Modern airpower owes much to the elite USAF commandos who hang out with the ground forces.

Controllers

By Bruce D. Callander

USAF combat controllers, such as these participating in Operation Enduring Freedom, set up and control air assault zones for Special Operations Forces. HERE is a touch of irony in the fact that in an era of smart bombs and stealth aircraft, the effectiveness of modern air operations often depends on a relative handful of Air Force specialists who spend most of their time on the ground. These airmen, mostly enlisted members, are USAF's commandos.

They often commute to work by parachute or other unusual means. Their job is to direct air operations, spot targets, suppress enemy forces, and help rescue downed aircrews. These operations fall to two groups of elite troops: combat controllers and enlisted terminal attack controllers.

While they share a general specialty, the two groups train and work separately.

Combat controllers are ground combat forces assigned to special tactics squadrons of Air Force Special Operations Command. They are schooled in unconventional warfare and operate in forward areas, where they control everything from assault landings to air strikes.

Enlisted terminal attack controllers, who fall under Air Combat Command, spend most of their time working with Army units. They, too, train in extreme tactics and operate with forward ground forces. Their primary job is to call in and then direct close air support aircraft.

Both specialties date back to the days of propeller-driven aircraft, but today's practitioners are among the most highly trained operators in any service, employing new technologies and equipment.



Enlisted terminal attack controllers, assigned to ACC but stationed with Army units, call in close air support strikes. Here, an ETAC checks one of his radios during a field skills test in South Korea.

Combat controllers trace their history to World War II, when the Army Air Forces formed glider units to insert troops into combat quickly and quietly. The method had promise, but the glider pilots often got lost en route or missed their intended target areas.

Charting the Path

The solution, Allied leaders decided, was to train a small group of specialists to land first and guide the main assault force. These advance personnel, called "pathfinders," used lights, flares, and other devices to mark the landing zones, and they provided on-site weather information to the inbound aircraft.

Pathfinders had their debut in 1943 during the Allied invasion of Sicily. They participated in the Normandy invasion and airdrops into Holland. Their use continued after the war, and, in 1947, when the Air Force became a separate service, USAF kept the specialists but later dubbed them combat control teams, or CCTs.

This group of airmen—also known

individually as CCTs—has overseen air operations in conflicts from the Korean War to the most recent action in Iraq.

In addition to training in ground combat, each CCT is a certified air traffic controller. The work includes setting up navigational aid equipment to guide aircraft to landings on makeshift runways. CCTs deploy into combat areas by air, land, or sea and set up bare bones airfield capabilities. The CCTs are trained in demolition work to clear obstructions and hazards from potential runways and landing zones. They manage parachute assault zones and aircraft landings and low-altitude airdrops for resupply-without air control towers or extensive communications systems. Once they have an "airfield" established, the CCTs control air operations, provide command and control, gather intelligence, and make weather observations.

However, said Maj. Jerry Kung, a combat controller now serving as commandant of AFSOC's Advanced Skills Training school at Hurlburt Field, Fla., "The primary thing we do is air-to-ground interface."

Jack of All Trades

Kung explained that the manner in which a CCT provides air-to-ground interface varies with each mission. "Sometimes it's providing air traffic control," he said. "Sometimes it's doing tactical control or close air support, and sometimes it's placing navigation aids or actually controlling aerodromes."

He went on, "We are trained to take over an airfield and run it just as if it were right here at Hurlburt Field." That means directing airplanes during landing and instructing pilots where to taxi and where to off-load personnel or equipment. "Basically everything you would do at a normal airfield," said Kung.

Because their aircraft land in combat zones, he said, CCTs also must provide "the long-range coordination to get them out of the airfield" and on to their next mission.

Training is varied and usually beyond USAF's mainstream courses. There are two major elements: Air Education and Training Command handles the first and AFSOC the second.

AETC first provides a two-week combat orientation course at Lackland AFB, Tex. Students undergo flight physicals, receive initial shooting instruction, and learn about the history of the combat control specialty. What's next on the agenda varies depending on Air Force and Army schedules. The prospective enlisted CCTs go through a four-month air traffic control school at Keesler AFB, Miss.; Army airborne school at Ft. Benning, Ga., which can last several weeks; and a 2.5-week survival school at Fairchild AFB, Wash. Following those three, the airmen must complete a three-month combat control school at Pope AFB, N.C.

