The Air Force is being asked to take on new assignments and dedicate more airmen and equipment to high-demand missions in support of two wars. Moreover, this must be done without a major increase in personnel or funding. We can handle that, responded USAF officials at AFA’s Air & Space Conference held Sept. 15-17 in Washington, D.C.

They expressed deep pride in the way airmen have performed in combat and support missions around the world. Across a broad spectrum of operations—from airlift and special operations to intelligence-surveillance-reconnaissance and close air support—USAF has delivered.

For all that, however, the whole force is under harsh pressure. The smallest active duty USAF force in its history will be hard-pressed to squeeze out more capability. Signs of stress, large and small, abound.

Air Mobility Command this year set an all-time record for sorties flown on a single day. Over one 24-hour period, it rang up 1,051 sorties, according to Gen. Arthur J. Lichte, the AMC commander.

In this year, AMC also chalked up its one millionth sortie since Sept. 11, 2001, and, as of August, the mobility fleet is on track to set a record for most tactical airdrops for the year, since October 2001, having already delivered 8.5 million pounds of supplies in this fashion over Iraq and Afghanistan.

Extremely heavy demand for mobility aircraft has stemmed from a range of contingencies across the world. AMC took the lead in Operation Caring Response, when C-130s flew into Myanmar on May 12 to deliver more than 1.1 million pounds of relief supplies after Cyclone Nargis hit. Also in May, a 7.9 earthquake rocked Sichuan Province in China, killing 32,000 and devastating infrastructure. After Chinese requests, two Pacific Air Forces C-17s were dispatched from Hickam AFB, Hawaii, with 200,000 pounds of humanitarian aid.

Several Gulf Coast hurricanes generated robust aeromedical and humanitarian missions. Relief efforts following Hurricane Ike and Hurricane Gustav in the early fall required significant mobility operations, Lichte said.

Along with the increase in operations, the force is transforming and taking on new missions—especially as a result of explosive growth of unmanned aerial vehicle missions.

Following the 2005 Base Realignment and Closure round, the Air Na-
ional Guard expanded significantly into the ISR mission as large chunks of its fighter force were moved out of the Guard or retired, said Lt. Gen. Craig R. McKinley. McKinley, head of the Air National Guard, has been confirmed for a fourth star and will become chief of the National Guard Bureau.

McKinley gave special note to new Guard unmanned aerial vehicle units flying their MQ-1 Predators from locations such as March ARB, Calif., and Davis-Monthan AFB, Ariz., and upcoming MQ-9 Reapers from Hancock Field, N.Y. He pointed out that, as of mid-September, Air Guardsmen were flying about one-third of all Predator missions, and that the percentage is certain to grow.

“That's where we're headed,” McKinley said.

The Air Force's special operations forces also have moved heavily into the unmanned aircraft game, collecting valuable ISR data on targets and locations across the US Central Command area of responsibility.

Air Force Special Operations Command's 3rd Special Operations Squadron, Cannon AFB, N.M., generated around 61,000 flight hours last year—exceeding the combined total of all of the rest of AFSOC aircraft, said Lt. Col. Paul Caltagirone, the squadron's commander. The 3rd SOS remains just shy of half of its authorized personnel, but is adding people as fast as possible.

In both Iraq and Afghanistan, the demand for specialized airpower is great, resulting in high usage rates for key assets such as AFSOC's gunship fleet. “We are using them at high levels, sometimes at four times their planned use rate,” said Lt. Gen. Donald C. Wurster, the AFSOC commander, about his fleet of AC-130H and AC-130U gunships.

A portion of his gunship fleet soon will need center wing box replacement, he noted. That is one of the factors driving a plan to acquire, as soon as possible, up to 16 AC-27J Stinger II gunships.

AFSOC's relatively small fleet is wearing out at unheard-of rates.

“People think we have invested a lot of money in special operations and so we have fixed it,” Wurster noted. “We have not invested a lot of money in the air in special operations. We are starting to.”

