

**I**N early 2014, the Air Force anticipated drawing down from a large and sustained expeditionary footing in Afghanistan and Iraq over the past 12 years to a smaller overseas presence. It would move into a period where it could “regroup, reset, and retrain,” as Assistant Vice Chief of Staff Lt. Gen. Stephen L. Hoog put it. Despite budget pressures, the projected dip in operations tempo would allow the service to retool and reorient its infrastructure.

But USAF did not pack up and go home. Instead, the service responded to a rapid succession of crises in 2014 that called for sustained air, space, and cyberspace power to react quickly and effectively.

In February 2014, Russia illegally seized Crimea from Ukraine, reanimating concerns about revanchist Russian military activity in Europe and spurring new theater security cooperation efforts.

ISIS terrorists rampaged through Iraq last June, leading USAF to contribute both combat and air mobility forces.

This was followed by the Ebola outbreak in Western Africa. It called for Air Force contingency response group forces to set up mobility hubs.

In all three contingencies, the Air Force’s unique ability to deploy rapidly and sustain forces was tested. 2014

showed why agile combat support (ACS) is critical to Air Force core capabilities—and linked to prosecuting the modern American way of war.

ACS, as a mission, is the connective tissue of airpower and involves the creation, growth, and support of combat capability, from garrison forces to operations on a bare airfield. Aspects of this mission range from providing base shelters and airfield vehicles to supplying life support equipment to

**It takes long-term planning to quickly deliver airpower.**

testing and calibrating weapons and maintaining stocks of war materiel around the world. ACS meets a vast range of materiel needs and acquisition requirements across the force.

As the Air Force adjusts its footprint around the world and ponders rebalancing forces across the Active Duty, Air National Guard, and Reserve, the future of the ACS mission is getting close study at the highest levels of the service.

Senior leaders overseeing ACS note it is slightly difficult to describe. It represents a nebulous USAF core com-

petency rather than a single platform or weapon. As one official said, ACS is all of the pieces of acquisition that don’t fit into neat boxes or have clearly delineated program offices for one capability, such as with most combat and mobility aircraft. “We support every airman, every aircraft, every day,” said Col. Gregory J. McNew, the deputy program executive officer and director for agile combat support at the Air Force Life Cycle Management Center at Wright-Patterson AFB, Ohio. “From the very first time someone shows up at [basic military training], to when they are touching aircraft, ... there is something associated with ACS that makes their mission happen,” he said.

McNew’s statement is representative of all the various aspects of ACS sustainment and why it is intertwined with so many other mission areas. AFLCMC’s Agile Combat Support directorate executes an annual budget of over \$5.1 billion. Billions more are closely connected to the ACS mission through the programs and operations of other organizations, such as Air Mobility Command. The ACS shop encompasses some 1,700 military, civilian, and contractor personnel in various locations spread across seven divisions: USAF sustainment activities

# AGILE COMBAT SUPPORT

By Marc V. Schanz, Senior Editor

related to metrology and calibration of instruments and aircraft (the METCAL directorate); automatic test systems; electronic warfare and common avionics; environmental and industrial engineering; human systems; simulator systems and support equipment; and vehicles.

These offices ensure the successful delivery of a vast array of products, services, and capabilities in ACS, from the provision of cold weather and chemical, biological, nuclear, and radiological uniforms to sensitive countermeasure equipment for nearly every aircraft in the Air Force's inventory to ammunition trailers and fire trucks for bases both here in the US and for deployed locations. "It's not very easy to describe," McNew conceded. "No two divisions [are] the same. But we do an awful lot of sustainment work. It's a lot of stuff that's out there and fielded and in ongoing operations." The ACS mission helps USAF reduce the need for massive inventories, at home and forward deployed, using what is known as "time-definite delivery" logistics to ensure steady resupply of forces. These needs must be balanced across USAF's component commands and the world's combatant commands.

ACS needs are largely worked out via demands and requirements from an organization or component command,

whether from Air Combat Command, Air Mobility Command, Air Force Global Strike Command, or elsewhere.

"When a squadron deploys, they have a table of allowances to take with them," said McNew. The TOA dictates how much of a component or piece of equipment must be deployed as well. "Our role is to make sure we are doing the best we can with the funds we are given to make sure we are managing the whole portfolio properly." The ACS directorates must balance needs, and prioritize, as sometimes "we don't always have all the pieces we need or are supposed to have," he said. Components can be broken, have performance issues, or can be on tap for disposal and replacement.

### A BALANCING ACT

Making sure airmen don't go looking for support and sustainment equipment for tasks when they are needed is a big challenge, McNew observed. "We have to balance across that portfolio and replenish things as best we can."

Timely sustainment means effective operations. "If you can't operate the base," Hoog said in an April 29 speech to the Air Force Association's Mitchell Institute for Aerospace Studies, "you sure as heck can't fly from it." ACS, as a result, is part and parcel of the Air Force's flexibility and provides

an agile footprint in operations from home garrison training to humanitarian disasters to air campaigns.

