Air operations are on the rise as the Air Force disperses throughout Afghanistan to take the fight to the enemy.

Boom Time in

fghanistan's Paktika province lies due south of the capital Kabul by just over 100 miles, over mountainous and rugged terrain, abutting Pakistan's border to the east. There are few paved roads, but in early March there was plenty of traffic high above,

as the contrails of tankers occasionally crossed the mountain-studded landscape and low flying fighter aircraft crossed the plains in between.

Now closing in on its 10th year, the war in Afghanistan is flaring anew. An infusion of troops and resources is placing American and coalition troops in the thick of insurgent and Taliban territory. Concurrently, the metrics for US and coalition airpower reflect an intense fight. In 2008, Air Forces Central recorded 20,359 close air support sorties, but in 2010, AFCENT flew 33,679 CAS missions. In addition, with the arrival of Gen. David H. Petraeus, US Forces

Two Army Chinook helicopters lift off on a mission from Bagram Airfield, Afghanistan, behind an F-15E Strike Eagle deployed from Seymour Johnson AFB, N.C. Bagram, located north of Kabul, has expanded significantly since the beginning of Operation Enduring Freedom in 2001, as a large number of close air support, airlift, and supply sorties originate from, or route through, the airfield every week.

Afghanistan By Marc V. Schanz, Senior Editor

Afghanistan commander, in July 2010, sorties with weapons releases began a steady climb: from 325 in July to a peak in October of 1,043 releases in a single month.

What's behind the numbers, various Army and Air Force officials in theater explain, is an increase in combat due to US and coalition forces entering contested areas—and staying. At Forward Operating Base Orgun-E, a remote US base mere miles from the Pakistan border and the largely ungoverned Waziristan, Army troops from the 101st Airborne Division's 4th Brigade Combat Team, known as "White Currahee," conduct nearly daily clearance and interdiction missions targeting militants.

Sitting at more than 7,000 feet altitude, Orgun-E is only a few miles from daily combat, as are small FOBs and combat outposts spread out across the area, part of Regional Command East, stretching from Paktika in the south up





Maj. Tracy Schmidt of the 389th Expeditionary Fighter Squadron, and her weapons system officer, Capt. Kimberly Volk, take off from Bagram on a sortie this past March. A C-17 (left) and C-5 (right) sit on the tarmac behind the fighter. The Air Force has poured resources into Afghanistan as troop levels have increased, making ramp space at major hubs like Bagram a precious commodity.

to Bamiyan in the north and Nuristan in the east.

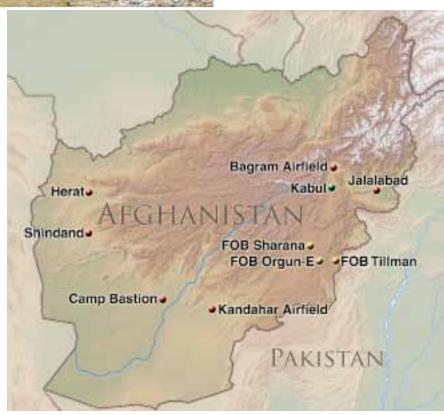
A tall sensor tower keeps watch on the nearby hills for incoming rocket and mortar fire, and all lights at night must have red lens caps affixed. Late one night in March, just across the hall from the tactical operations center, Maj. Mark Houston, executive officer of the 2nd Battalion, 506th Infantry Regiment, 4th Brigade Combat Team, summarized White Currahee's environment using a map of the region. Taliban and insurgent exfil and infiltration lines, especially for fighters and weapons, run all up and down Paktika's porous border, he explained. He paused every few minutes to indicate locations where his troops have taken fire or experienced tough fights recently.

Firepower and the High Ground

"At [Combat Outpost] Zerok, we were taking indirect fire every day last year, but since December things have cooled off," he explained. Operations had "put a whupping" on bad guys in the sector.

FOB Tillman, near a border post, often runs into a "professional enemy," working in small units, well equipped with top-of-the-line gear, and attacking to determine the strength of forces in the sector. Houston explained, "Two nights ago, Tillman took fire from three different locations," prompting a call for air of the most inhospitable terrain on the planet, the guarantee of air superiority changes the strategic picture in large and small ways. "You have to remember something about the enemy here," Houston said. "He respects two things: firepower and the high ground."

Airpower, be it air resupply or being able to call fixed wing or rotary wing assets to respond to a troops in contact scenario, is a huge advantage—and the ultimate high ground. Joint terminal attack controllers [JTAC] and joint fires observers are critical to carrying out daily operations in this terrain, as they are the link between operations on the ground and air superiority, from intelligencesurveillance-reconnaissance support to



support, with a B-1B arriving on station within 20 minutes.