AFSOC is now getting the CV-22, but, with only a few airframes delivered so far and the MH-53 retiring, acquisition of these aircraft needs to pick up speed. Wurster wants them faster to avoid a strategic vulnerability. At present, his 17 MC-130Hs are the primary covert infiltration aircraft.

The tanker situation is also getting worse. In September, just prior to the conference, Secretary of Defense Robert M. Gates announced the scrapping of the beleaguered KC-X tanker competition, pushing back further the recapitalization of this critical asset.

**Preservation Is Key**

The decision comes at a time when most of AMC's E model KC-135s are headed to retirement and those that are left sit on flight lines only to have their tires periodically rotated and engines turned on.

In the meantime, AMC is making great strides in preserving the capabilities of the existing tanker fleet. More than 50 percent of the KC-135 fleet is now equipped with global air traffic management upgrades, and more than 80 percent are equipped with flight director systems, radio altimeters, and requisite autopilot systems, Lichte said.

For the rest of the combat air forces, things are looking bleak. “I need more and better aircraft,” said Gen. Roger A. Brady, commander of US Air Forces in Europe. “In 1990, I had 16 NATO partners to deal with. Today I have 26 going to 28.” The aircraft in USAFE’s possession require more maintenance man-hours per flight hour with every passing year, as the aircraft are breaking in new ways, he added.

While the Air Force previously planned to draw down end strength to pay for recapitalization efforts, now it is faced with a host of new taskings and challenges to work out in the coming years, from a growing Army and Marine Corps to the standup of the newest combatant command—US Africa Command.

In Africa, the challenge will be significant. It is an enormous continent, with large gaps in infrastructure. There are sure to be huge demands for mobility and ISR aircraft, along with air control and security assets, said Brady.

**USAF fighters, bombers, tankers, and air control aircraft line the strip at Andersen AFB, Guam, a focus of Air Force power projection efforts.**
The USAFE chief noted that the service on Oct. 1 stood up 17th Air Force, or Air Forces Africa. It is based for now at Ramstein AB, Germany, with about 100 personnel in a space it shares with the 603rd Air Operations Center.

“AFRICOM is a strange animal, ... a COCOM with no assigned forces,” Brady said. “There will be a growing requirement for the rest of the world to support AFRICOM, and lift and ISR will be the big issues.”

Lichte confirmed this assessment. “We’re already up [to] 900 sorties a day,” he said. “To increase that is going to be a little bit difficult, and it really will ripple down to the Guard and Reserve because we’ll have to call on them for more help.”

Developing infrastructure at key facilities will also be important to ensuring success in Africa, said Gen. Duncan J. McNabb, head of US Transportation Command.

Key sites noted by McNabb were Lajes Field in the Portuguese Azores, Ascension Island in the mid-Atlantic, and NAS Sigonella on the Italian island of Sicily.

In the Pacific, efforts are well under way to begin regular Global Hawk operations on Guam. Already progressing is construction of a hangar to house the high-flying vehicles, according to the Pacific Air Forces commander, Gen. Carrol H. Chandler.

In 2009, the beddown of the Global Hawk will begin in earnest. Chandler also told conference attendees that Japan has expressed an interest in building a presence on the island, in the form of infrastructure rather than permanent forces.

**Focus on Guam**

A recent deployment of F-22s from Elmendorf AFB, Alaska, to Andersen AFB, Guam, helped verify some of the fighter’s deployment capabilities, Chandler said. In Alaska, Raptor operations (conducted by two active and one Reserve associate unit) reached initial operational capability in September.

Guam will continue to be a focus of Air Force power projection, said the PACAF boss. “As far as I can see into the future, we will continue to do a bomber rotation and a tanker rotation,” Chandler said, referring to the Air Force’s regular force projection deployments to the island.

Chandler said he plans to visit China in 2009 and work on cooperating with the People’s Liberation Army Air Force on possible search and rescue exercises, among other initiatives.

He added that Operation Pacific Angel, a humanitarian exercise conducted in Thailand and Cambodia, was a successful partner building effort that he wants to see continued.

“That’s been enabled by the C-17,” Chandler said, since the airlifter takes a sizable force of doctors, dentists, civil engineers, and others to accomplish a lot of assistance in a short period of time.

