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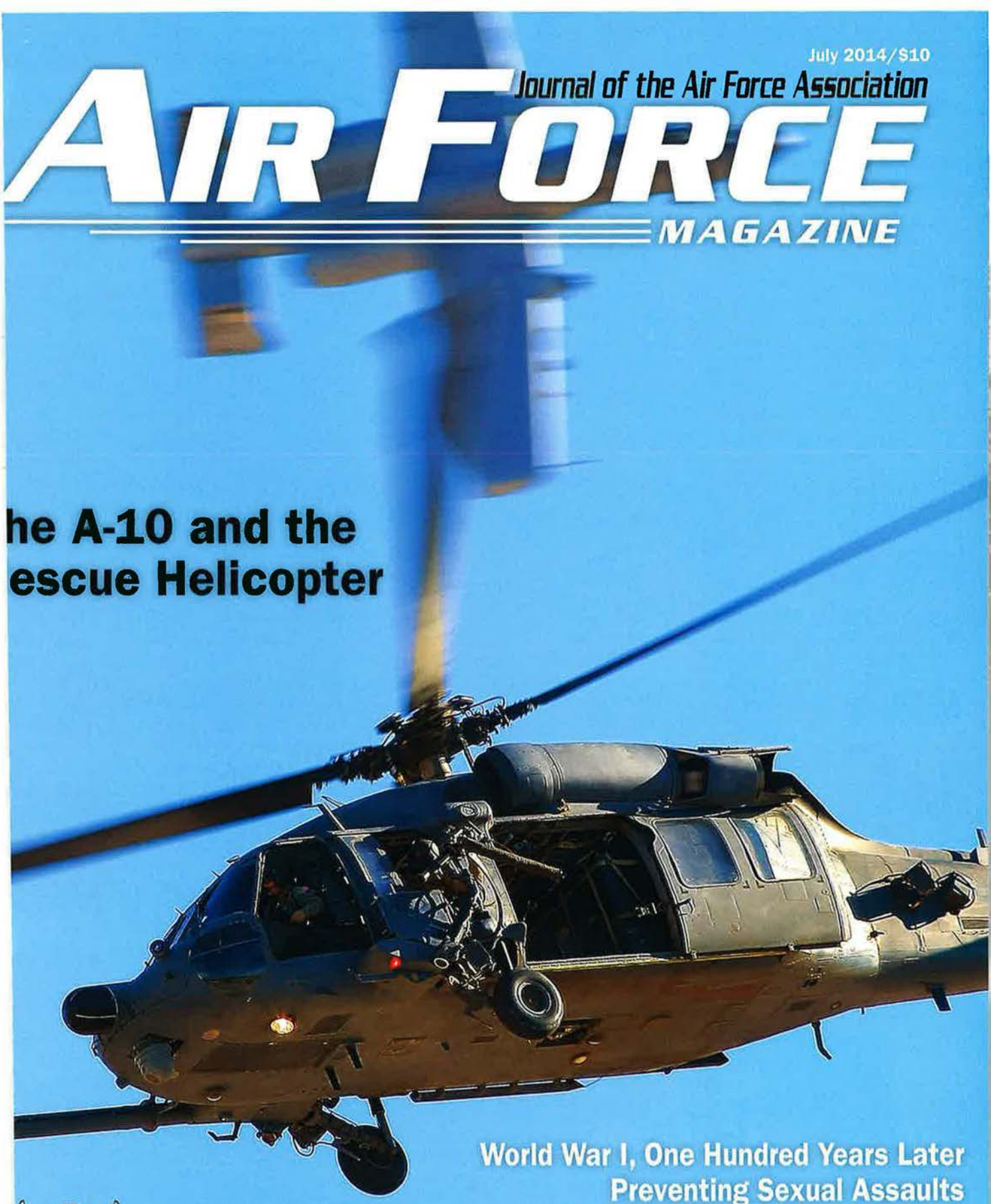

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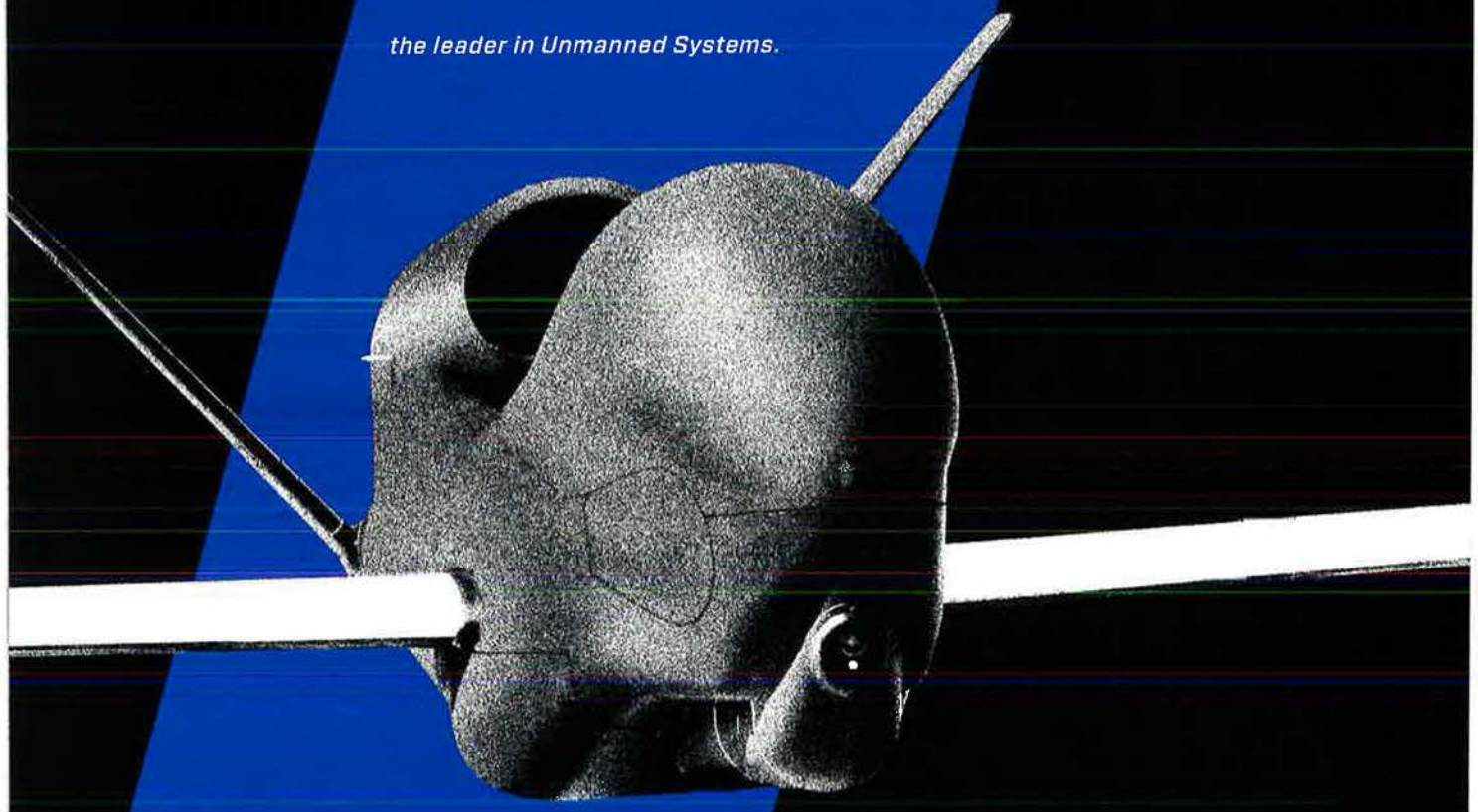

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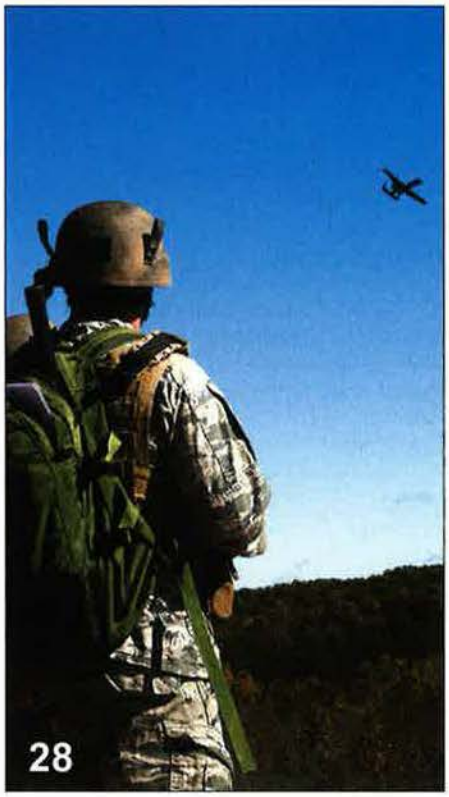
out the cover: An A-10 provides air ver to an HH-60G helicopter during a arch and rescue demonstration at Nellis B, Nev. See "The A-10 and the Rescue licopter," p. 28. Photo by Britt Dietz-rbird-Photos.com.



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Editorial

By Adam J. Hebert, Editor in Chief

This War Isn't Over

Washington, D.C., June 20, 2014

PRESIDENT Obama at the end of May outlined his path for ending US involvement in the war in Afghanistan. "We will bring America's longest war to a responsible end" by reducing the US military presence in Afghanistan from 30,000 troops today to roughly 10,000 at the end of the year.

The force level will be halved again in 2015, leaving 5,000 troops consolidated in Kabul and at Bagram Air Base. By the end of 2016, Obama said, the military presence will be strictly embassy protection and an Iraq-style security assistance force.

"I think Americans have learned that it's harder to end wars than it is to begin them," Obama said. "Yet this is how wars end in the 21st century—not through signing ceremonies but through decisive blows against our adversaries, transitions to elected governments, [and] security forces who take the lead and ultimately full responsibility."

A week later, Obama commented on the return of Army SSgt. Bowe Bergdahl, freed in exchange for five terrorists in US custody: "This is what happens at the end of wars," Obama declared. "That was true for George Washington; that was true for Abraham Lincoln; ... at some point, you make sure that you try to get your folks back."

The rhetoric about the end of the war sounded great, but reality intervened. As if on cue, terrorists and insurgents in Afghanistan, Pakistan, and Iraq immediately showed that this war is not over, and wishful thinking cannot make it so.

A look at the news from the first half of June:

In Pakistan, "militants launched a brazen attack on Karachi's international airport [June 8], killing at least 18 people and seizing control of part of the airport in Pakistan's largest city for more than five hours," reported the *Washington Post*. "The well-coordinated attack involved 10 assailants who were armed with grenades, rocket launchers, and assault weapons. ... They battled Pakistani security forces through the night." Another attack, on a nearby facility, followed two days later. In all, 36 died, including the terrorists.

In Afghanistan, "five US troops were killed in an apparent friendly fire incident in southern Afghanistan" June 9, the *Wall Street Journal* reported. "After an operation, the troops were on the way back to their base when they were ambushed by the Taliban," the local governor's aide explained. "Tragically, there is the possibility that fratricide may have been involved," NATO's International Security Assistance Force confirmed.

In Iraq the same week, "so absolute was the rout of Iraq's army in Mosul

Don't repeat the mistakes of Iraq in Afghanistan.

that soldiers stripped off their uniforms in the street and fled," *The Economist* read. "Roughly 1,500 jihadists from the Islamic State of Iraq and Greater Syria (ISIS), outnumbered by more than 15-to-one, reportedly seized six Black Hawk helicopters as well as untold plunder from the vaults of Mosul's banks. ... As many as half a million refugees sought sanctuary."

Back in Afghanistan, "Defense Ministry spokesman Gen. Mohammad Zahir Azimi said there had actually been 506 attacks across the country" during June 14 elections, *Stars and Stripes* reported. "Thirty-three civilians were killed and 63 wounded across the country, four times the number of civilian deaths reported in the April election. ... In Herat province 11 voters had their fingers, stained with ink to prevent repeat voting, chopped off by insurgents as punishment for voting."

And back in Iraq, as insurgents neared Baghdad, DOD began a return. Rear Adm. John Kirby, Pentagon spokesman, said June 16 approximately 170 US personnel began arriving in Baghdad while DOD also "moved approximately 100 personnel into the region to provide airfield management, security, and logistics support, if required. ... All of these forces are trained to integrate with existing US Embassy security teams or operate as a stand-alone force as directed."

Despite all this, Obama determined "we cannot have US forces around the world in armed conflicts without end," said White House spokesman Jay Carney.

Whether you want to call this the Global War on Terror, the Long War, or overseas contingency operations countering violent extremism—the US does not have the luxury of simply declaring victory.

Too many lives have been lost, too much money spent, and too many troops have been left with grievous injuries for the US to walk away, let the Middle East fend for itself, and hope for the best. June's attacks in Iraq, Afghanistan, and Pakistan are not other people's problems. As we should have learned from the attacks on the Air Force barracks at Khobar Towers in 1996, on the Navy destroyer *Cole* in 2000, and most especially in the terror attacks of 2001, violent extremism seeks out the United States.

Carney asked what he surely intended to be a rhetorical question: "Should American forces be occupying countries for decades, or should we take the approach that the President took when he ended the war in Iraq and established a relationship with the sovereign government of Iraq, through which we can provide the kind of assistance we provide?"

The question is a false one. For starters, the US has helped secure peace in places like Germany, South Korea, and Kuwait for decades. Would any of those nations seriously consider their state to be "occupied" by the US?

Meanwhile, our relationship with Iraq ended with no status of forces agreement, no enduring presence or real influence, and Iraqi defense forces that were clearly not up to their billing. We may have to fight again to stabilize Iraq and protect the Americans that remain there.

Let's not repeat our mistakes by running away from Afghanistan, too.

"Afghanistan will not be a perfect place, and it is not America's responsibility to make it one," the President noted back on May 27. "The future of Afghanistan must be decided by Afghans."

On this point, at least, we agree wholeheartedly. But a permanent US presence there will help ensure peace for both nations. ■

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Letters

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There's Still a Pulse

Being former Active Duty and USAF civilian, I very much enjoy each year's "USAF Almanac" *[May, p.22].* Keep up this good work, please! I was a C-130E pilot in Vietnam; thus, I was amazed to see that we still have six E models in service. Good grief! They are 50 years old. Give my old buddies a rest!

As an Air Force civilian, I studied the human components of our weapons systems, and I have documented the 50-year history of cognitive performance research at Brooks Air Force Base. While the electromechanical portions of our weapons systems are brilliantly designed and amazingly reliable, it is the human component that brings the highest levels of pattern recognition and decision-making competence to our systems. This is true across the cockpit, the maintenance hangar, the command and control environment, and the UAV workstation.

The CSAF, General Welsh, has noted that "everybody in this business is critically important to what we do" and "everybody in this room has a role to play in our Air Force; it is a critically important role." Ironically, as I scan down your 2014 Almanac table of funding for "Major USAF Programs RDT&E" (p. 134), I see no listing for RDT&E funding for the human components of our systems.

This omission is sad, but not surprising. The USAF RDT&E community is, essentially, an engineering organization. It is rare that a student or practitioner of electrical, mechanical, or aeronautical engineering is exposed to human factors concepts. I saw this to be true at the AFFTC at Edwards Air Force Base in the 1980s and the engineering departments at USAFA in the 1990s. Members of the Human Factors and Ergonomics Society have noted the same problem for decades in our civilian universities. Thus, even though our acquisition system requires human factors consideration in system design through Military Standard 1472, the engineers who manage acquisition don't have the education and training necessary to assure compliance.

The relatively new chief scientist of the Air Force, Dr. Mica Endsley, is a brilliant human factors scientist. She pioneered the concept of situational awareness. I hope that her appointment will usher in a new era of awareness in USAF of the importance of RDT&E concerning the human components in our weapons systems.

Maj. James C. Miller,
USAFR (Ret.)
Buffalo, Wyo.

So Many Notables ...

I just received my May 2014 issue of *Air Force Magazine.* The first section I always go to is the "Airpower Classics" *[p. 144].* I was pleased to see that the featured classic for May was the F-4 Phantom II, which was the premier fighter aircraft of my era. Then I realized the aircraft illustration used

Do you have a comment about a current article in the magazine? Write to "Letters," *Air Force Magazine,* 1501 Lee Highway, Arlington, VA 22209-1198. (Email: letters@afa.org.) Letters should be concise and timely. We cannot acknowledge receipt of letters. We reserve the right to condense letters. Letters without name and city/base and state are not acceptable. Photographs cannot be used or returned.—THE EDITORS

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in the article was Scat XXIII, which was flown during Vietnam by perhaps the greatest pure fighter pilot in our history, Robin Olds. While the article didn't specifically link Colonel Olds to the illustration, it did refer to him under the Famous Fliers section. I recognized most of the names there but I thought of one more notable that could have included as well—the hero of the Miracle on the Hudson, Capt. Chesley "Sully" Sullenberger, who was also a USAF Phantom pilot in late 1970s.

MSgt. James W. Roosa,
USAF (Ret.)
Waterbury, Conn.

It was great to finally see the mighty F-4 Phantom in "Airpower Classics"! I'm certain that the vast F-4 community has inundated you with many "other notables" who flew that awesome jet but were not mentioned. One other notable in particular comes to mind, my golfing buddy and good friend Phil "Hands" Handley. "Hands" was flying a hard wing F-4E over North Vietnam when he made the highest speed air-to-air gun kill in the history of aerial combat. On June 2, 1972, Hands and his WSO, 1st Lt. Jack Smallwood, were leading a four-ship combat air patrol northeast of Hanoi when their element was attacked by two MiG-19s. After expending all four of his air-to-air missiles, none of which was guided, and pursuing the MiG from 15,000 feet to 500 feet, Hands finally destroyed the MiG with a 300-round cannon burst in a 90-degree high-deflection snap shot at a speed of 1.2 Mach. Certainly Hands' singular achievement ranks him high on the list of the many notables who flew the venerable F-4.

Lt. Col. Craig Lamkin,
USAF (Ret.)
Collinsville, Texas

"Airpower Classics," p. 144, F-4 Phantom II, In Brief: Specific to F-4C: ... (defensive), four AIM-7 and four AIM-9 air-to-air missiles, 20 mm cannon ...

The above is misleading in that the F-4C was modified to carry a 20 mm cannon externally in a centerline pod that was designed mainly for strafing—not for air-to-air defense as implied in the article. The F-4E/F were the only two versions that came with the built-in 20 mm cannon in the nose and designed for defense.

CMSgt. Jerome T. Czeikus,
USAF(Ret.)
Victorville, Calif.

You're Aces With Us

Enjoyed reading (as always) the 2014 USAF Almanac issue of *Air Force Magazine*. But I felt slighted by page after page and picture after picture devoted to Air Force fighter pilot aces. There were, thankfully, several other pages listing decorated heroes, but no indication of whether they flew in fighters or bombers or other combat aircraft.

Wouldn't it be fair that if a bomber's crew shot down five enemy aircraft they should all be declared aces?

Or if a crew survived five missions as dangerous as the Doolittle Raid or over Ploesti or Berlin or any equally deadly target, shouldn't they get credit for, say, one kill? After five such missions they would be considered aces. Seems fair to me.

In World War II I was an Eighth Air Force lead bombardier with 30 missions, many of them in flak that was worse than fighter attacks where, at least, you could shoot back. I think every man in my crew should be considered an "ace."

Lt. Col. Robert L. Hecker,
USAF (Ret.)
Sherman Oaks, Calif.

Code Vs. Flash

Please note the omittance of the 125th Fighter Wing from p. 39 ("USAF Aircraft Tail Markings") in the May 2014 issue of *Air Force Magazine.* The ANG F-15s of Jacksonville, Fla., (JAX) clearly have the "lightning bolt" symbol on the outboard side of the vertical stabilizers. I have attached a recent photo of the 125th FW aircraft which also have a blue banner with the state's name: Florida.

Lt. Col. J. E. Martin,
USAF (Ret.)
Daytona Beach, Fla.

■ *What the reader is describing is a tail flash that many ANG and AFRC aircraft sport, not a two-letter tail code. Flashes are designs, sometimes wording, and we do not list them in the Almanac. However, he is correct that flashes are tail markings, and thus the name of the Almanac page will be changed to "USAF Aircraft Tail Codes."—THE EDITORS*

Throwback to Momyer

I read the August 2013 *Air Force Magazine* article about General Momyer *["Momyer," p. 64]* and the letters in October by Lieutenant Colonels Butler and Korzan *["Letters," p. 8]*. I found them quite interesting, but I would like to offer some historical perspective about General Momyer and his insight into the use of dedicated CAS jet aircraft such as the A-7 and the A-10.

In the early 1960s Generals Momyer and Disosway and most all the senior officers on the Air Staff were totally against such aircraft as the A-7 and the A-10, which came into the inventory several years later. My father, Brig. Gen. Jack Gibbs, was General Momyer's deputy director of operational requirements from the fall of 1961 until June 1963. He was a highly skilled aeronautical engineer who had been chief of the aircraft lab in the early 1950s.

In the spring of 1962, my father was selected by President Kennedy to lead a TDY team to assess the CAS requirements for the upcoming war in SEA. A key member of the team was Col. George Laven, who was a highly experienced combat veteran and TAC wing commander. I knew Colonel Laven personally and anyone who served under him would praise him to the highest levels. My dad was a great pilot, too, but his skill was aeronautical engineering. He and Dick Bissell started the Gusto Program while at the CIA in 1956 and managed the efforts to lower the RCS of the U-2. He just knew how to develop aircraft systems that solved problems.

It was the opinion of this team that the CAS requirements for the upcoming war in SEA would necessitate a jet aircraft that was dedicated to that mission only. This was due to the unique requirements of this war such as loiter time, terrain, weather, and undefined lines of battle. When General Momyer was briefed on this recommendation, he would have no part of such nonsense because USAF had the F-100, F-4, and F-105, which he felt could handle the CAS mission. Several years later when the war became a full-scale effort and the CAS capability of current tactical fighters was questioned, the USAF Chief of Staff asked his key staff officers where was the operational requirement for a dedicated CAS jet fighter for this conflict? This was precisely what the TDY team recommended in 1962 to Generals Momyer and Disosway, both of whom became commanders of TAC. USAF responded to this request with the procurement of the A-7 and other jet and reciprocating engine-based weapon systems.

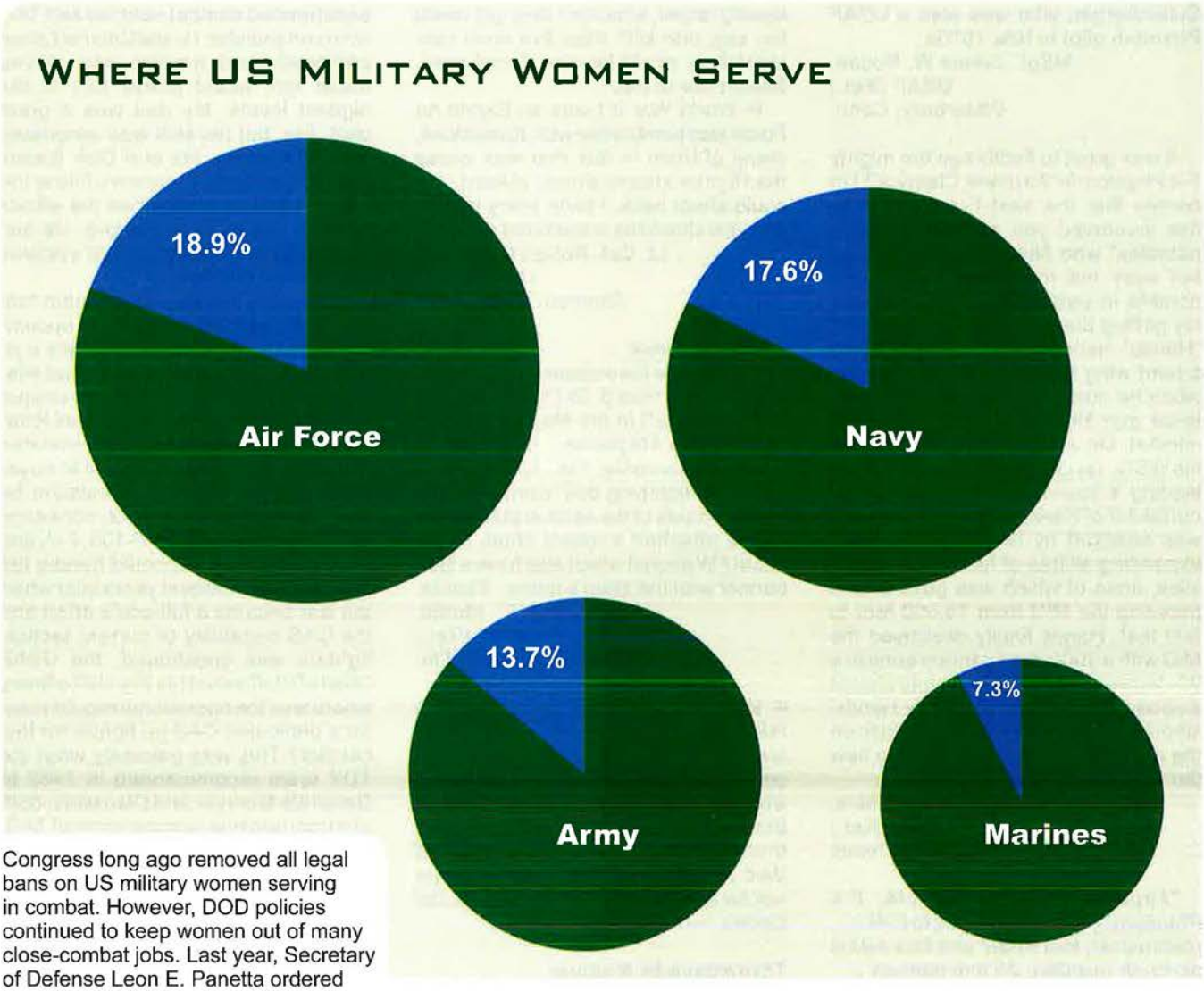
It is my opinion that the role of general officers is to be totally open to recommendations from their staff even if they are contrary to their preconceived notions about the solution to operational problems. Furthermore, their role is to have the vision for future operational systems which may face our country in a variety of conflicts.

James Gibbs
Tarpon Springs, Fla.

Corrections: The 426th Airlift Wing, Dover AFB, Del., operates C-17 as well as C-5 aircraft.
Gen. Frank Gorenc is the commander of USAFE-AFAfrica.

chartpage@afa.org

Band of Brothers and Sisters



Congress long ago removed all legal bans on US military women serving in combat. However, DOD policies continued to keep women out of many close-combat jobs. Last year, Secretary of Defense Leon E. Panetta ordered the Joint Chiefs of Staff to study opening all military jobs to women by 2016. The profile of military women varies by service. As seen in the table, USAF leads the way, with women making up some 19 percent of the force. They fly fighters and bombers; few jobs are closed to them. At the other end of the spectrum is USMC. Women are seven percent of the Marine Corps and are notably absent from the combat arms. According to Sen. Kirsten Gillibrand (D-N.Y.), the Marine Corps has yet to open up 70,000 positions to women.

Service	Male	Female	Total	%Fema
USAF	267,240	62,370	329,610	18
ARMY	451,222	71,751	522,973	13
NAVY	266,366	56,768	323,134	17
USMC	179,454	14,161	193,615	7
TOTAL	**1,164,282**	**205,050**	**1,369,332**	**15**

Source: *Department of Defense, as of Dec. 31, 2013.*

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Aperture

By John A. Tirpak, Editorial Director

War fatigue; Cyber attacks a serious problem; Poor, poor Putin; Whither the Pacific pivot; ....

RETIRED WORLD COP

In a major speech at West Point on how and where the US will—or most likely won't—intervene militarily in world affairs during the remainder of his presidency, Barack Obama pronounced the US out of the business of world policing. On his watch, the US will act militarily only if its citizens or interests are attacked "directly" and will resolutely avoid being drawn into any brewing wars, be they hot or cold.

Despite Russian tanks on the move, Obama made clear there will be no symbolic rebuttal from the US in the form of a major return of forces to Europe or a surge in defense spending. He specifically dismissed the notion of another Cold War and said terrorism—not aggressive nation-states—represents the biggest threat to Americans. Forces that directly combat terrorism will get special attention in defense spending during the rest of his tenure.

In spelling out the new American "restraint," Obama indicated there are few transgressions that would cause the US to reverse the rapid shrinkage of the US military, funding for which is expected to be a trillion dollars less than originally planned during the 10 years ending in 2023. For the Air Force, this has meant the retirement of more than 500 aircraft in recent years, with another 400 or so proposed in the most recent defense budget.

Obama explained that in specific conflicts underway or threatened in Syria, Iran, Egypt, and Ukraine, the US will exercise its world leadership by first exhausting soft-power efforts to isolate aggressors through diplomacy, economic sanctions, and the pressure of international law.

The "hammer" of the US military is the best in the world, he said, but not every problem "is a nail." Taking heavy-handed, precipitous military action in conflicts that should be solved by other means risks making "more enemies," Obama asserted.

With the US economy continuing to struggle, Congress' unwillingness to repeal the sequester, and the nation's overall war fatigue, an initiative to sharply upgrade the armed forces to counter world peers is a tough sell.

SOFT POWER AND LAWFARE

Not only will the bar for invoking US military action be set to new heights, when the US does engage with force, Obama said, it will almost never do so unless it is part of a coalition of allies or regional partners. The instances where the US acts alone will be rare, he said, because unilateral US action rarely produces lasting political results. However, he reserved the right of "just, necessary and effective" unilateral action, saying the US need never "ask permission" from the UN, NATO, or other countries to protect its people, homeland, or "way of life."

The preference to resolve conflicts through peaceful means is not new for the former law professor; Obama has expressed this since long before becoming President. What was startling about his West Point speech, however, was the timing of the remarks. It had only been two months since Russia forcibly annexed Ukraine's Crimea and was openly sponsoring, arming, and leading pro-Russian insurgents fostering military unrest in Ukraine.

The Russians—shown here in a May live weapons exercise just 100 miles from the Ukraine border—claim to feel "robbed" and "plundered" by the West.

Meanwhile, China has been stepping up its rhetoric and skirmishes with Asia-Pacific neighbors in more than half-a-dozen territorial disputes, warning the US to mind its own business about it all. Regarding these, Obama said, "We're working to resolve [them] through international law." A few months ago, China suddenly created an air defense identification zone around its coastline, demanding all aircraft entering it to check in with Chinese authorities and threatening intercept or worse of those who don't get permission. The ADIZ overlaps similar zones declared by Japan and South Korea.

The US has "a serious problem with cyber attacks" from China and Obama said he hopes to "shape and enforce rules of the road to secure our networks and our citizens.' He didn't mention that some of these cyber intrusions have been traced back to the Chinese military, and some have caused profound losses of sensitive data.

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HITTING THE SNOOZE BUTTON

Russia's aggression toward former Soviet states "unnerves capitals in Europe" and China's "rise and military reach worries its neighbors," Obama admitted in the West Point speech, adding that "regional aggression that goes unchecked—whether in southern Ukraine or the South China Sea, or anywhere else in the world—will ultimately impact our allies and could draw in our military."

In explaining his moves in Ukraine during a marathon March press conference, Russian President Vladimir Putin voiced sympathy for all those ethnic Russians who, as the old Soviet Union broke up, "went to bed in one country and awoke in dfferent ones, overnight becoming ethnic minorities." He suggested those new minorities may need to be rescued. Russia, he said, has been "robbed" and "plundered" by the West, and he ridiculed criticisms of Russia in the name of international law, saying the US has ignored those rules with its actions in Iraq and Afghanistan.

In March, NATO Secretary-General Anders Fogh Rasmussen, speaking in Washington, declared Russia's Crimea grab "the gravest threat to European security and stability since the end of the Cold War," a "wake-up call," and a "stark reminder" that European security "cannot be taken for granted." He urged NATO members to make "tough decisions in view of the long-term strategic impact of Russia's aggression on our own security."

In early June, Defense Secretary Chuck Hagel delivered a similar call to European partners to step up their defense spending, saying at a NATO ministerial that the US continues to bear a disproportionate share of the burden of European security, and NATO partners should live up to their commitment to spend two percent of their GDP on their militaries. It was the same message his predecessor, Robert M. Gates, voiced on his last visit to NATO as Defense Secretary. Both warned that the US is getting tired of paying Europe's military bills.

Obama told the graduating Army cadets that NATO, the International Monetary Fund, the World Bank, and similar institutions are "not perfect" but have proved to be a "force multiplier" for the US and have reduced the need for solo US military action. He said the "architecture" of these international organizations "must change," but he didn't say how.

Despite the obvious concerns about Russian adventurism, Obama steadfastly insisted "this isn't the Cold War," and in an interview afterward with National Public Radio, he offered reasons why Russia's actions are understandable, even if the US condemns them.

"Ukraine, in the minds of most Russians, has been a central part of Russia for decades, centuries," Obama told NPR, opining that Putin acted out of fear that "he was being further and further surrounded by NATO." Obama allowed that Crimea has been "historically ... dominated by native Russians and Russian speakers," but he believes the rule of law is "ascendant," and Russia "is going to be on the defense" politically and economically, if not militarily. Obama told NPR he hopes the truncated Ukraine will have "a good relationship with Russia." Asked if he would try to make Russia give Crimea back, his answer was, "We're going to have to see how it plays itself out."

MISSED THAT EXIT

Each time the US military was about undergo a major force drawdown in the last 20 years—under George H. W. Bush at the end of the Cold War, then again under Bill Clinton after the first Gulf War—the Administration in power promised the US military would retain the means to rapidly rearm and regrow if the world situation demanded it.

