TUNNEL VISION

Will the Air Force kill its most effective weapon?

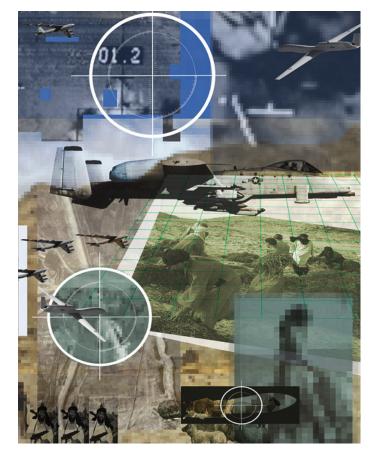
By Andrew Cockburn

arly one evening in May 2012, an extraordinary hour-long radio conversation attracted the attention of various listeners among the NATO forces in the Afghan theater. On one end of the conversation were the pilots of two U.S. Air Force A-10 Thunderbolt II attack planes, who had been patrolling the eastern province of Paktia, not far from the Pakistani border. They were on call for any ground unit needing "close air support," a task for which the A-10 was expressly designed.

On the other end was a Joint Terminal Attack Controller (JTAC), a specialist whose job is to as-

sign and direct air strikes. The JTAC was reporting Troops in Contact (TIC)—meaning that American soldiers were under fire. Although the entire, acronym-sprinkled transmission was on a secure "strike frequency," such communications can enjoy a wider audience, not only among the crews of other planes in the neighborhood but

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at various headquarters across the theater and beyond. Such was the case with this particular mission, making it possible to piece together an account of the ensuing tragedy.

After reporting the TIC, the controller, who was inside a base headquarters somewhere in eastern Afghanistan, informed the pilots that the enemy force was a large one and read out a grid coordinate. Reaching the designated spot, however, the pilots reported "no joy"—i.e., no sign of ac-

tion. They were directed to another grid, and then to a third, with the same result. At the fourth location, the flight leader reported the presence of a farm building. People and animals were visible, he said, but no one with a weapon, nor was there any sign of military activity.

The JTAC refused to accept this conclusion. According to one listener, he told the pilots that the ground commander, who was most likely sitting in the same room, "has determined that everybody down there is hostile." He then ordered them to prepare for a bombing or strafing run for the A-10, whose 30mm cannon is capable

of firing 4,200 rounds per minute.

The pilots continued to insist that they could see nothing out of the ordinary, reporting "normal patterns of life." The JTAC had at least a rough means of confirming this situation: like many other aircraft, the A-10 carries a "targeting pod" under one wing, which in daylight transmits video images of the ground below, and infrared images at night. This video feed is displayed on the plane's instrument panel and is relayed to the JTAC's array of LCD

Illustration by Darrel Rees LETTER FROM WASHINGTON

screens in his operations center, and frequently to other intelligence centers around the globe.

The pilots, who could fly low and slow close to the target and study it through binoculars, had a much more detailed view. Circling above the mudbrick farm building, they affirmed it to be a "bad target." Now, however, there was a new voice on the frequency. A B-1 bomber, cruising high above the clouds, was checking in and reporting its position to the JTAC. Originally developed to deliver nuclear bombs to Moscow at supersonic speeds, the 150-ton plane with its four-man crew lacks the A-10's low-level maneuverability and detailed views from the cockpit. It relies instead on what I am told are crude video displays and instructions from the ground to hit its targets. Yet it is now commonly employed for the same purpose as the A-10: close air support.

As the B-1 broke in with offers to take over the mission, the controller's voice grew increasingly frustrated. He continued to insist that the farm was a hostile target. Finally, his patience snapped, and as other listeners recall, he again asked the A-10 flight leader if he was willing to prepare for an attack.

"No," replied the pilot. "No, we're not."

The controller addressed the same question to the B-1, which had been privy to the A-10's ongoing reports.

"Ready to copy," came the quick, affirmative reply.

Down below, the unwitting objects of all this potent dialogue, a farmer named Shafiullah and his family, were settling in for the night. They would not have understood what it meant when the whine of the A-10s was replaced by the deeper rumble of the huge bomber, which was meanwhile confirming that it had "weaponeered" a mixture of large and small satelliteguided bombs. A few minutes later, the farm building was torn apart by three huge explosions that killed Shafiullah, his wife, and five of their seven children, the youngest of the victims only ten months old. Two other children were wounded but somehow managed to survive.