"We've stopped them down south, and up north, ... but now we are aiming to stop up the flow of insurgents and weapons from Pakistan," Houston said. The spring weather was improving, and soon he expected activity to jump up in his sector as the fighting season ramped up.

Many of these operations, from the tops of Paktika's mountains to defending the FOBs and COPs that litter the Afghanistan-Pakistan border, would be nearly impossible without the guarantee of air superiority, soldiers and senior officers across RC East attest. In some putting munitions "danger close" on top of the enemy.

Since 2009, when President Obama ordered more than 40,000 additional troops into Afghanistan (coinciding with the drawdown of combat forces in Iraq), the US and NATO footprint has mushroomed in the country—particularly in the south in provinces such as Kandahar and Helmand and the east along the provinces straddling the Durand Line, the border with Pakistan. Today, the number of troops contributing to NATO's International Security Assistance Force hovers around 132,000.

For the US, approximately seven infantry brigades' worth of personnel

are spread across RC East and RC North according to military officials. (RC East alone encompasses about 43,000 square miles, a geographic area where the bulk of this combat power is located.) Unlike the early years of the war, when NATO and US forces sought to concentrate their efforts on Kabul and a few other municipalities, the infusion of manpower is expanding the counterinsurgency campaign, with forward bases and combat outposts now sprouting up and enlarging in areas where just a few years ago a token presence existed.

Paktika's FOB Sharana is a prime example, sitting on top of a plateau with a valley and mountains beyond. The base has undergone significant expansion in the seven months preceding March 2011. Before the main force of Task Force Currahee moved in, operations expanded, and semipermanent buildings sprouted up. The base's airstrip is currently being extended and will soon be able to receive direct C-17 flights, in addition to the small contract airlifters and C-130s that routinely fly in and out. The days of Bagram serving as the big hub for air in Afghanistan are receding, as the process under way at Sharana is occurring at numerous other locations, many becoming semi-autonomous, with newer facilities, longer runways, enabling aircraft to arrive and depart without transiting through Bagram (or BAF, pronounced "Baff," as it is known in theater parlance).

Afghan airspace is now a lot more crowded as a result. The Air Force's hand in all of this can be revealed by just observing the ramp at either Bagram Airfield north of Kabul, or Kandahar Airfield, just outside Kandahar city, 300 miles to the south. A few years ago, Kandahar was host to a small operations group of USAF forces—mainly MQ-1 remotely piloted aircraft, HH-60 rescue helicopters, and other assets—when, in early 2009, Air Forces Central decided to stand up a full wing.

A Massive Infusion

The 451st Air Expeditionary Wing came online in July 2009, becoming the second expeditionary combat wing in Afghanistan. Brig. Gen. Paul T. Johnson, a veteran A-10 pilot and current commander of the 451st, said the movement coincided with the President's decision to increase troop levels. "The US began plussing up the level of presence to support increased numbers of ground forces [coming in], so we needed increased air capability as well," Johnson said.

Thus began a series of moves integrating with the forces now spread out across Afghanistan. With the new wing came an A-10 fighter rotation, what Johnson called the "triggering event" of the plusup of air forces in the south. Until 2009, A-10s were based at Bagram, hundreds of miles from where the US was making a concerted push into the Taliban heartland, in the Helmand River Valley, the Horn of Panjwai west of Kandahar, and other areas. Bringing a Warthog squadron south to Kandahar meant "you have a heavier kinetic fighter presence in the country than we had before '09," said Johnson.

Today, the AEW at Kandahar Airfield is a bustling operation, with aircraft seemingly taking off and landing every moment of the day. Its operations group is arguably the busiest and most diverse in the Air Force. "We have 11 squadrons total, [and we're] ramping up to 12 at some point this summer," said Col. David W. Hicks, another veteran A-10 pilot and commander of the 451st Expeditionary Operations Group at Kandahar. Four of Hicks' squadrons will divest out to Helmand province's Camp Bastion this summer, he added, in a new expeditionary group composed of rescue and aeromedical evacuation units. "As you can see, there are cats and dogs of all varieties, and we are spread out all over the place," he said in March.

Kandahar is undergoing a massive infusion of airpower, with large numbers of MQ-1, MQ-9, and MC-12 Liberty aircraft flowing in to provide ISR support. The 361st Expeditionary Reconnaissance Squadron stood up in spring 2010 as the second MC-12 squadron in Afghanistan, after the 4th ERS at Bagram began operations in December 2009.

Four C-130Js operate around the clock with Kandahar's 772nd Expeditionary Airlift Squadron. It will soon double the number of airframes to eight, according to Hicks.

Other units include an HH-60 Pave Hawk squadron; a Guardian Angel squadron of pararescue jumpers, survival specialists, and combat rescue officers; a battlefield airborne communications node (BACN) squadron; an air control squadron; and several more.