Obama has been no exception. In his 2012 National Military Strategy—the one that introduced the so-called "Pacific Pivot" and the "evolution" of US military presence in Europe—Obama made a similar pledge. He wrote that the drawdown would have to allow for "a course change that could be driven by many factors, including shocks or evolutions in the strategic, operational, economic, and technological spheres." A capacity for "reversibility" would be "a key part of our decision calculus" in deciding the "vectors" of "our industrial base, our people, our Active-reserve component balance, our posture, and our partnership emphasis." These calculations underpinned the choices made between "investments that should be made today and those that can be deferred."

Senior Pentagon officials have shortened this idea to the phrase "off-ramps," meaning that the military can change course if the situation warrants. Obama's West Point speech clearly indicated that neither the Russian situation nor China's bolder tests of US leadership in the Pacific drive him to change course. The Cold War, Obama insists, will have to remain in the rearview mirror, even if Putin thinks otherwise.

MAKING A VIRTUE OF NECESSITY

Numerous polls show the American public is exhausted by 13 years of land war. After putting trillions on the national credit card to pay for them, with the disengagement from Iraq, the drawdown in Afghanistan—and the sequester—it's unlikely Obama can order up a major rearmament or even reset to deal with Russian or Chinese adventurism.

So while his oft-repeated inclination is to try to settle problems by talking them out, Obama really has little choice but to make that the default setting on the use of force. Despite the urgency expressed by NATO leaders about the need for the alliance to up its game militarily—especially in those countries that used to be Soviet satellites—the alliance is dragging its heels to react to the Ukraine crisis. Despite Rasmussen's and Hagel's calls to action, few countries in NATO have the political backing for a major rearmament. During the NATO operation in Libya, European allies ran out of weapons. The US stepped in to provide munitions, but three years later, the NATO partners have done little but agree that they ought to restock. Denmark fronted a suggestion that NATO pool munitions buying to save money.

The so-called Pacific Pivot got no mention in Obama's West Point speech. Though it was to have been a break from the previous 10 years of counterinsurgency, the new-again emphasis will be on counterterrorism, he said. The "centralized al Qaeda leadership" has been defeated, he claimed, but splinter groups and franchises are popping up across the Middle East and Africa. To battle these "extremists," Obama announced he'll ask Congress for an up to $5 billion "Counterterrorism Partnerships Fund" to help build up the military capabilities of friends in the region. The money will be used to buy these countries gear and give them training so that the US can "more effectively partner" with them to prevent terrorists from gaining a "foothold" within their borders.

In the same vein, he said he will continue to authorize selective attacks by remotely piloted aircraft when such attacks are urgently needed to prevent terrorist actions and when loss of innocent life can be minimized.

Obama said the US remains "the indispensable nation,' and will lead on the world stage, but that leadership, on his watch, will not come in the form of military action unless the Commander in Chief sees no reasonable alternative. ▪

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Air Force World

By Aaron M. U. Church, Associate Editor

Record F-16 Rotation to Poland

US Air Forces in Europe dispatched its largest F-16 rotation to date to Lask AB, Poland, for training with Polish F-16s in response to Russian aggression and unrest in Ukraine.

"Our commitment to Poland's security, as well as the security of our allies in Central and Eastern Europe, is a cornerstone of our own security and it is sacrosanct," said President Obama, addressing US and Polish airmen alongside Polish President Bronislaw Komorowski during a June 3 visit to Poland.

USAFE announced the rotation of 18 F-16s from Spangdahlem AB, Germany, the same day. The fighters marked the third flying rotation to the NATO ally this year, according to a Spangdahlem officials. Nearly 300 airmen deployed to Lask and about 100 more rotated to Powidz.

While in Poland, Obama announced the European Reassurance Initiative, a series of measures built around a persistent US air, land, and sea presence in the region, especially in Central and Eastern Europe, to assure NATO allies in the face of Russia's aggression.

Obama asked Congress to provide up to $1 billion in funding for the initiative in the next year.

DLA Ends Embassy Support in Iraq

The Defense Logistics Agency ended its US Embassy support mission in Iraq, more than two years after US forces departed at the end of 2011, officials announced. DLA oversaw the demilitarization and disposal of US equipment and fuel stocks, in addition to supplying food, dry goods, planning, and daily support to State Department personnel.

"Those are skill sets we were able to provide that the State Department just didn't have organically," said Navy Capt. Jim Liberko, former head of DLA operations in Kuwait. "Because we were running the military bases, we already had the logistics pipeline established," he added.

The State Department signed an independent logistics and support contract last year, and DLA began transferring responsibility to the new contractors earlier this year. DLA

Russia's Aggressive Global Reach

Russian air and naval forces have become "increasingly active" in the Asia-Pacific region following the Ukraine crisis, Pacific Air Forces Commander Gen. Herbert J. "Hawk" Carlisle said.

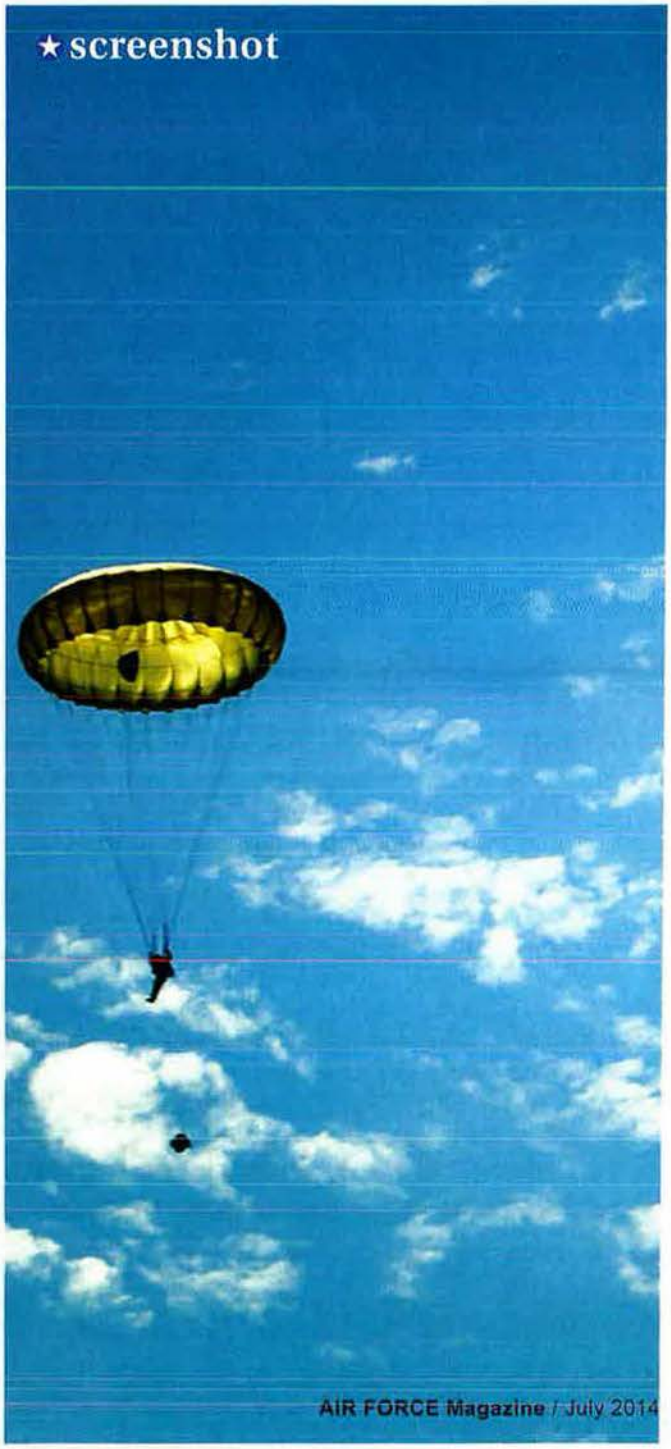
He said Russia's long-range aviation assets, Tu-95 and Tu-160 airplanes, have expanded flights in four areas: around Japan, near Korea, in the western Pacific near Guam, and in and around Alaska.

The uptick in activity has been "significant," Carlisle said speaking at the CSIS think tank in Washington, D.C., May 5. Flights near Japan and Korea have grown more assertive, notably near the disputed Kurile Islands.

Though specific reasons vary, Russian forces have been keen to demonstrate military capability as well as gather intelligence on US-Japan-South Korean drills such as the Exercise Foal Eagle with South Korea.

Although there is dialogue and engagement between Russia and some US allies in the Pacific, there is concern among the allies that Russia's posture is related to events in and around Ukraine and has implications for other territorial disputes, Carlisle said.

—Marc V. Schanz



ceased support in Iraq May 15, according to the agency's news release.

The Underappreciated Foundation

Some 220,000 airmen provide vital support to combat operations daily around the world, yet their contributions are often unfairly reduced to the term "enablers" in Pentagon budget conversations, said Chief of Staff Gen. Mark A. Welsh III.

This representation does not capture these airmen's value to the nation, he said in a speech before leaders of the New York business and finance community on May 13.

"It is not evil intent. It is just lack of understanding, but it is crushing the Air Force," said Welsh, the symposium's concluding speaker. "This is a big deal and it is our fault. We haven't told [the] story [of these airmen] well enough," he said. Welsh equated the work of these airmen—who serve in missions like airlift, command and control, and many others—to the Statue of Liberty's foundation. "That foundation is not visible so people don't really understand it," he said. "There is all of this stuff in the background going on all of the time that benefits so much more than just the military."

The Air Force Association's Mitchell Institute for Aerospace Studies sponsored this event, its first airpower symposium in New York City, together with AFA's Iron Gate Chapter and the Union League Club of New York.

Nigerian Search

The Pentagon tasked an MC-12 Liberty and RQ-4 Global Hawk remotely piloted aircraft to aid efforts to locate more than 200 schoolgirls kidnapped by terrorists in Nigeria.

Roughly 80 airmen deployed to neighboring Chad "in support of one of our [remotely piloted] ISR assets," Pentagon spokesman Army Lt. Col. Myles Caggins said in a statement May 22. In addition to the launch, recovery, and maintenance,

06.08.2014

Paratroopers jump into the "Iron Mike" drop zone outside St. Mere Eglise, France, on June 8. More than 600 American, German, Dutch, and French service members jumped into Normandy as part of a commemoration of the 70th anniversary of D-Day.

USAF photo by SSgt. Sara Keller

a small security forces detachment deployed to protect Air Force assets and personnel.

The Nigerian government requested US assistance after the group Boko Haram abducted the girls from a boarding school in April.

President Obama notified Congress of the deployments to "support the operation of intelligence, surveillance, and reconnaissance aircraft for missions over northern Nigeria and the surrounding area," as required by law, May 21.

US Africa Command also dispatched a 16-strong advance force to Nigeria to aid search efforts. Manned ISR flights commenced on May 12, according to the Pentagon.

Mighty Eighth Back on English Soil

Three B-52 bombers left their US bases in June to conduct training and exercises from RAF Fairford, England, with allied forces in Europe.

The roughly two-week deployment was part of a larger strategic effort to rotate US and NATO forces in the region in response to Russia's annexation of Crimea and trouble-making in Ukraine.

The B-52s supported two US European Command exercises and were scheduled to fly other "single-sortie" training missions, said Brig. Gen. Michael E. Fortney, Air Force Global Strike Command's director of operations, during a recent interview with *Air Force Magazine* at the command's headquarters at Barksdale AFB, La.

BUFFs Show the Colors: ***A B-52 from Barksdale AFB, La., gets into position to take on fuel during a deployment to RAF Fairford, England, on June 11. Three Stratofortresses were there for a two-week deployment aimed at familiarizing aircrews with the air base and operations in the region. One B-52 participated in the D-Day commemorations in Normandy, France, during the European deployment.***

By the Numbers

New Nuke Stats

103 Six-month drop in US deployed nuclear warheads

1,015 Total US deployed

112 Six-month growth in Russian deployed nuclear warheads

1,512 Total Russian deployed

The bombers brought no live weapons from the US.

An Air Force advanced echelon team recently visited Fairford—a standby airfield—to ensure it was prepared to support the B-52s. One of the B-52s departed from Minot AFB, N.D. Two were from Barksdale, home of "The Mighty Eighth" air force that in World War II was stationed in England.

Missileer Cure

Air Force Global Strike Command surveyed airmen across its three missile wings and will adopt 98 percent of the more than 300 recommendations made through the command's Force Improvement Program, officials announced May 28.

Air Force leadership initiated the effort following a cheating scandal that revealed widespread career malaise across

The War on Terrorism

Operation Enduring Freedom

Casualties

By June 20, a total of 2,329 Americans had died in Operation Enduring Freedom. The total includes 2,326 troops and three Department of Defense civilians. Of these deaths, 1,824 were killed in action with the enemy while 504 died in noncombat incidents.

There have been 19,803 troops wounded in action during OEF.

Red Tails Downrange

The Alabama National Guard F-16s of the 100th Fighter Squadron at Montgomery made the unit's first deployment to Afghanistan this spring.

The aircraft touched down April 27 at Bagram Airfield, Afghanistan, for a six-month combat deployment. Alabama Air Guardsmen will serve the entire deployment, instead of splitting the rotation with other units, as Air Guard fighter units often do, according to a press release.

The 100th's Vipers replaced Air Force Reserve Command F-16s deployed from Homestead ARB, Fla., and NAS JRB Fort Worth, Texas.

The Alabama airmen and jets will provide overwatch and close air support to ground forces alongside AFRC A-10s deployed to Bagram from Whiteman AFB, Mo., for a similar six-month stretch.

Afghanistan Endgame

The US will sharply draw down its military presence in Afghanistan as US forces transition from a combat, to a support and advisory role next year, President Obama said, announcing his plan to end America's longest war.

The number of US service members in Afghanistan will drop from some 30,000 today to around 10,000 by early 2015, Obama said after returning from Afghanistan in May.

By the end of this year Afghan forces will be "fully responsible" for their own security, Obama said May 27. "American personnel will be in an advisory role. We will no longer patrol Afghan cities or towns, mountains or valleys. That is a task for the Afghan people." He added that the US will be "cooperating with Afghans" on two specific missions: "training Afghan forces and supporting counterterrorism operations against the remnants of al Qaeda."

"By the end of 2015, we will have reduced that presence by roughly half, and we will have consolidated our troops in Kabul and on Bagram Airfield," said Obama.

"One year later, by the end of 2016, our military will draw down to a normal embassy presence in Kabul, with a security assistance component, just as we've done in Iraq," the President said.

the ICBM force and is pushing ahead reforms in three key areas: inspections, leadership development, and personnel reliability program.

AFGSC is changing the career structure to allow new missileers to "focus on mastering the weapons system" before being evaluated at the same level as an experienced crew commander or instructor. "Training now focuses on providing learning opportunities ... and the instruction is tailored to the experience level of each crew," said AFGSC boss Lt. Gen. Stephen W. "Seve" Wilson in a statement.

"Evaluation has shifted to a recurring 15-to-18-month cycle, similar to the aviation community," increasing the emphasis on daily operations instead of looming evaluations. The command is also reworking the personnel reliability program that gauges a crew's personal mission suitability to presumed ready state, instead of presumed "down," according to command officials.

Global Hawk Earns the Name

An Air Force RQ-4 Global Hawk transited British airspace for the first time as part of a NATO exercise aimed at developing operational concepts ahead of the arrival of the alliance's own RQ-4s.

"It is good to see existing airspace procedures enabling the seamless integration of remotely piloted air systems ... within European airspace," said RAF Air Vice Marshal Phil Osborn, alliance RPA capability director, in a May 29 news release.

"From an air traffic control perspective ... there is no discernible difference in our operation with the pilot being remotely located," said Osborn.

The Global Hawk flew a segmented route at approximately 50,000 feet altitude from a base in the Mediterranean Sea to exercise airspace in Norway as part of the alliance's Unified Vision 2014 exercise. Several alliance members are purchasing a fleet of five pooled RQ-4s under the Alliance Ground Surveillance program.

A separate RQ-4 landed for the first time in Japan, touching down at Misawa Air Base for a six-month Pacific rotation beginning May 24. The Global Hawk Block 40 and some 40 airmen redeployed from Andersen AFB, Guam, to dodge the island's rainy season.

Air Jordan's Double Slam-Dunk

California Air National Guard C-130Js and F-16s from Misawa AB, Japan, recently joined armed forces from 22 countries for Exercise Eager Lion in Jordan.

The F-16s practiced escorting transports during a combat airdrop drill at the combined combat and humanitarian relief event in June, US Air Forces Central Command stated.

"There are a lot of pilots who haven't gotten to see these situations during real-world operations," said Hercules pilot Capt. Sean Smith of the 115th Airlift Squadron, from Channel Islands ANGS, Calif.

The flying scenarios aimed to "standardize flight tactics to make it easier to fly with people and aircraft we've never flown with before," said Royal Jordanian Air Force F-16 pilot 1st Lt. Saddam Mardini.

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Some 6,000 personnel took part in Eager Lion, May 25 to June 8. It was the second Jordanian exercise Air Force fighters flew in less than a month. The first was Eager Tiger—also known as Falcon Air Meet—beginning on May 11.

13,000 Miles To Drop a Bomb

A pair of B-1B Lancer bomber crews recently flew a 30-hour strike training mission from Ellsworth AFB, S.D., hitting ground targets at a Pacific range near Guam.

"The success our aviators have had in Operations Enduring Freedom and Odyssey Dawn does not happen by accident," said 28th Bomb Wing Commander Col. Kevin B. Kennedy in a May 21 news release.

The nonstop, 13,200-mile mission tested cooperation between Air Combat Command, US Pacific Command, and US Strategic Command, as well as between the bombers and tankers needed en route.

Ellsworth B-1s were called on to fly global strike missions directly from South Dakota both during Operation Odyssey Dawn over Libya and Operation Desert Fox in 1998, according to the wing.

The successful May 13-14 flight affirmed the bomber fleet's "extended lethality" and underscored the "importance of air refueling to expand our global reach," commented Kennedy.

Lockheed Martin Earns Space Fence Contract

Lockheed Martin won a $914.7 million contract to supply the Air Force's Space Fence ground-based radar system designed to detect and track objects on orbit, Pentagon officials announced June 2.

The company won out over Raytheon to develop, manufacture, and deploy the system that will be capable of tracking even small debris as part of the broader US space surveillance network.

Space Fence is slated to reach initial operational capability from its first site at Kwajalein Atoll in the Marshall Islands in 2018, giving Lockheed Martin 52 months from contract award to IOC, according to the Pentagon.

Space Fence will replace the Air Force's Space Surveillance System. It ceased operations in 2013 after more than five decades of service.

SASC Me Again, We'll Keep the A-10

The Senate Armed Services Committee markup would prohibit USAF from "retiring or preparing to retire" any A-10 or E-3 AWACS aircraft, or from making significant crew cuts in the Fiscal 2015 defense authorization bill.

The Senate committee's mark of the bill was slightly more accommodating of pay and personnel costs than the full House version, but the SASC took a tough line on most of the Air Force's proposed aircraft reductions, particularly its ISR portfolio.

If SASC marks prevail, they would increase A-10 operation and maintenance funding by $256.5 million and AWACS O&M by $34.6 million.

The panel also cut $63 million in procurement funds for the next generation JSTARS ground surveillance aircraft effort and ordered the service to integrate "existing technologies" into a replacement aircraft.

The mark prohibited the retirement of operational JSTARS pending the completion of a report outlining the service's modernization plan for the ISR platform. The SASC mark also directed the continuing modernization of the U-2, which USAF intends to retire, with an additional $62.3 million in modernization funds.

USAF's requested $244.5 million for RQ-4 Global Hawk research and development was slashed to $108.5 million because the money would be duplicative of U-2 capabilities, according to the mark.

—Marc V. Schanz

Sikorsky Snags Presidential Helo

Sikorsky landed a $1.24 billion contract to build an initial six S-92 presidential helicopters for test and evaluation purposes, the Navy announced May 7.

Under the contract, Sikorsky will deliver six FAA-certified S-92 helicopters and two trainer simulators to the Marine Corps. The company will deliver a total of 21 aircraft by 2023 to replace the current mixed fleet of VH-3D Sea King and VH-60N White Hawk helicopters used to transport the President.

Sikorsky is expected to deliver the first two aircraft, both engineering development models, to the Navy in 2018. The remaining four aircraft will perform operational test and evaluation and then transition to operational status, the company stated.

Lockheed Martin and Augusta-Westland previously won a bid to recapitalize the presidential helicopter fleet. The Pentagon canceled the VH-71 helicopter program due to cost overruns and schedule delays in 2009 after spending nearly 10 years and $3.3 billion.

USMC Leaving Joint Schoolhouse

The Marine Corps plans to shift F-35B flight training out of the joint service schoolhouse at Eglin AFB, Fla., to a separate training location at MCAS Beaufort, S.C.

When Marine Fighter Attack Training Squadron 501 departs next March, only Air Force, Navy, and international pilots will remain at Eglin's F-35 initial joint training schoolhouse, 1st Lt. Hope Cronin, spokeswoman for Eglin's 33rd Fighter Wing, told *Air Force Magazine*. The wing runs the schoolhouse. Eglin cur-

Russian Engine Wars

The House version of the Fiscal 2015 defense authorization bill includes $220 million to develop an alternative to the Russian-made RD-180 engine that powers the United Launch Alliance Atlas V rockets. These are one of the US military's main satellite launchers.

In addition, the Senate Armed Services Committee's markup of the bill prohibits "the use of Russian rocket engines on the Evolved Expendable Launch Vehicle at the end of the current block buy contract," according to a press release from Sen. Carl Levin (D-Mich.), SASC chairman. The SASC mark also calls on the Defense Department to "pursue new domestic development in a world-class liquid rocket engine."

If enacted, the language becomes even more critical as tensions between the US and Russia over the RD-180 heat up.

In early May, a judge with the US Court of Federal Claims lifted a preliminary injunction that barred United Launch Alliance from purchasing RD-180 engines, noting US officials had sufficiently convinced her that the purchases did not violate US Treasury Department sanctions against Russian officials, enacted in March in the wake of Russian military aggression in Ukraine.

Following the announcement, Russian officials shot back, saying the engines will not be sold to the US for use on defense projects. "Russia is ready to continue deliveries of RD-180 engines to the US only under the guarantee that they won't be used in the interests of the Pentagon," Russia's Deputy Prime Minister Dmitry Rogozin tweeted on May 13 following a press briefing on international space cooperation.

In a statement released the same day, ULA officials denied knowledge of the new constraints, but assured stakeholders that any disruption would not be fatal to the program.

"United Launch Alliance (ULA) and our NPO Energomash supplier in Russia are not aware of any restrictions. However, ... ULA has two launch vehicles that can support all of [our] customers' needs. We also maintain a two-year inventory of engines to enable a smooth transition to our other rocket, Delta, which has all US-produced rocket engines."

During a space conference in Colorado in May, Air Force Space Command boss Gen. William L. Shelton said there "have been no official pronouncements out of the Russian government on the RD-180" other than the one tweet from "one government official that has caused everybody concern," reported Space Politics.

This is "a time to pause and find out if this is the official position," added Shelton. "Right now, I don't think we have an indication that is really where the government comes down on this in the long term, and there are other indications that 'business as usual' is kind of the state of play with Russian industry."

Shelton did say, however, that he supports the development of an American alternative to the Russian-made engine. "There's a debate to be had, and I think it will occur over the next four-to-five months," he said. "All of the studies we did in the past indicated that the cost to co-produce [an alternative engine], versus the cost of developing a new engine, were about in the same ballpark."

Retired Maj. Gen. Howard J. "Mitch" Mitchell and former NASA Administrator Michael D. Griffin led a commission, formed earlier this year as tensions between Ukraine and Russian began to escalate, to study potential issues with the RD-180 supply line, reported *Aviation Week,* citing industry officials.

Although the commission's findings were not made public, *Aviation Week* published a summary of the commission's report. It says that "regardless of RD-180 viability, [the] US needs to develop a domestic engine" and that the "national baseline manifest [is] not supportable beyond March 2016" without additional RD-180 engines. Specifically, there are 38 Atlas missions manifested and only 16 RD-180 engines in the stockpile, states the summary.

During the May 13 briefing, Rogozin said Russia "will proceed from the fact that we can no longer deliver these engines to the United States, and that we can no longer maintain and repair previously shipped engines, unless we receive guarantees that our engines are used only for launching civilian payloads."

Rogozin went on to outline other actions Russia was considering, including ending participation in the International Space Station.

"We've repeatedly warned our colleagues at the political and professional levels that sanctions are always a boomerang. They always come back around and are simply inappropriate in such sensitive spheres as cooperation in space exploration, production of spacecraft engines, and navigation, not to mention manned spaceflights. Sanctions are like releasing a bull in a china shop."

—Autumn A. Arnett

rently has 15 F-35Bs, including three British airplanes, she said. The Royal Air Force and Royal Navy F-35s "will transfer with VMFAT-501 when they transition to Beufort" by March 2015, added Cronin.

The bulk of non-British international flight training will eventually shift to Luke AFB, Ariz., as the new formal training unit there spools up, she said.

The Marines stood up their first operational F-35B squadron at MCAS Yuma, Ariz., in November 2012.

VMFAT-501 was initially assigned to Eglin to help develop Marine Corps F-35 training concepts and doctrine before standing up their own training center at Beaufort. "Between June and September, we'll have all the VMFAT-501 aircraft and squadron personnel relocating, and in October we'll start training," said Marine Lt. Col. Luis E. Villalobos, training facility chief at Beaufort in a press release June 3.

The base is eventually slated to receive a second F-35B training squadron as more aircraft are delivered.

Golden Raiders, Aces, and CAP

Retired Air Force Lt. Col. Richard E. Cole, one of four surviving Doolittle Raiders, stood behind President Barack Obama as the Commander in Chief approved Congress' highest civilian honor for the airmen.

Obama signed legislation bestowing the Congressional Gold Medal on the World War II Doolittle Raiders as well as the collective group of American fighter aces.

President Obama also signed a bill awarding Civil Air Patrol's World War II veterans the Congressional Gold Medal on May 30, which he will present sometimes this fall, according to a CAP spokesman.

Royal Rivet

A Royal Air Force RC-135W Rivet Joint crew flew the type's first sortie in British airspace since delivery from the US, RAF officials announced. The flight took place from its home base at RAF Waddington.

"We have worked very closely with our colleagues in the US on this project, and today's first flight signifies the commencement of a new and potent" intelligence, surveillance, and reconnaissance capability, said RAF RC-135 procurement boss Air Marshal Simon Bollom in a May 28 release.

The RAF ordered three "off the shelf"—in the words of British Defense Secretary Philip Hammond—RC-135s as replacements for the service's prematurely retired Nimrod R.1 intelligence fleet, slashed in 2011 as a result of a cost-driven 2008 defense review.

RAF aircrews have flown with the 55th Wing at Offutt AFB, Neb., to enhance interoperability. "Having jointly operated

Senior Staff Changes

PROMOTIONS: To Lieutenant General: Christopher F. **Burne,** Darryl L. **Roberson.**

NOMINATIONS: To be Lieutenant General: William J. **Bender,** Carlton D. **Everhart II,** Samuel A. **Greaves,** John F. **Thompson. To be Brigadier General:** Walter J. **Lindsley,** Ricky N. **Rupp,** Lee E. **Payne. To be ANG Brigadier General:** Warren H. **Hurst Jr.,** Richard W. **Kelly.**

CHANGES: Lt. Gen. Gregory A. **Biscone,** from Cmdr., Office of the Defense Representative, Pakistan, to IG, OSAF, Pentagon ... Brig. Gen. (sel.) Robert I. **Miller,** from Command Surgeon, Medical Svcs. & Tng., AETC, JBSA-Randolph, Texas, to Dir., Education & Tng., Defense Health Agency, JBSA-Fort Sam Houston, Texas ... Brig. Gen. (sel.) Thomas E. **Murphy,** from Dep. Dir., Ops & Plans, TRANSCOM, Scott AFB, Ill., to Vice Cmdr., 24th AF, AFSPC, JBSA-Lackland, Texas ... Lt. Gen. Ellen M. **Pawlikowski,** from Cmdr., SMC, Los Angeles AFB, Calif., to Mil. Dep., Asst. SECAF for Acq., USAF, Pentagon ... Brig. Gen. Stephen W. **Oliver Jr.,** from Sr. Mil. Asst., SECAF, OSAF, Pentagon, to Dep. Dir. for Planning & Mgmt., AFRICOM, Stuttgart, Germany ... Brig. Gen. (sel.) Kirk W. **Smith,** from Spec. Asst., Cmdr., SOCOM, MacDill AFB, Fla., to Dir., Plans, Rqmts., & Prgms., AFSOC, Hurlburt Field, Fla. ... Brig. Gen. Roger H. **Watkins,** from Cmdr., 379th AEW, ACC, Southwest Asia, to Dep. Cmdr., Jt. Warfare Ctr., Supreme Allied Command for Transformation, Stavanger, Norway.

SENIOR EXECUTIVE SERVICE CHANGES: Scott M. **Anderson,** to Dir., Log., Instl., & Mission Spt., AFSPC, Peterson AFB, Colo. ... Nancy K. **Andrews,** to Dir., Contracting, AF Sustainment Center, Tinker AFB, Okla. ... Lorna B. **Estep,** to Dir., Resource Integration, DCS, Log., Instl., & Mission Spt., USAF, Pentagon ... William C. **Redmond,** to Exec. Dir., AFOTEC, Kirtland AFB, N.M. ... Bobby **Smart,** to Dep. Asst. Sec. (Acq. Integration), Office of the Asst. SECAF (Acq.), Pentagon.

US aircraft with British and American personnel for three years, this proven strategic intelligence and surveillance capability will be an excellent addition," Bollom said.

The fleet is slated for full operational capability in 2017.

Great Falls Goes Heavy

The Montana Air National Guard's 120th Airlift Wing flew its first C-130 sortie after converting from F-15 fighter operations earlier this spring, unit officials announced.

The last F-15C from the former 120th Fighter Wing departed Great Falls for the California ANG's 144th Fighter Wing in Fresno last October.

The redesignated 120th Airlift Wing received its first C-130H in March, and all but one of seven airlifters arrived by the start of routine flying operations at the beginning of June, wing spokesman Maj. Cody Smith told *Air Force Magazine*.

C-130 maintenance and support personnel trained with the Wyoming ANG for several months before the airlifters arrived, while unit pilots cross trained to the C-130 at Little Rock AFB, Ark.

The unit flew fighters for 66 years before changing to the airlift mission.

Tacking Down Djibouti

President Barack Obama secured basing rights in the Horn of Africa, agreeing to a 20-year lease deal for a US presence at Camp Lemonnier, Djibouti.

"Obviously, Camp Lemonnier is extraordinarily important not only to our work throughout the Horn of Africa, but throughout the region," Obama said after meeting Djibouti President Ismail Omar Guelleh at the White House May 5.

Roughly 4,000 defense personnel are deployed to Camp Lemonnier supporting anti-terror and counterpiracy missions in Yemen, the Gulf of Aden, and around the region.

Pending final approval, the new deal more than doubles the annual lease cost from $30 million to $70 million, due primarily to planned base expansion, the *New York Times* reported.

The Pentagon already invested in new hangars, taxiways, and utilities and plans to sink roughly $1 billion to upgrade and expand the base from 88 acres to nearly 500 acres, according to the *Times*.

Razorbacks' Final Stampede

Arkansas Air National Guard pilots recently flew their final A-10 training sortie from Fort Smith Airport ahead of the 188th Fighter Wing's conversion to intelligence and remotely piloted aircraft missions.

"I'm going to miss flying over Arkansas and seeing it through the cockpit canopy, for sure," said 188th Operations Support Squadron Commander Lt. Col. Marty Dahlem after the ground-attack training sortie May 16.

"As a wing, we've been flying manned aircraft for 60 years," Col. Mark Anderson, the unit's commander, said last fall. "While we're sad that our A-10s had to go, we're getting a cutting-edge mission."

The unit's first A-10 departed for Moody AFB, Ga., last September. Fort Smith converted to Warthogs in April 2007 and marked its largest-ever deployment with the aircraft to Bagram Airfield, Afghanistan, in 2012.

Its last three A-10s were slated to depart Fort Smith in early June.

1,000 and Still Jamming

The Air Force recently took delivery of its 1,000th Miniature Air Launched Decoy jammer variant as part of Lot 5 production, manufacturer Raytheon announced.

"The MALD program has enjoyed a perfect 33-for-33 flight test record over the past two years," Mike Jarrett, company air warfare and missile systems vice president, in a press release May 13.

"The MALD has demonstrated it can simultaneously increase the combat capability of platforms, sensors, weapons, and decision-makers," he said.

Raytheon began delivering the 300-pound, radar-jamming decoy in late 2012 and sealed an $81.7 million deal with the Air Force for production Lot 6 last spring.

End of an Era in Wichita

Boeing recently completed the final Air Force overhaul at its plant in Wichita, Kan., before closing the facility.

The final USAF aircraft was an E-4B National Airborne Operations Center platform.

"Our division is responsible for ensuring the safe operation of some extremely important aircraft and we've always answered that charge," said Zane Boatright, Air Force Life Cycle Management deputy chief for special-mission aircraft, the *Wichita Eagle* reported. "We know that is due in large part to the tremendous support we have received there," he said.