This obliteration of almost an entire family drew some attention in the media, though reporters had no idea of the

real circumstances of the attack. NATO claimed that a ground patrol had come under heavy fire by more than twenty insurgents and had asked for close air support. "We are trying to determine whether the mission has any direct correlation to the claims of civilian casualties," a NATO spokesman told the New York Times. Shafiullah's relatives meanwhile took their complaints to the Afghan government, which duly investigated and concluded that the dead were neither Taliban nor Al Qaeda but civilians. According to Shafiullah's brother, Gul Khan, the Americans then admitted that the family had been killed by accident. Both the U.S. ambassador and the military commander "shared their condolences and asked for forgiveness," he

told me—but the promised compensation never arrived.*

he death of the Shafiullah family might easily be one more addition to the sad roster of CIVCAS, as the military calls the civilian victims of our post-9/11 wars. It fits what has become a traditional pattern: a fatal strike elicits an official denial, followed by concession of responsibility (sometimes grudging and partial, and sometimes accompanied by an offer of compensation), followed by a pledge to mandate stricter procedures. But the events of this particular evening are worth further examination, for they tell us a lot about the way our military operates these days.

The A-10 pilots were able to make a detailed, independent judgment about the target because their aircraft was designed for that very purpose. Its bulletproof armor, along with other features such as reinforced fuel tanks, meant the plane could fly low without fear of enemy ground fire. On the other hand, no one was going to risk a lumbering, \$300 million B-1 within easy range of rifles and machine guns, let alone thread it through narrow mountain valleys. (By contrast, the inflation-adjusted price tag for an A-10

is about \$20 million.) Confined to high altitudes, and limited by its huge wingspan and turning radius, the B-1 is precluded from close observation of the ground below. Like our fleet of thin-skinned supersonic fighter jets—and like drone operators—it must rely largely on video.

The consequences are frequently bloody. In May 2009, bombs from a B-1 killed at least 140 men, women, and children in Farah, Afghanistan, because the pilot, according to the Pentagon's own explanation, "had to break away from positive identification of its targets"—i.e., he couldn't see what he was bombing. Other mass CIVCAS incidents in the same conflict, such as those in Kunduz (ninetyone dead) and Herat (ninety-two dead), can be traced to the same fatal dependence on video-screen images rather than the human eye.

Video will often supply a false clarity to preconceived notions. One A-10 pilot described to me an afternoon he spent circling high over southern Afghanistan in May 2010, watching four people—tiny figures on his cockpit screen—clustering at the side of a road before they retreated across a field toward a house. Everything about their movements suggested a Taliban I.E.D.-laying team. Then the door to the house opened and a mother emerged to hustle her children in to supper.

"On the screen," he explained, "the only way to tell a child from an adult is when they are standing next to each other. Otherwise everyone looks the same."

"We call the screens *face magnets*," remarked another veteran, Lieutenant Colonel Billy Smith, a former A-10 squadron commander who flew tours over Bosnia, Iraq, and Afghanistan. "They tend to suck your face into the cockpit, so you don't pay attention to what's going on outside."

Smith recalled a 2003 night mission in pursuit of a Taliban contingent close to the Pakistani border: "We were looking for them under the weather in a deep, narrow valley, with steep mountains going up to fifteen thousand feet. Suddenly I saw a glow from a fire in a cave on the side of the mountain and called the ground commander." Smith was immediately cleared to attack the cave. Yet he still wasn't sure

^{*} Earlier that day, there had in fact been a firefight about two and a half miles from the farm. Gul Khan recalled that his truck had been stopped at a military roadblock during the fighting and that the skirmish had ended at least four hours before the bombs were dropped.

he had located the enemy. "So with my wingman covering me, I put my plane on its side," he told me, "and flew along the mountain so I was looking straight up through the top of my canopy into the cave. Didn't see anybody. Just to be sure, I turned around and flew back the opposite way, and this time I saw a

whole family at the mouth of the cave, waving."

he characteristics that enable the A-10 to observe the battleground with such precision, and safely to target enemy forces a stone's throw away from friendly troops, should ensure it a long life—at least until a superior replacement is developed. But the Air Force has other plans. Assuming the leadership gets its way, all A-10 units will be disbanded in 2015 and the aircraft itself will be junked. Close support will be assigned to the B-1 bomber fleet, along with various jet fighters, including the F-35, which has yet to undergo operational testing and is estimated to cost \$200 million per plane.