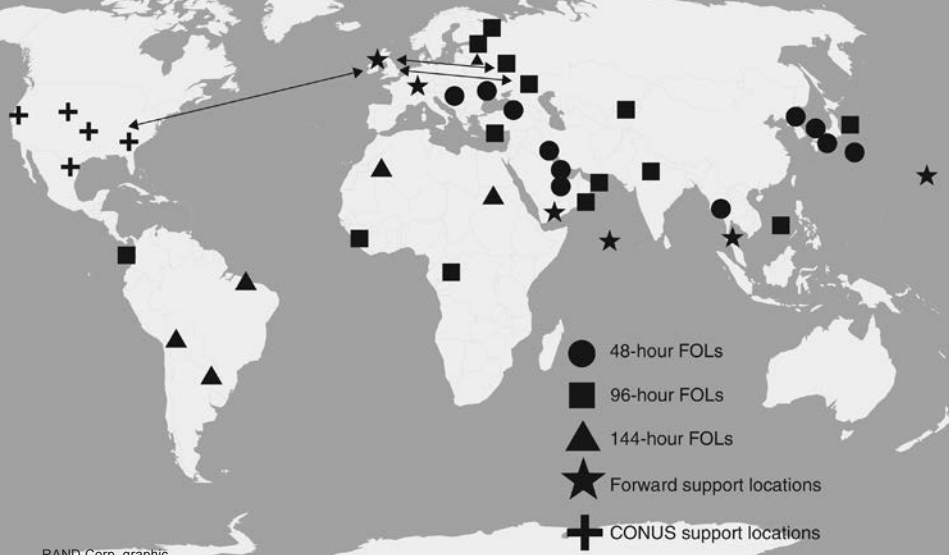
This capability must be exercised and practiced, in turn. Just as vital to USAF's combat power as Red Flag, efforts such as Silver Flag are key to keeping ACS adept and flexible.

The Silver Flag exercise has grown over the past decade to draw in other career fields and specialties involved in standing up and sustaining base operations, such as engineers, explosive ordnance technicians, communications airmen, force support personnel, and others. (See "Don't Call it a Comeback," p. 20.) Practicing expeditionary sustainment of air operations is a focus area in Pacific Air Forces, for example, and Silver Flag is a critical tool to this end. At Andersen AFB, Guam, Silver Flag training on the island is expanding to return explosive ordnance disposal (EOD) training to the SF curriculum. The exercise moved to Guam from its previous location at Kadena AB, Japan, last year, and is vital to preparing airmen to set up and operate in expeditionary environments. Part of the Pacific Regional Training Center on the island, Silver Flag trains an estimated 1,200 Air Force engineers and support airmen across 13 specialty codes, many of them involving core ACS tasks such as airfield damage

*C-17s take off at 30-second intervals during a large-formation exercise, Crescent Reach, in May. Agile combat support ensures USAF's diverse units have the equipment for their varied missions.*



USAF photo by TSgt. Nathan Lipscomb



*Below: A C-17 is packed with US soldiers and equipment on the way to an overseas deployment. The agile combat support mission includes providing base shelters, testing and calibrating weapons, and supplying materiel and personnel in short order worldwide. Left: A RAND graphic shows a notional overview of an evolving ACS system. It depicts a diverse set of forward operating locations (FOLs), forward support locations (FSLs), and CONUS support locations.*

RAND Corp. graphic

repair, electrical systems, and water purification. EOD is slated to return to the Silver Flag curriculum in 2016, according to Andersen officials.

Because of its role supporting and sustaining expeditionary airpower, ACS is getting a lot of analysis at the Air Staff level, particularly in the aftermath of last year's report by the National Commission on the Structure of the Air Force.

Hoog stated that after more than two decades of near-constant combat operations following the end of the first Gulf War, the Air Force has a good idea of components, requirements, and support services it needs to rapidly stand up combat abilities anywhere in the world. "We know what it takes. ... We have all been through the basic [air and space expeditionary force] training where you start with an airfield that's 8,000 feet with potable water, and you build out combat capability." He said Air Force engineers have performed exceptionally, doing earth work and building forward operating bases in Iraq and Afghanistan, and the Air Force's contingency response groups are often called on to deploy quickly and set up air base operations on short time lines, a complicated task requiring a fine-tuned ACS system.

The question is, though, "what [is it] going to take to support the combination of in-garrison operations and agile combat support at the same time?" Hoog asked in April. Finding a balance between these, and managing operations tempo requirements,



USAF photo by SSGT. Angela Ruiz

will be important. Metrics for supply and demand must be tracked, among ACS, the components, and the regional commanders. "We look closely at cost and health of funding, to commitments we have made to our customers," McNew said. "But a lot of what we do is make sure we deliver the items we are charged with acquiring and putting them back in the field." Sometimes this is contract logistics support, other times it could be supporting organic depot maintenance or swiftly putting replacement equipment back to work.