Boeing is shifting depot-level maintenance for the Air Force's 747-based E-4B and VC-25 presidential fleets to a purpose-built facility in San Antonio. The Wichita facility opened in 1927 and famously produced B-29 bombers during World War II. The last E-4B departed Wichita to return to Offutt AFB, Neb., May 29. ■

Verbatim

verbatim@afa.org

By Robert S. Dudney

Hostage on Stealth

"We [had] one F-117 shot down in 78 days of flying over that country [Serbia, in 1999], thousands of sorties. They shot down one airplane. And they shot down one airplane because we flew across the same spot on the ground for weeks at a time. It took them multiple weeks to figure out how to shoot the thing. Then they had to get four or five systems to do it. It took them weeks to take it out. I can accept that kind of attrition rate. I obviously don't want to lose anyone, but good Lord, one airplane over the course of 78 days, that's pretty impressive."***—Gen. G. Michael Hostage III, head of Air Combat Command, on the continuing value of stealth despite claims that high-powered EW support is needed, breakingdefense.com, June 6.***

The VA Meets Godot

"When you actually get in the room with a doctor, it's OK, but it's what it takes to get to that point that I think is the problem. You're sick today. Three weeks from now, you're either cured or you're dead."***—Stewart Hickey, national executive director of AMVETS, on the long wait times for service at VA hospitals,*** **Washington Post,** ***May 30.***

Deja Vu All Over Again

"I remember the very first time I struck in a B-1 bomber. It was my first combat sortie. This was in Afghanistan. We checked in, and they said, 'Hey, we have troops in contact and you've got to fly over here.' So we flew, like, 500 knots, and by the time we got there, they were ready for the bombs and they had given us clearance. And we dropped bombs right away. And it was like, 'Whoa! Super exciting! Oh my gosh, my first combat sortie! And then, my very first strike in a [drone]—I had nearly identical feelings inside."***—"Patrick," last name and rank withheld, USAF RPA pilot based at Holloman AFB, N.M.,*** **The Atlantic,** ***June 4.***

Blue—Really Blue—Angels

"This commanding officer witnessed, accepted, and encouraged behavior that, while juvenile and sophomoric in the beginning, ultimately and in the aggregate, became destructive, toxic, and hostile. He failed himself, failed those that he led, failed the Blue Angels, and failed the Navy."***—Adm. Harry B. Harris Jr., US Pacific Fleet, referring to Capt. Gregory McWherter, Blue Angels commander. Harris had led a probe that found McWherter failed to stop sexual harassment and condoned pornography, homophobia, and lecherous behavior in the unit.*** **Washington Post,** ***June 3.***

Hagel Speaks ...

"In recent months, China has undertaken destabilizing, unilateral actions asserting its claims in the South China Sea. ... The United States has been clear and consistent. We take no position on competing territorial claims. But we firmly oppose any nation's use of intimidation, coercion, or the threat of force to assert these claims."***—Secretary of Defense Chuck Hagel, address to a regional defense conference in Singapore, May 31.***

... And China Responds

"As US power declines, Washington needs to rely on its allies in order to reach its goal of containing China's development. But whether it will get involved, or use military intervention once there is a territorial dispute involving China and its neighbors, that is another issue. We can see from the situation in Ukraine this kind of ED [extended deployment] has become the male type of ED problem—erectile dysfunction."***—Chinese Maj. Gen. Zhu Chenghu, interview with Chinese-language Phoenix TV in Singapore, reported in*** **Wall Street Journal,** ***June 2.***

The Empire Strikes Back

"The former Soviet Union invested in [the right] technology. Our country has not invested in that technology for now going on 30 years."***—Mike Gass, chief executive of United Launch Alliance, on why Russia has the RD-180 booster engine and the US has nothing comparable,*** **Washington Post,** ***May 30.***

The Insult

"[Ukraine President Petro] Poroshenko said last week that he hoped for an extensive 'lend-lease' program from the United States that would supply the ragtag Ukrainian army with the weapons and training it needs to defeat the Russian-backed forces. He got a promise from Mr. Obama of $5 million in nonlethal equipment, including radios and goggles. It would have been less insulting to have offered nothing."***—House editorial,*** **Washington Post,** ***June 4.***

In the Wings

"I believe, today, we could build a Mach 5 cruise missile [with] off-the-shelf materials. We could go 500 nautical miles in 10 minutes."***—Charles Brink, Air Force Research Laboratory, dispatch on the website breakingdefense.com, June 3.***

CNO Surprises All

"We need 11 [carriers] when you add [general combatant commander requirements] with the contingencies that we are tasked to respond to, in the time that we have to respond, and the capabilities that we have out there. It would be wonderful if we had a 'doomsday device' and magical things that could come off [fewer] carriers and fly further and be invisible, but we don't have that now. We have what we have. So when I look out into the future, we need at least 11 carriers."***—Adm. Jonathan W. Greenert, Chief of Naval Operations, remarks to the Defense Writers Group in Washington, D.C., May 21.***

Poland Speaks Up

"For the first time since the Second World War, one European country has taken a province by force from another European country. America, we hope, has ways of reassuring us that we haven't even thought about. There are major bases in Britain, in Spain, in Portugal, in Greece, in Italy. Why not here?"***—Polish Foreign Minister Radoslaw Sikorski, calling for a US military presence in Poland,*** **New York Times,** ***June 3.***

Well, Yes—Backed by Guns

"You don't lead with your military in foreign policy. The military is an instrument of power. It's an important instrument of power. But our foreign policy is based on our interests around the world. It's based on who we are, international law. It's based on our standards, our values."***—Secretary of Defense Chuck Hagel, remarks to reporters aboard his aircraft, May 28.***

Weather Forecast:
Partly Cloudy Tonight and Monday

The Washington Times

SUNDAY EVENI
EDITION

NUMBER 8212. WASHINGTON, SUNDAY EVENING, JULY 26, 1914. PRICE ONE CENT.

WAR DECLARED; ALL EUROPE IN TURMOI

MEN BREAK
AIL AND RUN
WAY UNDER A
IAIL OF SHOTS

isoners, Aided by About Dozen Confederates, Sawed Way Out of Alexandria County Prison Early Today.

lice of District Join in Search for Joseph Williams, Joseph Mullen, and John Norman, Fugitives.

RULERS IN CRISIS, AND MAP WHICH MAY BE CHANGED

AUSTRIAN TROOPS ARE
MOVING ON BELGRAD
EVACUATED BY SER

First Overt Act of Duo-Monarchy Is to Seizure of Capital Which King and Royal Advisers ! eserted, Ac ing to Late Dispatches Today.

Austria today declared war against Servia, acc to a Central News dispatch from Vienna.

Austrian troops are moving on Belgrade, the S capital.

The capture of Belgrade, which has been eva by King Peter, will be the first step in the war which ens to embroil all Europe.

A proclamation has been issued at Vienna decl state of siege as existing throughout the duo-monarc

Hope of peace, or at least the quick cessation hostilities, today lies with England and France, accor advices from London. It is believed that these two will propose a joint mediation plan for the settlen the controversy.

The French cabinet has been in session all da word has come from it, excepting that it has not b cided to mobilize the French army.

Servian King Shifts Capital to Mounta

Short Fuze to th

One thing after another went wrong on the morning of June 28, 1914, in Sarajevo, capital of the Austrian province of Bosnia. The motorcade carrying Archduke Franz Ferdinand, heir apparent to the Austro-Hungarian throne, through the city got lost.

The driver of the open touring car in which the archduke and his wife, Duchess Sofie, were riding made a wrong turn onto a narrow street. The car had no reverse gear and had to be pushed back to the main thoroughfare.

By purest chance, it had come to a complete stop exactly in front of Bosnian Serb nationalist Gavrilo Princip, 19, who had been assigned to assassinate Franz Ferdinand. Princip was an inexperienced marksman, armed with an underpowered .32 caliber handgun. Nevertheless he managed, with two shots, to kill the archduke and the duchess.

The assassin had been recruited and equipped by anti-Austrian factions in Serbia. The Serbian government was not party to the act but was almost certainly aware of the plot. Serbia wanted to break Bosnia away from the Austro-Hungarian Empire and make it part of a greater Slavic nation in the Balkans. More than 40 percent of Bosnians were ethnic Serbs.

There was widespread rejoicing and celebration in Serbia at the success of the assassination. Official condolences did little to moderate the public jubilation and commentary in Serbian nationalist press. The Serbian government was not as innocent as it claimed.

Sarajevo was the spark that led to World War I. On the day of the assassination, Europe was at peace. Less than six weeks later, it was at war. Austria-Hungary, with the full backing of Germany, declared war on Serbia, causing Serbia's ally, Russia, to mobilize. Germany issued an insulting "double ultimatum" to Russia and its ally, France, to stand down and stay out of it. In August, Germany invaded Belgium, en route to attack France. This drew in Great Britain.

The men who started the war did not understand what they were bringing down on themselves and the world. The Germans expected it to be a short war. "You will be home before the leaves have fallen from the trees," Kaiser Wilhelm II told departing troops the first week in August.

Photo via Library of Congress

The men who started the war in 1914 did not understand what they were bringing down on themselves and the world.

GREAT WAR

By John T. Correll

The war would last more than four years, eventually drawing in 32 nations, including faraway Guatemala and Siam, although not all of them were engaged in combat. When it finally ended, some 9.5 million had been killed and more than 15 million wounded.

It was known as the "Great War" and was not generally called "World War I" until the approach of World War II in 1939. On the 100th anniversary of its beginning, historians are still struggling to understand how and why it happened.

BREAKUP OF THE OLD EMPIRES

Nearly all of Europe from the Atlantic to the Urals was divided into two armed camps in 1914, a situation that evolved from the breakup of the old empires that had dominated the continent for centuries.

- The Ottoman Empire, which once ruled as far north as Poland, was already known as "the sick man of Europe." Only the Turkish homeland and parts of the Middle East remained under its control. Loss of the Balkans left a power vacuum that Austria and Russia were competing to fill.
- The Hapsburg Empire in 1914 consisted of the "dual monarchy" of Austria-Hungary in which Hungary was decidedly the junior partner. The empire was still large but its southern boundaries had been rolled back by insurrections in Italy. More important, Austria had been defeated in a short war with Prussia in 1866 and displaced as leader of the Germanic states by the newly established Second Reich in Germany. Smarting from its decline, the Hapsburg Empire annexed Bosnia in 1908.
- The Romanov Empire in Russia, ruled by the weak Czar Nicholas II, survived an attempted revolution in 1905 but the next one, already developing, would bring it down. The Slavic states in the Balkans, especially Serbia, looked to Russia as their patron and protector.

France was in an awkward position. Its strength had been broken by the defeat of Napoleon a century before. It was soundly beaten again in the Franco-

Above left: The front page of* The Washington Times *on July 26, 1914. Above: Kaiser Wilhelm II (l) parades through the streets with his six sons, (l-r) Crown Prince Wilhelm, Eitel Friedrich, Adalbert, August Willhelm, Oskar, and Joachim. The kaiser dismissed Chancellor Otto von Bismarck and set on a course of bombastic politicking that led directly to World War I.

Prussian war of 1870-71 and forced to cede the provinces of Alsace and Lorraine to Germany. With its choice for alliances severely limited, France—the only republic in Europe—signed a pact with czarist Russia in 1894. France hoped to contain Germany. Russia mainly wanted to offset Hapsburg influence in the Balkans.

Germany, which had given its neighbors ample cause for alarm, worried about "encirclement" and struck a military alliance with the diminished Austria-Hungary. Thus 1914 began with the Central Powers—Germany and Austria-Hungary—squared off against Russia and France with a rambunctious Serbia stirring up trouble on the southern flank.

Italy was allied, at least nominally, with the Central Powers, which were trying to pull the Ottoman Turks into their camp as well. It was uncertain whether Great Britain, which had mutual defense arrangements with France, would engage in the developing crisis or stay out.

TEUTONIC INTRIGUES

Austria in 1914 was a regional power, no longer a continental one. Despite its decline—or perhaps because of it—the Austrians had adopted an aggressive stance, particularly in regard to the upstart Serbs. The Hungarian half of the dual monarchy was more inclined toward moderation.

Franz Ferdinand had not been popular in the Hapsburg capital of Vienna. The previous heir to the throne, Crown Prince Rudolf, committed suicide, and Franz Ferdinand had emerged as next in line. His uncle, Emperor Franz Joseph, 84, resented and disliked him. After the assassination, Franz Ferdinand and Sofie were buried with little fanfare and little mourning.

Nevertheless, hotheads at the Hapsburg court were ready to use the assassination as a pretext to act. The most strident of them was Field Marshal Franz Conrad, the army chief of staff. He had proposed war with Serbia more than 25 times and each time had been blocked by Franz Ferdinand, who was now dead.

Germany was unwilling to rein in its ambitious ally. In fact, Kaiser Wilhelm II shared the tendency to be reckless, impulsive, and aggressive. He was related by blood to the other royal houses of Europe. The kaiser, the king of England, and the czarina of Russia were all grandchildren of Queen Victoria. Wilhelm and the czar were great-grandsons of Czar Paul I. The kaiser was on first-name terms with his kin, but that did not keep him from plotting against them.

The kaiser was given to swaggering, blustery behavior and military pretensions. He had more than 300 military uniforms from various countries and changed from one to another several times a day. The seat in his office was a saddle chair. He claimed that the saddle was more comfortable than a regular chair. Wilhem, said historian Margaret MacMillan "told conductors how to conduct and painters how to paint."

The French army shifted from its position on the central front to join the British in stopping the Germans at the Marne.

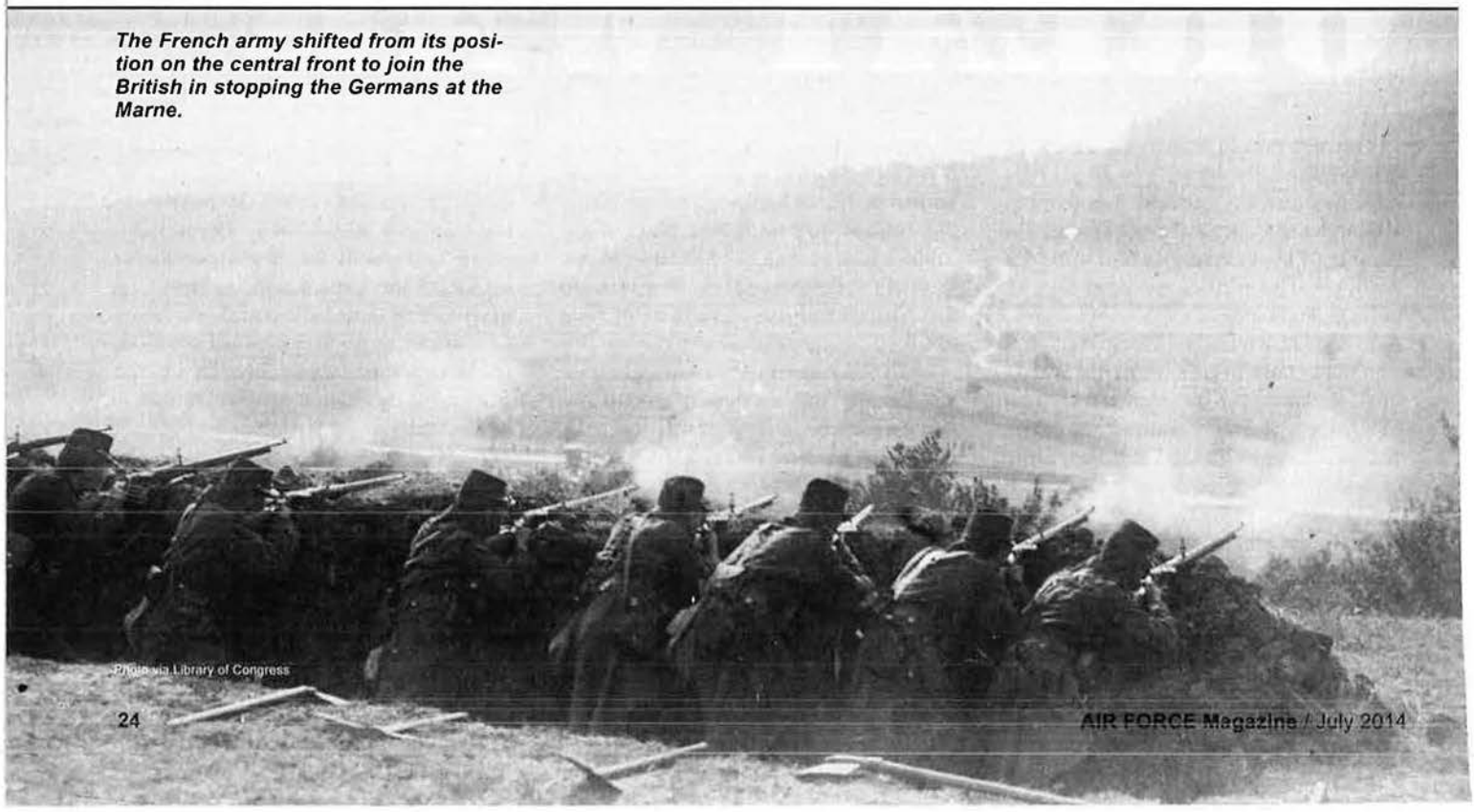


Photo via Library of Congress

Russian horse-drawn artillery troops prepare for the offensive in East Prussia in 1914.

He had dismissed the fabled Chancellor Otto von Bismarck in 1890 in order to take full powers into his own hands. Wilhelm refused to renew a treaty that Bismarck had made with Russia, which opened the door for an alliance between Russia and France. The kaiser brooded that Russia and France were united against Germany but was too self-centered to see why that was so.

Long before Sarajevo, pressures for war were gathering in Germany.

THE SCHLIEFFEN PLAN

The Schlieffen plan, first laid down in the 1890s by Gen. Alfred Graf von Schlieffen, chief of the German general staff, was more than a contingency plan. It was the centerpiece of German strategy.

It began with the assumption that Germany was not strong enough to fight France and Russia at the same time. Therefore, Germany would conduct a holding action against Russia and strike hard on the western front, defeating France quickly before the Russians had time to mobilize.

The plan was analyzed and revised every year. The 1906 plan, the last one before Schlieffen retired, allocated six weeks for the defeat of France while an eighth of the German army held the line against Russia.

The French had fortified the Alsace-Lorraine frontier, blocking a frontal attack. Instead, the right wing of the German army would sweep south like a swinging gate, turning the left flank of the French in a classic envelopment. Since 1899, it had been part of the plan to route the invasion through Belgium, even though Germany was party to an agreement guaranteeing Belgium's neutrality. Schlieffen's last words before he died in 1913 were, "Keep the right wing strong."

The keeper and advocate of the Schlieffen plan was Gen. Helmuth J. L. von Moltke, the army chief of staff. He was a competent soldier but a pale shadow of his uncle and namesake, "Moltke the Elder," the great field marshal who led Prussia to victories over Austria and France. Von Moltke's version of the plan projected a decisive victory over France in 39 days.

The Germans, especially von Moltke, held several fundamental beliefs: War was inevitable and time was not on Germany's side; in a few years, Russia—which had unlimited manpower—would reach military superiority too strong to challenge; delaying the conflict was not to Germany's advantage.

The critical element was time. "The French and German armies each required two weeks to complete mobilization before a major attack could begin on the fifteenth day," said historian Barbara W. Tuchman. "Russia, according to German arithmetic, because of her vast distances, huge numbers, and meager railroads, would take six weeks before she could launch a major offensive, by which time France would be beaten."

THE BALKAN CONNECTION

Before he died in 1898, Otto von Bismarck predicted that a great European war would come out of "some damned foolish thing in the Balkans." The Iron Chancellor was right.

Under the old structure of alliances, a crisis in the Balkans—a cluster of small nations on the periphery of Europe—would not have spread beyond regional conflict. However, in 1914, a combination of circumstances made the Balkans the trigger for world war.

Russia took pride in its role as cham-

Below left: Archduke Franz Ferdinand and Duchess Sofie prepare to set out in a motorcade through Sarajevo. The assassin, Gavrilo Princip, was waiting along the route. Below right: The German strategy to invade and defeat France before Russia could mobilize was laid down in the 1890s by Gen. Alfred Graf von Schlieffen.

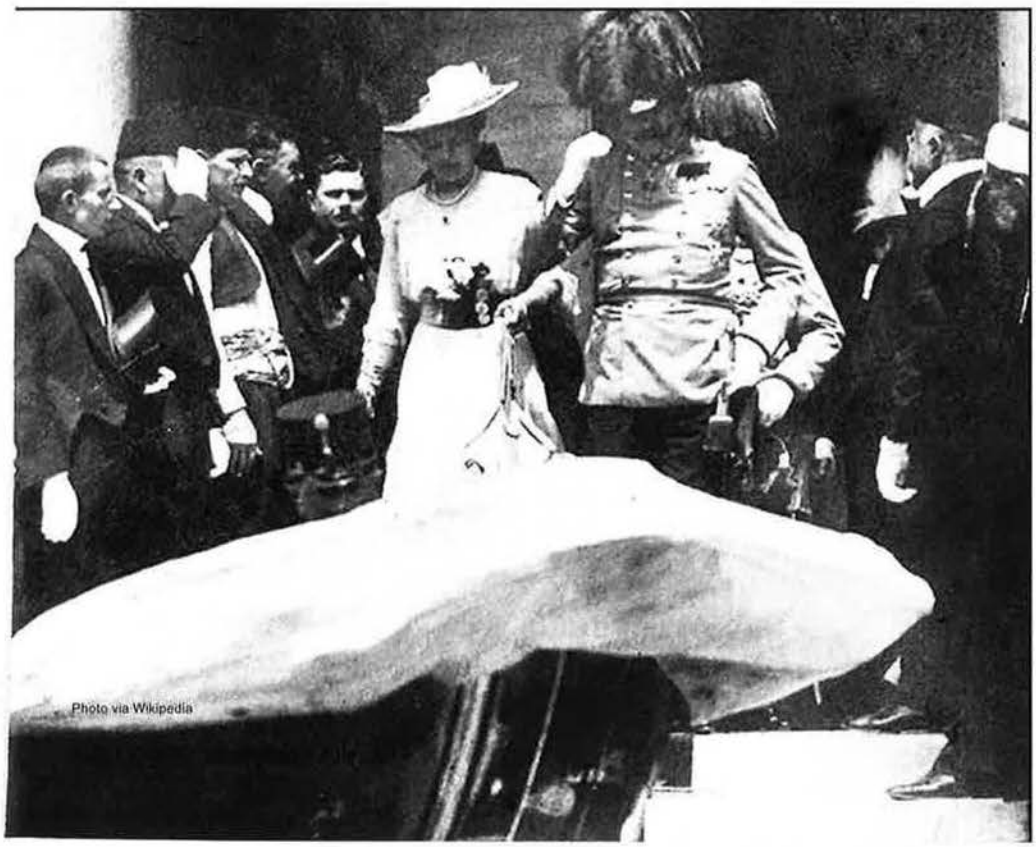


Photo via Wikipedia

Corbis-Bettmann/AP image via Wikipedia

An aerial shot of a cratered battlefield shows the utter devastation the war wrought. The dark diagonal lines are the shadows of the few remaining tree trunks.

pion of the Slavic states that had broken free of the Ottoman Empire. Russia also welcomed an allied presence adjacent to its traditional adversary, Turkey.

Confident of Russian support, Serbia was more defiant of Austria than it might otherwise have been. The critical factor was that the alliance of France and Russia in 1894 created a linkage between France and Russia's ally, the free-wheeling Serbs. Western Europe had no sympathy for the Serbs in their own right, regarding them as troublemakers.

At the same time, the Germans were encouraging the Austrians to exploit the confrontation with Serbia. The kaiser remarked in marginal notes on a dispatch that it was "high time a clean sweep was made of the Serbs." On July 5, Germany assured Austria of its full support in whatever action it took against Serbia, a signal remembered in history as the blank check.

On July 23, Austria-Hungary sent Serbia an ultimatum, designed to ensure that the Serbs would reject it. Among other things, it insisted on Austrian participation in Serbia's internal investigation of the assassination and suppression of the "subversive" Slavic movement.

As expected, the Serbs refused and Russia put its armed forces on increased alert.

On July 28, Austria declared war on Serbia and the next day, Austrian gunboats on the Danube and Sava Rivers bombarded Belgrade.

The last opportunity to head off the conflict was the so-called "Willy-Nicky telegrams"—an exchange of 10 messages between the czar and the kaiser in which the cousins addressed each other by their first names. The exchange was broken off by the kaiser Aug. 1, with a warning that Russia must not commit "the slightest act of trespassing over our frontiers."

MOBILIZATION

The major military forces in Europe were huge conscription armies that could be augmented by the mobilization of trained reservists who had served previously. The only exception was Great Britain, an island nation that relied primarily on the navy for its defense and whose army was comparatively small and consisted of volunteers. The British did not begin conscription until 1916.

The mobilization system meant that a nation could increase its striking power enormously within a matter of weeks. It is often suggested that mobilization was an act of war, but there is little basis for such a proposition. It was so regarded by some nations in some instances, but not always. Mobilization "had been used in previous crises as a buttress to diplomacy, a form of brinksmanship rather than a step in an inevitable escalation," said historian Hew Strachan.

Austria and Russia began general mobilization July 30. The French moved their forces forward but held them 10 kilometers back from the Franco-German border to avoid provocation. The French knew about the Schlieffen plan but believed that if the Germans overstrengthened their right wing, the left wing and center in Alsace-Lorraine would be correspondingly weak. They planned to counterattack in the center and cut the German force in half.

Germany issued its arrogant double ultimatum July 31, demanding that Russia suspend "every war measure" within 12 hours and that the French declare neutrality and surrender their fortifications at Verdun and Toul. France and Germany mobilized Aug. 1.

A theory, promoted by Sean McMeekin of Koç University in Istanbul and currently enjoying a boomlet of popularity, holds that "the decision for European war" was made by Russia on the night of July 29 when the czar signed the order for general mobilization to begin the next day. The Germans, "outnumbered and outgunned on both fronts, with Britain primed to intervene against them," were thus forced to move.

In fact, neither the Russians nor the French had shown any inclination to attack Germany and as tacitly acknowledged by the double ultimatum, there was still time to stop the war.

The European Armies in 1914

	Peacetime	Mobilization
Russia	1.4 million	5.3 million
Germany	880,000	5.7 million
France	823,250	4.5 million
Austria	480,000	2.3 million
Britain	255,000	700,000
Serbia	30,000	459,000

Varying numbers are cited for the strength of the European armies when the war began but most of the reliable sources are fairly close to these figures, compiled by David F. Burg and L. Edward Purcell for their *Almanac of World War I.*

A WAR IN FULL

Time ran out on Aug. 1 when Germany declared war on Russia and invaded Luxembourg, en route to France by way of Belgium. France and Germany declared war on each other Aug. 3.

Germany demanded free passage through Belgium, and when the Belgians did not agree, the Germans responded with a fury of assault and atrocity that shocked the world. They shot hostages and burned a village the first day, then declared collective responsibility for resistance and killed hundreds of civilians in mass executions. The rampage included burning the historic city of Louvain and its collection of medieval manuscripts. When the Germans crossed the border into France Aug. 7, the British had declared war and organized an expeditionary force to join the French defense.

Hardly anything worked out as planned or expected. Russia, still only partially prepared, invaded East Prussia Aug. 12 to open a new front in the war. The German forces, commanded by a political favorite of the kaiser's, fell back and von Moltke sent two corps and a cavalry division, withdrawn from his offensive in the west, as reinforcements. The Germans prevailed at the battle of Tannenberg, but in violation of Schlieffen's injunction, von Moltke had fatally weakened his right wing. Von Moltke got within 30 miles of Paris, but no further.

The French abandoned their central strategy and moved to block the German flanking attack from the north. The British and French defeated the Germans at the battle of the Marne in September and that was the end of the Schlieffen plan. The kaiser sacked von Moltke and replaced him with a new commander, but the invasion had failed. The armies on the western front settled down into siege lines in Belgium and northern France, where they remained for the rest of the war.

Austria-Hungary fizzled out. Field Marshal Franz Conrad, the loudest advocate of going to war, launched three unsuccessful invasions of Serbia. In the first month-and-a-half, he lost more than a fourth of his army. He was routed in his foray into Russian Poland and the Germans had to send forces to rescue him. Thereafter, Austria-Hungary was a burden on Germany rather than an effective ally in the war.

The Ottoman Turks, wary of the Russians—who were not averse to using the war to achieve their ancient goal of seizing the Turkish straits as an outlet from the Black Sea to the Mediterranean—joined the Central Powers in October. However, Italy defected to the Allied side in 1915.

The final German defeat was not sealed until after the United States entered the war with fresh resources in 1917.

FOOTPRINTS IN SARAJEVO

The Great War brought an end to the old empires on the continent. The Romanovs were overthrown in the Russian Revolution of 1918, and the czar and his family were slain. The kaiser was forced into exile in 1918 and the German Reich was replaced by a parliamentary government. The Hapsburg Empire ceased to exist in 1918. Hungary became a separate country, although it lost much of its former territory. Austria was annexed by Germany in 1938. The Ottoman Empire had dissolved by 1923.

The Germans and the Austrians were compelled by the treaties of Versailles and St. Germain in 1919 to acknowledge their responsibility for starting the war. This "guilt clause" was a bone of contention for years, especially in Germany, where repudiating it was one of Adolf Hitler's main themes in his rise to power.

The one country that got exactly what it wanted out of the Great War was Serbia. In 1918, the Slavic states in the Balkans, including Serbia and Bosnia, were united in the new nation of Yugoslavia. Gavrilo Princip was celebrated as a national hero. In the 1940s, Communist dictator Josip Broz Tito had bronze footsteps and a plaque marking "the first steps toward Yugoslav freedom" placed in the sidewalk near where Princip stood when he assassinated Archduke Ferdinand.

Tito died in 1980 and, beginning in 1991, the Yugoslav union disintegrated amidst ethnic turmoil. Bosnia-Herzegovina declared independence in 1992.

The Bosnians destroyed the plaque in Sarajevo and dug up Princip's footprints. ■

JFK and the Guns of Tuchman

The most popular book ever written about the beginning of World War I is Barbara W. Tuchman's *The Guns of August*, published in 1962. It remained on the New York Times best-seller list for 42 weeks and won a Pulitzer prize. Her conclusion was that the belligerent nations had been carried along by events they could not control into a war that nobody wanted.

"Appalled upon the brink, the chiefs of state who would ultimately be responsible for their country's fate attempted to back away but the pull of military schedules dragged them forward," she wrote.

Among those impressed by *The Guns of August* was President John F. Kennedy. He urged members of his Cabinet and others to read the book, which reinforced his own thoughts about the unintended consequences of an arms buildup.

"Truman and Eisenhower believed that Hitler had started World War II because he had thought his enemies were weak and not ready to act," said Cold War historian W. R. Smyser. "They strengthened and united the West to avoid having Moscow repeat Hitler's mistake. But Kennedy and his advisors looked more closely at the events that had led to World War I. They believed that a sequence of mutually threatening mobilization plans and actions had gotten out of hand and escalated into war in 1914. They thought that US policy should strive to avoid such misunderstandings."

Tuchman's opinion is one of several in the ever-shifting historical judgment of World War I and is accorded less standing today than it once was. The notion of shared blame for the war had been fashionable among scholars since the 1930s, but the work of German historian Fritz Fischer in the 1960s, drawing on previously untapped documentary evidence, re-established the theory of German guilt. Today, says John J. Mearsheimer of the University of Chicago, "hardly any scholars accept the Tuchman thesis that World War I was an accidental or inadvertent war."

The concept of shared blame still has its adherents but the prevailing consensus is summed up by British journalist-historian Max Hastings who contends that, "it is indisputable that Germany willed a Balkan war, urging the Austrians to invade Serbia, which led to everything else. Germany alone had the power to halt the escalating crisis at any time in July, by telling the Austrians to stop, and Berlin refused to exercise that power. Though no one nation deserves all the blame, for this reason, Germany seems to deserve more than anybody else."

John T. Correll was editor in chief of Air Force Magazine *for 18 years and is now a contributor. His most recent article, "The Semi-Secret Birth of the Luftwaffe," appeared in the June issue.*

USAF photo by A1C Joshua Klainhotz

USAF photo by SSgt. Zachary Wolf

The A-10 and the Rescue Helicopter

By Megan Scully

Air Force leaders have made no secret about the difficult decisions made during the service's deliberations on the Fiscal 2015 budget. For the first time, the Air Force—like the rest of the military—was required to adhere to congressionally mandated caps on spending, forcing officials to re-evaluate their priorities and make painful sacrifices.

The result of the negotiations is a nearly $500 billion budget proposal for the Defense Department that reads like a long list of winners and losers. And perhaps no two programs better illustrate the budgetary challenges and dilemmas facing the cash-strapped department than the Air Force's decisions on the A-10 Warthog and the Combat Rescue Helicopter.

The missions of the two aircraft overlap. But the Air Force attempted to put the two airplanes on different paths going into next year as officials evaluated what made the budget cut—and more importantly, what did not.

Tough budget limits and diverging requirements led USAF in opposite directions on two high-profile platforms.

The Air Force moved the A-10, a close air support aircraft popular with both ground forces and on Capitol Hill, to the loser column. The service's budget proposal would retire the entire fleet of 334 Warthogs, a move Air Force officials have estimated would save a tantalizing $4.2 billion over the next five years.

"Cutting the A-10 fleet was the lowest risk option from an operational perspective—a bunch of bad options," Air Force Chief of Staff Gen. Mark A. Welsh III told the House defense appropriations subcommittee on March 26. "And while no one is happy, especially me, about recommending divestiture of this great old friend, from a military perspective, it's the right decision and is representative of the extremely difficult choices that we're facing in the budget today."

As the Air Force was making the tough decision to send the A-10s to the boneyard, officials made an abrupt about-face on the Combat Rescue Helicopter (CRH), a nascent program that the service had planned to shelve, at least for now.

Indeed, the Air Force sent a budget to Capitol Hill that contained no funding for the CRH program, despite $334 million approved for the program this fiscal year. Prewritten budget documents stated that the department planned to delay the program by two years to explore less expensive options.