This decision, which practically guarantees that more civilians as well as American soldiers will die, may seem bizarre and irrational, but in light of the core beliefs that give the Air Force its sense of identity, it makes absolute sense. Deep in the Air Force's psyche is the irksome memory of its early life as a mere branch of the Army, with less status and a smaller budget even than artillery. Its subordinate role was widely recognized: in his 1931 sketch of the capital's social pecking order, the Washington columnist Drew Pearson described an official so lacking in status that he was routinely seated at dinner "beside the wives of the Second Assistant Postmaster General [or] the Commander of the Army Air Corps."

Consequently, the Army Air Corps (AAC) nurtured dreams and schemes of independence, on the presumption that strategic bombing could ensure victory without any need for armies or navies. This dogma they derived from the writings of an Italian artillery officer, Giulio Douhet, who argued that bombing the enemy heartland could, by itself, crush any foe. By the time World War II broke out, these crusaders had convinced themselves that the destruction of a lim-

ited set of targets supposedly vital to the German economy, such as electrical-generator factories, would bring victory within six months.

Politicians, including Franklin Roosevelt, took the bait. Drawing up war plans before Pearl Harbor, they budgeted for a huge bomber buildup. Then, thanks to a leak that makes the revelations of Edward Snowden appear trivial by comparison, the full details of this "Victory Plan" appeared on the front page of the isolationist Chicago Tribune just days before the Japanese attack. Suspicion fell on an Army general of alleged German sympathies. But the Tribune's Washington bureau chief at the time, Walter Trohan, told me years ago that it was the Air Corps commander, General Henry "Hap" Arnold, who had passed along the information via a complicit senator. Arnold believed the plan was still too stingy in its allocation of resources to his service, and so he wished to discredit it at birth.

Attempts at daylight precision bombing of strategic targets in World War II proved ineffective. The bombers suffered heavy losses, and the enemy had to be defeated the old-fashioned way, with massive armies slogging across Europe or, in the case of Japan, the invasion of outlying islands together with strangulation by blockade. (These factors had already brought Japan to its knees by the time the atomic bombs were dropped in 1945.)

Air power did play a decisive role—but not in the way envisaged by Douhet's disciples, who considered fighter planes of secondary importance. One such fighter, the P-47, rugged and maneuverable at low altitudes, turned out to be ideally suited for attacking ground targets threatening friendly troops. This weapon proved so successful that during the Third Army's spectacular advance across France in the summer of 1944, General George S. Patton depended almost entirely on close air support to protect his force's exposed right flank.

Meanwhile, back in the bowels of the newly built Pentagon, the AAC had put together a team to plan the most important campaign of all: winning independence from the Army and grabbing 30 percent of the defense budget. By design, none of these officers ALPINE TRAILS 021 had any background in fighter planes—indeed, few had combat experience of any kind. With World War II in its last throes, they still believed that Douhet and his prewar adherents had been right all along: strategic bombing was the key to victory. Close air support, which essentially meant helping out ground operations, was definitely not on their agenda. They had much bigger things in mind, especially after they learned of proposals to create a postwar United Nations dedicated to preserving world peace.

Surely, argued the Air Corps staffers, this new authority would need a law-enforcement arm, an International Police Force—and the most obvious candidate to fulfill this role was the U.S. strategic bomber fleet. As one 1943 planning document put it: "The essential nature of any Post War I.P.F. will be based on the application of Air Power, and such a force will essentially be an air force.... [The I.P.F.] will eliminate subversive or dangerous focal points before they can develop to the point where they become a danger to the security of the world."

This dream of policing the globe in U.N. garb never panned out, but in 1947 the United States Air Force was finally born, complete with its own uniforms, budget, and exclusive control of all fixed-wing aircraft operating from land (the Navy managed to fight off attempts to take over its own planes). The Army feebly consented to this arrangement, having extracted a promise that the Air Force would always be there with close air support when needed.

