- 54. Jones, DOD press briefing, Sept. 7, 2006

Secretary of Defense Donald Rumsfeld, shown here with Army officers, fretted right away about Pakistan. In May 2002, he noted, "It has been our worry for the last six months that the border [with Pakistan] is 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." (DOD photo/R.D. Ward)



USAF combat controllers, forward deployed for Operation Enduring Freedom, practice various firing movements at a range in Afghanistan. The targeting activities of controllers have been vital to US operations in the discontinuous Afghan battle space. (USAF photo/SSgt. Jeremy Lock)

#### **NOTES**

55. Dave Markland, "Operation Medusa: Fog of War, NATO's Failure and Afghanistan's Future," Seven Oaks Magazine, Feb. 2, 2007.

56. "Tanks and 200 More Soldiers Going to Afghanistan," David Akin, CTV News, Sept. 15, 2006

57. "US, Afghan Troops Launch Offensive," Fisnik Abrashi, Associated Press, Sept. 16, 2006

58. Mark Laity, NATO spokesman in Afghanistan, Kabul podcast report, Sept. 22, 2006.

59. British Gen. David Richards, commander, ISAF, DOD press briefing, Oct. 17, 2006.

60. "Operation Medusa a 'Significant' Success: NATO," CTV News, Sept. 17, 2006.

USAF SSgt. Brian Millefsky preflights a C-130 tactical airlifter in the theater. Air Force C-130 crews help to pioneer and perfect a new form of precision airdrop for use in Afghanistan. (USAF photo/ MSgt. Andy Dunaway)



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. 55 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. <sup>57</sup> 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. <sup>58</sup>

From the outcome of Medusa, Richards concluded that the Taliban was not a "strategic threat" capable of deposing the regime in Kabul or Kandahar. Deposition of Medusa, 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.<sup>61</sup> 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.<sup>62</sup> 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.<sup>63</sup> 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 skimmed 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 conGen. Pervez Musharraf, president of Pakistan during most of the war years, blew hot and cold on rounding up Taliban fighters based in Pakistan's lawless northwest frontier areas. Here, Musharraf meets in 2006 with Marine Corps Gen. Peter Pace, at that time the Chairman of the Joint Chiefs of Staff. (DOD photo/SSgt. Myles Cullen)

#### **NOTES**

61. Gen. John P. Abizaid, commander, US Central Command, Defense Writers Group, Sept. 19, 2006.

62. "2004-2008 Combined Forces Air Component Commander Airpower Statistics," US Air Forces Central, Dec. 31, 2008.

63. "CVW-7 Continues OEF Missions Over Afghanistan," USS *Eisenhower* Strike Group Public Affairs, Nov. 18, 2006.



USAF TSgt. Harvey Wagenmaker (I), a tactical air control party airman in Afghanistan, is pictured here with members of a US Army fire effects coordination cell. TACP airmen serve as liaisons between ground commanders and airborne pilots. (USAF photo/SSgt. Aaron Allmon)



Secretary of Defense Robert Gates (I) tours a UAV facility in Afghanistan. Briefing him is Col. Trey Turner (r), commander of the 451st Air Expeditionary Group, and Lt. Col. Scott Miller, commander of the 42nd Expeditionary Attack Squadron, both in Kandahar. (USAF photo/TSgt. Jerry Morrison)

**NOTES** 

64. Maj. Gen. Benjamin C. Freakley, commander, Combined Joint Task Force-76, and commanding general, 10th Mountain Division, DOD press briefing, Jan. 26, 2007.

65. Author interview, Lt. Gen. Gary L. North, CFACC, Jan. 9, 2009.

66. "ISAF and Afghan Forces Launch Major Operation in the South," ISAF release, March 6, 2007.

67. "March 30 Airpower: B-1B Protects Coalition Convoy," Air Force News, March 30, 2007.

68. Gen. Peter Pace, Chairman, Joint Chiefs of Staff, Defense Writers Group, April 17, 2007.

secutive, 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 76.64 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.<sup>65</sup>

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.<sup>68</sup> 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 could 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 US and NATO forces to press hard to find and clear Taliban concentrations in the most dangerous provinces of Afghanistan.