But officials suddenly changed course on the program after the budget request was finalized, a highly unusual move for a Pentagon whose budget-drafting process consumes most of the year.

"Breaking news: We have made a decision to fund the CRH," Maj. Gen. James F. Martin Jr., the Air Force's budget director, told stunned reporters at the Pentagon on March 4, the day DOD released its budget request.

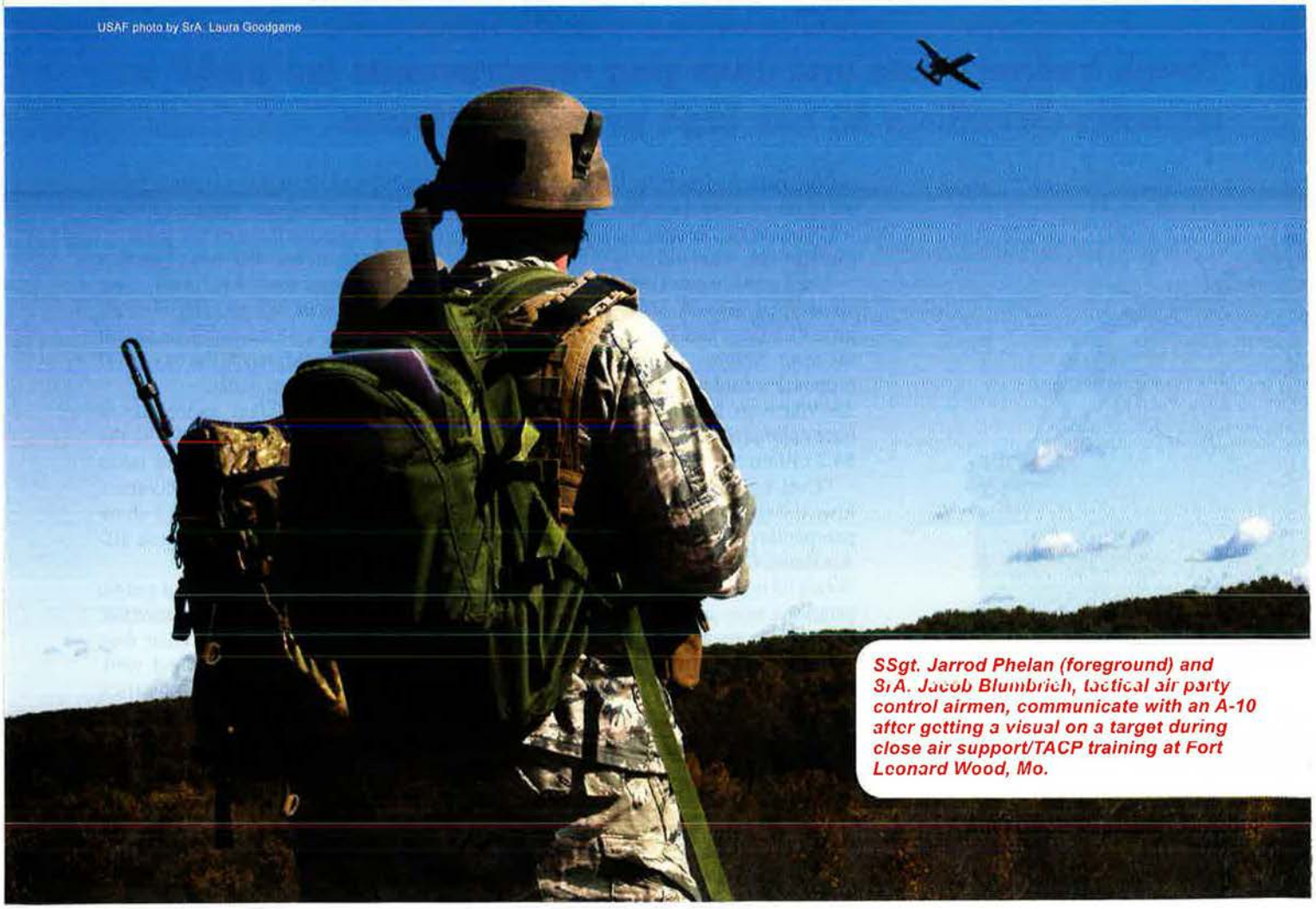
The Pentagon budget, especially in today's cost-constrained world, is the product of a series of puts and takes within each of the service's accounts. But how could two aircraft that share a role in combat rescue have such different fates?

In a series of testimonies and public statements over the last several months, defense officials have made clear they believe the A-10 has performed well. But they argue it is largely a one-trick

Top: Amn. Brandon Kempf signals to an A-10 pilot on the ramp at Nellis AFB, Nev. Left: An HH-60G helicopter carries out search and rescue training. Heavy use, high altitude, and high temperatures in Afghanistan took a toll on Pave Hawks. Many are worn out.

An A-10 turns away after releasing ordnance during a close air support training mission at Nellis' test range in Nevada.

USAF photo by SrA. Brett Clashman



USAF photo by SrA. Laura Goodgame

SSgt. Jarrod Phelan (foreground) and SrA. Jacob Blumbrich, tactical air party control airmen, communicate with an A-10 after getting a visual on a target during close air support/TACP training at Fort Leonard Wood, Mo.

pony whose job could be filled by other, more multimission aircraft.

In short, the A-10 was a tempting bill payer.

Meanwhile, top officials believe the Combat Rescue Helicopter will fill a critical mission gap, enabling the service to divest itself of aging rescue choppers in its fleet.

What may have really worked in the CRH's favor is that little is required for the program next year. The Air Force plans to tap already appropriated money to award a contract this summer and keep the program afloat into 2015, making it a low-risk financial decision in the short term.

A-10 MISSION

Welsh has acknowledged that every major decision the Air Force makes in the budget will ultimately affect his force's mission. And those decisions, he has said, are driven strictly by declining budgets.

When asked by the Senate defense appropriations subcommittee on April 2 whether the Air Force wanted to retire the A-10 because it was no longer relevant or because of limited dollars, Welsh said flatly: "Because of budget problems, clearly."

Welsh, who has spent thousands of hours in the cockpit of the A-10, has steadfastly stood by the service's choice to retire the fleet and has urged an extremely reluctant Congress to back the decision rather than try to find savings elsewhere.

Other cost-saving options included retiring F-15 and F-16 fighters, but the service would have to retire such a large number of those aircraft to find the same savings as divesting itself of its A-10 fleet. The service also considered—and rejected—delaying purchases of the F-35 strike fighter, which will count close air support of ground troops among its many missions.

During weeks of testimony before the congressional defense committees, Welsh explained over and over that other aircraft—including fighters and bombers—can fill the close air support gap created by retiring the A-10s. However the A-10 cannot, in turn, fill in the gap if the service retired platforms more oriented to a wider range of missions.

"The other airplanes we're talking about—F-16s, F-15Es, the B-1—they do other things besides close air support in an uncontested environment, as we've had in Afghanistan," Welsh told House appropriators.

Air Force officials have repeatedly said the A-10, while a useful platform valued by ground forces, performed only 20 percent of the close air support missions in Afghanistan, an indication that the negative effects of retiring the fleet could be mitigated by tapping other aircraft.

"The A-10 doesn't operate throughout the battlefield," the four-star told reporters after the hearing. "I understand the mission can be done better in some ways with an A-10. But we are way past having the best in every mission area across the Air Force. That's just not where our funding levels are. And so we just have to make very difficult choices about how to balance what we provide to the theater commander."

Welsh said the decision was based on logic, not emotion.

Lawmakers, however, are simply not buying the Air Force's logic. After some public battles over the aircraft, both the House and Senate Armed Services Committees included provisions in their versions of the annual defense authorization bill that would keep the A-10s in service through at least next year.

The House's version of the bill, passed May 22, would raid war funds to find the $635 million needed to keep the A-10s flying next year. The Senate Armed Services Committee's bill, meanwhile, would authorize $320 million for the A-10s, enough to maintain them next year without beginning an expensive rewinging of the aircraft, the panel believes.

New Hampshire Sen. Kelly Ayotte, a vocal Republican on the Senate Armed Services Committee whose husband flew A-10s in Iraq, rejected the characterization of the A-10 as a single-mission or an unessential airframe.

"It's not a single-mission aircraft. No. 1, that's inaccurate," Ayotte said in a brief interview. "When you're taking fire, what do you want? You want the kind of fighter that is low and slow and can take out your enemy."

Close air support, she added, is "one of the most important missions that we have. It actually protects lives."

Other missions for the A-10, able to fly low and survive direct enemy hits from armor-piercing and high explosive projectiles up to 23 mm, include airborne forward air control and combat search and rescue, according to the Air Force's own fact sheet on the airplane.

Indeed, Republican Sen. Saxby Chambliss of Georgia has said he believes the Air Force is "discounting its capability" in combat search and rescue.

Ayotte, who held up Deborah Lee James' nomination as Air Force Secretary last fall as she demanded answers from the Air Force on its plans for the A-10, said ground troops, including those in Afghanistan, are nonetheless backing her crusade to save the airframe.

"I was in Afghanistan a week ago and I can't tell you how many people on the ground have said, 'Keep going defending the A-10 because last night an A-10 saved my butt,'" she said.

CRH MISSION

The Air Force, meanwhile, is proceeding with the CRH, another aircraft in the life-saving business. Service officials expected to award a contract on the estimated $6.5 billion program to Sikorsky by the end of June.

Former Air Force Chief of Staff Gen. Norton A. Schwartz called the decision to move forward with the program a "pragmatic issue," considering the toll high-altitude operations in Afghanistan and the high temperatures in Iraq took on the service's fleet of HH-60G Pave Hawk helicopters.

"The current fleet of -60s is early '80s vintage," Schwartz, now the president and CEO of Business Executives for National Security, said in an interview. "And I've flown them. They are getting worn out."

The Air Force has discussed buying a new combat rescue aircraft for the better part of the last decade. But the predecessor to the CRH, the CSAR-X combat search and rescue helicopter, was canceled in a spate of program terminations announced by Defense Secretary Robert M. Gates in early 2009.

Gates axed the helicopter program just months before the Air Force planned to award a contract for a replacement for the HH-60s, long believed by service leaders to lack the speed, range, cabin space, survivability, battlespace awareness, and all-weather operability needed for the search and rescue mission.

Instead of proceeding with the CSAR-X, Gates ordered a review to determine whether the military needed a specialized aircraft for combat search and rescue or whether it could be done using existing aviation assets across the services.

After getting a $334 million influx of cash this year, the Combat Rescue program appeared to be on track, but it was nonetheless targeted for cuts until the budget-day save.

DOD photo by Glenn Fawcett

Maj. Gen. James Martin, USAF budget director, briefs reporters on the budget outlook for Fiscal 2015. No one likes the options forced on the services by sequestration, but retiring the A-10 is the best of a bad lot, USAF leaders say.

During the briefing with reporters, Martin said he had been informed of the Air Force's intention to award a contract on the CRH as he was walking into the briefing. The service put out an official statement later in the day, pinning the decision to the "criticality" of the personnel recovery mission.

Air Force Undersecretary Eric Fanning told reporters March 11 that the reason for the last-minute change of heart on the CRH was a combination of the priorities of a new Secretary—James took the service's top civilian job on Dec. 20—and the late enactment of 2014 appropriations, signed into law more than three months into the fiscal year.

"It was one of many decisions that we wrestled with over the course of last year," Fanning said. "I think we were indicating—I know I was very publicly for a long time—that new starts were going to be very difficult in this budget environment."

Before moving forward with the CRH contract, the program must go through a major acquisition review, including cost estimates, and requires sign-off from the Pentagon's acquisition chief.

Like the A-10, the CRH program has the backing of many lawmakers. This could bode well for its future.

Those backers include Republican Sen. Lisa Murkowski, who sits on the powerful Senate defense appropriations subcommittee. Within Murkowski's home state of Alaska, the HH-60s flown by the Air National Guard have only about three years left of their service lives, and their mission capable rates are dropping.

"In Alaska, we have amazing men and women within our Air National Guard rescue squadrons. They do some amazing rescues in some pretty incredible places," Murkowski, who estimates those units have saved more than 2,000 lives since 1991, said during the April 2 hearing. "But in order to do the amazing things, they need to have equipment. They need to have helicopters that are state of the art."

During testimony on Capitol Hill, James has stressed that she sees the combat rescue mission being a critical one for the Air Force. She also views Sikorsky's offer—lower than the Air Force had anticipated—as a good deal for the taxpayer.

"There is a need for this, a great need," James told reporters after the April 2 hearing. "I certainly became convinced of that as I did my due diligence."

TIGHT BUDGETS

Nonetheless, the fate of the CRH program—like any other in the Pentagon's constrained budget—is far from assured. James herself has said that the Air Force will "probably re-evaluate" the future of the CRH if Congress does not provide the department with relief from stringent budget caps in place for Fiscal 2016 to 2021.

Lawmakers passed a budget agreement late last year that lifted those caps for Fiscal 2014 and 2015. But absent another bipartisan deal, expected by many to be elusive in an election year, the Defense Department will have to live with a budget that officials believe is inadequate to meet the national security strategy.

The Air Force is already scrambling to come up with funding for the CRH. The service will quickly burn through the $334 million in research and development money appropriated for the program for this year.

Service officials need to find another $430 million from within the five-year defense plan to pay for the CRH—no easy feat particularly if Congress continues to reject cost-saving moves like the A-10 retirements.

Wisely, the Air Force has intentionally delayed the heaviest investments in the CRH until after Fiscal 2019, a move that could help the program navigate the particularly tumultuous budget waters expected for the next two years.

"We had a couple of options with CRH when we decided to move forward with it in terms of how we ramp it," Fanning said. "And we did pick one that ramped up a little bit more slowly in order to take some of the pressure off those two really difficult years."

The Air Force is quickly trying to write a schedule for the program. That may mean little if the budget caps remain in place.

As the Air Force has demonstrated with the A-10, the savings generated from taking an entire fleet of aircraft out of the inventory is too great to pass up in this era of austerity.

Along with funding the aircraft comes the costs of training infrastructure, spare parts, and the logistic trail. There is also modernization to consider, even if those bills won't be due for years. Retiring the A-10, for example, would allow the Air Force to cancel a $500 million upgrade planned for the aircraft.

Officials, meanwhile, can reassign pilots to other aircraft while protecting the service's biggest—and most expensive—priorities. Those are, the Air Force has stated unabashedly for years, the F-35 strike fighter, the next generation bomber, and the KC-46 tanker.

"It makes less sense to sort of cherry-pick single airplanes or dozens or hundreds of airplanes and leave the tail intact when you could go after the A-10," Schwartz said. "The fundamental argument here had to do with substitutability, and secondly how do you save the most money with the least pain."

Schwartz, who is no stranger to budget battles himself, applauded Air Force leaders for the tough choices they made in the budget request, calling it a sound proposal that prioritizes modernization by reducing current force structure and making other cuts.

"It was a pretty bold package," he said.

Perhaps too bold for Congress, however. ■

Megan Scully is the defense reporter for National Journal's CongressDaily *in Washington, D.C., and a contributor to* National Journal *and* Government Executive. *Her most recent article for* Air Force Magazine, *"Stealth Bomber, Public Message," appeared in the February issue.*

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The problem is stubborn, but the Air Force is renewing its efforts with new ideas and initiatives.

The Air Force's internal war on sexual assault has proved stubborn. Despite all the prevention programs, re-education efforts, and structural changes, the most recent prevalence survey showed the percentage of airmen being victimized had hardly budged. The 2012 survey indicated some 3,200 airmen — three percent of females and 0.5 percent of males — suffered unwanted sexual contact in the preceding year alone.

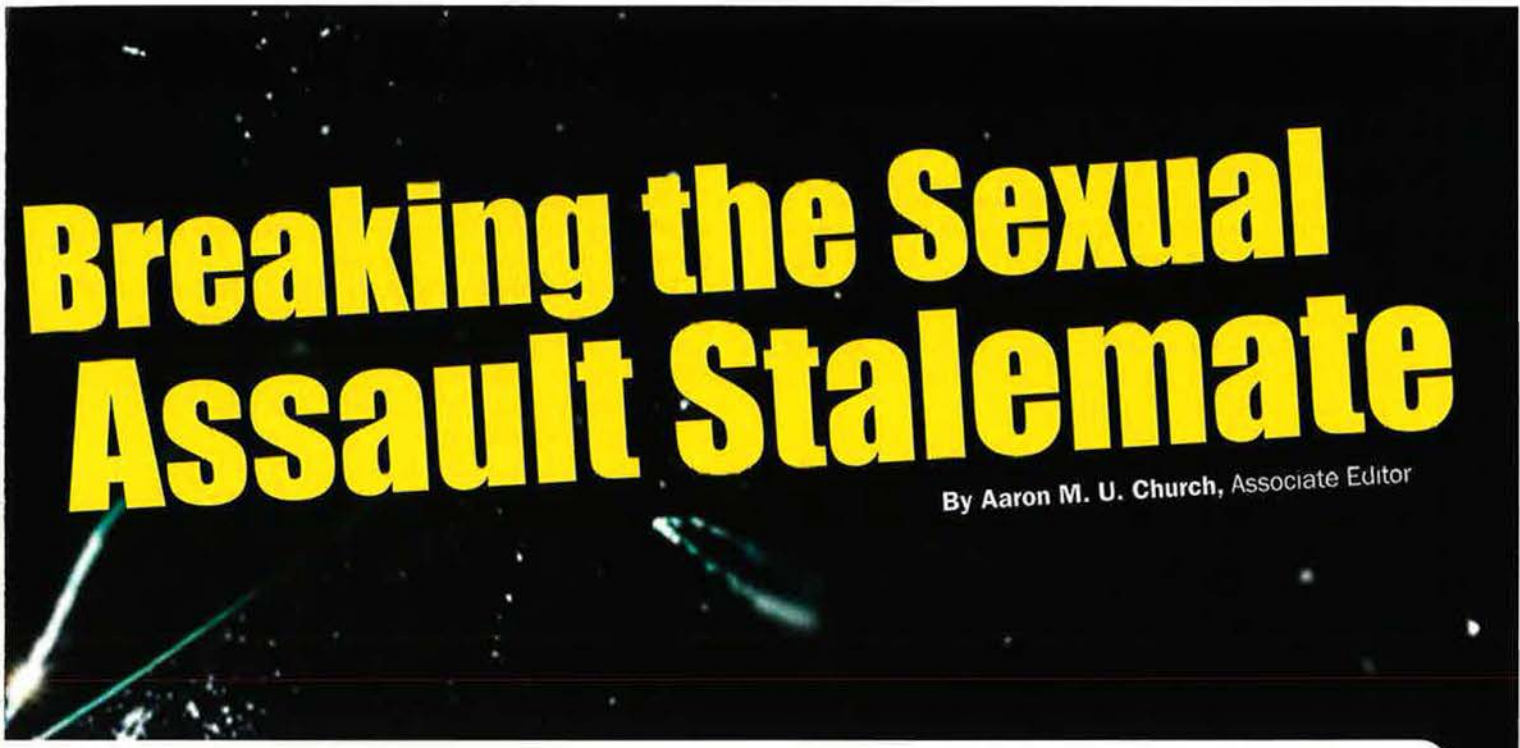
"That has been pretty consistent over time," said Brig. Gen. Gina M. Grosso, director of the Air Force Sexual Assault Prevention and Response Office at the Pentagon. All told, one in five female airmen reported having been sexually assaulted since enlisting. One bright spot is that more and more victims are reporting offenses, theoretically bringing more perpetrators to justice, Grosso noted.

Misconduct at the Air Force Academy in 2003 triggered the beginning of the service's elevated fight. However, recently, "we realized we have done a lot, but we are not seeing any change in outcome," said Grosso in an interview. Until last year, four people on the Air Staff oversaw the service's entire SAPR efforts. Officials decided this wasn't enough, and in 2013 stood up the office that Grosso now oversees. It reports directly to the Air Force vice chief of staff.

"I think the work that's happened over the last two years is tremendous," said Grosso. The new office, initially headed by Maj. Gen. Margaret H. Woodward, boasts its own team of experts, including a judge advocate, mental health specialist, Air Force Office of Special Investigations agent, curriculum advisor, policy team, and public affairs section. As a result, it is "able to coalesce things" in a way that was previously impossible, said Grosso.

Up until the last few years, changes were "evolutionary, not revolutionary," she said. With the injection of resources and better integration, she thinks the Air Force will finally "be able to get to that next level."

The strategy in the short term is to boost reporting and prosecution. In Grosso's opinion, the only way to prevent future offenses is to identify predators "and in my view, kick them out of the Air Force," which she acknowledged, isn't easy. While reporting is already on the rise, comparing actual reports to the most recent survey numbers shows that only one-third of



Breaking the Sexual Assault Stalemate

By Aaron M. U. Church, Associate Editor

offenses are ever brought to light. "We cannot figure out who committed the crime and get them out of the force if we don't have people reporting," said Grosso.

In these cases, officials' hands are tied. What the Air Force has done, though, is significantly strengthen its ability to investigate and prosecute offenses that are reported. In March 2013, a single agency, AFOSI, took over investigating all allegations of sexual assault within the Air Force's ranks. In the past, AFOSI only probed the high-end violent crimes like rape. Lesser allegations fell to base security forces. The previous system was a "very complicated matrix" of agencies that risked letting offenders slip through the cracks, said Grosso. "It's very helpful now to have one law enforcement arm investigating all of these," she explained.

AFOSI recently established a special victims unit comprising 24 full-time civilian agents dedicated to probing sexual accusations. These agents train side-by-side with a corps of judge advocates general who receive additional specialized training to effectively team with their AFOSI colleagues. A handful of experienced so-called super prosecutors receive additional training in sexual assault. The combined result is "we're getting better at that cohesive work between OSI doing the investigation and the JAG prosecuting" the cases in court, said Grosso.

The Air Force also recently lowered the standards of evidence required to send sexual assault cases to trial "so that more cases would go to court," said Grosso. Holding more courts-martial is "not a bad thing," she said, especially since not all of them end in conviction.

Another new policy requires commanders to automatically start discharge paperwork on anyone admitting to sexual assault or having substantiated claims leveled against him or her, even without a judicial proceeding. "It doesn't mean you'll be discharged, but you start the process," explained Grosso.

On the flip side, officials upped aid to victims, adding more sexual assault response coordinators and funding 90 new on-base victim advocates across the service. "Over time, we have increasingly put more resources to this issue, but we have to get our prevalence down," stressed Grosso. Despite high-profile media coverage of misconduct at basic military training in the past several years, the Air Force still "has the lowest prevalence by far" of any service branch, lower even than the US population at large at last count, she said.

"Trust me, I'm not claiming victory" said Air Force Chief of Staff Gen. Mark A. Welsh III in an April 2014 speech in Washington, D.C. "We'll celebrate when the number is zero, and I don't think that will happen in the human domain."

Airmen are "taught to trust the people who wear our uniform," Grosso said, so the numbers are still far too high for a cohesive combat team.

IDENTIFYING PREDATORS

The long-term aim is to diminish the prevalence of sexual assault, preferably by barring would-be offenders from ever joining the ranks. Since the armed forces already screen and exclude applicants for reasons ranging from weight to past drug use and gang-related tattoos, the idea isn't outlandish. Grosso said there is good evidence that many predators freely self-report, when responding to well-crafted questions, thus saving the Air Force from having to deal with them.

University of Massachusetts, Boston, researcher David Lisak conducted a survey of 1,800 male university students. Instead of asking if they had ever raped a woman, he posed a series of questions about the students' sexual behavior. "It turns out that, because these men don't see these things as rape, they readily admit to it," said Grosso. The Air Force primarily recruits young people from the same age demographic of 18 to 25 year olds as most of the students surveyed. In this study, "two-thirds of those men [identified as sexual predators] turned out to be serial rapists," she said, and the Air Force has no reason to believe its recruiting pool is any different. "The vast majority of these men never get prosecuted because they don't get caught, and I just don't want to bring them in" to begin with.

Grosso said she would like to find a way to embed some of the same questions Lisak asked in his study into the Air Force's entry screening. "If we could somehow find a way to ask every recruit, 'Have you done this?' ... which we define as sexual assault [then], ... I just don't assess you, because you've already committed a crime," she said, although she emphasized that this idea is still somewhat controversial and by no means policy yet.

Studying ways of screening for potential predators is new, but service officials have already joined forces with a slew of experts, and over the next year, "we're going to take a hard look at that," said Grosso. Even the Air Force Scientific Advisory Board, which normally tackles science and technology, is joining the fight to understand and deal with sexual assault. "These folks are big-time engineers and they don't tend to do social science work. In fact, they've never done a social science project" before now, she said. As a result, AFSAB is bringing new tools and a fresh perspective and "doing some really cool work," said Grosso.

SEXUAL PSYOPS

The most difficult and important battlefield is arguably airmen's hearts and minds, and Grosso's office is working to standardize the message and curriculum across the force. The goal is ensuring airmen "know immediately what the expectations are" for them as well as their leaders from the time they enlist, throughout their entire career, she said. Hand in hand with these efforts, officials at JBSA Lackland, Texas, are trimming a week off of basic military training, making room for a week-long values seminar before shipping new airmen off to technical school.

"We're going to do a top-off course that gets to core values, ethics, sexual assault prevention, [and] bystander intervention" to integrate airmen into the operational culture without the "extreme imbalance of power" trainees have with instructors at BMT, she said.

Educating airmen to identify precarious situations and take action to prevent harm is a huge recent effort. "We spent significant time and energy on this bystander intervention training and we used, literally, the industry experts to help us build" outstanding curriculum, said Grosso. Unfortunately, "I can train you all I want," she said, but "for an airman to actually intervene, we just find is a very hard task" that is far from assured. "I think there are a lot of things people would like to believe they would do, ... but when you're actually faced with that situation, can you?"

Indications are airmen could be helping each other much better than they are, possibly because key parts of the message aren't always getting through. "When you're training a group of people and you tell them [actions can lead] from a sexual joke to rape, they just think that's ridiculous, and they shut off" despite the research bearing this out, said Grosso. "They get a negative impression of your message. It's not even neutral," she said.

The Air Force hasn't been able yet to thoroughly evaluate the effectiveness of its SAPR initiatives, something Grosso said she's pushing hard to improve. With the huge number of structural changes, new programs, and training over the last few years, "what we really haven't done well is assess," she said.

Early feedback, however, has shown that airmen clearly are not receptive to the use of computer-based training (CBT) modules—which the Air Force routinely uses to instruct airmen—for this purpose. "The feedback's been loud and clear: no CBTs," said Grosso. On the other hand, unvarnished small group discussions really do seem to work. "The more frank the training, the more receptive airmen are to it," she said.

That includes discussing and demystifying even disturbing and violent crimes, up to and including rape. "[I] can't stand having to talk about penetrating crimes," Grosso said, but leaders, too, have to overcome this aversion and "be able to talk frankly about this crime, who commits it, and what it is" to begin preventing it. ■

Gillibrand vs. Chain of Command

The Senate in March narrowly rejected a bill to take away a unit commander's authority to prosecute sexual assault.

Sen. Kirsten Gillibrand (D-N.Y.) introduced the Military Justice Improvement Act based on her belief that commanders had historically displayed a bias against victims in cases of alleged sexual assault.

However, her legislation actually went far beyond such cases and would have crippled commanders' traditional ability to enforce good order and discipline. It would have stripped commanders' authority to punish "any crime that wasn't military-specific," said Brig. Gen. Gina M. Grosso, who oversees the Air Force's Sexual Assault Prevention and Response Office, in an interview. "[Responding to sexual assault] is a leadership problem, ... and if you take the responsibility away from leaders, they have no leverage to fix it," she stressed.

In fact, the notion that commanders are biased and less competent to deal with these cases contradicts the actual record, according to Air Force Chief of Staff Gen. Mark A. Welsh III. Every commander in the Air Force is "advised by a trained prosecutor," said Welsh in an April 2014 speech in Washington, D.C.

Out of some 2,411 courts-martial in the last three years, "there were 25 instances where the commander did not agree with his judge advocate general's recommendation" and instead sent the case up the chain of commander for review, said Welsh. Of these, only one case was about sexual misconduct.

Further, there were nearly 100 cases "where the commander decided to take it to trial when the JAG did not recommend it, for that very reason of good order and discipline," noted Grosso.

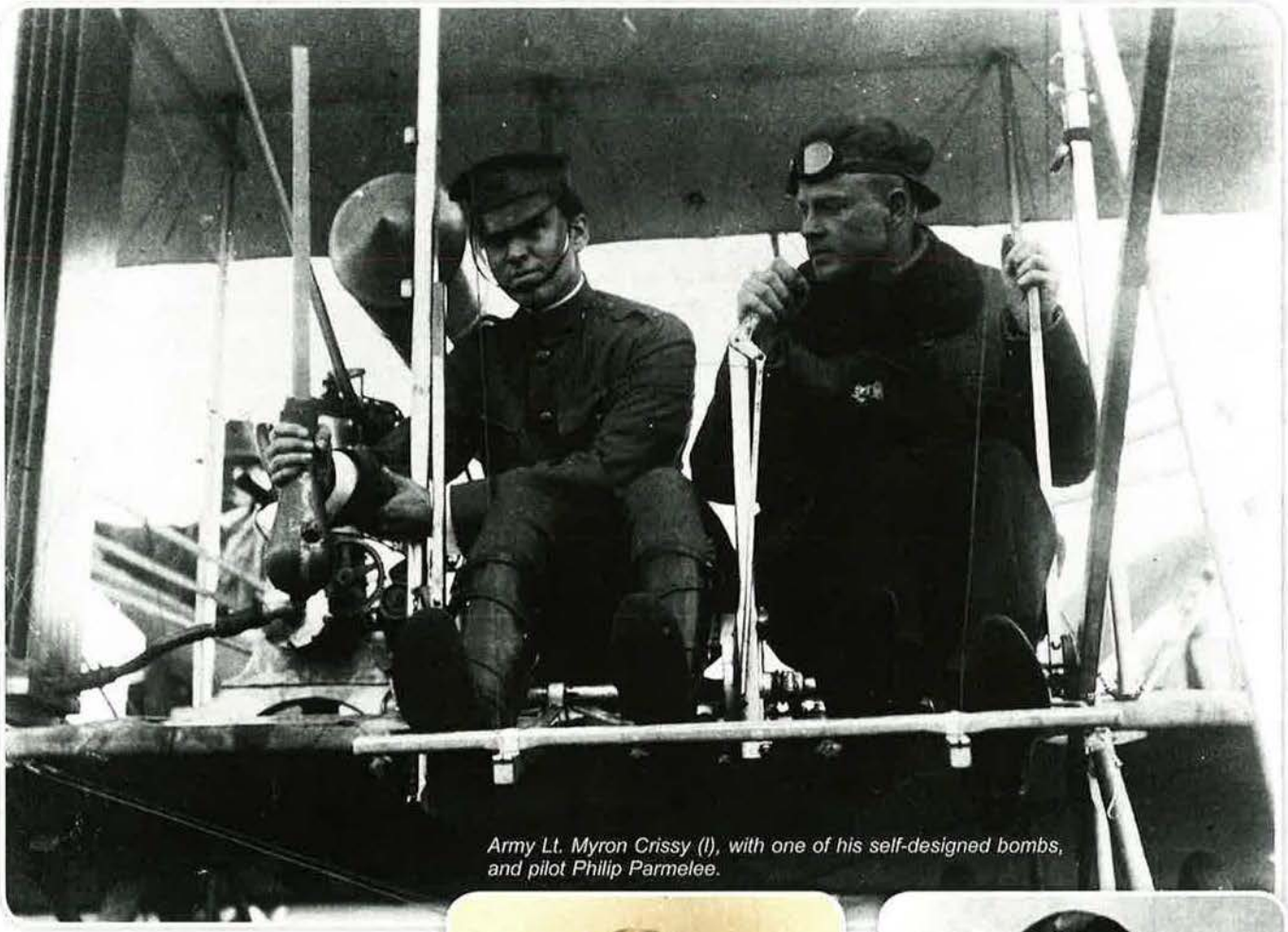
She acknowledged that this solid record has not always been the case, but "we can't fix things that happened way in the past." Yet through concerted effort over the last few years, there are "lots of victims who are having very good experience with their chain of command."

While Gillibrand's legislation did not advance, Congress instead passed a victim's protection measure that Welsh called a "great idea." It keeps authority within the chain of command. Gillibrand, meanwhile, vowed to continue her fight.

However, "if your ultimate aim is to create trust in victims, so that victims are willing to report, ... [Gillibrand's] legislation actually makes that worse, not better," asserted Grosso.

Bombs Away

Photo from National Air and Space Museum



Army Lt. Myron Crissy (l), with one of his self-designed bombs, and pilot Philip Parmelee.

Who dropped the first live bomb from a US airplane? In January 1911, Army Lt. Myron Crissy, flying over a San Francisco race track in a Wright airplane piloted by Philip Parmelee (often spelled Parmalee), tossed out 36 pounds of small, self-designed explosive devices. Crissy and Parmelee re-enacted the feat for photographers. The weight of historical opinion thus favors Crissy. Still, some give a bit of credit to Lt. Paul Ward Beck (left). In 1910 at an air meet in Los Angeles, Beck went aloft in a Farman III biplane to stage a crude bomb demonstration using sandbags. He later claimed he and Crissy collaborated on a bomb-dropping device, an assertion Crissy stoutly denied. Neither Crissy nor Beck can lay claim to making the first combat drop. That honor goes to Italian aviator Giulio Gavotti (right), who dropped four grenades from a Taube monoplane on a Turkish encampment in Libya on Nov. 1, 1911.

Paul Ward Beck

Giulio Gavotti

USMC photo by Lance Cpl. Wesley Timm

Building combat networks that can survive high-threat environments is key.