Three years later, the Korean War broke out. The new service found itself in action as part of the overall U.S. expeditionary force, but sent only unsuitable fighters to support beleaguered infantry units, many of which were consequently overrun. Meanwhile, heavy bombers soon succeeded in incinerating every city, town, and village in North Korea. Yet this had little effect on the course of the war, which was once again decided by armies fighting it out on the ground.

Asked at the end of the Korean conflict what useful lessons had been learned, an Air Force general replied: "Nothing." A decade or so later, when the service was once again called on to

provide ground support in Vietnam, it initially deployed jet fighters that flew too fast to keep targets in sight. The Air Force would ultimately make use of the A-1 Skyraider—which, though highly effective, was an unwelcome expedient, since it was not only old, dating back to

1945, but had been developed by the Navy.

he Navy, of course, was not the only rival on hand. By the late 1960s, the Army's burgeoning helicopter bureaucracy had conceived the notion of a fast, complex, heavily armed attack vehicle—which would lessen its dependence on the airmen. So ambitious was this project that the proposed machine, the AH-56 Chevenne, promised to cost more than a jet fighter. This presented a serious threat to the Air Force budget: if the Chevenne won a constituency in Congress and the industry, the close-air-support mission might be lost. Politically sensitive staff officers whispered in the ear of General John P. McConnell that he was in danger of going down in history as the first Air Force chief of staff to lose a mission and the budget that went with it. Something had to be done.

The solution came from one of the "Whiz Kids," the brilliant group of analysts recruited by defense secretary Robert McNamara to challenge the hidebound orthodoxies of the military. Pierre Sprey was a mathematics prodigy who had been admitted to Yale when he was fourteen, then spent his summers during graduate school working at the Grumann Aircraft Engineering Corporation. After arriving at the Pentagon in 1966, he had soon earned the enmity of the Air Force with a study demonstrating that its strategy for a war against the Soviets in Europe—deep-strike interdiction bombing—was essentially worthless. A rigorous empiricist, Sprey examined recent military history and concluded that close air support was the most useful contribution the Air Force could make to any conventional war.

McConnell's advisers reasoned that given Sprey's otherwise repugnant views on air power, he might be just the man to help develop a close-air-support plane—something demonstrably better and cheaper than the dread-

ed Cheyenne helicopter. Accordingly, Sprey and a select group of Air Force staffers were detailed to draw up the requirements for such a plane. His research had already revealed, for example, that the majority of losses to antiaircraft fire were caused by fuel from punctured tanks leaking onto hot engines and igniting. So manufacturers bidding for the contract were required to separate these two components in their designs. "They howled about that," recalls Sprey, "since they were so used to wrapping the fuel tank around the engine."

Sprey's analysis led to other requirements: a tight turning radius at slow speeds, an ability to land on dirt strips, bulletproof armor enclosing the cockpit, and a quick-firing 30mm cannon to devastate tanks, machine-gun nests, and the like. Circulated to manufacturers, this checklist elicited a variety of designs, and ultimately the first-ever fly-off between two competing prototypes, from which the A-10, manufactured by the Fairchild Corporation, emerged victorious. Congress quickly approved a buy of 750 planes.

By 1977, when the A-10 first went into service, it had already fulfilled its primary mission. The Army threat had been beaten off, and the Chevenne was cancelled. Now, however, the Air Force had to live with the instrument of its victory, an aircraft that represented everything that it had fought so hard to escape. From early on, the A-10 was treated as the poor relation, unwelcome at the feast. During the Reagan years, a golden age for the military-industrial complex, the Air Force showered money on such cherished programs as the B-1 bomber and the F-15 and F-16 fighter jets. Meanwhile, the generals shut down the A-10 production line in 1984 (thirty-seven of the original 750 were still to be built) and firmly nipped in the bud any initiative to develop a replacement. In 1988, General Robert Russ, head of Tactical Air Command, announced in the semi-official pages of Air Force Magazine that the A-10 had been far outclassed by such favorites as the F-16. "Slow ducks," Russ

told his readers, "will be dead ducks."

wo years later, the United States deployed a huge force to Saudi Ara-

bia in response to Saddam Hussein's invasion and occupation of Kuwait. No A-10s were included in the initial air deployment. Legend has it that General Norman Schwarzkopf, commander-in-chief of the expedition, was well aware of the plane's potency against enemy armor, so he demanded of his air commander, General Charles Horner: Where was the A-10?