#### **IV. 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 US 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 Combat controllers in Afghanistan, having established a runway and cleared the surrounding air space, clear a C-130 to take off for a mission. The Air Force controllers are organized to establish and control assault zones, conduct limited offensive actions, and help insert and extract SOF. (USAF photo/SSgt. Jeremy Lock)

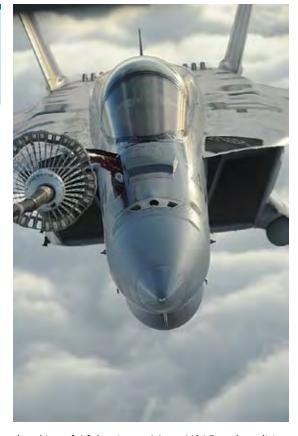
#### **NOTES**

69. Lt. Col. Michael Downs, "Rethinking the Combined Force Commander's Intelligence-Surveillance-Reconnaissance Approach to Counterinsurgency," Air and Space Power Journal, Fall 2008.



In foreground, a Sniper advanced targeting pod hangs from the underside of a B-1B bomber. Another B-1B is shown in the background. With the Sniper pod, the B-1B carrapidly switch into its so-called "ISR mode" and monitor the battle space. (USAF photo/SSgt. Darnell Cannady)

The receptacle of a USAF KC-10 tanker is barely visible as an F/A-18 Super Hornet fighter takes on fuel over Afghanistan. The KC-10s and KC-135s have been stars of the war, right from the first day. (USAF photo/SSgt. Aaron Allmon)



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 co-

AND Anzus Anzus ordinating 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 in-

Security forces airmen A1C Kelliea Guthrie (I) and SrA. Greg Ellis provide security for a C-130 during a cargo mission at Feyzabab Airfield in Afghanistan. Guthrie was deployed from Beale AFB, Calif., and Ellis from Davis-Monthan AFB, Ariz. (USAF photo/MSgt. Andy Dunaway)

formation 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.<sup>70</sup>

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 be-



ing out on the objective with the Army," said MSgt. Thomas Gorski, a JTAC instructor with the Air Force's 6th Combat Training Squadron. 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

In December 2008, Lt. Gen. Gary North, the CENTCOM "air boss," mingled with airmen at Bagram Air Field in Afghanistan. North had seen a fundamental shift in the context of the war. "The enemy decided to show up," he explained. (USAF photo/SSgt. Samuel Morse)

#### **NOTES**

70. MSgt. Dave Howard, tactical air control party (TACP) modernization lead at Electronic Systems Center, "ESC Unit Making Digital Air Support Possible," Chuck Paone, 66th Air Base Wing Public Affairs release, March 6, 2008.

71. Author interview, MSgt. Thomas Gorski, joint terminal attack controller (JTAC) instructor. Nellis AFB. Nev., Oct. 11, 2008.

#### Munitions Dropped in Afghanistan by Month and Year (As of December 31, 2008)

| (AS OF December 31, 2000) |      |      |       |       |       |  |  |
|---------------------------|------|------|-------|-------|-------|--|--|
|                           | 2004 | 2005 | 2006  | 2007  | 2008  |  |  |
| January                   | 1    | 1    | 5     | 178   | 190   |  |  |
| February                  | 3    | 1    | 23    | 163   | 259   |  |  |
| March                     | 7    | 1    | 42    | 310   | 265   |  |  |
| April                     | 1    | 23   | 63    | 202   | 166   |  |  |
| May                       | 3    | 7    | 59    | 179   | 327   |  |  |
| June                      | 24   | 10   | 141   | 288   | 646   |  |  |
| July                      | 16   | 16   | 216   | 368   | 515   |  |  |
| August                    | 9    | 20   | 242   | 670   | 385   |  |  |
| September                 | 13   | 9    | 329   | 406   | 230   |  |  |
| October                   | 4    | 19   | 240   | 198   | 182   |  |  |
| November                  | 1    | 23   | 201   | 289   | 120   |  |  |
| December                  | 4    | 46   | 209   | 321   | 84    |  |  |
| Total                     | 86   | 176  | 1,770 | 3,572 | 3,369 |  |  |

Source: 2004-2008 Combined Force Air Component Commander Airpower Statistics

- 72. Author interview, Lt. Col. Red Walker, director of operations, 6th Combat Training Squadron, Nellis AFB, Nev., Oct. 11, 2008.
- 73. "Afghans Say NATO Bombs Kill 25 Civilians," Barry Bearak and Tamoor Shah, New York Times, June 22, 2007.
- 74. "Seven Children Die as US-led Air Strike Hits Afghan School," Chiade O'Shea and Richard Norton-Taylor, *The Guardian*, June 19, 2007.
- 75. Bearak and Shah, *New York Times,* June 22, 2007.