By **Marc V. Schanz,** Senior Editor

The Combat Cloud

Photo illustration by Erik Simonsen

The Air Force has built a formidable air armada, one it has used effectively to support continuous air operations for more than two decades. In Afghanistan and Iraq, USAF has linked its intelligence, surveillance, and reconnaissance tools with its capacity to deliver precision strikes from bombers, fighters, and remotely piloted aircraft across a theater of operations in minutes.

But integrating these capabilities in a highly contested environment is a different matter. An adversary may attempt to deny the United States use of its space systems and attack US command and control elements. Even with the advent of the Pentagon's AirSea Battle, or ASB, initiative to integrate air and sea forces more closely so that the United States prevails in such environments, the Air Force and Navy appear to be in different places in unifying their efforts.

While AirSea Battle has opened discussions between the two services on how to better combine their respective capabilities, the current aviation modernization plans of the Air Force and Navy show they are not yet synchronized. There is a risk of developing solutions that wind up stove-piped, to quote Pentagon parlance, meaning they are not well-coordinated.

It is a predicament some have already suggested the Air Force, along with the sea-based combat air arms, needs to address. "It is time for Congress and the Defense Department to take a hard look at the mix of combat air forces that will be needed to sustain America's asymmetric airpower advantage," wrote Mark A. Gunzinger, senior fellow at the Center for Strategic and Budgetary Assessments in Washington, D.C., and retired Lt. Gen. David A. Deptula, former Air Force intelligence chief, in an April 2014 CSBA report.

They advised the Air Force, now operating the smallest and oldest combat air fleet in its history, and its sister services to rethink old habits and focus on tools and concepts that will address real-world security concerns and anti-access, area-denial (A2/AD) threats. Long-range intelligence, surveillance, and reconnaissance assets and strike aircraft should receive emphasis, they argued, along with concepts that will allow real-time adaptation to sophisticated enemies employing tools such as cyber warfare, electronic jamming, and ballistic missiles.

Speaking on the CSBA report in April, Deptula advocated that the services embrace distributed air combat operations, harnessing data links that have evolved over time, jam-resistant communications, and new targeting tools. This would help ensure that space-based capabilities would not become a liability in an A2/AD fight and could lead to leaps in information sharing across the air, land, sea, and space domains.

Likening the approach to network cloud computing, Deptula called this concept a "Combat Cloud." It would integrate both manned and unmanned systems and utilize advances in stealth, precision weapons, and advanced command and control tools, ensuring that no single point of attack would cripple US combat operations. Such an effort would also present an opportunity to create modular, scalable combat capabilities, rather than force individual aircraft or other assets to take on more and more tasks.

While it sounds distant, some of the capabilities have already been battle tested, particularly in the command and control arena. Recent combat operations have shown the utility of the Link 16 data link, the Battlefield Airborne Communications Node, Tactical Targeting Network Technology, and other systems, albeit in a permissive combat environment where US assets have ruled the skies.

Well-tailored to Coming Missions

However, as Deptula and others have noted, these systems came into being without a construct to maximize cooperation between the services and allies. A Combat Cloud approach would help solve this problem, minimizing potential capability gaps, among its advantages.

The Air Force, so far, has focused its energies on dealing with its deep fiscal and structural crisis, as it struggles to decide what capabilities it will retain and let go in the next decade. Service leadership has made clear what kind of fight the Air Force should prepare for, and it is one the Combat Cloud appears well-tailored to respond to.

After becoming Chief of Staff in August 2012, Gen. Mark A. Welsh III began tackling hard choices with the service's modernization and reset initiatives; he delayed making long-term strategy pronouncements until relatively recently. But Welsh has made clear a guiding principle in his stewardship: The Air Force will not forfeit its ability to fight in a contested, high-intensity conflict, as it represents the existential purpose of a military air arm.

Welsh told reporters in Washington, D.C., in November 2013, "We don't exist to fight a counterinsurgency. ... We can participate in that, we can help in that, but major air forces exist to fight a full-spectrum conflict against a well-armed, well-trained, determined foe."

This understanding has guided the development of the service's new strategy document, which was due for release in June, and the vigorous protection of its three core acquisition programs: the KC-46A tanker, the F-35A strike fighter, and the long-range strike bomber. It's also behind what Welsh calls strategic agility,

Clockwise from top: A B-52 comes in low over JB Pearl Harbor-Hickam, Hawaii, during a training flight in April; a combined air and space operations center; a photo illustration of a military satellite on orbit. Similar to network cloud computing, the combat cloud concept would integrate manned and unmanned systems, space assets, and advanced command and control tools.

something he first articulated in February. The Air Force's existing modernization plans, at least the ones preceding June's strategy document, are one big "pipe dream," said Welsh in March at the Center for Strategic & International Studies. The service has to be more vigorous in scrubbing lists of wishes down to lists of needs, he asserted.

"We really have to start by making a concerted effort to look at the long term for the solution," he said in April. However, it is a unifying strategy bringing together operational concepts from strike, unmanned operations, command and control, and ISR that has gone missing for nearly a decade, declared Welsh.

Thus, the first part of the Air Force's new strategy is the "call to the future," he said. "It's the priorities for science and technology, for research and development," and for "new approaches to training and educating our people." Officials involved with ASB are working on some of this.

Welsh, drawing on his experience flying A-10s in the later days of the Cold War, has noted that the Cold War-era AirLand Battle concept began as a series of initiatives that guided the Air Force and Army to communicate more effectively and link their capabilities, such as procuring better radios. "It was a series of steps designed to develop capability to work together that resulted in what you see on the battlefield in Afghanistan today, with battlefield airmen, combat controllers," joint terminal attack controllers, and tactical air control party personnel, said Welsh in November 2013. All of these capabilities make air-ground communication "virtually seamless" today. "All that was an outcome of AirLand Battle," he said.

Multi, Multi, Multi

Today, the Air Force and Navy are engaged in the same problem-solving exercise, said Welsh. "How do you pass hard quality data to weapons that now have longer ... ranges than they have the ability to target?" he asked rhetorically, adding that sensor ranges are longer and detection ranges are greater in weapons now being fielded and proliferated around the world.

The services are already making some changes in how they train together to help operationalize ASB. The Air Force's Red Flag exercise now features interaction with naval planners to familiarize the two services with each other's operations, while Air Combat Command and the Navy's US Fleet Forces Command now collaborate in a Navy Air Force Integration Forum.

However, the Air Force still lacks a blueprint for how it will consolidate and operationalize these concepts with its planned modernization program. Some senior leaders have declared they want to move forward with integrating ISR and strike assets in a more holistic manner—reflecting many of the concepts in the cloud.

"We must prepare for an era of warfare requiring new levels of cross-domain collaboration, operational level command and control, and the dynamic integration of national, theater, and tactical capabilities across the full range of military operations," Maj. Gen. John N. T. "Jack" Shanahan, commander of the Air Force ISR Agency, said during an address at a May defense conference in Arlington, Va.

USAF, and the services, need to get out of building "exotic single-mission platforms" designed for one threat, he added, only to find they are obsolete by the time they are fielded. "Multidomain, multisensor integration is where the future lies" in contested fights, Shanahan said. This will emphasize multisensor, stealthy, long-endurance aircraft, "redundant and resilient" information networks, and "self-learning, self-protection capabilities," among other attributes.

The Navy, on the other hand, has been hard at work on its future concepts. In Naval Aviation Vision 2014-2025, the sea service lays out a blueprint for its airpower modernization, something officials call Naval Integrated Fire Control-Counter Air, or NIFC-CA. This operational concept, the Navy argues, "extends the battlespace, increases survivability, and provides maximum engagement capability in the air and at sea."

Naval planners call NIFC-CA a system of systems that, by 2025, will provide long-range fire control and power projection and the ability to operate in contested areas and enable "coordinated and cooperative situational awareness."

Rear Adm. Michael C. Manazir, director of air warfare on the Chief of Naval Operations Staff, said NIFC-CA is built around exploiting situational awareness and long-range collaborative targeting concepts, some of the same ideas articulated in ASB.

While the Navy will largely have many of the same capabilities in 10 years it fields today, a carrier strike group will be far more networked by the 2020s and able to move valuable battlespace information seamlessly between assets.

"We'll be able to show a common picture to everybody," Manazir told the US Naval Institute in December 2013. In a shooting war in an A2/AD scenario, a "decision-maker can be in more places than before," he said.

Manazir's justifications echo many of the points laid out by Deptula and Gunzinger in their critique of today's combat air fleet. "In the past, we bought platforms for platform capabilities," he said. Now, the Navy is concentrating on its "integrated capability to deliver an effect on the maritime battlefield."

Air Force officials said no formal cooperation has been inked yet with the Navy on NIFC-CA, but airmen are already working on pieces of the problem set that the Navy's concept addresses.

At the operational level, Pacific Air Forces' Commander Gen. Herbert J. "Hawk" Carlisle, as part of his commandwide strategic initiatives, has made command and control resiliency a key. It is critical to carrying out the Air Force's mission in the Pacific, he said in September 2013. Steps include linking Army Terminal

Top: A KC-135 tanker tops off a US Navy F/A-18E Super Hornet over the Pacific Ocean. Right: Gen. Hawk Carlisle speaks at the first AirSea Battle forum at JB Pearl Harbor-Hickam in March. Both services are working hard to improve operational collaboration.

USN photo by Mass Comm. Spec. 1st Class Trevor Welsh

USAF photo by MSgt. Matthew McGovern

High Altitude Area Defense anti-missile batteries and Navy Aegis cruisers to Air Force air and space operations centers. Combat operations in permissive environments have allowed USAF to defer tackling issues like defending against electronic jamming and surviving without space assets for too long, he said.

In the meantime, the Air Force Association's Mitchell Institute for Aerospace Studies is pushing the conversation forward. The institute, with Deptula as its dean, has initiated a project to win support for the Combat Cloud vision.

An in-depth study to propose possible solutions for the Combat Cloud is in the works. A Mitchell Institute working group, gathering inputs from across the services, has already helped define elements of the concept and possible obstacles to its implementation.

Combat capability, as the Navy has discovered, is by and large not the limiting factor in adapting to future conflict. The sticking point is connectivity. The Air Force leadership appears to believe this as well, and both services have suggested there is an opening for a cloud-like concept to take hold.

"We are taking elements of [NIFC-CA] and we are integrating them into exercises with the Air Force," Chief of Naval Operations Adm. Jonathan W. Greenert told reporters in May, citing Northern Edge and Valiant Shield as examples. The collaboration "needs to be better," he said, "but we are working on it." Not all Navy networks can just plug into USAF networks, particularly tactical nets. "The key is to sort through the tactical nets" and get them compatible, Greenert said.

"For some time, we will need to operate at two speeds and in two directions" Shanahan said in May: manage "legacy" ISR operations while rapidly building the foundations for operations in a contested and degraded environment. This will affect many USAF functions from combat to ISR collection and analysis. The Air Force should be at the forefront to design a "resilient, secure, redundant, high-capacity cloud-based information architecture" and ensure that "integration is at the heart of everything we do," he said.

Building architecture to support core missions is the key to success, Welsh said last November. "It's the distributed common ground station. It's the people, the analysts, the network administrators, the folks who flow data, create intelligence, and move it to where decision-makers need it."

Welsh said, "That's kind of the heart of this whole thing for us, and we'll continue to focus a lot of time, energy and investment on that." ■

By John A. Tirpak, Editorial Director

THE AIR FORCE INVESTIGATORS

Special agents Martha Ward (r) and Bryan Schmelzer, both forensic consultants, tote equipment from a house used as a training facility.

USAF photo by SrA. Renae L. Kleckner

CRIME SCENE

They catch spies and are in charge of keeping the Air Force's secrets. Their biggest job is to investigate crimes involving the Air Force and its people. They're the guys with the big duffel bags of guns, traveling with and protecting the Secretary of the Air Force. They are the people without rank on their battle uniforms, collecting intelligence in Afghan villages. They figure out who's hacking into Air Force and contractor networks and develop defenses against cyber intrusions.

All these roles belong to the Air Force Office of Special Investigations, whose 3,000 people have perhaps the most diverse portfolio of any USAF agency. The bulk of OSI's mission is criminal investigations: solving or preventing crimes ranging from travel voucher fraud all the way up to murder. Other principal missions involve cybercrime and cyber war detection—it is the Defense Department's executive agent for cyber forensics—as well as counterespionage, security for senior USAF leaders and their foreign visitors, and supervising the Air Force's most classified, special-access programs.

If it all sounds like the Federal Bureau of Investigation, that's because OSI was born in the FBI's image. In 1948—in the wake of a profiteering scandal involving a general officer—Air Force Secretary Stuart Symington asked J. Edgar Hoover to help him set up an FBI-like organization within the service to perform myriad law enforcement functions. Hoover sent his lieutenant, Joseph F. Carroll, to help USAF set up the agency. Carroll received a direct commission as a brigadier general and was OSI's first commander.

Symington had to give something for Carroll, and did: The FBI got the Air Force-owned armory in the District of Columbia, to house the FBI's burgeoning collection of fingerprints.

It was typical Washington horse-trading, said OSI Commander Brig. Gen. Kevin J. Jacobsen in an April interview. "That's how things get done," he said.

Jacobsen, who had led OSI since 2010 and retired in May, presided over its military and civilian special agents, analysts, and reservists in a brand-new headquarters located on Marine Corps Base Quantico in Virginia, not far from some of the FBI's own facilities. OSI moved there from JB Andrews, Md., in 2012, as a result of 2005 Base Realignment and Closure changes. Those changes also co-located the Naval Criminal Investigative Service (NCIS) and the Army's Criminal Investigation Command (CID) at the site (the acronym CID is a vestigial reminder of when that organization was a division; the initials persist). NCIS is downstairs from OSI. CID is down the hall.

USAF's OSI agents stay out of the limelight working to prevent and resolve all sorts of problems

Practically the whole building, with the exception of the gym and cafeteria, is a sensitive compartmented information facility (SCIF), meaning the rooms are sound- and electromagnetically sealed to prevent eavesdropping. Common areas not so protected, such as the cafeteria, are used as meeting areas with NCIS and CID. They collaborate but not under a single command authority. The agencies all derive their legal authority from the Pentagon's inspector general and their respective service Secretaries, but operationally, they only share space. OSI is unique, however, in that it is a mix of civilians and uniformed personnel and that it has both a law enforcement and intelligence mission, giving it some special capabilities.

Of the 3,000 or so people in OSI, 1,800 are special agents who conduct investigations. Nearly 800 are professional staff ranging from analysts to logisticians, and at any given time, some 400 reservists who are individual mobilization augmentees, or IMAs, are also investigators. On top of that, there are usually about 300 contractors who help with analysis and preparing special studies.

The largest group of agents performs investigations of criminal activity and fraud, OSI's "bread and butter," Jacobsen said. Almost as large is counterintelligence. Next is cyber.

CRIM

USAF photo

OSI never recruits first-term airmen. They must first "learn to be airmen"—and good ones—Jacobsen said. Agents recruit on bases from among airmen who are "award winners ... rising on their own" and who show interest in the OSI mission. It's a popular career field and "we have the luxury to be very selective," Jacobsen said. Many agents have advanced degrees, and many are multilingual. OSI recruits civilian agents, as well, but looks for people who already have done some law enforcement work or have useful special skills.

"We're looking for staff sergeants ... at about the six-to-10-year" point in their careers, Jacobsen said. This guarantees an experienced and mature cadre but one still young enough to justify the considerable investment of training, he said.

Recruits take a basic 19-week law-enforcement training course along with new agents going into the FBI, CID, NCIS, and 77 other federal law enforcement organizations. An Air Force-specific basic course lasts another eight weeks. After further schooling and a probationary period, agents are fully trained after about a year. Almost everyone's first assignment is as a criminal investigator.

Recruits must also be self-starters and able to function on their own without a lot of support, Jacobsen said. Many OSI shops are one- or two-person offices—the largest field office is about 35 people, at JBSA-Lackland, Texas—and some of these offices are in countries where the US doesn't even have a formal military presence.

OSI, along with its NCIS, CID, and FBI brethren, divides up countries where the US military might transit and assigns agents there as force protection detachments. These agents keep in touch with local military and US Embassy personnel "to help determine the security of the local area" and warn of threats. There are 35 such locations around the world, OSI is executive agent for seven of them.

Despite the tremendous amount of training to get its people up to speed as fully capable federal agents, OSI moves them around from specialty to specialty. No one is allowed to select an area and stay put, Jacobsen said.

"They'll get into a track and stay for an assignment or two," he explained, "and then we're going to bridge them out into something else." He said, "We expect that every agent, at the end of [his or her] career, to have experience in every one" of OSI's mission areas. "What we don't want to do," he added, "is create an organization of silos."

SEXUAL ASSAULT

In the US, OSI participates in the Joint Terrorism Task Force with the other alphabet-soup agencies, ferreting out those who are planning, conducting, or supporting terrorism against the US at home and abroad. As crime-fighters, OSI agents pick up where local security forces leave off. While the security forces handle traffic tickets, misdemeanor offenses, and first responder situations, OSI is brought in for the heavier stuff.

Most OSI leads actually come in from tip lines; someone calls in because he sees something that's not right. It's not a complaint-based system, Jacobsen said. OSI only needs "credible information" to open an investigation.

In 2012, DOD ordered that only the armed forces investigative services—OSI, NCIS, and CID—could investigate sex assault cases, to reduce subjectivity and increase rigor. Consequently, OSI's case-load in sexual assaults jumped 55 percent. "That's not to say that there's much more sexual assault today than there was" two years ago, but now "it's all coming" to OSI, Jacobsen said. The actual rates of sexual assaults hasn't radically changed, he said.

Unless it takes place in a medical setting or under the care of a doctor, every airman's death is investigated by OSI—even combat deaths and suicides. Sometimes, an apparent suicide is actually a murder "made to look like suicide," Jacobsen said. "So we approach every suicide death as if it were a murder case."

Fraud investigation is a significant and rising OSI activity. It can be as small as people lying on their travel vouchers

USAF photo

all the way up to "higher-end contract fraud." Jacobsen said including falsifying records, providing substandard parts, or fraud involving military construction or housing. "Just in the last year, there was an investigation that we were running on Pratt & Whitney [that] resulted in a judgment of $664 million. ... It's the largest recovery in OSI's history, and this was pursuant to a false claims investigation."

Contract fraud investigation requires more collaboration with the other services, too. Jacobsen said that earlier in his career, contracts tended to be service-specific. Today, "any one contract on any Air Force base might have eight or nine other agencies interested" as the services share and operate jointly. So "just about any investigation we're conducting, whether it be fraud, counterintelligence, or criminal work, it's involving some other agency or component," such as the other tenants at Quantico.

The fraud work in a sense pays for OSI by itself. "Every year, we recover more money for the US Treasury than OSI's budget," Jacobsen asserted. Judgments totaled more than $1.5 billion in recent years.

OSI is a battlefield agency, as well, performing an intelligence function. In fact, Jacobsen said, it's DOD's "agency of choice" for battlefield intelligence collection and is one of only a handful of Air Force entities routinely operating "outside the wire"—off base and in potentially hostile territory. In Afghanistan, OSI goes to villages, develops relationships with village elders and populations, and cultivates informants, a role it also performed in Iraq.

Protected by security forces tactical security elements, OSI teams "meet with the people ... to find out ... what's going on. 'Any strangers in town? Anything weird going on? Have you heard anything?'" Jacobsen said. Through this intelligence collection, agents develop not only the threat picture for nearby bases, but identify active or likely terrorists, bomb makers, and insurgents, Jacobsen said. These OSI teams develop "target packages," which amount to capture/kill lists, for special operations forces such as the Navy SEALs. After combat units "action the target"—meaning capture or kill the identified enemies—OSI goes into the scene to interrogate detainees and exploit what it can from leftover bomb-making equipment, hard drives, and other "pocket litter" to see if it can find out who was supporting the insurgents, who they associated with, or about any plans in the works.

Of the 10 OSI agents who have died in the line of duty, seven were killed in Iraq by roadside bombs and one died in Afghanistan as a result of an insider attack by an Afghan Army soldier.

Counterespionage is "big, big, even to the same degree as criminal investigations," Jacobsen reported. It has two parts: stopping the adversary "from taking our secrets" and "finding out who within our own structure—either the Department of Defense or the Air Force—[is] committing espionage. So there's a defensive part to it and an offensive part." While OSI does not run agents or recruit agents overseas, it may turn a spy to become a double agent.

In criminal investigations, OSI uses informants. A spokeswoman said that sometimes, there is no other way to gather information. The agency came under fire in 2013 for its handling of an informant: a cadet at the Air Force Academy. The former cadet told the *Colorado Springs Gazette* that OSI induced him to lie, spy on his fellow cadets and break academy rules in order to gather information—including which cadets were involved in drug dealing or sexual assault—then disavowed him and wouldn't explain his informant activities at his expulsion hearing.

An Air Force inspector general investigation determined that the cadet had already earned enough demerits for expulsion before OSI recruited him as an informant, and his information-collecting activities—joining in with those who were breaking the rules on the agency's behalf—after that point wouldn't have changed the outcome of his case.

Even so, the case resulted in a unique special circumstance, wherein the superintendent of the academy, Lt. Gen.

Top left: Agents undergo weapons training. Bottom left: AFOSI agents train with a British police tactical boat unit in the UK. Below: Special agents conduct surveillance at Barksdale AFB, La. Training takes about a year, and after becoming an agent, airmen can expect to stay in an OSI mission area for an assignment or two, and then transfer to another area, ensuring well-rounded agents with a host of skills.

USAF photo by A1C Micaiah Anthony

Fallen Heroes

Ten OSI members have died in the more than 65-year history of the agency. Three were civilian agents, six were military agents, and one was a support staff member. They are memorialized in the OSI Hall of Heroes, located in the OSI headquarters building in Quantico, Va.

Capt. Lee Hitchcock
Died 1967
Vietnam

Special Agent Ray Round
Died 1970
Thailand

Special Agent Matthew Kuglics
Died 2007
Iraq

Special Agent Thomas Crowell
Died 2007
Iraq

Michelle D. Johnson, will now oversee OSI's use of informants at the school. That's unusual because, while the office counts the various major commands as its customers and organizes largely along majcom lines, OSI doesn't answer to their commanders. Indeed, other than being kept informed of the progress of investigations, commanders—up to and including the Chief of Staff—can't have a role in investigations, because command influence must be avoided.

Commanders can and do conduct their own probes into problems within their organizations—these are called CDIs, or commander-directed inquiries—but such investigations are largely administrative in nature and take place outside the legal arena. OSI has jurisdiction for any crimes.

OSI discovered a cheating ring at Malmstrom AFB, Mont., last year during a drug-related investigation, and passed what it discovered to Air Force headquarters. "I notified [Secretary Deborah Lee James] right away," Jacobsen said.

The cheating itself wasn't an OSI case because it wasn't technically criminal. Those cheating were doing so on a "locally developed proficiency test," a breach of discipline but not a crime, he explained. A CDI followed. "I kept the criminal investigation," Jacobsen said, as well as a related charge of disclosing classified information. Typically, OSI investigates cheating when it involves testing affecting promotions and pay, such as the Weighted Airmen Promotion System, or WAPS, test. In such cases, cheating is a means to obtain money fraudulently, and becomes a crime.

OSI's cyber function is also multifaceted. "What we're not doing is information assurance," Jacobsen explained. "We work with 24th Air Force [Air Forces Cyber] ... investigating ... who got in and how did they get in. And then develop an investigation or operation to prove attribution. ... Who's on the other end of the keyboard typing in the codes and hacking in. And we've become very, very successful at identifying that and stopping that."

He explained that what makes OSI different from other cyber-oriented agencies is it views the activity as a counterintelligence issue. Even unclassified information, taken in large enough quantities, can provide an ability to reverse engineer technologies.

OSI is the executive agent for the Defense Cybercrime Center in Linthicum, Md. Once it characterizes a threat and identifies weaknesses, it tells 24th Air Force how it can better defend the network architecture. It's an endless cycle, Jacobsen said, but the more time enemies are spending trying get around the new defenses, the less time they have to commit other crimes.

It is useful for OSI to act as an investigative agency and an intelligence agency in these pursuits, because OSI can use its federal investigative authorities to get warrants, do searches, and collect information while working with other intelligence agencies when attacks come from overseas. Like the National Security Agency, OSI gets its warrants from FISA (Foreign Intelligence Surveillance Act) courts and judges.

TRUST THE SECRETARY—ONLY

That's not OSI listening in on base phone calls, though. Jacobsen said while OSI does get court orders for electronic eavesdropping, it must be as a result of probable cause that a crime has taken place. Base operational security (OPSEC) teams, however, do listen in on random base phone calls, checking for people discussing secrets. They are the people who put the stickers on base phones, saying a call may be monitored, he said.

The Office of Special Projects, out of JB Anacostia-Bolling, D.C., is the hub for OSI's work to protect the secrets of special-access programs and investigate any leaks. OSI develops the security

Special Agent Rick Ulbright
Died 2004
Iraq

Special Agent Dan Kuhlmeier
Died 2006
Iraq

Special Agent Ryan Balmer
Died 2007
Iraq

Special Agent Nate Schuldheiss
Died 2007
Iraq

Special Agent Dave Wieger
Died 2007
Iraq

MSgt. Tara Brown
Died 2011
Afghanistan

systems to keep USAF's most precious technology secrets hidden. Jacobsen didn't talk much about this activity, but said his people are not the so-called "camo dudes" who patrol the perimeter of USAF's classified Groom Lake facility in Nevada. Because they are part of the national law enforcement community, OSI agents also play a role in the shipment of nuclear materials. Though not in charge of the shipments, OSI agents will ride along and keep in constant touch with local sheriffs and state police to ensure the shipments aren't stopped or threatened en route.

The OSI commander works for many people. His direct rater is the Air Force inspector general, who provides oversight programmatically and for criminal investigative standards. The commander works directly for the Secretary of the Air Force, but OSI's intelligence work routes up through the undersecretary of defense for intelligence and the Defense Intelligence Agency. "I've got a lot of bosses," Jacobsen observed.

No one is above OSI's purview. In recent years, even a Chief of Staff came under investigation, when Gen. T. Michael Moseley was the subject of a probe of command influence in the choice of a contractor for a Thunderbirds show audio-visual system. There's "always someone" higher up who is the overseeing authority in such cases, Jacobsen said.

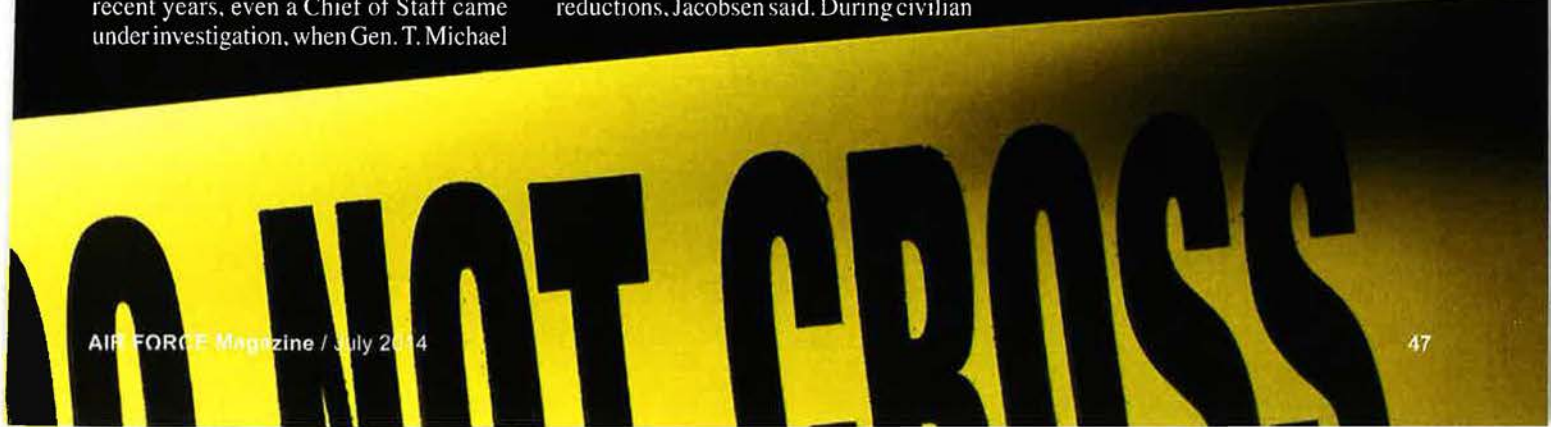
"You have to trust somebody. The system says the Secretary is the trustworthy one," he noted. "Only the Secretary of the Air Force, ... can tell me to stop an investigation that has already been initiated or tell me not to investigate something." The OSI commander typically briefs the Secretary every quarter about ongoing investigations—more frequently on topics of high-level interest. If there are bad guys in OSI, like most law enforcement agencies, it has an internal affairs division for self-policing. Such a case was pending in May, "and I keep the senior leadership informed of those, as well," Jacobsen said.

OSI is affected by sequestration, just like the rest of the service. That's problematic, because where an OSI location is a one-or-two-man shop, "that could be a 50 percent or in some cases a 100 percent capability that we lost" due to personnel reductions, Jacobsen said. During civilian furloughs last year, "the military [agents] stood up and worked extra hard."

Limited resources mean choices. Jacobsen showed a chart tracking the number of criminal investigations pursued from 2005 to 2013. During the times when OSI agents were heavily deployed to Southwest Asia—many at a "one-to-one dwell," or a year at home station for every year deployed—criminal investigations Stateside dipped. By the numbers, the majority of those not pursued during that time were drug cases and sexual assaults.

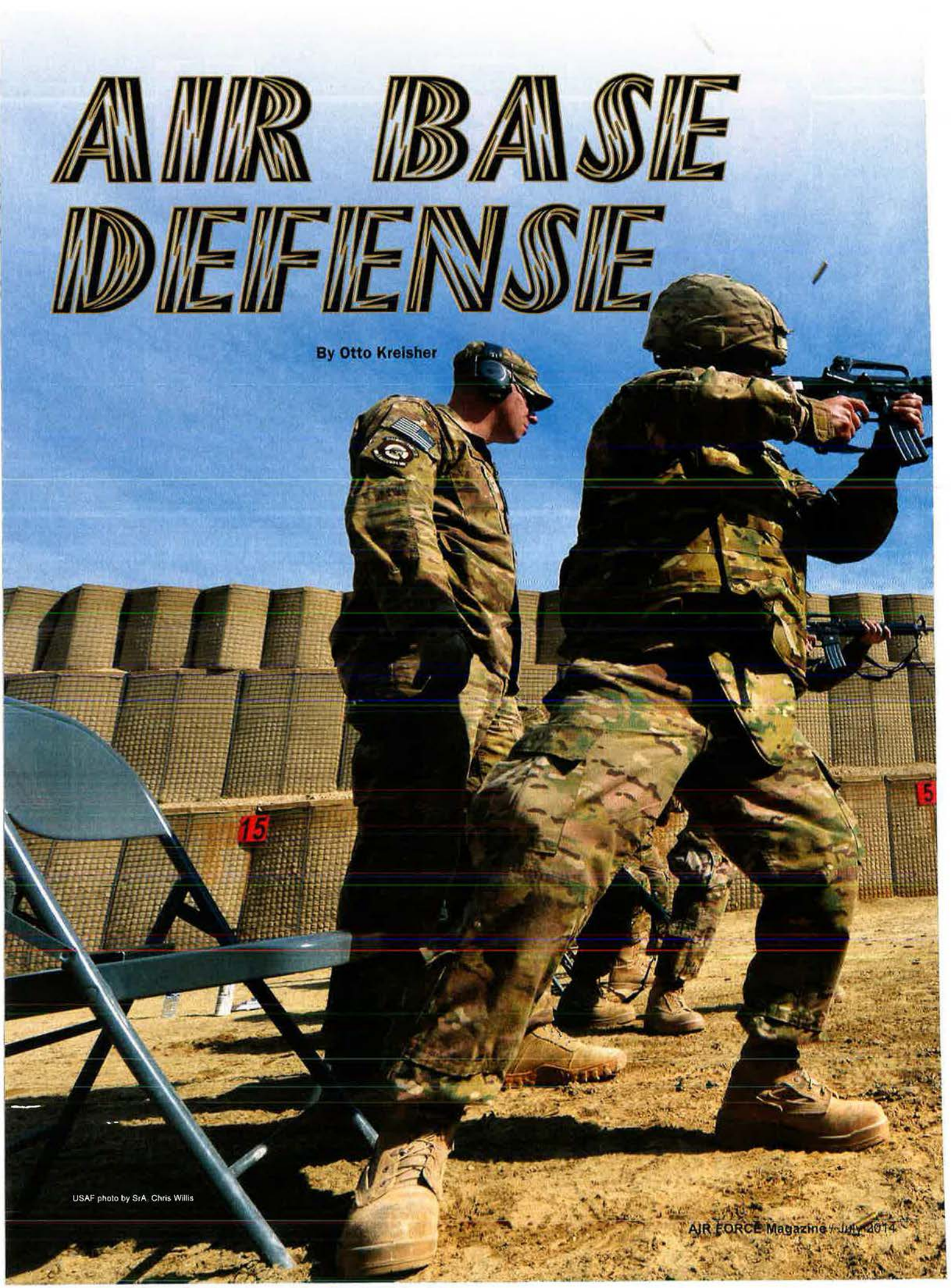
"Something always has to give," Jacobsen said. During that period, "our folks were either in training, on the battlefield, or just coming back," and investigations back home "really did take a hit." Crime, he said, "doesn't stop just because there's no money."