"Oh," replied Horner, "the F-16s can do the job."

"Don't give me that Air Force political bullshit," snapped Schwarz-kopf. "Bring me the A-10!"

It was a wise decision. While precision-guided bombs and missiles captured the imagination of the media and the public, thanks to the new CNN-funneled video footage they provided, these weapons turned out to be less useful at destroying targets especially if the targets were moving. It was left to 144 grudgingly deployed A-10s to dispatch the bulk of the Iraqi armor, along with truck convoys, radar sites, and other crucial targets. Some A-10s even flew off "hasty bases," rough strips secretly laid deep inside Iraq's western desert, the better to hunt for elusive Scud missile launchers. So useful did they prove that Horner, by all accounts an emotional character, was inspired at the war's end to send a signal back to Washington stating, "The A-10 saved my ass."

The general's heretical admission was very much off-message at a time when stealth bombers and precisionguided weapons were the military's pet projects. Horner recanted soon afterward, giving the F-16 most of the credit for the successful air war in Iraq. Throughout the 1990s, the Air Force began steadily retiring A-10s, consigning them to the "boneyard"—a vast parking lot of discarded planes at the Davis-Monthan Air Force Base outside Tucson, Arizona. By the end of the decade, the force was reduced to 390 aircraft, with increasingly confident predictions that the "old and slow" A-10 was finished.

Inconveniently for the official plan, however, the United States was soon at war again, first in Afghanistan, then in Iraq. As usual, the A-10 proved its worth, not least during Operation Anaconda, the badly planned 2002

assault on an Al Qaeda lair in Afghanistan. During the operation, U.S. soldiers were pinned down by an unexpectedly large enemy force. Chaos ensued as warplanes of various descriptions crowded a confined airspace while 2,000-pound bombs dropped by B-52 bombers seven miles up rained down through their formations. "It was a case of accelerating dysfunction," one veteran recalls bitterly. "They were simply bombing GPS coordinates inside a ten-kilometer-square kill box." The situation was salvaged by an A-10 pilot, Lieutenant Colonel Scott "Soup" Campbell, who set up an ad hoc airtraffic-control system while circling the mountainous battlefield, guiding the distant B-52s so that they didn't inadvertently bomb friendly troops.

Among the aircraft Campbell narrowly avoided colliding with that night was a Predator drone, streaming infrared pictures to U.S. military installations around the globe, thereby unleashing a flood of contradictory orders from a hodgepodge of far-flung officers, all of whom believed that they had total "situational awareness" of the battle. Though Anaconda was widely considered a disaster, this particular aspect of the operation received only limited attention. The notion that information could be acquired and disseminated far more efficiently through video streams than by a pilot looking through his canopy was already taken for granted.

"If you want to know what the world looks like from a drone feed, walk around for a day with one eye closed and the other looking through a soda straw," an Air Force colonel with firsthand experience of the drone program remarked to me as we discussed the topic over a beer in the bar of an officers' club near Washington. "It gives you a pretty narrow view of the world." On another occasion, a weapons designer lamented that "people just don't realize that high-definition video isn't good enough to show the subtle stuff you've got to see to keep from hitting your own guys or killing civilians." He compared it to watching a Super Bowl broadcast and attempting to pick out a spectator leaning on an AK-47 rather than a cane.

Experienced A-10 pilots make frequent use of the soda-straw analogy in describing the crucial, fragmentary

CARAVAN 014 visual snippets they pick up almost subconsciously when viewing a scene directly from the cockpit: the flare of a cigarette being lit, an interior car light flicking on when a door opens. Video images from their targeting pods are always available, of course, but these lack the gymnastic focusing power of both the human eye and the human brain.

"You can *find* people with the targeting pod," an A-10 pilot and veteran of Afghanistan told me. "But when it's zoomed in, I'm looking at a single house, not at anything else." Binoculars and a cockpit view deliver something else, commonly called the big picture. "I see these people standing around a house. Are they hiding? What are they hiding from? You can put all that together. If you're looking through the soda straw, you don't

know everything else that's going on around them."

ven as drone warfare has lately dominated the headlines, the entire military-industrial complex, with the Air Force in the lead, was putting its weight behind a gigantic program officially calculated to cost \$1.5 trillion: the F-35 fighter. The plane, built by Lockheed, is billed as "multi-mission"—capable of fulfilling the varying needs of the Navy, Marine Corps, and Air Force. The Air Force version, we are told, will be designed for both the treasured "deep-strike interdiction" bombing and close air support.