**VARYING DEMANDS**

But priorities change—and sometimes quickly. When it comes to urgent needs, the ACS apparatus has to juggle resources, to push and pull in the right places for USAF to act promptly and decisively, McNew said. Once a need

is identified, resources and planning and engineering must shift from other areas and this puts a certain amount of risk on other less important areas at that given time. "We will get money, because the [combatant commander] says, 'Hey, we need you to go buy these things.' But we don't get any more manpower, so we have to balance the assets that are most important and take priority." Recent examples include the rapid fielding of 260 improved ballistic protection helmets for aircrews in USAF's helicopter fleet—reducing the weight of the helmet while doubling its protection level—and successful efforts to develop a new transportation isolation system for moving contagious personnel. This met an urgent need last summer with Operation Unified Assistance, McNew said. Agile combat support personnel helped to perform

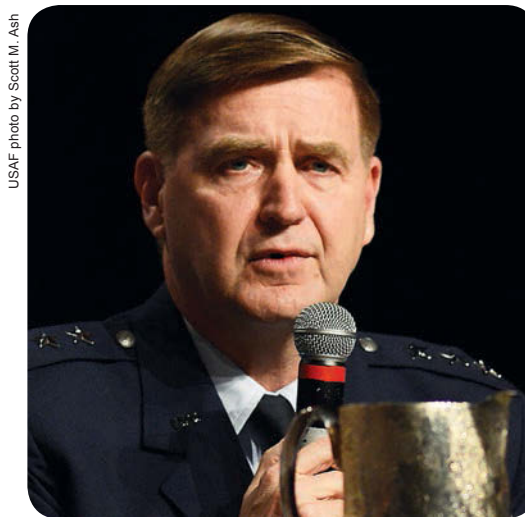
certifications for a system that could bolt into a C-17 or a C-130 and safely move large numbers of patients if needed.

ACS supply and demand varies from theater to theater, but despite the completion of the Afghan drawdown, a persistent stream of requirements continues to need close monitoring at US Air Forces Central Command, for example. As an enterprise, the Department of Defense has continued to try to minimize its on-hand inventories, as large theater depots are costly, noted Lt. Col. Marshall Perry, the deputy director in AFCENT's logistics and mission support directorate. For AFCENT, "this is a balancing act when focusing on agile combat support" and having materiel and supplies close to the fight. As such, AFCENT's logisticians have to take into account requirements of the theater and in the US and attempt to optimize the logistics pipeline to meet anticipated demands.

It is not easy to foresee ACS needs for CENTCOM, Perry claimed, because of its austere operating environments, the sometimes minimal support infrastructure, country specific supply mandates and customs duties, and limited airlift and storage capacity. Not everything can be called up quickly from the US, and some supplies must be maintained in theater.

Even before combat operations over Iraq and Syria geared up last year, AFCENT maintained a network of some \$3 billion in pre-positioned "war readiness materiel" or WRM throughout the theater, staged at Al Udeid AB, Qatar, and numerous other locations throughout the Middle East and Persian Gulf region. According to Perry, this WRM "is the key to agile combat support from a logistics perspective." The components of these war reserve caches vary, but include ACS items such as expeditionary airfield resources, vehicles and parts, fuel equipment, medical equipment, concertina wire, sandbags, racks, and pylons. A combination of these supplies is maintained at an "appropriate storage level," ready to respond if necessary, he said. Because they are located in theater, the arrival time drops significantly, a critical factor in short-notice missions, which routinely emerge across CENTCOM.

These war reserve caches were called upon as Operation Inherent Resolve got underway last August and the US and coalition allies returned aircraft to theater and stood up new units across the region. AFCENT works to "validate



*Above: John Goines, chief of the Life Science Equipment Laboratory, compares survival vests from crashes in the late 1960s as part of a forensic investigation. Left: Lt. Gen. Stephen Hoog, assistant vice chief of staff, answers questions during an Air Force Association discussion. Hoog said some of USAF's highest operations tempo are in ACS areas.*

historical demand data and current mission tasks," Perry explained, so it can estimate what items will be in the highest demand and must be at the "closest point of utilization." For example, after anti-ISIS operations last August, AFCENT's logistics and mission support directorate reviewed aircraft flying hours, to better prepare for spare parts and aerospace ground equipment needs. The command is also tracking flight hours to watch trends in fuels, munitions, and support personnel required. As these items are reviewed, they are passed along to supply hubs and centers and make their way back through the ACS system. "It is a constant effort of validating ever-changing requirements," Perry said.

Hoog said this dynamic is a big reason "some of our highest operations tempo is on the agile combat support side," such as for explosive ordnance disposal airmen and contracting experts.

"We look at this, and the relationships between Active and Guard and

Reserve [are] all in that mix," Hoog said in April. How many RED HORSE engineering units must the Air Force retain in the Active Duty force structure—versus the number it should keep in either the Air National Guard or the Reserve—in order to maintain a surge capacity? These are cases where the mission is well-suited for the reserve components—able to leverage experience in engineering or contracting—and airmen who work with equipment in civilian life and can be activated to use these skills downrange, Hoog stated. "As we speak, we are doing analysis as to maybe we move some [units] back and forth."

Regardless of where the capability resides, ACS will continue to prioritize and meet a demand signal showing no sign of drawing down.

"We don't make operational missions happen," McNew said. "Our operators do that. But behind the scenes, we do the acquisition that puts out into the field the things that are used every single day, ... [which] our airmen use to accomplish the mission around the world. And we are proud of that." 