The entire process takes about a year, said Kung, and prospective CCTs leave "the AETC pipeline with a three-level apprentice skill level from combat control school." They are ready then for the AFSOC portion of their training—another year during which they learn advanced skills at Hurlburt. "By the time they finish with this," he said, "they are five-level qualified controllers."

Officer combat controllers follow much the same process. One exception is that officers spend slightly less time on air traffic control, but they receive training in airfield management.

AFSOC's 720th Special Tactics Group, headquartered at Hurlburt, is



This ETAC helps secure a road in Iraq after major operations ended for Gulf War II.



Members of a combat control team walk through the rubble of one of Saddam Hussein's palaces. These CCTs were operating from Baghdad Airport, where, among their other duties, they perform air traffic control.

home to combat controllers. Within the group, there are seven special tactics squadrons: six active duty and one Air National Guard. Of the six active units, one is located at Kadena AB, Japan, and one at RAF Mildenhall, UK.

Depending on the mission, Air Force CCTs operate with Navy SEALs, Army Rangers, and Special Forces. The mission also dictates whether the 720th STG's other special tactics airmen—combat weathermen and pararescuemen deploy with the combat controllers. "There are instances when all three will be on the same mission," said Kung.

The weathermen can deliver timesensitive forecasting, explained the major, and that can "affect a commander's decision on how to prosecute a coming mission or an ongoing mission." The weather channel provides an overview of the weather situation, but in a combat situation, said Kung, "You don't know what's happening at that mountain pass." That is why, he added, "You need to send somebody out there to collect the data."

Combat controllers display a number of talents, not the least of which is their ability to recognize and sort out air traffic in the combat area—that includes rockets or artillery. Kung called it an "ability to see in three and four dimensions." The CCT must be able to "deconflict" air traffic in the area to prevent problems from developing. That is "really our core skill," he said. All the other specialty skills, such as free-fall parachuting and scuba diving, "just comes with the territory."

The CAS Controllers

The history of the other elite group of controllers dates to the Korean War when the Air Force sent fighter pilots to Army units to call in close air support for ground attacks. USAF deployed some enlisted airmen to operate the heavy communications gear needed by the officers. Only the officers were permitted to direct CAS air strikes. That practice continued through the Vietnam War.

By the 1980s, however, the Air Force could not afford to continue using pilots for these ground assignments, so it began to train enlisted



A combat controller on a four-wheel off-road vehicle provides escort as the first civilian aircraft lands at Baghdad Airport after coalition forces secured the site in early April.

men for the job. Today, USAF's enlisted terminal attack controllers (ETACs) work directly with Army combat forces to manage their close air support.

The Air Force awards the ETAC specialty (which has no officer counterpart) only after an airman has served a long apprenticeship and taken a variety of courses, many of them with the Army. Becoming an ETAC is an extended process, said MSgt. Charles Heidal, who has been in the career field since the 1980s. The first step is to gain basic credentials as a tactical air command and control specialist.





These combat controllers are setting up communications to guide in assault aircraft during training at Hurlburt Field, Fla. Their skills include the ability to "deconflict" various aircraft, rockets, and artillery in their combat area.

First, there's a 75-day technical school at Hurlburt. There, Heidal said, an airman receives training on ground maneuvers, handling weapons, and radio equipment—"the basics that you need to use just to wander around with the Army."

After this initial training, the airman may take a number of specialized courses with the Army or other services. Heidal, for instance, went through the Army's basic parachute course and pathfinder course. "I've also been through EIB [Expert Infantryman Badge] training and some sniper weapons stuff and miscellaneous courses that are available at various forts where I have been stationed," he added.

Heidal said that while the Air Force does not require such courses, they help the airmen to support the "Army customer." Airmen working with the airborne forces, for example, have to be jump-qualified, he explained.