Reflecting on a 30-year career with OSI, Jacobsen said the organization has really evolved. "Although we bring bad news, we at least bring a suggestion, in context," as to how and why someone went wrong and how to keep it from happening again. ■



AIR BASE DEFENSE

By Otto Kreisher



USAF photo by SrA. Chris Willis

With the "strategic rebalance" to the sprawling Asia-Pacific region, the US armed services increasingly are sending small forces to unfamiliar, remote locations far different from their usual established overseas bases.

Many of those deployments involve Air Force aircraft, either as the primary mission provider or for logistical support to US or friendly foreign ground units. These small, expeditionary packages, as a means to answer widely dispersed security threats and humanitarian emergencies, are becoming commonplace.

Part of the idea is to give potential enemies more locations to worry about. USAF Chief of Staff Gen. Mark A. Welsh III recently noted that the threat from conventional ballistic missiles to large US air bases has led to plans to spread out combat aircraft over many smaller allied airfields, to complicate an adversary's targeting challenge during a conflict.

All this adds up to US aircrews and support personnel deployed at foreign air bases where the main security may be provided by host nation forces.

Unfortunately, this creates additional base-defense challenges. US military history is replete with episodes where depending on others for security had tragic consequences.

The most recent example was the Sept. 14, 2012, suicide attack by Afghan insurgents on Camp Bastion, a British-controlled airfield in Afghanistan's volatile Helmand province. In a nighttime assault, 15 heavily armed insurgents wearing US military uniforms quickly penetrated the security perimeter and reached the flight line, where they destroyed six Marine Corps AV-8B Harriers and severely damaged two more.

The attack also killed two Marines from the Harrier squadron and wounded 13 other US and UK troops and a civilian contractor.

Leaving security in the hands of a host nation has sometimes proved disastrous for US forces abroad.

Security forces instructors train airmen during an "active shooter" scenario at Bagram Airfield, Afghanistan.

Although Bastion adjoined Camp Leatherneck—a large US Marine Corps compound with a lot of ground combat troops—most of those at the air base were aviators, maintainers, and other support personnel. The base also hosted British aviation units, including the AH-64 Apache attack helicopter squadron that Capt. Harry Wales—Britain's Prince Harry—served in.

To defend themselves, the pilots and maintainers from Marine Attack Squadron 211 fell back on the infantry training all marines receive early in their service to defend themselves, killing some of the intruders and delaying the assault until stronger forces could arrive.

One of the marines killed was the squadron commanding officer, Lt. Col. Christopher K. Raible, who was organizing a defense, armed only with his semi-automatic pistol.

At the request of the Marine Corps Commandant, Gen. James F. Amos, the commander of the US Central Command, Army Gen. Lloyd J. Austin III, conducted an extensive investigation of the attack.

Completed nearly a year later, the investigation found that the British were responsible for guarding Bastion. It was ringed by a chain link fence, concertina wire, and 24 watchtowers that supposedly provided good visibility across the open terrain surrounding the air base.

The British base commander, however, had assigned the task of manning the towers to troops from the Pacific island nation of Tonga, and the Tongan soldiers had left some towers unmanned. The insurgents used a gap in surveillance to cut through the perimeter fencing with simple wire cutters and were well inside the compound before being detected.

The investigation concluded that other aspects of the US-British security plan for the Bastion-Leatherneck complex were "suboptimal," with no single officer in charge of security for the contiguous bases.

The security arrangement created command and control relationships "contrary to the warfighting principles of simplicity," Amos wrote in accepting the investigation.

Based on that investigation and internal Marine Corps reviews, on Sept. 30, 2013, Amos publicly asked for the retirement of the two top marines in Afghanistan at the time of the attack: Maj. Gen. Charles M. Gurganus, head of Regional Command Southwest (where most of the marines were fighting), and Maj. Gen. Gregg A. Sturdevant, the senior marine aviation officer in the area.

It marked the first time since Vietnam that any US general officer had been fired for negligence in combat.

The eight Harriers destroyed or damaged meant the loss of nearly an entire squadron of short takeoff and vertical landing attack aircraft capability that cannot be replaced. They had received expensive upgrades and service life extension work to keep them flying until the F-35B replaces them.

Although he considered both men close friends in the small cadre of marine general officers, Amos said the two "failed to exercise the level of judgment expected of commanders of their rank." It was unrealistic, he said, "to think that a determined enemy would not be able to penetrate the perimeter fence."

It was evident that sharp reductions in US forces in Afghanistan had affected security at Bastion.

When Gurganus took over RC Southwest in late 2011, he commanded about 17,000 troops and had 325 marines providing security at the two bases. By the night of the attack, Gurganus' forces had dropped to 7,400 and 110 marines assigned to security at the complex.

Still, Gurganus had tried to correct the problem. He had requested permission earlier in the year to add 160 troops back in to the complex's security force, but was refused by ISAF headquarters in Kabul because of the force limits in place.

Amos said Gurganus should have reassigned troops from within his command to protect the bases.

A SHARP EYE

"The commander still has the inherent responsibility to provide protection for his forces," Amos asserted. "Regardless of where you are in a drawdown, you're required to balance force projection with force protection."

As the aviation commander, Sturdevant "did not adequately assess the force protection situation at Bastion airfield," the Commandant said. And although the marine air units were on the British-run base, Sturdevant remained responsible for assessing vulnerabilities and mitigating them with his own forces by having a layered, integrated defense in-depth.

USMC photo by Sgt. Keonaona C. Paulo

Marines arm a Harrier fighter at Camp Bastion, Afghanistan. An insurgent attack on this post in 2012 destroyed six Harriers (see picture facing page).

Marines, Amos concluded, "can never place complete reliance for their own safety in the hands of another force."

Similar attacks by Taliban insurgents against US-occupied Kandahar and Bagram air bases in the spring of 2010, before coalition forces started the drawdown, had been repulsed by security personnel, including US airmen.

The Air Force had suffered a greater loss of life due to constrained security arrangements in the June 25, 1996, truck-bomb attack on Khobar Towers,

Saudi Arabia. The complex provided housing for airmen with the 4404th Wing (Provisional), supporting "no fly" operations over Iraq from the nearby Saudi Arabian international airport.

A large tank truck loaded with a mix of gasoline and explosives—with an estimated force equal to 20,000 to 30,000 pounds of TNT—was detonated against the security fence 72 feet from the building, which housed US airmen and foreign nationals. The blast shattered the front of the eight-story structure, killing 19 American troops and injuring nearly 500 people.

Air Force SSgt. Alfredo R. Guerrero, standing security watch on the roof of the building, recognized the threat from the parked truck and called for an evacuation. He is credited with saving the lives of many who were in a reinforced stairway on the opposite side of the building when the blast hit.

Guerrero was awarded the service's highest peacetime award for valor, the Airman's Medal.

Subsequent investigations revealed that there had been warnings of a possible attack on Khobar particularly after a Nov. 13, 1995, car-bomb attack in Riyadh, Saudi Arabia, killed or injured more than 35 Americans who were there as advisors to the Saudi National Guard.

Various investigation reports offered widely varying conclusions, though, over what security steps were taken in the wake of the Riyadh bombing and who was to blame for any deficiencies.

An investigation led by retired Army Gen. Wayne A. Downing roundly blamed the entire chain of command for failing to take adequate force protection measures. He directed most of his criticism at USAF Brig. Gen. Terryl J. Schwalier, commander of the 4404th Wing, writing that "it appears that the 'fly and fight' mission and 'quality of life' took precedence over force protection" at Khobar Towers and that Schwalier "did not adequately protect his forces."

An Air Force investigation, however, showed that Schwalier had taken major steps to improve security at the compound, closing 36 of the 39 security gaps that USAF inspectors had noted. Three were left unaddressed due primarily to lack of funding.

Downing's condemnation also overlooked the fact that some of Schwalier's attempts to improve security, such as moving the fencing farther from the quarters, were denied by Saudi officials. Downing also failed to acknowledge that the Saudis had primary responsibility for security at the facility.

Downing's findings—coupled with congressional pressure—ultimately inspired the new Defense Secretary, William S. Cohen, to overrule the Air Force and deny Schwalier a previously approved promotion to major general, forcing his subsequent retirement.

The Navy had a similar experience when two terrorists drove a motorboat packed with explosives into the guided-missile destroyer USS *Cole* on Oct. 12, 2000, during a refueling stop in the port of Aden, Yemen.

The massive explosion blasted a 40-by-40-foot hole in *Cole's* hull at the waterline, causing massive flooding and killing 17 sailors and wounding 42. *Cole's* well-trained crew struggled for hours to rescue their wounded shipmates, to remove the dead they could reach, and to keep the crippled warship from sinking.

The Navy had avoided Aden for more than a decade because of Yemen's history of terrorist activities and weak government control. But it had resumed use of the port a few years earlier because US Central Command wanted to rebuild relations with the supposedly moderate regime.

Although US intelligence services had detected unspecified threats of a terrorist attack against American interests in Yemen, *Cole* was operating on a Threat Condition Bravo, the second lowest of four security levels, with rules of engagement that heavily restricted the use of deadly force for self-protection.

Primary security in the port was supposed to be provided by Yemeni forces.

As a result of these conditions, a sailor standing watch with an M60 machine gun did not consider firing warning shots when the bomb-laden boat approached and the two men on it smiled and waved, before steering into the side of the ship.

A Navy investigation praised *Cole's* crew for its heroic efforts that saved the ship and concluded that the com-

USMC photo

Marines fight fuel pit fires caused by the insurgent attack at British-controlled Camp Bastion in 2012.

manding officer, Cmdr. Kirk S. Lippold, acted reasonably in adjusting his force protection posture based on his assessment of the situation in Aden. Chief of Naval Operations Adm. Vern Clark said Lippold "did not have the specific intelligence, focused training, appropriate equipment, or on-scene security support to effectively prevent or deter such a determined, preplanned assault on his ship."

Despite those findings, the Navy denied Lippold's promotion to captain and he retired as a commander.

The history of attacks on US forces reliant on other nations for security goes back much further. The Vietnam War marked a particularly painful period of being let down by host nations.

US involvement in South Vietnam began in the late 1950s with small numbers of ground and aviation advisors to Republic of Vietnam forces. Soon, though, it grew to include Air Force, Army, and Marine Corps air units, providing helicopter and fixed wing transport support.

Those airfields and the expensive US aircraft on them—defended primarily by South Vietnamese forces at the beginning—soon became attractive targets for Viet Cong guerrillas.

One of the earliest serious attacks came in the night of Feb. 6-7, 1965, when VC sappers penetrated the wire perimeter surrounding the air base at Camp Holloway, or Pleiku, in the Central Highlands.

Undetected by the few Army military policemen inside the compound until it was too late, the guerrillas killed eight soldiers, wounded another 128, destroyed 10 US aircraft, and damaged another 15 before escaping into the night.

On July 1, 1965, VC fighters used mortar fire to cover the assault by well-armed sappers who pierced the perimeter defenses of the air base at Da Nang, on the coast, which was used by Air Force and Marine Corps squadrons. The attack destroyed two C-130s and one F-102 and damaged two F-102s and another C-130.

At those and other air bases that suffered similar attacks, security outside the wire was supposed to be provided by South Vietnamese troops, while US personnel stayed inside.

President Lyndon B. Johnson responded to the airfield attacks by ordering new air strikes against North Vietnam and sending in two battalions of marines to guard Da Nang, beginning the buildup of US forces and offensive operations that would last nine more years.

TRYING TO GET IT RIGHT

Attacks—mainly by mortar and rocket fire—against Da Nang, Tan Son Nhut, and other airfields continued throughout the conflict, destroying and damaging scores of aircraft.

Given the sad history of depending on host nations for air base security, and threat posed by the "new normal" security environment, all of the services have changed their organizations and procedures for protecting forces deployed to potentially dangerous locations.

The Army's military police organization has units sometimes referred to as "combat MPs," who have training and equipment much more like the infantry than the law enforcement elements that normally serve on bases in the US.

These combat MPs provide area security, conduct mounted or dismounted patrols, man listening or observation posts, and escort convoys, among other combat-zone duties. They've been heavily engaged during the last 12-plus years of US involvement in Iraq, Afghanistan, and elsewhere.

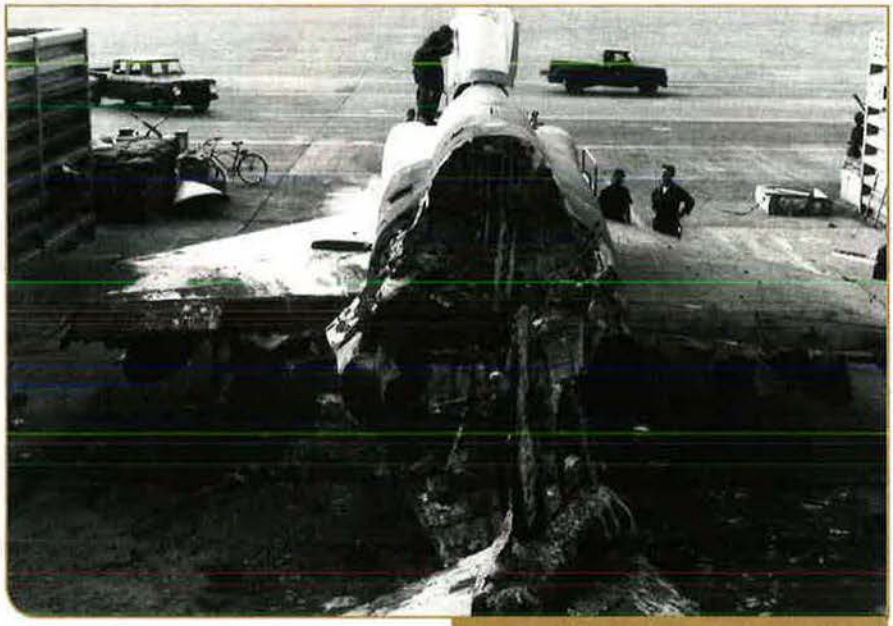
The Navy has gone through several revisions of its overseas security measures since the *Cole* attack. The first step was to assign marines to provide security in Aden when Navy ships stop there for refueling.

It then opened an Anti-Terrorism and Force Protection Warfare Center at Naval Amphibious Base Little Creek, Va., in 2001 to develop tactics, equipment, and training to combat terrorists.

In 2004, the Navy created a new organization, the Maritime Force Protection Command, to oversee the administration and training of the expeditionary units it sends overseas to protect ships, aircraft, and bases from terrorist attack.

Those functions then were put under yet another new command, the Naval Expeditionary Combat Command, which created a subcommand, the Coastal Riverine Force, in 2012. That force combines the riverine squadrons—operating well-armed small powerboats for operations in coastal waters and rivers, much like the "Brown Water Navy" of Vietnam—and the Maritime Expeditionary Security Force, providing force protection of deployed ships and units in overseas harbors and ports.

The Coastal Riverine Force has squadrons on both US coasts and a detachment in Bahrain, supplying well-trained and heavily armed boat crews and land-based operators to provide security around any Navy ship in a potentially dangerous port.



USAF photo

An RF-4C Phantom II after it was destroyed at Tan Son Nhut AB, South Vietnam, in a 1968 rocket attack during the Vietnam War.

The heightened security measures—and tension—on deployed ships was drawn in sharp relief by an unfortunate incident in July 2012, when an armed sentry on a Navy ship fired on a fast-approaching boat off Dubai, killing an unarmed Indian fisherman and wounding three others.

The Marine Corps has clearly embraced Amos' doctrine of providing for their own security. Lt. Gen. John

F. Wissler, commanding general of III Marine Expeditionary Force and Marine Forces Japan, sends units for exercises and training missions to host nation facilities all over East and Southeast Asia.

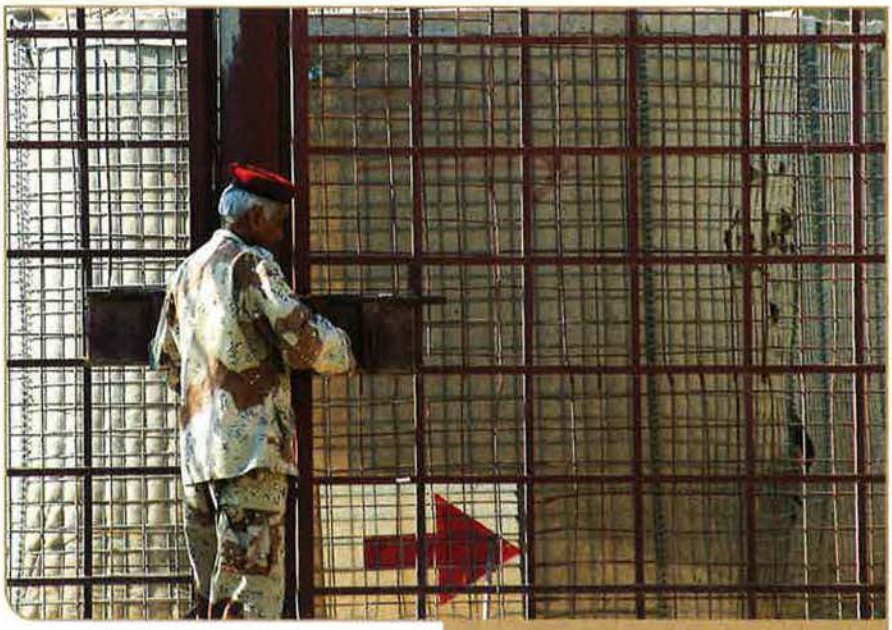
"Force protection is always one of the major concerns anytime we deploy," Wissler observed. "We do a good analysis of the threat wherever we are deployed. And we always bring sufficient force protection capability as part of that exercising team, to take care of ourselves."

The level of the perceived threat "will drive what we will bring, in terms of our own organic force protection, or where we will work with host nation capabilities."

The ground commander "understands that his principal responsibility is the safety of his marines and their capability," Wissler said.

USAF photo by SrA. Chris Willis

SSgt. Steven Owen and his working dog, Tex, conduct a night operations search at a traffic control point at Bagram.



USAF photo by TSgt. Brian Ferguson

An Iraqi soldier locks base gates for the evening in May 2006. Five US security forces airmen advised the Iraqi Army on base defense procedures.

He cited a major combined command post exercise in South Korea this spring involving high-level staff members from the US and South Korean Marines.

"Because of the level of classification at which we ran the exercise, we had security for our headquarters ... that was set up under tentage in the field. So we brought along sufficient marines who could provide that security from the outset."

The Air Force began developing air base security units during the Korean War and expanded those efforts in Vietnam.

They were revised and strengthened after the Khobar Towers attack, with the Air Force security forces personnel field divided to produce specialists in air base ground defense, as well as law enforcement. The security forces also have trained working dog teams for bomb detection and other security missions.

In recognition of their capabilities, Air Force security personnel were deployed to protect Army installations overseas in what were called "in lieu of" assignments or "joint expeditionary taskings" when Army forces became strained from heavy commitments in Iraq and Afghanistan. Even after the assignments ended, security forces airmen have maintained one of the highest deployed-to-dwell ratio in the Air Force.

In 1997, Air Mobility Command created its own security force with the Phoenix Raven program, providing small teams of well-trained security personnel to protect AMC aircraft operating out of foreign air fields. Teams of two to six specially trained and equipped Ravens are sent "where security is unknown or additional security is needed to counter local threats," according to a USAF fact sheet.

Other Air Force major commands, including Air Combat Command, Pacific Air Forces, and even Air Force Special Operations Command, have sent security force personnel to the intensive month-long Phoenix Raven training course, conducted at JB McGuire-Dix-Lakehurst, N.J.

Air Force security forces in Afghanistan provide both perimeter and flight line security at USAF-run airfields. If Air Force units are operating on facilities controlled by the Army or Marine Corps, the security airmen primarily are still responsible for the flight line, according to an Air Force statement. ■

Otto Kreisher is a Washington, D.C.–based military affairs reporter and a regular contributor to Air Force Magazine. *His most recent article, "China's Carrier Killer: Threat and Theatrics," appeared in the December 2013 issue.*

CHINA FLIES

By Rebecca Grant

[10] things Americans need to know about the People's Liberation Army Air Force.

The air forces of China aren't as large or as skilled—yet—as the Soviet Union's airmen were in the days of the Cold War. However, trends in Asia point to more encounters with China's increasingly active forces at sea and in the air.

"China is conducting a coordinated and deliberate campaign of coercive diplomacy in the South China Seas," noted Georgetown University professor and Air Force Reservist Oriana Skylar Mastro in a 2012 bulletin for the Center for a New American Security. She cited the establishment of a garrison on tiny Sansha Island as a definitive example of deliberate expansion, clearly directed from the top leadership.

That was before the 2013 declaration of special rules in the Air Defense Identification Zone (ADIZ) and the December confrontation between an escort ship of China's aircraft carrier and USS *Cowpens*, a US Navy cruiser.

The People's Liberation Army Air Force PLAAF and smaller counterparts in Naval Aviation and Army Aviation are changing fast. Yet with China especially, history and culture play a big role in opera-

Photo via chinesemilitaryreview.blogspot.com

tional art. USAF is still getting to know this Pacific power and its airmen. Herewith are 10 things to know about the PLAAF circa 2014.

[1] They're Flying Near Japan.

When China flies in the East China Sea, the Japanese react. Japan scrambled aircraft due to PLAAF activity 38 times in 2009 and 96 times in 2010. In 2013, 415 scrambles occurred, according to Japan's Ministry of Defense. And these aren't isolated reconnaissance patrols; on Sept. 8, 2013, two PLAAF H 6 bombers took off from China and flew a diagonal course between Miyakojima and Okinawa's main island. Although the H-6s are based on the old Russian Tu-16 Badger design, they have been extensively updated. The H-6s can carry air-launched cruise missiles with ranges of several hundred miles, fitted for attack against ships at sea or fixed points on land.

Japan's Ministry of Defense took the unusual step of releasing the flight track of the bombers in this incident. The bombers followed a corridor used by Chinese naval forces transiting toward exercise areas in the Pacific. They stayed in international airspace and China called the flights routine.

Gen. Herbert J. "Hawk" Carlisle, head of Pacific Air Forces, reinforced the importance of the treaty ties between Japan and the US as a counterweight to increased flight activity by China. Just last month, another scuffle involving China's fighter patrols and the Japan Air Self-Defense Force interceptors made news. This time, the military aircraft came dangerously close to each other. China claimed Japan Air Self-Defense Force fighters flew within 100 yards of a Tu-154, while Japan said its aircraft were being harassed by Chinese Su-27s. The frequent encounters have made the East China Sea a high-risk airspace.

"They see the strong friendship and enduring alliance between Japan and the United States, and they see that [working] together, we can counter threats to the security and stability of the region," Carlisle told Japan's *Asahi Shimbun* [newspaper] in April 2014.

[2] They're Hospitable.

USAF Chief of Staff Gen. Mark A. Welsh III, Carlisle, and CMSAF James A. Cody visited China together in late 2013. They made strides in deepening the connection and Welsh later said they were "treated exceptionally well."

According to Welsh, the USAF delegation experienced something of a charm offensive. "Commander Ma [Gen. Ma Xiaotian], the Chief of Staff of their air force, was a wonderful host," said Welsh. China had not hosted a USAF Chief of Staff since 1998, nor had a PLAAF Commander visited the US since 1997.

In between, then-PACAF commander Gen. Paul V. Hester traveled to two bases in China in 2007. Hester saw Su-27s and China's FB-7s, all-weather, supersonic, medium-range fighter-bombers. "There are still a lot of unknowns, and if you will, unanswered questions," Hester observed, according to the *Honolulu Advertiser* newspaper. "There are certainly not many solid answers to that question of 'What is your vision for your military and where will it lead you?'"

Carlisle (who visited China in 2009 for the 60th anniversary founding of the PLAAF) had reflections on the relationship, too. He told the *Asahi Shimbun* that "just to have the discussion with them, it gives us a greater understanding. It also gives them a greater understanding of us and our capabilities. And so, I think it has a potential to influence, in a positive way."

After the 2013 trip, Welsh said, "The biggest take-away was that I think we can communicate, we can cooperate in a way that helps prevent misinformation, miscommunication, accidental confrontation. ... I don't think a mil-to-mil relationship will ever be the pillar of the US-Chinese relationship, but I think it can be part of the connective tissue."

Yet cautions abound. Engagements with US Pacific Command are

China's H-6K extended-range bomber, shown here, was based on the old Soviet Tu-16 design but significantly upgraded over the years.

Photo via Internet

This J-20 advanced fighter prototype was photographed carrying an air-to-air missile.

an example. At first, the People's Liberation Army "readily engaged with PACOM when its interests could be met or when PACOM offered entrée to more strategic, national-level lessons resident elsewhere in the United States," wrote Frank Miller in a 2011 Army War College publication, *Chinese Lessons From Other People's Wars.* But as China's own position improved, the attitude toward contact shifted. Now, according to Miller, "the primary lessons the PLA wants to learn from PACOM is how to defeat it."

[3] They're Hosting Other Airmen.

Overall, China's airmen seem to prefer hosting visits to traveling themselves.

According to China expert Kenneth W. Allen, exchanges with other air forces have been steadily increasing since 2001. Allen, a retired USAF officer and former assistant air attaché in China, has emerged as one of the nation's foremost guides to the inner workings of China's air force. He concentrates on people, organization, and training—not on equipment.

Recently, activity intensified. Allen wrote that from September 2011 to January 2012, the PLAAF Command College held a course that included foreign and PLAAF pilots with a focus on tactics, combat methods, and training.

In addition to six PLAAF pilots, a total of 69 officers—including several pilots—from 41 countries participated. The countries included Chile, Pakistan, Philippines, Saudi Arabia, Singapore, and Venezuela.

Likewise, Carlisle noted, "We have to keep in mind [that] every single one of these nations has a bilateral relationship with China. They have trade with China. They have an economic relationship with China and cultural [ties] in many cases," Carlisle told *Defense News* in February 2014.

[4] They Play Second Fiddle to the Ground Forces—For Now.

China claims that the PLAAF is a force of 398,000, or just over 17 percent of China's total military.

The PLA has a "ground force-dominated culture," said Allen. Most attachés sent abroad are PLA army officers specializing in intelligence. Nor is the PLA an army doing the bidding of the state, per se. The PLA answers to the Central Military Commission (CMC) of the Communist Party, not the defense ministry or state apparatus. Ten uniformed officers plus one civilian sit on the CMC. Army officers dominate senior posts on the CMC, which controls the modernization of China's military forces.

Two PLAAF airmen entered the inner circle in 2012 when they were appointed to the Central Military Commission. One was incoming air chief Ma. More significant, in the opinions of Mastro and colleague Michael S. Chase of the US Naval War College, was the choice of outgoing PLAAF air chief Xu Qiliang to serve as vice chairman of the Central Military Commission.

Mastro and Chase described Xu as a trailblazer. He's the first airman to take a high-ranking position amongst the CMC Army officers.

According to Mastro, Xu is a blunt-talking fighter pilot. He sees China developing anti-satellite and other space control capabilities to ensure China has access to space, even though space programs are run by the army. Xu has spoken of conflict moving to the air, space, and even deep space as a "historical inevitability." That's Marxist-tinged language for top priority.

"Given that two air force officers have secured a place on China's highest military body for the first time in the history of the People's Republic," Mastro and Chase wrote in *The Diplomat* in 2012, "many China watchers believe this foreshadows the loosening of the ground force's 60-year-long stranglehold on the levers of military power."

"Of particular significance is that Xu is identified as an air force general and continues to wear an air force uniform," Allen commented.

[5] Their Combat Record Is Slim.

Xu and Ma together look set to continue pushing the boundaries of PLAAF airpower toward extended-range and joint operations.

Their biggest obstacle may be China's lack of combat experience. "The only times the PLAAF has engaged in any sustained air-to-air combat were during the Korean War [1950 to 1953] and the 1958 Taiwan Strait Crisis, which lasted only a few days," noted Allen.

Photos via chinesemilitaryreview.blogspot.com

Top: A J-20 takes off from an airfield in China. Here: A model of what China's next fighter may look like—supersonic and stealthy.

The most recent experience belongs to their surface-to-air missile battery operators, some of whom manned batteries during the Vietnam war, according to Allen and unrelated colleague Jana Allen. The air defense forces lack recent experience. "The last shootdown by a PLAAF SAM occurred against a Vietnamese aircraft that inadvertently crossed the border in October 1987," they found.

They Are Students of Recent Military History.

A keen eye to recent operations helps compensate for the lack of combat time. Carlisle, from the 2013 visit, recounted that China's leaders were serious about improving.

"I'll tell you, frankly, they watched what the Western nations and the United Nations did in Desert Storm, they watched what we did in the Deliberate Force, in the former Republic of Yugoslavia, in Europe, and then, of course, they saw Iraqi Freedom and Enduring Freedom," Carlisle said in his April interview. The West's overwhelming airpower was incentive for China to improve. "I think all of that made them aware of their disadvantage, strategically, with the United States and the West," he added.

"The PLA, given its lack of combat experience, seems to be trying to compensate through the close study and analysis" of how other countries fight, especially the US, wrote Dean Cheng in the 2011 Army War College publication *Chinese Lessons.* In his view, what particularly impressed Chinese observers was the need for advanced technology systems, integrated operations, command and control to cover wide expanses, as well as the reality of a high rate of munitions expenditure.

They're Trying Out Global Reach.

China made its first foray into long-range air operations in 2005. A Chinese 747 with 104 tons of relief supplies for victims of Hurricane Katrina landed at Little Rock AFB, Ark., on Sept. 7, 2005. "It's quite unusual," commented USAF Brig. Gen. Joseph M. Reheiser, quoted at the time by Xinhua news agency. "I'm not a historian, but I can't think of a time when China has airlifted relief supply to the United States," he said. The cargo included tents, light power generators, linens, and clothing.

In 2010 a detachment of Chinese Su-27s arrived at Konya air base in Turkey for a joint exercise with Turkey's F-4s. "Indeed, an incipient expeditionary PLA is in the making," David M. Finkelstein, director of the China program at the Center for Naval Analyses, said at the time.

Activity accelerated in 2011. During February and March, the PLAAF sent Il-76s to evacuate Chinese civilians from Libya. Altogether, the aircraft flew 1,655 Chinese from Libya to Khartoum, Sudan, and then brought 287 back to China, calculated Allen.

China now frequently participates in international relief missions. Besides Hurricane Katrina, in September 2011, four Il-76s took supplies to Pakistan following severe flooding and the next month three Il-76s flew similar relief missions to Thailand, wrote Allen.

More recently, however, China lagged badly in assistance when Typhoon Haiyan hit the Philippines in 2013. China also scored few points with its lackluster response to the missing Malaysian airliner Flight MH370 earlier this year. The flight was bound for Beijing and most passengers were Chinese.

They're Like a Big Family.

The PLAAF is inward-looking by nature due to its organizational style. China's People's Liberation Army has a distinct sociology that often looks more like a sprawling extended family than a Western-style army. Those who joined Mao in the years before the Communist takeover in 1949 were often educated, fed, and raised within what became the PLA.

Chinese troops typically serve in one unit for their whole careers, developing strong personal relationships, said Allen.

Aircrews work on one aircraft at a time, and pilots will fly only one or two different airplanes, Allen said, according to *Stars and Stripes* coverage of his briefing to airmen at Misawa AB, Japan, in 2009. Since the Chinese airplanes are handmade in factories, crews and pilots have to learn the ins and outs of each piece of equipment, the newspaper reported.

One remarkable tradition is that Chinese pilots often serve only at one base. Allen said wing commander-equivalents exercise detailed control over flight operations, starting with taxi and takeoff. Units are organized around one type of aircraft. However, a recent PLAAF reorganization at upper echelons opened up the possibility for dissimilar aircraft types to train together. According to Allen, pilots

A Chinese cargo aircraft laden with 100 tons of humanitarian aid for the victims of Hurricane Katrina lands at Little Rock AFB, Ark., in 2005. China wished to be seen "standing" with and showing sympathy for the US after the hurricane.

USAF photo by TSgt. Christopher Steffen

USAF photo by Scott M. Ash

USAF Chief of Staff Gen. Mark Welsh meets with the head of China's Air Force, Maj. Gen. Li Chunchao in Beijing, in 2013. PACAF Commander Gen. Hawk Carlisle and CMSAF James Cody also made the goodwill trip.

in some units are now given "pilot autonomy" to create the own flight plans and conduct "free air combat" in training zones, which includes non-scripted air intercepts. That could signal progress.

They're Training With Air-Launched Cruise Missiles.

Ballistic missiles like the so-called carrier-killer DF-21, which belong to the Second Artillery Force, get most of the attention. However, the PLAAF has aircraft equipped to carry long-range cruise missiles.

"A key element of the PLA's investment in anti-access, area-denial (A2/AD) capabilities is the development and deployment of large numbers of highly accurate anti-ship cruise missiles (ASCMs) and land-attack cruise missiles (LACMs) on a range of ground, air, and naval platforms," noted the 2014 book *A Low-Visibility Force Multiplier* by Dennis M. Gormley, Andrews S. Erickson, and Jingdong Yuan.

The key lies in how well they are learning to employ the missiles as air-launched weapons. Why worry? Because the "supersonic speed, small radar signature, and very low altitude flight profile of cruise missiles stress air defense systems and airborne surveillance and tracking radars," the authors noted.

They're Flying Longer Missions and More Hours.

The *Wall Street Journal* claimed in late November 2013 that PLAAF pilots were on track to fly more hours than their US counterparts. That was due in part to sequestration, but the Chinese are flying more. The question is what they gain from it.

Idiosyncratic PLAAF recruiting and training has raised Western eyebrows for years. The PLAAF long recruited mainly high school-equivalent graduates. They excluded those from certain provinces and didn't mix women or college graduates in with the majority of pilot trainees.