Neither as hardened nor as maneuverable as the A-10, the plane does include multiple features designed to enhance the pilot's "informational awareness." There is, for example, a system that will allow an F-35 pilot to look "through" the floor of his aircraft, by means of a video feed projected onto his helmet visor. Unfortunately, because of the complexity of signal processing, these magical pictures will arrive one eighth of a second out of date. This means that a pilot targeting a weapon on the basis of what he sees while traveling at 400 miles an hour will miss by seventy-three feet, and that's assuming the picture is not unstable, which it usually is. (By contrast, an A-10 pilot firing his cannon "danger close"

may be aiming within twenty feet of friendly troops.)

Despite these and copious other deficiencies, the F-35 has one attribute that outweighs all other considerations: its enormous cost and the consequent political influence that comes from supporting 133,000 jobs spread across forty-five states. As ballooning defense budgets give way to restrictions on Pentagon spending, the Air Force in particular has resolved to protect the F-35 at any cost to other programs. Not surprisingly, the A-10 is on the chopping block once more.

Other attempts at eliminating the plane have been beaten back before, most recently in 2012, when a plan to eliminate five squadrons was defeated by congressional opposition. This time, the Air Force is going in for the kill, insisting that "divestiture" of the A-10 would save a sorely needed \$3.5 billion over five years. The first hint of this plan came from a confidential briefing slide detailing the service's budget request for 2015. Inadvertently disclosed by a senior Air Force general, the document revealed that the figure for the A-10 was a bald zero.

Further inquiry confirmed that the entire operation—pilots, planes, maintenance, training—would be dismantled and trashed. Legislators with A-10 bases in their districts, who might ordinarily attempt to save those jobs, were offered special inducements by the Air Force. Thus Michigan's Carl Levin, chairman of the Senate's Armed Services committee, has been guaranteed a squadron of aerial tanker planes that will provide substitute employment. Other powerful legislators have been promised F-16 units—more, in fact, than the Air Force actually has available.

Despite such evasive maneuvers, the Air Force tactics generated a groundswell of opposition. Senator Kelly Ayotte of New Hampshire, herself married to an A-10 pilot, held up the confirmation of the incoming secretary of the Air Force, and followed this with legislation to keep the A-10 in service until an equivalent aircraft is fielded. At a seminar on close air support organized by a Washington public-interest group

and packed with combat veterans, including numerous present and former A-10 pilots, Pierre Sprey made a rare appearance. Long retired from the Pentagon, Sprey spoke of the bureaucratic betrayal of fighting men on the ground as a "festering sore." As I learned, Air Force officers had been warned away from the seminar with thinly veiled threats that such attendance would hurt their careers, and a camera recording the proceedings was pointedly turned away from the audience.

Listening to pilots and other combat veterans discuss their experiences at the seminar, it occurred to me that there was more at stake than a particular plane, or even whether we allow our soldiers and other nations' civilians to die in the name of budgetary politics. Most fundamentally, we're talking about a drive to eliminate a direct connection with outside reality—the sort of connection that prevents children from being mistakenly bombed as Taliban fighters. Instead, the military would rather focus on images relayed along electronic pathways, undeterred by the frequently catastrophic consequences.

The trend extends beyond the military, and beyond a president who relies on a soda-straw view of the world to draw up his weekly kill list. Much of the coverage of the Syrian conflict has been derived from heavily edited videos recorded and posted online by one or another warring faction, then rebroadcast by TV networks around the globe. There are still brave journalists covering the war directly, but declining budgets (and declining interest from both their employers and audiences) have made this sort of firsthand observation the exception.

In Paktia, on that May evening in 2012, it was Shafiullah and his family who paid the price for this disengagement. How will we learn about the next such target selected in error? It may not even be in the record. After all, every wartime U.S. air mission generates a report for the files. When someone recently checked on the report for the Paktia incident, the involvement of the A-10s had been expunged. Sometimes reality is hard to bear.