II or Type III CAS, accurate data from the JFO may be the piece needed to allow for an air strike. <sup>72</sup> (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.<sup>73</sup> NATO responded with an air strike that inadvertently killed seven Afghan children.<sup>74</sup> On June 22, Afghan officials announced the deaths of 25 more civilians who had been caught in the warfare between NATO and Taliban forces.<sup>75</sup> 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, US 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. Correct-

#### **LEARNING TO LIVE WITH PAKISTAN**

Pakistan has for centuries been inextricably linked to security in Afghanistan. The long and porous border between the two nations makes Pakistan much more than the average neighbor.

For the US, cooperation from Pakistan was essential to starting Operation Enduring Freedom in 2001 as Pakistan quietly provided emergency divert bases for aircraft. US pilots landed unexpectedly in Pakistan on several occasions before airfields in Afghanistan were available. Pakistan is also key to the logistics routes that sustain NATO's large operations in Afghanistan. Turmoil in that nation and the election of President Asif Ali Zardari have kept Pakistan in the news.

Since the upswing in violence, the US has stepped up efforts to assist Pakistan and stem the Taliban support across the border. Unmanned aerial vehicles often pursue leadership targets to strike in Pakistan.

"It's my view, we need to have a comprehensive approach with the country of Pakistan," Adm. Michael G. Mullen, Chairman, Joint Chiefs of Staff, explained. Mullen personally visited Pakingers.

stan several times in 2008.

Britain drew the border between Afghanistan and Pakistan right through the middle of the 25-million strong Pashtun group—perhaps the largest ethnic group in the world without its own state. The border is a national line but not always one respected by residents.

After OEF began, "thousands of Taliban fighters and virtually the entire intact Taliban senior leadership shura (religious council) found sanctuary in Pakistan's Federally Administered Tribal Area (FATA) at the center of the border, as well as in parts of the Pakistani province of Baluchistan to the west and the North West Frontier Province (NWFP) to the east and south," noted two scholars.<sup>2</sup>

Grim as the choices are, there's no giving up on Pakistan. "I believe fundamentally if the United States is going to get hit, ... the leadership in the FATA is [going to provide] planning and direction. And al Qaeda specifically. So that is a threat to us that must be dealt with."

- 1. Adm. Michael Mullen, Chairman, Joint Chiefs of Staff, DOD press briefing, Dec. 10, 2008.
- 2. Thomas H. Johnson and M. Chris Mason, "No Sign Until the Burst of Fire: Understanding the Pakistan-Afghanistan Frontier," *International Security*, Spring 2008.
- 3. Mullen, Defense Writers Group, June 19, 2008.

ly, 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 US 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.<sup>77</sup> 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 troopsin-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

TSgt. Scott Innis, who on this deployment in 2006 served as a combat controller attached to an Army Special Forces unit, cools off during a break in the action in Afghanistan. Innis later was awarded the Silver Star for his actions with the ground forces. (Courtesy photo via USAF)

#### **NOTES**

76. Brig. Gen. Joseph L. Votel, deputy commanding general for operations of Combined Joint Task Force 82, DOD press briefing, June 26, 2007.

77. Author interview, Lt. Gen. Gary L. North, CFACC, Jan. 9, 2009.

Army troops disperse from a helicopter during Operation Anaconda in early 2002. After Anaconda, Afghanistan was relatively quiet for the rest of 2002 and stayed that way until the war picked up in 2006. (DOD photo)



#### **NOTES**

 "Bagram C-130s Drop High-tech Cargo Delivery System," Maj. David Kurle, 455th Air Expeditionary Wing Public Affairs, Sept. 1, 2006.

79. "C-17 Employs Screamer in Combat Airdrop," Air Mobility Command Public Affairs, May 25, 2007.

80. 2008 Army Posture Statement Information Papers, "Joint Precision Airdrop Systems."

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 timesensitive 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



TSgt. Jason Dryer, an Air Force combat controller, is shown here on a recent deployment in Afghanistan with Army Special Forces. Dryer was seriously injured by the blast of an improvised explosive device, but recovered to complete his assigned tour. (Courtesy photo via USAF)

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.<sup>78</sup> 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.<sup>79</sup> "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."<sup>80</sup>

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."

#### V. 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



Army Sgt. 1st Class Ricky Bryant (foreground) loads up his gear and heads to board a USAF C-130 Hercules aircraft at Bagram AB, Afghanistan, for a flight to a remote forward operating base in Afghanistan. (USAF photo/MSgt. Lance Cheung)

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 US 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."81 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 Haggani 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.<sup>82</sup>

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

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81. Maj. Gen. Jeffrey J. Schloesser, commander, Combined Joint Task Force 101, and commanding general, 101st Airborne Division, DOD press briefing, June 24, 2008.