Operational training is picking up. "For several years now, both PLAN Aviation and the PLAAF have been running exercises that involve cruise missile firing over water including at night and against surface vessels," noted Gormley and his coauthors.

One thing that's not changing? An outlook common in air forces. "Pilots are gods in the PLAAF," remarked Allen at his Misawa briefing.

Most observers expect growth and progress from the PLAAF and Naval Aviation—not just in capabilities but in the essentials of training, tactics, organization, and even culture. Monitoring how the change affects the Pacific balance of power will require a watchful eye.

"Some experts believe a major goal of China is to emerge as a regional hegemon quietly and without fanfare until it achieves that status as a fait accompli," concluded Carl D. Rehberg, an analyst in USAF's strategic plans and programs office, in a recent article.

China's leadership is realizing its economy and stability are intertwined with the international system. That's "terra incognita" for China's leaders, in Finkelstein's words. "There simply is no precedent in the history of the PRC for a China so enmeshed in the international system."

Carlisle put the progress of the PLA in context. "The efforts they have put forth are to try to fix what they thought were their disadvantages, to put them in a better strategic position," he explained in his Japanese newspaper interview. "Clearly, they're doing that," he said, "but at the same time, so are we." ■

Rebecca Grant is president of IRIS Independent Research. Her most recent article for Air Force Magazine *was "The Autonomy Question" in the April issue.*

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The air advisor mission aims to make it so the good guys can win a fight without American troops in harm's way.

IN the summer of 2009, a small special operations team from Air Force Special Operations Command's 6th Special Operations Squadron hit the ground in the West African nation of Mali.

Attached to Joint Special Operations Command Trans-Sahara under US Special Operations Command Africa, their mission was clear: Train and equip the country's nascent armed services to battle back against regional terror groups, such as al Qaeda in the Islamic Maghreb (AQIM), that were steadily and violently gaining ground on the continent.

The 6th SOS team arrived in country at a time when the Pentagon and USAF leaders were learning painful lessons in counterinsurgency and irregular warfare on the battlefields of Iraq and Afghanistan. Terms, such as "building partnership capacity" or BPC missions, were also coming into vogue among senior military leaders, including the air service's senior brass.

But to air advisors in Mali and teams deployed to Africa, Central Asia, and other hot spots, the Pentagon's rhetoric on COIN, IW, and BPC boiled down to one main objective: Train foreign forces to fly and fight now, so US forces would not have to in the future.

With the Iraq War now over and DOD entering the endgame in Afghanistan, Pentagon leaders are doubling down on BPC operations, dramatically expanding the number of countries where those missions take place, and increasing the personnel dedicated to them.

Military planners at US Special Operations Command anticipate fielding 4,500 soldiers, sailors, airmen, and marines into more than 100 countries to conduct bilateral and joint training operations, including the air advisor mission, the Pentagon's Fiscal Year 2015 budget plan states.

In May, President Obama announced the creation of a new "Counterterrorism Partnership Fund," which will set aside roughly $5 billion specifically to train and equip foreign forces to combat terror groups worldwide.

The fund will finance a foreign-led counterterrorism force via "a network of partnerships from South Asia to the Sahel" underwritten by American military training and equipment, Obama said during a May 28 speech at West Point.

"We have to develop a strategy that matches this [terrorism] threat, one that expands our reach without sending forces that stretch our military too thin, or stir up local resentments," according to Obama. "We need partners to fight terrorists alongside us."

On the AFSOC side specifically, airmen are taking their hard-earned experience from building up Iraqi and Afghan air squadrons to various

USAF photo by MSgt. Russell E. Cooley IV

USAF photo by Capt. Bryan Purtell

Left: USAF special operations airmen disembark from a Russian-built Mi-17 at Eglin AFB, Fla., during a capabilities demonstration. Right: Malian troops secure the landing zone as a CV-22 lands during Exercise Flintlock 08, the first time the AFSOC Osprey was deployed overseas.

"rougher neighborhoods" across the globe, with particular focus on Africa and South America, the chief of plans for AFSOC's Air Warfare Center, Lt. Col. Michael Grub, said. "The demand has always been there, but [there] has been a shift in focus" from the initial spike in focus on air advisor missions beginning in late 2000 to the missions envisioned for the post-Iraq, post-Afghanistan era, Grub said.

AFSOC planners are looking to shift away from the "short term," counterterrorism-driven air advisor missions that defined much of the command's BPC operations during the Iraq and Afghan wars, he said. Taking a page from counterinsurgency operations, the postwar air advisor strategy under construction by him and others is a "long-term, [more] permanent" plan that goes beyond teaching foreign air forces how to fly and fight, Grub said.

But while the air advisor mission inside the Air Force is expanding, operators with the 6th SOS and other AFSOC units will have to do more with less, as service leaders continue to cope with across-the-board budget cuts tied to sequestration.

In an attempt to handle those looming budget cuts, service leaders are looking to transition some of the air advisor mission from AFSOC and move it to conventional units in the Air Force. General-purpose squadrons are already beginning to take some of the mission load off AFSOC, with USAF planning to stand up a new air advisor corps made up entirely of conventional Air Force units by 2016.

PHASE ZERO

Air Force advisors, as well as other US special operations units working the foreign internal defense mission, make their home in what is known as "Phase Zero" or preconflict conditions.

Their job, according to Grub, is to work hand-in-hand with partner nations' forces, "giving them the capabilities to take care of themselves" before the bullets and bombs start flying. "What you are trying to do is get

The Future of AFSOC's Air Advisor Mission

By Carlo Muñoz

them [prepared] with the right kind of equipment and training," he said. Team members from 6th SOS deployed to Mali in 2009 were tasked with training the Mali air force to operate and maintain their fleet of BT-67 transport aircraft, while schooling MAF fusilier commandos, who provide ground security for Malian air bases, much like USAF security forces.

Air advisors with the 6th SOS have drilled Malian military personnel through various combat scenarios, including a downed aircraft where indigenous forces conduct the planning and coordination to locate the aircraft, deploy air and ground forces to the location, and rescue the surviving crew members.

While these missions are not the headline-grabbing variety of special operations exploits, they remain a staple of SOCOM's mission set. Security force assistance (SFA) and foreign internal defense (FID) operations, the terminology for the air advisor and other similar missions, continue to be "instrumental in providing access" to global hot spots for US special operations teams "and is critical to preserving [SOCOM's] worldwide readiness posture," according to DOD's budget justification plans.

But as the Pentagon's counterterror strategy became more and more focused on finding and targeting top terrorists, the skill sets and capabilities taught by US air advisors followed suit. While this effort has produced short-term victories against al Qaeda and other extremist groups at the hands of US-trained foreign air forces, the long-term goal of preparing partner nations' forces for Phase Zero of a conflict was diluted.

In the post-Iraq, post-Afghanistan world DOD is now contemplating, air advisor units in AFSOC are trying to get back to their core mission set, according to Grub. "It's a [strategic] shift in what we have been doing in the past two wars," he said. Long-term fixes are critical to success in air advisor operations.

"We [are] not there to win the war for them," Grub said of AFSOC's future air advising plans.

"BANG FOR THE BUCK"

Shifting from the battlefields of Iraq and Afghanistan to the vast, ungoverned regions in Africa, South America, and elsewhere presents "very different challenges" to the current cadre of Air Force operators conducting the air advisor mission, Grub said.

The biggest enemy facing foreign forces in places like Africa and South America is the wide swaths of ungoverned geography that allied forces cannot reach, due to a lack of air mobility. If an indigenous counterterrorism force cannot get to the enemy's location to carry out a mission, other capabilities are rendered useless. Many of the early US-led aviation FID missions concentrated on getting foreign forces attuned to the intricacies of moving men and materiel in and out of those ungoverned regions.

USAF photo by Capt. Justin Brockhoff

While a foreign air force may request training and support on advanced platforms, such as unmanned intelligence, surveillance, and reconnaissance aircraft or fixed wing fighters, "they probably don't need to have [those] capabilities," in many cases, according to Grub. Return on investment, as he put it, is the name of the game for American air advisors when working with partner nation forces. And there is no bigger bang in the aviation FID mission than air mobility.

"[More] mobility is absolutely what I would give" foreign air forces working alongside their American counterparts, Grub said. Aside from the logistical challenges of operating in places like the Trans-Sahara, American air advisors must also attempt to strike a delicate balance in the tactics and techniques they school allied forces in and the ability of those forces to take those lessons onto the battlefield.

Those myriad skills are only eclipsed by the types of missions Air Force operators train foreign forces in—ranging from counterterrorism and counternarcotics missions to preventing illegal animal poaching. Finding that right mix of combat skills and mission sets is all part of the art of FID, said Grub, adding that the trick to the air advisor mission is to find "the right [capability] set for their problems and getting them to a [US] standard" of operating.

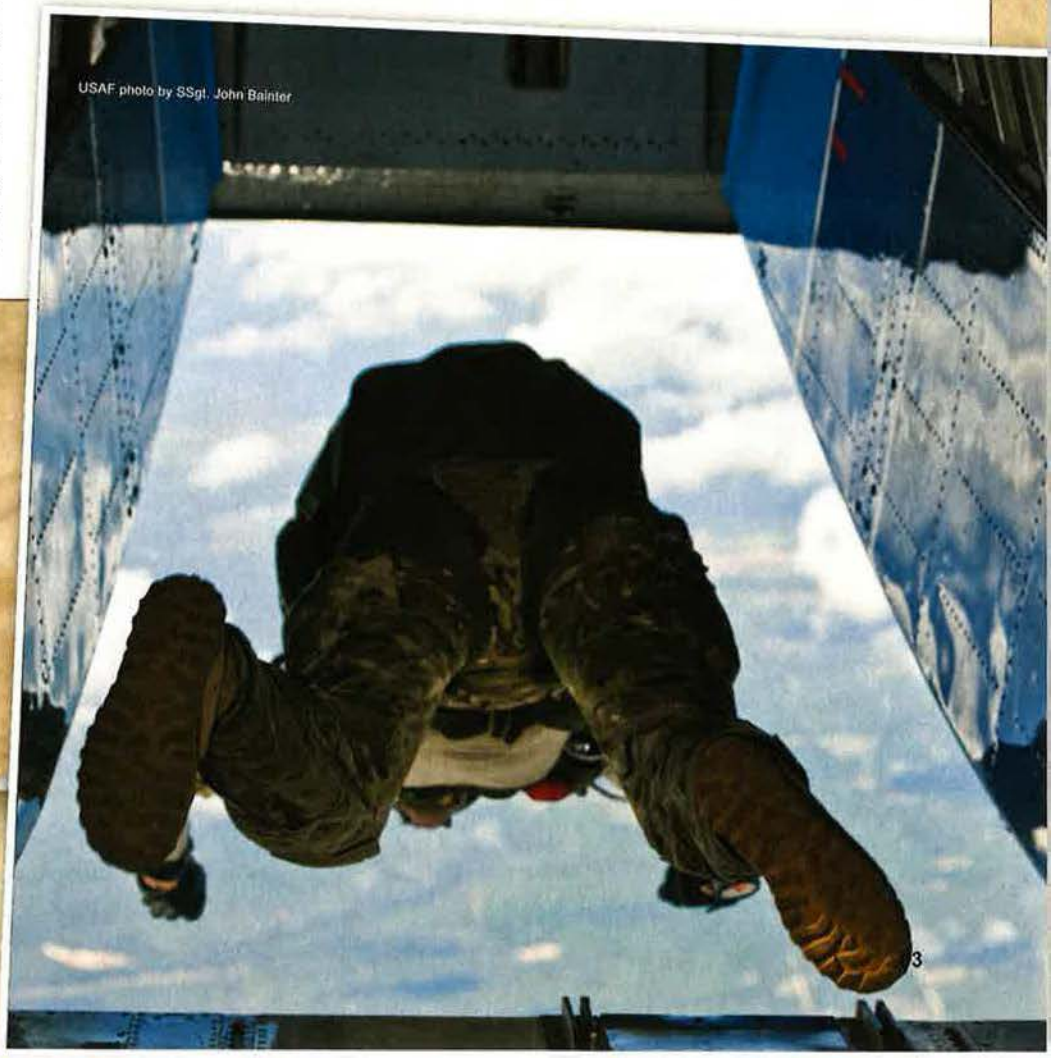
But as the aviation FID mission has evolved, so have the capabilities of the partner nation forces, according to Grub. US air advisors have expanded the aviation FID mission to include ISR and tactical strike operations in recent years. Grub said the ISR and tactical strike mission could "eclipse the mobility mission" in terms of the core capabilities taught by American air advisors to some foreign air forces.

"In years past it was mostly mobility, [with] a little bit of ISR, a little bit of light strike," Grub said. But, as the US increasingly tries to put an indigenous face on those operations, those skill sets will become more prevalent in future aviation FID operations.

The decrease of mobility training missions, coupled with ramped up focus on ISR and strike capabilities, reflects AFSOC's budget woes as much as it does its partner nations' abilities to conduct such missions. Service leaders slashed the number of air mobility and strike platforms in the AFSOC's Fiscal 2015 budget plan, cutting 10 strike and mobility aircraft over the next four years. Aside from aircraft, overall funding for the air advisor mission is being reduced, to cope with departmentwide budget reductions.

"As a result of sequestration and additional fiscal constraints, current budget forecasts through FY19 show a decline in investment on BPC activities, which is consistent with an overall decrease in the Air Force budget," said Maj. Jason Herring, division chief for irregular warfare in the Air Staff's strategic plans directorate.

Service officials declined to comment on specific funding levels for AFSOC's future air advisor operations, but noted the Air Force "is assessing ... how to effectively and efficiently



Left: Col. Garry Moore (c), Capt. Elizabeth Peters, and Maj. Mike Hampton (r) discuss deployed medical support issues with a Chilean air force officer in Santiago, Chile. Right: A US service member jumps from the cargo door of a C-145A aircraft during a military free-fall exercise aimed at demonstrating the new capability for the aircraft.

organize, train, and equip our service" for the aviation FID mission, according to Herring.

One solution USAF is looking at to preserve air advisor operations is by taking some of them out of the hands of AFSOC and placing them into regular service squadrons and wings.

SOF VS. GENERAL PURPOSE

In October 2012, Air Force officials signed off on a plan that would evolve AFSOC's air advisor mission into a new, more conventional era.

As part of the service's irregular warfare roadmap, service leadership directed the establishment of "a permanent general-purpose force air advisor capability" by Fiscal 2016. After spending a decade standing up the Iraqi and Afghan air forces, the scope and demand for the US air advisor mission had gone beyond what AFSOC could handle alone.

"One of the most significant observations from the wars in Afghanistan and Iraq is that [USAF] needs an institutional air advisor capability," Herring said. "As operations in Afghanistan wind down, the need for air advisors and personnel trained to support security cooperation will not end."

Foreign internal defense and security force assistance have always been a point of pride for US special operations forces. SOCOM and its service components were named the executive agent for SFA ops in mid-2000. That said, "many of the skill sets required to improve the aviation enterprise of partner nations reside in the conventional force," Herring said. "If partner nations are going to be able to employ airpower to counter violent extremists and other irregular threats, they need assistance in developing their support capabilities," predominantly the domain of the regular Air Force, he added.

The move mimics those taken by the Army, which is in the midst of standing up its own "regionally aligned brigades" tasked with working with foreign militaries on stability, security, and training operations. The first of those brigades assigned to Africa Command went operational in 2013.

Air Force leaders stood up a new Air Advisor Academy "to train and educate general-purpose force airmen in support of air advisor missions in Afghanistan, Iraq, and around the globe," stated Herring. "This capability will continue to ensure that the Air Force has a trained and ready air advisor force to support" aviation FID operations in the future.

To that end, members of the 818th Mobility Support Advisory Squadron have carried out aviation FID operations in Chad, Nigeria, and most recently Uganda, in support of Air Force components attached to Special Operations Command Africa (SOCAFRICA). In Colombia, members of the 571st MSAS have assisted local air forces in air advisor operations there, according to Grub.

While AFSOC units will continue to take the lead on the more advanced aspects of the air advisor mission, Grub noted the 818th and 571st have lightened the load Air Force special operators are carrying on aviation FID operations. "The ability to complement combat advisor skills with conventional specialties will pay long-term dividends in the service's ability to increase interoperability with coalition partners," Herring commented.

But budget woes could scuttle this burgeoning partnership between AFSOC and Air Force conventional units. If spending projections hold, service leaders will have to shutter the Air Advisor Academy just as the first cadre of graduates are scheduled to enter the force, Grub said.

Despite budgetary and strategic challenges, he remained confident the mission would endure in some form. "We are on a pretty good track," he said. "We can [still] go in and do a lot of good." ■

Carlo Muñoz is a defense and national security correspondent based in Washington, D.C. He has covered US military operations in Afghanistan, South America, Cuba, and the Asia-Pacific. His most recent article for Air Force Magazine, *"Operation Damayan," appeared in April.*

USAF photo by MSgt Stan Parker

TSgt. Joshua Tippy, a loadmaster air advisor from the 818th Mobility Support Advisory Squadron, discusses loadmaster operations with members of the Cameroon air force at Doula, Cameroon. The 818th has carried out advisory missions in Chad, Nigeria, Cameroon, and Uganda in support of Special Operations Command Africa.

Herman Kahn's Doomsday Machine

By 1960, there had emerged an orthodox view of nuclear war: It would be all-out—an instant, automatic, unstoppable plunge into megadeath. Herman Kahn, a RAND nuclear strategist, thought this was nuts. To dramatize the point, Kahn outlined a bizarre—and imaginary—"Doomsday Machine," a computer linked to nuclear bombs primed to destroy Earth. It would, if the US were attacked, go off by itself and could not be stopped. Khan noted that, though the device reflected the orthodox view of nuclear war, no one would ever dream of building one. There had to be control, some option between surrender and the end of the world. The machine was parodied in the 1964 movie "Dr. Strangelove." Ever since, it and Kahn have been slammed by critics. They are evidently unaware that no one opposed Doomsday Machine-like thinking—or lack of thinking—more than Kahn himself.

I would like to start ... with some comments on the strategic theory of three conceptualized devices, which I will call the Doomsday Machine, the Doomsday-in-a-Hurry Machine, and the Homicide Pact Machine. Discussing these idealized (almost caricaturized) devices will both focus attention on the most spectacular and ominous possibilities and clarify a good deal of current strategic thinking.

A Doomsday weapons system might be imaginatively (and entirely hypothetically) described as follows: Assume that for, say, $10 billion we could build a device whose only function is to destroy all human life. The device is protected from enemy action (perhaps by being put thousands of feet underground) and then connected to a computer, which is in turn connected by a reliable communication system to hundreds of sensory devices all over the United States. The computer would then be programmed so that if, say, five nuclear bombs exploded over the United States, the device would be triggered and the Earth destroyed.

Barring such things as coding errors (an important technical consideration) the above machine would seem to be the "ideal" Type I Deterrent.* If [Soviet Premier Nikita] Khrushchev should order an attack, both Khrushchev and the Soviet population would be automatically and efficiently annihilated. ...

Let us discuss how one might adapt the Doomsday Machine to Type II and Type III Deterrent purposes. ... I would like to call this model the Doomsday-in-a-Hurry Machine. The computer would be given all the facilities it would need to be "well-informed" about world affairs. We could then unilaterally legislate into existence a Soviet (or Chinese) Criminal Code. This would list in great detail all the acts which the Soviets were not allowed to commit. The Soviets would then be informed that if the computer detects them in any violations it will blow up the world. ...

We will now have drawn a line ... the Soviets would not dare to cross. We could relax forever our interest in defense and turn our attention to other matters.

Unfortunately, the world is not that simple. First, the Soviets would rush to build their own machine. There would be a rather hectic race to publish [its own criminal code] first. ... There almost has to be an incompatibility between the two sets of rules, since paragraph one of each probably states that the opponent shall not build a Doomsday Machine!

To many people, to build a Doomsday Machine would be the most provoking thing short of an attack that the opponent could do. In fact, because it may destroy so many people, some find it more provoking than an attack. ...

"Not Look or Be Too Dangerous"

Herman Kahn
Excerpt from Chapter IV
On Thermonuclear War
Princeton University Press
June 1960

Find the full text on the *Air Force Magazine's* website
www.airforcemag.com
"Keeper File"

The Doomsday Machine is not sufficiently controllable. Even though it maximizes the probability that deterrence will work, ... it is totally unsatisfactory. One must still examine the consequences of a failure. In this case a failure kills too many people and kills them too automatically. There is no chance of human intervention, control, and final decision. And even if we give up the computer and make the Doomsday Machine reliably controllable by the decision-makers, it is still not controllable enough. Neither NATO nor the United States, and possibly not even the Soviet Union, would be willing to spend billions of dollars to give a few individuals this particular kind of life-and-death power over the entire world. ...

Most decision-makers, if forced to choose between accommodation to the point of surrender, a large risk of surprise attack, and buying a Doomsday Machine, would choose one of the first two as against the last one.

I have been surprised at the unanimity with which the notion of the unacceptability of a Doomsday Machine is greeted. I used to be wary of discussing the concept for fear that some colonel would get out a General Operating Requirement or Development Planning Objective for the device, but it seems that I need not have worried. ...

Aside from the obvious moral and political reasons, and the repugnance policy-makers and practical men have for a device which is aimed at their own population, the main reason the Soviet Union and the United States would not build a Doomsday Machine is that they are both status quo powers, the US because it has so much, and the Soviet Union partly because it also has much and partly because it expects to get so much more without running any excessive risks. ...

There is another form of deterrence which, while not a Doomsday Machine, is still an "ultimate" of a sort. This could be called the Homicide Pact Machine, an attempt to make failure of Type I Deterrence mean automatic mutual homicide. ... We destroy the enemy and the enemy destroys us. ...

The Homicide Pact system has many of the same drawbacks as the Doomsday Machine, though not in so extreme a form. The major advantage of the Homicide Pact is that one is not in the bizarre situation of being killed with his own equipment; while intellectuals may not so distinguish, the policy-makers and practical men prefer being killed by the other side. It is just because this view no longer strikes some people as bizarre that it is so dangerous.

*Type I deters direct attack on the US. Type II deters severe aggression but not directly against the US. Type III deters minor provocations or small-scale aggression not against the US. ■

THE GENEVA CONV

According to the Old Testament, Jericho's problems were just beginning when the walls came tumbling down. Joshua, the commander of the invasion force, ordered that the survivors—man and woman, young and old, along with all of the sheep and oxen—be put to the sword. Then he burned what was left of the town, saving only the silver, gold, and vessels of brass and iron.

That was not far from the norm for war through most of recorded history. Massacre, subjugation, enslavement, and pillage were standard practice. St. Augustine wrote about "just war" in the fifth century and there were sporadic attempts to establish laws and rules for war. However, none of the efforts took lasting root until 1864.

It began with Henry J. Durant, a Swiss businessman traveling in Italy in 1859 where he was struck by the plight of wounded soldiers, left on the field after the battle of Solferino in the second Italian War of Independence. Durant and a group of his colleagues formed the International Committee for the Relief to the Wounded and persuaded 16 nations to send representatives to a conference in Geneva in 1863.

The conference produced a paper, the "Convention for the Amelioration of the Condition of the Wounded in Armies in the Field," in August 1864. It was only two pages long and had just 10 articles. It called on nations to collect and care for the sick and wounded, "to whatever nation they may belong," and to respect ambulances and military hospitals as neutral.

Medical facilities were to be marked by a distinctive symbol, "a red cross on a white ground." The red cross is said to be a reversal of the Swiss flag, chosen as a compliment to the host nation, although the notes of the conference give no explanation. In time, Durant's committee was renamed the Red Cross and the 1864 statement became known as the First Geneva Convention.

National societies were formed in support. The American Red Cross was founded in 1881 by Clara Barton, who led the campaign that resulted in US ratification of the Geneva Convention in 1882.

The original Convention was amended and supplemented by further conventions and protocols, culminating in the definitive Geneva Conventions of 1949, which have been ratified and given the force of law by virtually every nation in the world. The International Committee of the Red Cross (ICRC) is recognized as the custodian of the Geneva Conventions.

Once regarded as sacrosanct, the Geneva Conventions have run into controversy in recent years as political winds pushed them in new directions. Today, the basic Conventions are often subordinated to a broader concept called "International Humanitarian Law," the definition and origins of which are difficult to pin down and which, in any case, did not exist until the end of World War II.

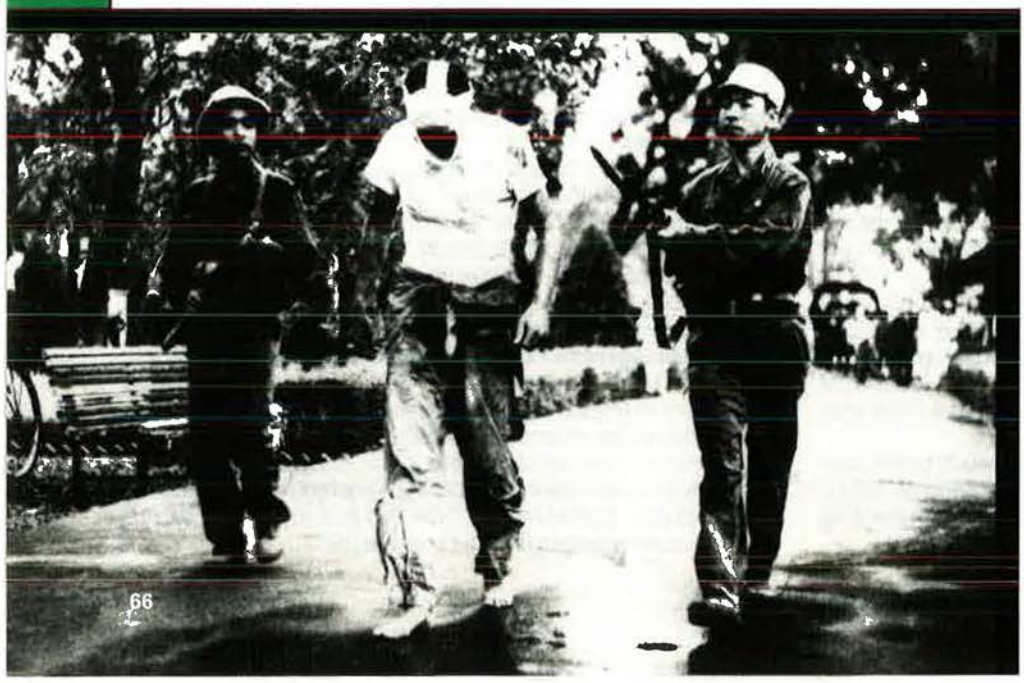
Advocates of International Humanitarian Law—the ICRC foremost among them—are increasingly focused on civilian victims of war and on rights and protections for insurgents and irregular combatants. For members of the regular armed forces, the emphasis has shifted from their protection and medical care to their obligations and liabilities under the Conventions.

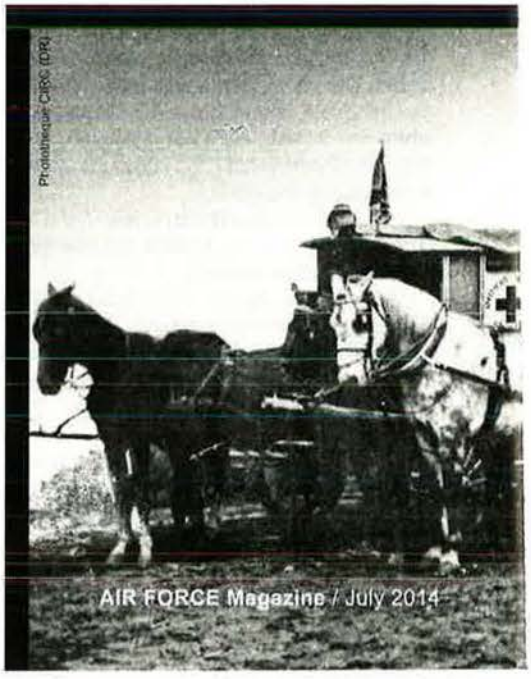
Filling in the Gaps

Although the 1864 Convention laid the cornerstone for what was to come, it was very limited in scope. It did not include prisoners of war or sailors wounded in battles at sea. It said nothing about the rules or laws of war or about civilians caught up in the devastation of war. Those issues would be taken up in other venues.

The Lieber Code, developed in the United States by political philosopher Francis Lieber, is largely overlooked by history but it was a seminal influence on the laws of war. It was adopted by the US Army and promulgated as General Order 100 in 1863. It sought "to ameliorate the ravages of combat" and established rules for the protection of persons and property and for treatment of deserters, prisoners of war, partisans, captured messengers, and

Below: Prisoner of war Lt. Col. James Hughes, clearly injured, is paraded through the streets of Hanoi by North Vietnamese guards in 1970. Below center: A red cross on this Serbian horse drawn ambulance marks it as noncombatant to provide protection for the wounded and those caring for them. Below right: In the dock at the Nuremberg Trials are (first row, left to right), Hermann Goering, Rudolf Hess, Joachim von Ribbentrop, and Wilhelm Keitel.The tribunal set a precedent for trial (and capital punishment) for offenses not specified in any law or treaty.





ENTIONS EVOLVE

By John T. Correll

The first Convention, 150 years ago, was about aid for soldiers wounded in battle. Today the focus is on "International Humanitarian Law."

others. The Army kept it in effect until the publication of its *Rules of Land Warfare* manual in 1914.

The Hague Conventions, second in fame only to Geneva, began in 1898 with a call from Russia for a conference on limitation of armaments. Russia, behind in the arms race, hoped to slow down its rivals, principally Austria. The Hague in the Netherlands was selected as the site because it was the seat of government of a small neutral country. The delegates balked at the declared purpose of the meeting, which was the limiting of arms. The first Hague Convention in 1899 included a five-year ban on projectiles dropped from balloons as well as prohibition of "asphyxiating gas" and dum-dum bullets and other ammunition that expanded on contact with human bodies.

The follow-on Hague conference of 1907 was of far greater importance. It produced several proposed treaties, the main one being the fourth—"Convention Respecting the Laws and Customs of War on Land"—known ever since as "Hague IV."

Hague IV stipulated that prisoners of war were to be humanely treated and if questioned, were obliged to give only their "true name and rank." It also set four conditions that had to be met to qualify for protection under the Convention.

Combatants had to (1) be commanded by a person responsible for his subordinates; (2) have a "fixed distinctive emblem recognizable at a distance"; (3) carry arms openly; and (4) conduct operations "in accordance with the laws and customs of war." For most combatants, the fixed distinctive emblem would be a uniform.

The Hague definition of a lawful combatant was repeated by the Geneva Conventions of 1949. However, another provision of Hague IV—that the Convention applied only to "contracting powers" who agreed to it—would be radically changed in future developments.

Meanwhile, a limited-purpose Geneva Convention in 1906 extended protective coverage to those wounded in war at sea. The original convention had applied only to "armies in the field."

Japan Opts Out

In World War I, both sides used poison gas against enemy soldiers. This was forbidden by the Hague Conventions, but the grim wartime experience led to the Geneva Protocol of 1925, which added another layer of prohibitions on chemical and biological weapons. This is still the main agreement on the issue today. When Syria used chemical weapons against its own people in 2013, it was denounced as a breach of the Geneva Protocol.

The international community gathered again at Geneva in 1929 and strengthened the previous treaties on POWs and those wounded in battle. Among other things, it provided authority for the investigation of accusations of noncompliance.

Japan refused to sign the Convention. Under the Japanese code of *bushido,* "the way of the warrior," surrender was dishonorable. Japan did not allow its own military members to be taken prisoner and did not want to be told how to treat combatants of other nations who fell into its hands. The full implications of this policy would be seen in World War II, when Japan was notorious for its mistreatment and summary execution of allied POWs.

The Soviet Union also rejected the new Convention, announcing that it would instead follow the Hague Conventions on POWs, which did not require inspection of prison camps and other considerations for prisoners.

The Geneva Convention of 1929 said that its provisions would be in effect in wartime so long as one of the belligerents was a party to the agreement. This loosened the Hague IV rule that treaties applied only to "contracting powers" who agreed to them.

Neither the Hague or the Geneva Conventions anticipated the atrocities committed by the Germans and the Japanese in World War

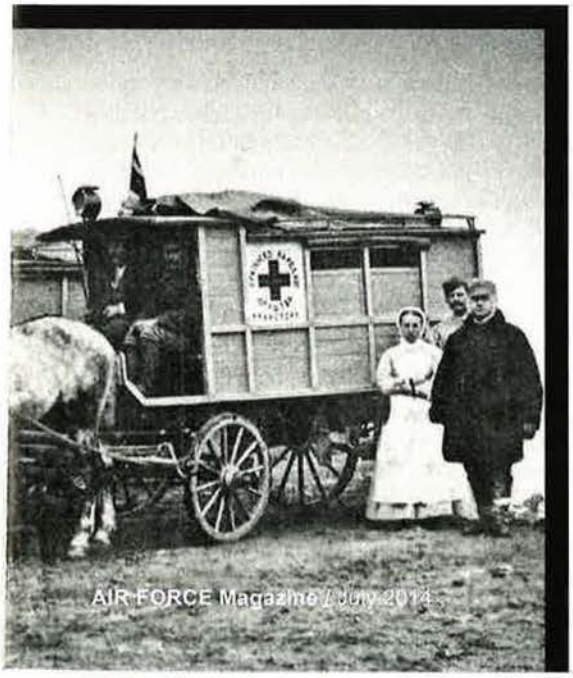


Photo via National Archives

II. None of the existing treaties offered protection for civilians. As the evidence of the Holocaust emerged, it was clear that the laws of war were incomplete. The Geneva and Hague conventions did not cover the main Nazi offenses. The Germans were undeniably guilty, colossally so. The legal question was: of what?