However, the majority of training for airmen hoping to become enlisted terminal attack controllers comes from work in the field, serving as an assistant to an ETAC and as a member of a tactical air control party (TACP). After an airman has been working in the career field for approximately two years, said Heidal, he is sent to the Joint Firepower Course at Nellis AFB, Nev. That course provides training in advanced close air support tactics. On returning to his unit, the airman gets a "check ride" with an experi-



Enlisted terminal attack controllers usually carry on their backs all their gear, which can weigh several hundred pounds. Here, an ETAC passes coordinates over one of his two radios during an exercise.

enced ETAC or air liaison officer. If he passes, Heidal said, he is qualified to handle CAS air strikes "without the direct supervision of an officer."

Once certified, an ETAC may spend most of his USAF career living and working with an Army unit. Frequently, a single ETAC is the sole Air Force representative with a small Army Special Forces or Ranger unit. At battalion level, Heidal said, an ETAC likely will be working with a younger tactical air command and control specialist trying to gain the experience needed to move up the TACP chain.

Weight Watching

Calling in close air support strikes is the primary mission, but an ETAC also winds up simply sorting out air traffic in a combat area. With his equipment mounted on a small vehicle, Heidal said, an ETAC "probably can control about 100 square miles of airspace by racking and stacking aircraft, watching fuel loads, and the whole bit." At the same time, the ETAC must keep in close contact with Army counterparts to let the "duck shooters"—the air defense troops—know that American aircraft are going to be in the area.

However, operating from a vehicle is a luxury rarely afforded USAF's enlisted terminal attack controllers. The ETAC works with what he can carry on his back. That includes several different heavy ra-

dio systems. The Air Force has been able to reduce the load somewhat. Heidal tries to find even more ways to "lighten that stuff" because "we're being one-pounded to death." There is always someone who "wants to hand me one more pound of gear," he said.

Heidal noted that, when he jumps out of an aircraft, he weighs 405 pounds. The only part he can dump quickly—the parachute—weighs just 65 pounds. The rest of the weight is on his back, which makes it "a significant issue," he said.

Body armor and tactical gear weigh close to 40 pounds. Then come a helmet with a night-vision kit, a rucksack with food and water, and the radios.

"We went from carrying four radios down to one," said Heidal. "Then they said, 'Well, we need you up on multiple channels,' so now we're carrying two radios."

The relationship between these special airmen and the Army has changed over the years. Heidal thinks the change has been for the better.

The Air Force began placing its tactical air control parties with the Army in 1977. Earlier, USAF tactical air support units were assigned to Air Force bases and farmed out to the Army. That was a problem, said Heidal, because the airmen had to work with different Army personnel on every mission. They could not establish a close rapport.

Today, that situation is reversed. The airmen, who wear Army badges and Army patches on their shoulders, are more accustomed to the Army way. "Most of my NCO experience is dealing with soldiers," said Heidal.

After the Air Force moved most of its ETACs directly onto Army posts, soldiers started viewing them as part of the Army team. Now, soldiers call Heidal by name and know that, when he talks about close air support, he knows what he is talking about.

Air Combat Command has three air support operations groups:

• 1st ASOG assigned to 12th Air Force and headquartered at Ft. Lewis, Wash.

• 3rd ASOG assigned to 8th Air Force and headquartered at Ft. Hood, Tex.

• 18th ASOC assigned to 9th Air Force and headquarterd at Pope AFB, N.C., adjacent to Ft. Bragg.

Each group has subordinate squadrons or flights stationed at various Army posts around the country.

Many ask why the Army has not developed its own ETACs. This issue surfaced most recently during Operation Enduring Freedom and Operation Iraqi Freedom, when ground units said there were not enough Air Force ETACs to go around. As a result, both the Army and Marine Corps have started pursuing their own programs. The Air Force has adapted some of its ETAC course material for a new joint terminal attack controller program.

Despite the rigorous training and long apprenticeship, the Air Force has no shortage of volunteers for enlisted terminal attack controller duty. "We have to turn people away," said Heidal.

"We have had to raise the bar at the tech school," he said. "This is not Rambo stuff." He explained, "I can take a very smart individual and make him an ETAC, but I cannot take an overly muscled individual who just wants to break things and make him one."

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