When combined with Bagram, the expansion at Kandahar has changed the tenor and profile of combat in the Afghan campaign—not only due to the capabilities deployed, but also how they are being dispersed through the country. USAF has tweaked the command and control of air assets to ensure they are used optimally in an environment where no commander ever says he has too much air.

The Air Force is "more widely dispersed around the country," Johnson said. "One of the reasons is, we have simply reached capacity in a place like Bagram and Kandahar, and ... out at Bastion, so we have physically run out



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A1C Jarren Ewing (back) and SrA. Stephen Jardine of the 455th Expeditionary Security Forces Squadron pause during a patrol outside Bagram Airfield.

of space. We are pushing people out to new locations. It's a reflection of how we have more heavily resourced the fight," he added.

With the proliferation of combat outposts and FOBs in hard-to-reach areas, the need for air to provide ISR, lift, and CAS is growing. "The logistical burden has increased," Hicks noted. "Because [troops] are not sitting in large clumps, the need for airdrop has gone way up, ... and you can make an argument you need more CAS, ISR, too, because they also need overwatch to provide security." He said the mission hasn't changed much, but the tempo sure has.

Across the ramp from Hicks' operations group, the 772nd EAS is pushing toward yet another record-breaking month for airdrops. In January, the squadron set a monthly airdrop record of 51 drops, quite a feat at the time. The record was again broken with the unit completing 72 airdrops of more than 1.5 million pounds (about 1,100 bundles) in March. "We are doing a tremendous amount more now than we were when I got here, nine months ago," Hicks said of the ops tempo of the tactical airlifters.

The rapid rise in airdrops is due to several factors, USAF officials explain. There are better delivery parachutes, coupled with larger-capacity C-130 J models carrying more cargo, which can place larger loads in increasingly accurate drop zones. "That allows crews to have a great deal of confidence they will hit a drop zone, and the customers are assured they won't have to hike over a mountain to get what we deliver," Johnson said. More importantly, he added, the accuracy and reliability enables US and coalition forces to stay in areas more isolated and more dispersed than would otherwise be possible. With no reliable network of roads, air resupply is of great importance in Afghanistan. "Because we can do this, ... this allows us to ponder going places [that we] previously wouldn't have gone before," Johnson said.

New Capabilities in Real Time

Air units under the umbrella of the wings at Kandahar and Bagram have dispersed throughout the country. Hicks rattled off a list of forward operating locations for his aircraft—often far flung from Kandahar. In March, a detachment of the 451st EOG stood up at Herat. Another operates out of Shindand in the western portion of Afghanistan. Another detachment operates out of Jalalabad, performing primarily ISR duties.

Johnson admitted ISR gathering is easily the "lion's share of what we do," and the same could be said for the 455th AEW. "The vast majority of the time, I'm using my aircraft as a [nontraditional ISR] asset. ... Only in certain cases do we employ kinetic firepower."

From combat outposts to brigade commanders all the way back to AF-CENT's combined air and space operations center, there is an "appetite" for intelligence about specific areas to conduct operations, he added. Missions vary widely, and run the gamut from "sweeps" to route clearance to providing overwatch for "key leader engagements," where service members work with local leaders and tribal officials to root out troublemakers. The demand for ISR is driving skyward the number of combat air patrols for unmanned vehicles, and their utility in combat is evidenced by near-constant Predator and Reaper presence on the ramps at Kandahar and Bagram. Even with the UAV surge, the twin-engine MC-12 was quickly developed to supplement them.

"In some of those cases, we are actually figuring out [new capabilities] in real time," Johnson noted. The MC-12 was rushed into combat first in Iraq, then in Afghanistan, which required a lot of dialogue with "customers" as well as the planners and operators. They are all but deployed "out of the lab" and must be tinkered with while carrying out combat missions, in order to figure out their best employment. He pointed to a relatively new platform operating over Afghanistan under command of his wing: Blue Devil, a sensor package on a King Air 90, combining a signals intelligence node with a wide-area surveillance camera. Blue Devil aids enormously in tracking larger areas of interest, as opposed to the "soda straw" view associated with Predator sensors.

Of course, all of this capability must get to the right place when needed, and to better facilitate this, AFCENT and senior USAF commanders have altered the command and control structure for assets since the beginning of the 2009 force surge. Today, NATO has the lead for security operations in Afghanistan under the rubric of ISAF. As a result, communication between the CAOC, ISAF, and the various regional commands has become even more critical.