Nuremberg

Twenty-two former high officials of the Third Reich were tried by the International Military Tribunal at Nuremberg in 1945-1946. Of these, 19 were convicted and 12 were sentenced to death by hanging.

The Nuremberg indictments were based on the Tribunal's charter from the governments of the United States, France, Britain, and the Soviet Union. The Tribunal was empowered to try and punish (a) "Crimes Against Peace," which meant the planning and waging of a war of aggression; (b) "War Crimes," defined as "violations of the laws or customs of war"; and (c) "Crimes Against Humanity," to include murder, extermination, and "other inhumane acts." The Tribunal had authority in such crimes "whether or not in violation of the domestic law of the country where perpetrated."

From this charter, the prosecutors drew up an indictment with four counts: crimes against peace, war crimes, crimes against humanity, and conspiracy to engage in the other three counts. Each charge was accompanied by a long list of specifications. The Tokyo war crimes trial—officially, the International Military Tribunal for the Far East—generally followed the pattern of the Nuremberg Trials.

The Nuremberg Tribunal set a precedent for trial (and imposition of capital punishment) for offenses not specified in any law or treaty. The concept of war crimes was firmly embedded.

Concurrently, the United Nations charter in 1945 created the International Court of Justice as the judicial branch of the UN. Its mandate covered not only international conventions "expressly recognized by contesting states" but also "international custom" and "general practice accepted as law." The court was further directed to consider "judicial decisions and the teachings of the most highly qualified publicists of the various nations."

The principle of "customary international law" was off and running and international judicial review—in which the Geneva and Hague Conventions would be regarded as subject to interpretation by the courts—was not far behind.

World War II had brought on a redistribution of global power. The big nations never regained their prewar domination and the relative strength of the smaller nations increased steadily.

Expanding the Coverage

A short reference to "the Geneva Conventions" usually means the four conventions—designated by Roman numerals I through IV—from the big international conference of 1949. They have been ratified by a record 194 nations.

The 1949 Conventions are comprehensive, incorporating the previous Geneva treaties and adding important new articles. Conventions I and II, dealing with sick and wounded in the field and at sea, were not much different from before but III and IV introduced fundamental change.

Convention III bestowed eligibility for POW status and protection on "militias, volunteer corps, and organized resistance movements." What the delegates had in mind was the French resistance from World War II, but they opened the door for al Qaeda terrorists in the 21st century. Prisoners, whether regulars or irregulars, could not "be threatened, insulted, or exposed to unpleasant or disadvantageous treatment of any kind." All were to be "treated humanely."

Convention IV, "Protection for Civilian Persons in Time of War," was entirely new, stimulated principally by German atrocities in

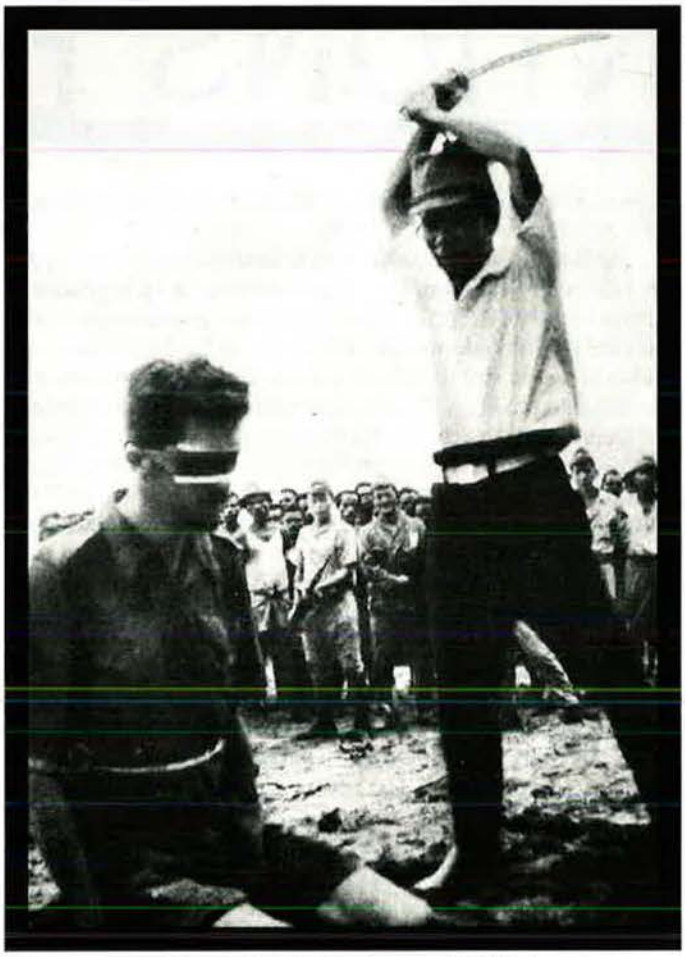


Photo via Wikipedia

A Japanese officer beheads Sgt. Leonard Siffleet, an Australian commando, in 1943. Japan, regarding surrender as dishonorable, did not sign the Geneva Convention on POWs.

World War II. It prohibited violence to life or person, the taking of hostages, "outrages upon personal dignity," and execution without a "judgment pronounced by a regularly constituted court."

By the 1970s, irregular warfare and unconventional conflict were on the rise. The Geneva rules were not of much benefit to insurgents, so supporters of such conflicts set about what the Red Cross described as "loosening" the "identification requirement for guerilla fighters." National liberation groups, including the Palestine Liberation Organization, were invited to an ICRC meeting in Geneva to help draft "additional protocols" to supplement the 1949 Conventions.

The new protocols, introduced in 1977, said the Geneva rules applied to "peoples" fighting "colonial domination, alien occupation, and racist regimes." The requirement for uniforms or other means of distinguishing combatants was not eliminated outright but the protocols envisioned situations when "an armed combatant cannot so distinguish himself." Even if a guerrilla fighter failed to meet the usual tests for POW status, "he shall nevertheless be given protections equivalent in all respects to those accorded to prisoners of war."

US representatives from the Ford Administration helped negotiate the additional protocols and the Carter Administration signed them with no public debate. The Joint Chiefs of Staff opposed ratification on the grounds that the protocols legitimized terrorists and enabled them to hide within the civilian populace.

President Reagan pulled the plug on ratification, saying that, "We must not and need not give recognition and protection to terrorist groups as a price for progress in humanitarian law." The

Washington Post agreed, saying the PLO and other groups had "hijacked" the Red Cross convention.

More than 150 countries have ratified the 1977 additional protocols and the clamor continues for the United States to do so as well.

Unlawful Combatants

During World War II, a German submarine delivered eight saboteurs to a beach on Long Island. They were soon captured, convicted, and sentenced to death by a military tribunal. The Supreme Court upheld the decision. Chief Justice Harlan F. Stone said the Germans were "unlawful combatants" who had buried their uniforms and did not bear arms openly.

The term "unlawful combatant" was not specifically mentioned in the 1949 Conventions, which kept intact the Hague requirements for POW status. Even so, the issue remained in play and gained momentum after the 1977 protocols. Insurgents, fighting without uniforms and using terrorist tactics, claimed the protection of the conventions.

In 2002, White House counsel Alberto R. Gonzales advised President Bush that Geneva Convention III did not apply to al Qaeda terrorists. Gonzales then plunged deeper into murky territory with an argument that "the nature of the new war" and the need to obtain information quickly "renders obsolete Geneva's strict limitations on questioning of enemy prisoners." In his opinion, "waterboarding," an interrogation technique in which water was poured into a prisoner's breathing passages, was legal.

Legal officers in the Defense and State departments disagreed with Gonzales and Sen. John McCain (R-Ariz.), who had been a POW in the Vietnam War, declared that waterboarding was torture. Several senior Republican senators warned that protection for US troops in future conflicts would be endangered if nations felt free to reinterpret the Geneva conventions as they saw fit. North Vietnam had ratified the Conventions in 1957 but justified abuse and torture of American POWs by calling them war criminals.

In 2006, the Supreme Court ruled that the "humane treatment" clause of Geneva Convention III did apply to the prisoners held at Guantanamo Bay, Cuba. Consequently, the Administration decided that basic Geneva protections would be accorded to terrorism suspects in US custody.

The Obama Administration continued some of the Bush Administration policies, such as trying terrorists by military tribunals and holding them in long-term detention without trial if necessary to protect critical secret information. The 2010 defense authorization act changed the term "unlawful enemy combatant" to "unprivileged enemy belligerent," although the difference was essentially cosmetic.

Targets and Drones

The question of lawful targets is a recurring issue, especially where airpower and bombing

The Emblems

Geneva conventions and protocols recognize three protective emblems: The Red Cross, the Red Crescent, and the Red Crystal. The original one, the Red Cross, had no religious significance, but some nations were suspicious of that assurance.

In the Russo-Turkish War of 1877-1878, the Ottoman Empire adopted the Red Crescent as its protective sign while continuing to respect the Red Cross. Subsequent Geneva conventions confirmed the status of the Red Crescent as well as the Red Lion With Sun, which was used by Iran from 1924 to 1980.

In 1949, the new state of Israel sought recognition for the Magen David Adom, the "Red Star of David," as a protective symbol but was turned down because of opposition by Islamic nations. The Magen David Adom organization was denied membership in the International Federation of Red Cross and Red Crescent Societies. This prevailed through 2000 when the American Red Cross began withholding funds from the Federation in protest.

In 2005, Geneva Additional Protocol III created a third protective symbol, the Red Crystal, which is a red diamond shape on a field of white, for use by nations that had a problem with the Red Cross or the Red Crescent. In 2006, the Red Cross-Red Crescent foundation admitted Magen David Adom as a member.

There is a difference in "protective" and "indicative" use of the symbols. As a protective device, the emblems carry the full shielding value conferred by the Geneva Conventions. In addition, national societies are authorized to use the symbols as indicative devices for various other identification purposes. Protocol III permits the "incorporation" of other devices within the Crystal by national societies within their own territory.

Thus, Israel can use the Magen David Adom inside the Red Crystal diamond within Israel for indicative purposes, but is limited by Protocol III to using the Red Crystal "in its pure form" for protective purposes anywhere else. The Red Lion With Sun, dropped by Iran in 1980 because of its association with the deposed Shah, retains its official status as a protective symbol.

Decoding the Language

In diplomacy, a convention is an international agreement or treaty. However, the term "Geneva Conventions" is regularly used in two different ways, and is correct in both usages: It may refer either to the series of conferences—the First Geneva Convention (1864), the Second (1906), the Third (1929), or the Fourth (1949)—or to the agreements that came out of those conferences. Reference to the "Geneva Conventions," unless otherwise modified, means the group of four instruments adopted at the Fourth Convention in 1949.

In addition to that, there are several "Geneva Protocols" produced by conferences in 1925, 1977, and 2005. There is no legal difference in protocols, conventions, and treaties. The United Nations Definition of Key Terms says that "no precise nomenclature exists," but that "convention" is generally used for "formal multilateral treaties with a broad number of parties" where a "protocol" may be an agreement "less formal than those entitled treaty or convention."

The Hague Conventions from 1899, 1907, and 1954 have the same standing. The key aspect is ratification. Under Article VI of the Constitution of the United States, a treaty (or convention or protocol), once ratified, becomes part of "the supreme Law of the Land."

The Geneva Conventions have nothing to do with the "Geneva Accords," an altogether different set of international agreements in 1954, 1988, and 1991.

are concerned. Some are always ready to label any airstrike a war crime, especially if there are civilian casualties or collateral damage.

Geneva Convention IV defines military action against persons or property a "grave breach" of the treaty, but only if it is "not justified by military necessity and carried out unlawfully and wantonly."

Even the more tightly worded 1977 additional Protocols recognized the principle of necessity. The injunction against attacks "which may be expected to cause incidental loss of civilian life, injury to civilians, [or] damage to civilian objects" was limited to instances in which the action is "excessive in relation to the concrete and direct military advantage anticipated."

In 1999, Amnesty International asked the International Criminal Tribunal for the former Yugoslavia to charge NATO with war crimes for the air campaign in Kosovo. The court accepted and investigated the case (implying jurisdiction) but the prosecutors declined to indict.

The use of drones for lethal strikes in Afghanistan and Pakistan has again raised the targeting controversy. A coalition of nongovernmental organizations, led by Amnesty International and Human Rights Watch, formed the "Campaign to Stop Killer Robots." The Peshwar High Court in Pakistan ruled that drone strikes violate the UN charter and the Geneva Convention. In 2013, Sen. Dianne Feinstein (D-Calif.) and others proposed a new special court to oversee selection of drone targets for lethal attacks.

The ICRC takes the position that drone strikes are neither expressly prohibited or specifically mentioned in treaties or other legal instruments but cautions that drone operators are "no different than the pilots of manned aircraft" in "their obligation to comply with international humanitarian law."

Lawfare

The idea of "universal jurisdiction"—meaning that any state or international organization can claim criminal jurisdiction no matter where or by whom an offense was committed—has become enormously popular.

The concept did not exist until the 1990s but it supposedly drew inspiration from the Nuremberg trials and the case in 1961 when Israel apprehended Adolf Eichmann in Argentina and took him to Jerusalem for trial.

The ICRC maintains that universal jurisdiction "is firmly rooted in humanitarian law" and that "although the Geneva Conventions do not expressly state that jurisdiction is to be asserted regardless of the place of the offence, they have generally been interpreted as providing for universal jurisdiction."

Activists, impatient with what they have been able to achieve through formally adopted conventions and protocols, look to the international courts, which are not reluctant to weigh in on major issues. For example, although the Geneva Protocol prohibits chemical and biological weapons, none of the Geneva treaties mentions nuclear weapons. Nevertheless, the International Court of Justice ruled in 1996 that use of nuclear weapons was subject to international humanitarian law and contrary to its principles and rules.

The International Criminal Court, created at a conference in Rome in 1998, is the latest forum for prosecution of "war crimes and crimes against humanity." Henry A. Kissinger says that "the ideological supporters of universal jurisdiction also provide much of the intellectual compass for the emerging International Criminal Court." The United States has declined to ratify the "Rome Statute" establishing this court.

Another new term—but from the opposite point of view—is "Lawfare," derived from an abbreviation of *"law* as a means of *warfare."* Former Justice Department officials David B. Rivkin and Lee A. Casey explain that "lawfare describes the growing use of international law claims, usually factually or legally meritless,

Gozo13/fox photo via Wikipedia

Insurgents captured in Iraq in 2006. Fighting without uniforms and using terrorist tactics, many insurgents are quick to claim equal protection under the Geneva Convention.

as a tool of war." Al Qaeda, they said, "is an experienced lawfare practitioner. Its training manual, seized by British authorities in Manchester, England, openly instructs detained al Qaeda fighters to claim torture and other forms of abuse as a means of obtaining a moral advantage over their captors."

The Watchword is IHL

The ICRC relentlessly pushes "international humanitarian law," which it has come to regard as the central objective, with the Geneva Conventions and other considerations subordinate to it. However, the ICRC says, "the cornerstone of IHL is the Geneva Conventions" and "while some states have not ratified important treaty law, they remain nonetheless bound by rules of customary law."

As the ICRC sees it, "customary international law is made up of rules that come from a general practice accepted as law and that exist independent of treaty law." It "is not written but derives from a general practice accepted as law." ICRC says the term "international humanitarian law" is synonymous with "law of war" and "law of armed conflict."

The problem, said Knut Dorman, head of the ICRC legal division, is that "Treaty law still falls short of meeting some essential protection needs." In particular, "the so-called 'global war on terror' raised important issues about the law ... and led to a reassessment of the balance between the requirements of state security and protection of the individual. In many cases, actions were taken to the detriment of the individual."

This drift in focus and emphasis has undercut the credibility of the Geneva Conventions in the minds of some, but most senior officials and analysts in the United States are still committed in their support.

"We obey the law of war if for no other reason than because reciprocity tells us that what goes around comes around; if we abuse our prisoners today, tomorrow we will be the abused prisoners," says Gary D. Solis, former Marine Corps officer and a former professor of law at West Point, currently at Georgetown University Law Center. "We obey the law of war because it is the law and because it is the honorable path for a nation that holds itself out as a protector of oppressed peoples. We abide by the Geneva Conventions because it's the right thing to do." ■

John T. Correll was editor in chief of Air Force Magazine *for 18 years and is now a contributor. His most recent article, "The Semi-Secret Birth of the Luftwaffe," appeared in the June issue.*

AFA National Report

natrep@afa.org

By Frances McKenney, Assistant Managing Editor

XBox: How To Appeal to a Younger Audience

"The older guys would never have thought of this," said Mel Johnson, communications VP of the **Whiteman Chapter** in Missouri. He was referring to an XBox video game tournament, hosted by the chapter in April for the airmen of Whiteman Air Force Base.

Some 30 people turned out for the contest, held at the Spirit Cafe at Whiteman's Community Center. The cafe offers airmen a place to read or play games ranging from the computer-based kind to pool or ping-pong. A Friday night tradition calls for serving a free meal. So on tournament night, a half-dozen Whiteman Chapter members—Fred and Ann Niblock and event coordinator MSgt. John De La Rosa, among them—provided Italian food entrees like lasagna, ravioli, and pizza to feed the players.

Although many volunteer groups provide a Friday feed, "what was different was that we actually organized a tournament" on top of the dinner, Johnson said.

Besides state-of-the-art video games, competitors faced off against a 1970s-era electronic ping-pong game, Atari's Pong. Johnson guessed that one of those "older guys" unearthed the relic and brought it in. The young airmen found Pong hard to play, he said, chuckling.

Tournament winner SrA. Brian Hannah, with the 509th Medical Support Squadron, received a trophy-plaque from the chapter and a gift card for a new video game.

Creative ideas such as this contest come from new members. Johnson said the chapter recently realized that as its members aged, they had become less able to connect with the young airmen at Whiteman. The chapter took action, placing articles in the base newspaper, setting up Air Force Association tables at the base exchange, and nudging younger inactive members into taking a more visible role.

USAF photo by A1C Joel Pfiester

Whiteman Chapter's XBox champion, SrA. Brian Hannah (second from right), accepts congratulations from (l-r) MSgt. John De La Rosa, SSgt. Joshua Riffe, MSgt. Lafoundra Thompson, and SMSgt. Mark Cruz. Whiteman's base newspaper published this photo, along with a description of AFA.

Some 10 members resulted from this push for new blood, Johnson recalled. He thinks the key to involving more young airmen in AFA lies in recruiting senior NCOs. "That bumps it up real quick," he said. "The older members like me—we are satisfied with that we have." What drives the chapter now, he said, what pulls in a younger crowd, is "the excitement [generated by] the senior NCOs."

Not long after the XBox contest, Fred Niblock came across the winner, a medic at the base hospital. Hannah was still talking about the AFA tournament. "So word spreads around," Johnson pointed out.

New in New York

AFA's newest chapter received its charter from the top. Air Force Chief of Staff Gen. Mark A. Welsh III handed the document to George Baker, officially establishing the **Finger Lakes Chapter,** in May. The Chief was in New York City at the time, as part of an AFA Mitchell Institute of Aerospace Studies and **Iron Gate Chapter** symposium at the Union League Club of New York.

The Finger Lakes Chapter is centered in Upstate New York, where Baker is first sergeant for the 313th Recruiting Squadron based in North Syracuse. He said he was inspired to start the chapter for two reasons: Although the ANG's Hancock Field is nearby, and the Army's Fort Drum is an hour away, he has constantly been mistaken for a soldier. "I'm always asked what I do in the Army," he said. "I wanted to get the word out about the Air Force."

As first shirt, he rides herd on some 90 squadron personnel, but he began his career 16 years ago as a weapons loader, with a first assignment at Mountain Home AFB, Idaho. Then came stints at Kunsan AB, South Korea, six years at Elmendorf AFB, Alaska, and Holloman AFB, N.M.

At Holloman, he joined AFA for the first time and was impressed by the professional development opportunities available through the chapter. That's the second reason he started the Finger Lakes Chapter: to help his fellow airmen learn about Air Force issues and airpower. Education, he said, "is part of my job as a first sergeant."

The chapter was scheduled to hold its first meeting in mid-June, with Aaron Garber as chapter VP, Thomas F. Daugherty, treasurer, and MSgt. Kelly Lomber as chapter secretary.

Although the chapter has barely gotten started, Baker is working hard on continuity of leadership because he has received orders for a new assignment in Texas. He said getting Active Duty airmen involved in the chapter would ensure that it thrives.

Finger Lakes is the second chapter that Region President Maxine Rauch has helped charter this year. The first was **Pride of the Adirondacks.**

Photo by Cwen Geste b

USAF Chief of Staff Gen. Mark Welsh (left) presented MSgt. George Baker (right) with the charter for New York's Finger Lakes Chapter.

US Rep. Ralph Hall, who served 17 terms in Congress, shows the Northeast Texas Chapter audience the AFA coin he received from Chapter President Trey Johnson (left).

It's a Spring Thing

The **Northeast Texas Chapter,** based in Greenville, held its annual spring awards banquet, with US Rep. Ralph M. Hall (R-Texas) as special guest.

The dinner, nicknamed "Spring Thing," took place at Texas A&M University-Commerce, with what Chapter Communications VP Vance Clarke described as a "crowd full of AFA, military, students, and family and friends of the award winners."

The more than 50 banquet guests honored Teachers of the Year Jennifer Simpson and Billy Walker, both from Greenville Christian School, and the chapter's Earle North Parker Essay contest winners: Caitlin Nance, Alicia Guthrie, and Cody Redus.

As the chapter's first place essayist, Nance received $1,000. Chapter Community Partners VP Terry Thomas presented the award; he represented the family of Lt. Col. John Murray, sponsors of the chapter's top prize.

Chapter officials then surprised Nance by announcing her second place finish at the state level of the essay competition. So she earned another $1,000 and—since this year's assigned topic was the F-35—a model of the strike aircraft donated by Lockheed Martin. Nance read her essay to "rousing applause at the end," Clarke said.

The AFA Texas essay contest, open to all high school seniors in the "Lone Star State," is named for a Fort Worth businessman who served in the Army Air Forces in World War II and later founded AFA's Fort Worth Chapter. Parker died in 1993.

During the awards banquet, Civil Air Patrol cadet Patrick J. Pearce received an AFA CAP Outstanding Cadet of the Year award and citation. He had earlier been admitted to the Air Force Academy, in part on a recommendation from Hall. Clarke reported that the congressman "was thrilled to be there to compliment [Pearce] yet again on his acceptance."

Gayle White (left), the Rocky Mountain Region president, applauds Maj. Gen. Sandra Finan, guest speaker for the Northern Utah Chapter's Scowcroft Awards banquet.

Hall presented each essay contest winner with a flag that had flown over the US Capitol.

MSgt. Matthew Murdick served as master of ceremonies for the evening. Clarke delivered the keynote address.

Scowcroft Awards

For the 25th year, the **Northern Utah Chapter** singled out the best of the best by presenting Brent Scowcroft Awards to selected members of the ICBM and space and C3I communities.

A banquet to honor the award winners took place in March at the Eccles Conference Center in Ogden, where the nominees, too, received recognition.

Guest speaker was Maj. Gen. Sandra E. Finan, commander of the Air Force Nuclear Weapons Center at Kirtland AFB, N.M. In her remarks, she listed "specific examples of how individuals and teams, through hard work and dedication, have made great improvements in Air Force hardware, processes, policies, and procedures," according to a press release from the 75th Air Base Wing public affairs office.

Finan joined Gayle C. White, the Rocky Mountain Region president, in presenting awards to: Maj. Matthew Franchetti, SMSgt. James Spino, Maren Dykster, SMSgt. Jason Salonis, and Capt. Shaun Phillipps.

Team awards went to the ICBM Integration Support Contract Team from Hill AFB, Utah, and the AEHF-3 Launch and Test Team from Los Angeles AFB, Calif.

Retired Lt. Gen. Brent Scowcroft, for whom the awards are named, served as national security advisor to Presidents George H.W. Bush and Gerald Ford and, under President Reagan, led the 1983 commission that examined the future of the US ICBM force. An Ogden native, Scowcroft today heads an international business advisory firm in Washington, D.C.

The Aircraft Carrier Convention

Hosted by the **Charleston Chapter** in April, the South Carolina State Convention held its awards presentations at an unusual venue: a decommissioned aircraft carrier.

Built for World War II and mothballed in 1970, USS *Yorktown* now forms the centerpiece of a military museum complex called Patriots Point. It was one of three locations where convention-goers gathered for events.

Activities began with a Friday afternoon golf tournament. Saturday morning's business session took place at a Hyatt hotel, then guests headed across Charleston Harbor to the aircraft carrier.

Awardees came from the Total Force, AFROTC, AFJROTC, and CAP units.

Melissa Yarbrough received the Teacher of the Year award. She teaches third-graders at St. Andrew's School of Math and Science in Charleston.

Retired Lt. Gen. David A. Deptula, dean of AFA's Mitchell Institute of Aerospace Studies, addressed the gathering.

Actually, this isn't the first time AFA has hosted an event on *Yorktown:* Last fall, a group of CyberPatriot students from the Military Magnet Academy competed in a qualification round aboard the carrier. (See February's "AFA National Report" at http://bit.ly/1nA8AUT.)

Making History

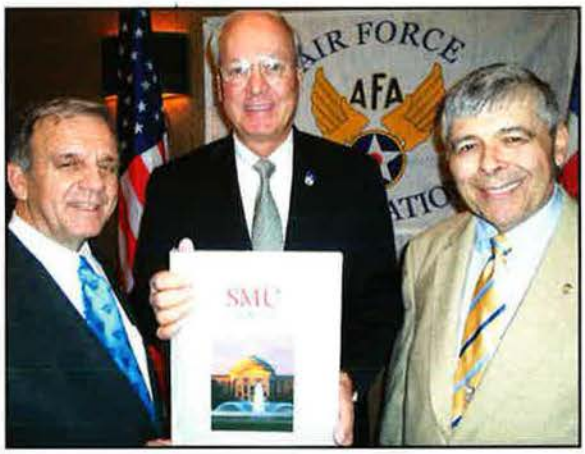
AFJROTC cadets from Pennsylvania made school history when they earned the Overall Champion trophy at a drill meet sponsored by West Virginia's **Chuck Yeager Chapter.**

The victory marked the first time that cadets from Pine-Richland High School in Gibsonia, Pa., toted home the biggest prize, according to their school district. The unit is only four years old. It numbers 33 cadets.

The drill meet, sponsored for 18 years by the chapter, took place at Parkersburg South High School in West Virginia.

Cadets came from Pine-Richland, as well as Knox County Career Center in Mount Vernon, Ohio, and from West Virginia's Nitro, South Charleston, Woodrow Wilson, and Parkersburg South high schools.

The chapter provided two dozen trophies, seven of them now on display at Pine-Richland. ■



Seidel-AFA Dallas Chapter President John Tannehill (left) and National Director Dave Dietsch (right) present AFA President Craig McKinley, chapter guest speaker, with a Southern Methodist University photo album. More than 80 guests attended this meeting in April, including some from the Northeast Texas and Gen. Charles L. Donnelly Jr. chapters.

The Long Island Chapter unveiled this AFA monument at Eisenhower Park in East Meadow, N.Y., on Memorial Day weekend. Its inscription reads: "Dedicated to our veterans, members, and supporters." L-r: Chapter Secretary Cathy Ward, Northeast Region President Maxine Rauch, Chapter VP Al Parise, and Chapter President Fred Di Fabio.

Red Tail Memorial Chapter President Mike Emig (second from left) and Michael Hare (back row, far right), aerospace education VP, attended the University of Florida Det. 150 awards ceremony in April.

Reunions

reunions@afa.org

18th Military Airlift Sq. Sept. 6 at Charley's Other Brother, Mount Holly, NJ. **Contacts:** alumni@18thbluediamonds.org.

28th Wing Assn. Aug. 28-Sept. 1, Rapid City, SD. **Contact:** Lloyd Peterson (605-393-8545) (28thwingassociation.org).

29th Fighter-Interceptor Sq. Oct. 8-11, Branson, MO. **Contact:** Harold Phillips (405-341-0621) (rephil330@cox.net).

98th Bomb Group/Wing Veterans Assn. Aug. 24-28, Rapid City, SD. **Contact:** Bill Seals (281-395-3005) (colbillyseals@hotmail.com).

100th Bomb Wg, Pease AFB (1956-66). Sept. 18-21 at Crockett Hotel in San Antonio. **Contact:** Bill Obert (303-520-7643) (billobert2@yahoo.com).

336th Tactical Fighter Sq, Ubon RTAB (1972-73). Oct. 10-12, Little Rock AFB, AR. **Contacts:** Tim Fisher (t.fisher13@comcast.net) or Fred McMurray (ferd7@frontier.com).

445th FIS, Wurtsmith AFB, MI. Oct. 28-31, San Antonio. **Contact:** Larry Flinn (210-695-1944) (lawrenceflinn@me.com).

509th BW. Sept. 8-11, Omaha, NE. **Contacts:** Don Schied (djs509@cox.net) or Homer Morgan (hmorgan1@wavecable.com).

526th FIS/TFS. Oct. 7-9, Savannah, GA. **Contact:** Monte Johnson (815-347-7353) (monte.j@att.net).

623rd Aircraft Control & Warning Assn, including **624th, 851st Sq, 529th Gp, 305th Fighter Cont. Sq, 313th ADIV, 51st FIW, 2152nd Comm Sq, 623rd ACFlt.** Sept. 28-Oct. 1, Charleston, SC. **Contact:** Stan Duro (843-650-4969) (sduro@att.net).

B-47 Stratojet Assn. Oct. 30-Nov. 1, Fort Walton Beach, FL. **Contact:** Dick Curran (865-940-1020).

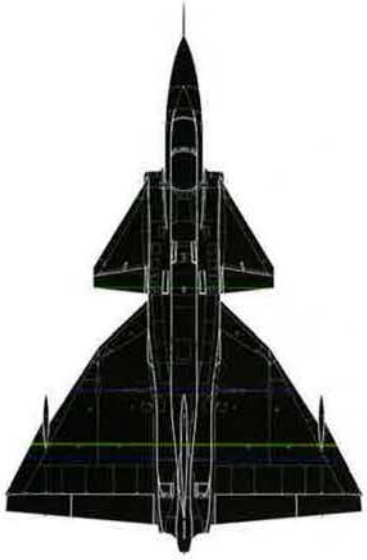
F-4 Phantom II Society. Oct. 20-23, Tyndall AFB, FL. **Contact:** Bill Crean (856-461-6637) (williamcrean@comcast.net).

USAF Combat Camera AAVS/600 Photo Sq/601 Photo Flight. Sept. 18-21, Ontario, CA. **Contact:** Mario Condia (630-910-4765) (mariocandia@usafcombatcamera.org). ■

Airpower Classics

Artwork by Zaur Eylanbekov

JA37 Viggen



Sweden's Viggen fighter, ultramodern at the time it made its first flight in 1967, proved highly capable in the roles of air superiority, close air support, reconnaissance, and maritime surveillance. The Swedish Air Force continuously modernized the aircraft with sophisticated avionics and advanced ordnance, allowing the Viggen to serve as that nation's first-line fighter for more than 30 years.

Studies leading to the aircraft began in 1952, though it was not introduced for two decades. The Viggen was compelled to meet stringent requirements for supersonic low-altitude flight and Mach 2 high-altitude flight, all combined with a capability to operate from primitive road runways and to be serviced by inexperienced ground crews. One unusual need was for low angle of attack landings to prevent damage to highway surfaces. To meet these demands, Saab chose a delta-wing configuration with two-section elevons, supplemented by a forward fixed canard with trailing edge flaps. Special agreements with the United States provided advanced technology and allowed for a licensed adaptation of Pratt & Whitney JT8D engine. The Viggen was initially powered by this licensed Volvo RM8A engine.

Early versions of the Viggen were dangerous to fly in low-altitude missions, and losses were high. Improved later versions, especially the JA37 variant, were fitted with a larger engine and were much easier to control. While the Viggen was competitive with most contemporary fighters in the world market, Swedish politics prevented sales to foreign nations, a self-imposed ban that resulted in a short production run, although it remained in service until 2007.

—Walter J. Boyne

This aircraft: Swedish Air Force JA37 Viggen—*#37393*—as it appeared in late 1989 when assigned to a unit based at Ostersund-Froson AB, Sweden.

In Brief

Designed, built by Saab ★ first flight Feb. 8, 1967 ★ number built 329 ★ crew of one or two (trainer) ★ **Specific to JA37:** one Volvo RM8B turbofan engine ★ armament one 30 mm Oerlikon KCA-cannon; either six AIM-9 Sidewinder or two RB71 Skyflash and four AIM-120 AMRAAM or four rockets ★ max speed 1,386 mph ★ cruise speed 600 mph ★ max range 1,200 mi (internal fuel) ★ weight (loaded) 37,348 lb ★ span 34 ft 9 in ★ length 53 ft 9 in ★ height 19 ft 4 in.

Famous Fliers

Notables: Owe Wiktorin, Kent Harrskog, Kurt Johansson, Ulf Johansson, Bertil Kersmark, Ake Lindqvist, Lennart Pettersson, Jerry Pousette. **Test Pilots:** Erik Dahlstrom, Jon Ertzgaard, Arne Lindholm, Per Pellebergs, Gosta Sjostrom.

Interesting Facts

First aircraft to use integrated circuits ★ used pilot seat angled back by 19 degrees to resist G forces ★ suffered losses of more than 40 aircraft over service life ★ could be "turned" in 10 minutes by a five-man ground crew ★ ceased operations in 2007 ★ termed "biplane" by some due to use of fixed canard ★ named either "Thunderbolt" or "Tufted Duck," depending on the interpretation of word "Viggen."

An underside view of a Saab 37 Viggen fighter aircraft during Exercise Baltops '85.

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