82. "Predators on Patrol in Afghanistan," SSgt. Rachel Martinez, 455th Air Expeditionary Wing Public Affairs, Dec. 22, 2008.



Air Force Capt. Steve Grogan controls an operator work station installed within an E-8C Joint STARS aircraft. Grogan was senior director of the 7th Expeditionary Airborne Command and Control Squadron. (USAF photo/SrA. Domonique Simmons)

**NOTES** 

83. "Airmen in Sky Give Warriors on Ground Situational Awareness," SrA. Clinton Atkins, 379th Air Expeditionary Wing Public Affairs, Jan. 12, 2009.

84. Maj. Gen. Michael Tucker, deputy chief of staff for operations, ISAF, and deputy commander for operations, US Forces Afghanistan, DOD press briefing, Dec. 5, 2008.

85. "10 Green Berets to Receive Silver Star for Afghan Battle," Ann Scott Tyson, Washington Post, Dec. 12, 2008. 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.<sup>83</sup>

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."84 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 US 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



UAVs were among the brightest stars in the Afghan war. Here, an MQ-1 Predator, armed with AGM-114 Hellfire missiles, flies a combat mission over southern Afghanistan. (USAF photo/Lt. Col. Leslie Pratt)

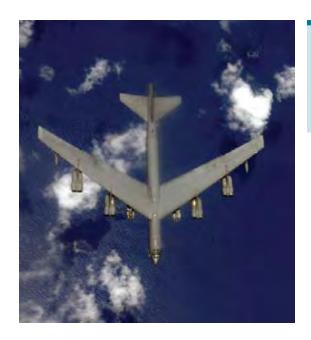
yards away. In that case, the blast of another 2,000-pounder allowed the Americans to move away.

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 danger 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.



A B-52 bomber on its way to war in Afghanistan. The Air Force's B-52, B-1, and B-2 bombers demonstrated the unique merits of long-range precision strike. B-52s and B-1s often carried a mix of weapons to give air controllers a choice for attacks. (USAF photo/SMSgt. John Rohrer)

#### VI. 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 US assembled a coalition to unseat the Taliban government and, on Oct. 7, 2001, launched Operation Enduring Freedom. Later, US forces joined up with NATO units under the ISAF umbrella. Allied airpower, and the US 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 US, 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



As US Army paratroopers of the 82nd Airborne Division look on, cargo bundles dropped from Air Force C-17 airlifters drift toward a landing spot. These cargo drops brought in food and water needed to resupply the troops operating in remote areas of Paktia Province. (US Army photo/Spc. Micah Clare)

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



The last C-17 of a two-ship formation departs the scene as a total of 62 cargo bundles head toward the waiting troops. The C-17s and crews came from the 817th Expeditionary Airlift Squadron, located at Manas Air Base in Kyrgyzstan. (USAF photo/SSgt. Brian Ferguson)

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.

ator 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

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At a state-of-the-art Combined Air Operations Center in Southwest Asia, coalition troops track a mission in Afghanistan. The CAOC is the nerve center for all air component missions in support of Operation Enduring Freedom. Crews operate around the clock. (USAF photo/SSgt. Derrick Goode)

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.

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 ringlead-

ers, 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 US and allied ground forces around the world is key to repositioning a much reduced US 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.

In November 2001, at the outset of the war, an Air Force munitions loader from the 28th Air Expeditionary Wing preps JDAM weapons on the trailer used to serve a B-1B bomber. The value of airpower has only gone up in the years since. (USAF photo/SSgt. Shane Cuomo)



#### VII. 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. Be 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 US forces ever deeper into the struggle for control in key provinces.

With a big reinforcement planned, NATO and US 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 US Central Command and architect of recent combat successes in Iraq.<sup>87</sup> "A regional approach is required."

Army Gen. Bantz J. Craddock, NATO's Supreme Allied Commander Europe and also head of US 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.<sup>88</sup> "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 US 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."

#### NOTES

86. "Afghanistan: Karzai Defends Taliban Peace Move," CNN.com, Nov. 26, 2008.

87. Gen. David H. Petraeus, US Institute of Peace panel "The Way Forward in Afghanistan," Jan. 8, 2009.

88. Gen. Bantz J. Craddock, NATO Supreme Allied Commander Europe and commander, US European Command, Defense Writers Group, Jan. 9, 2009.



#### **About the Air Force Association**

The Air Force Association, founded in 1946, exists to promote Air Force airpower.

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