"For several years, it was all about [Operation Enduring Freedom], and in that case, it was very much a regional command structure funneling requests up through US channels," Johnson recalled. Today, airpower requests from ground commanders make their way up to NATO's ISAF joint command in Kabul, the headquarters responsible for directing day-to-day operations across Afghanistan and partnership operations with Afghan security forces. IJC and the CAOC are in contact daily, as IJC must be the "arbiter" of all these requests for air support, Johnson said.

AFCENT Commander Lt. Gen. Gilmary Michael Hostage III has made some changes to the air hierarchy since arriving in Southwest Asia in August 2009. The moves are designed to empower the air component commander for Afghanistan (Maj. Gen. Charles W. Lyon, the senior airman in the country) by giving him limited operational control and full administrative control over AFCENT forces.

Though tactical control of theaterwide assets remains with the CAOC, Lyon has authority to organize force, recommend courses of action, and provide authoritative direction to the subordinate air expeditionary wings in country. In late 2010, Hostage redesignated the air component coordination element for Afghanistan as the 9th Air and Space Expeditionary Task Force-Afghanistan (9th AETF-A) and moved to add staff and authorities to the post.

Effective integration of airpower with ground maneuver required more than close proximity, Hostage wrote in the winter 2010 edition of *Air and Space Power Journal.* "My intent ... is to make the ground commander successful. I have seen positive results from this change as the ACCEs [air component coordination elements] have been more fully integrated in operational planning and during staff deliberations, allowing them to provide world-class air support," Hostage wrote.

From the operations perspective, Hicks agreed communication has improved—and it is a fluid, two-way process. Between the CAOC and Lyon, the air picture is "tailored" because they have a unique perspective of what the theater looks like at any given time. It helps because "8,000 individual requests [are not coming] to the wing," Hicks said. "Down here, we look at the fight, we understand what's going on, and we can offer up support or ask questions. ... We're trying to keep our arms around [the fight] on a daily basis, and it is certainly a challenge." Most days, in addition to responding to taskings, Hicks or Johnson are also asked their opinion on how to operationally employ assets to get the best coverage or response time in theater.

Johnson believes there is more dialogue in the air-to-ground process today than ever. "There was a time when a JTAC would say, 'Stand by for a nine line,'" (target coordinates), he'd get them, and that would be the end of the conversation," Johnson said. Now, when you get a request, "what you would observe is a dialogue up and down the line, ... so that everyone understands what is taking place."

While the Afghan campaign has certainly become more kinetic, airmen and



Armored tactical vehicles pass each other on a road linking the older section of Forward Operating Base Sharana with the newer areas. Sharana, an Army FOB, has undergone rapid growth in the last year.

service members operating in country are still cognizant they are in an environment demanding "a lot of personal restraint ... by all the participants," Johnson said. "It requires all of us to be very conscious of the lethality that is at our disposal and how, if misapplied, that lethality can work against us."

Time Will Tell

USAF officials in Afghanistan couch their perception of the future carefully, but they all seem to agree that a great deal of pressure is now on Taliban and militant forces. US and coalition forces have gone into places they hadn't gone before, and stayed-presenting the enemy with a choice of either fighting or giving up terrain. "In some cases, they went away, but in others they fought-unsuccessfully," Johnson said. "We anticipate they will come back in the spring, ... but nobody is exactly sure what that fighting season is going to look like. They get a vote in how they are going to conduct their operations." In fact, only a day prior, Kandahar Airfield had been subject to a late-night rocket attack.

Johnson said operations in Afghanistan have evolved, but the demands are no less difficult, especially in situations where mortars are falling, tempers are rising, and casualties are accumulating. For the JTACs and air advisors, "it's an astounding amount of responsibility. And they embrace it."

In the coming years, the Obama Administration is forecasting a slow drawdown of forces, and USAF officials are waiting to see what implications this will have on operations. As Afghan forces step up capabilities and US ground forces withdraw, CAS will not be emphasized as much, Hicks said. "If the dynamic changes, ... that in large part depends on decisions made as far as what the force lay down will look like." However, Hicks added, ISR and airlift will not be going away any time in the near future, as having the ability to move about the country and have a persistent air picture will "continue to be critical."

Just down from the offices of the 451st wing, four Mi-17 helicopters of the Afghan Air Force sat on the ramp, where Afghan military members fly missions and work alongside advisors from the 442nd Air Expeditionary Advisor Squadron. The fliers have made progress, and regularly perform cargo transport, VIP movement, and even medical evacuation missions, but much work remains in areas such as building up a strong NCO corps and lines of authority across squadrons and wings in the country.

"We are ... cognizant that they still have a long way to go," Johnson admitted. "Will [the Afghans] need assistance with mobility, with ISR? Time will tell."

For now, the pace and intensity of the USAF mission in Afghanistan is connected to the US and coalition forces currently operating across the country. "Whoever is outside the wire, we see [that force level] and presence driving our level and presence here," Johnson said.