“We’ve been very fortunate in the Pacific over the last 60 years or so that we have been able to continue an economic development that has produced four of the world’s 10 largest economies,” Chandler said. “Some of that has been because of the mil-to-mil relationships that [have] created the security and stability for that development to occur.”

While the force is growing its missions and stretching capability, concerns also surfaced about the sustainability of the current force and its requirements and the risk to air dominance.

When asked what he would do if he had extra funds for unfunded require-
ments, Chandler said he would hire back 800 to 1,000 flight line maintainers. That is because airframes are taking more and more punishment and are being kept in service well beyond their planned retirement dates, he noted.

Gen. John D. W. Corley, commander of Air Combat Command, issued a blunt warning about today’s aircraft acquisition rates.

“This is not a time for us to be buying fewer aircraft in a year than we used to procure in a month,” he said.

Air Force officials in April told Congress they are expecting a fighter gap of about 800 airframes to emerge in Fiscal 2017, based on the current F-22 and F-35 buys. If the gap is not closed with an increase in F-35 production, Corley said, airmen across the combat air fleet will experience a “loss of capability.”

Not only is iron on the ramp a critical concern to leadership, but so are the nation’s orbital assets. A key enabler for USAF air dominance, from Global Positioning System satellites to secure communications, space is no longer an uncontested domain, said Gen. C. Robert Kehler, commander of Air Force Space Command.

There are more than 450 active foreign spacecraft on orbit today, but still only a “handful” of nations—what Kehler calls “space-faring nations”—can build and launch space vehicles. But today, any entity can purchase space capability, from terror groups to criminal networks.

This goes beyond kinetic weapons such as China’s recently demonstrated anti-satellite weapon. Anyone who can deny communications connectivity, intelligence-surveillance-reconnaissance, or launch ability can make US forces less precise and less globally agile.

Kehler said two of his top priorities in the years ahead are to increase space situational awareness to protect orbital assets and to harden future capabilities. “Space won’t become a contested domain; space is a contested domain,” he said.

There is no guarantee that the Air Force will maintain air dominance if current procurement trends are unchanged, a panel of airpower experts concluded.

Losing Air Dominance

“We are for the first time in a very long time critically on the edge of losing our ability to guarantee air dominance for the joint force,” said Rebecca Grant, who addressed a large blue-suit audience in tandem with Loren B. Thompson of the Lexington Institute.

Their topic: “Losing Air Dominance.”

Grant traced the roots of the problem to the aftermath of the 1991 Gulf War. Because of the huge success of low-observable technologies in that war, the Air Force concluded it would no longer procure traditional fighter aircraft, only stealthy ones.

This decision, coupled with deep budget cuts in search of a post-Cold War “peace dividend,” saw the retirement of many proven airframes (such as the F-111). Throughout the 1990s, the Air Force’s procurement went down to near zero.

This was done to husband resources for subsequent fighter recapitalization with all-stealth airframes. The Air Force finished procuring other systems such as the B-2 and F-15 and waited for the ramp-up of fighter production. It never happened.

The 2001 terrorist attacks and subsequent wars in Afghanistan and Iraq drained away funds, leading to cuts and more postponements. In 2004, the Pentagon took a large chunk out of fighter modernization, effectively cutting the F-22 program from a planned 381 aircraft to only 183. USAF’s plan for air dominance was, at that point, “no longer affordable or executable,” Grant said.

Threats changed as well, with the rise of “double-digit SAMs” such as the SA-10 and SA-20 systems, both of which the Air Force has never faced, Grant noted. A resurgent Russia and economically powerful China now complicate the strategic picture.

“We need an analysis that could determine what the right number is,” Grant said of the F-22. “That number is well above 183.”

Not getting this right will endanger the ability for US forces to guarantee future air dominance as older fighters retire and are replaced at much lower rates with the F-35. The Raptor is the only aircraft designed to guarantee air dominance, she said, adding that the less-potent F-35 fighter should be viewed as complementary, not competitive.

Thompson added that the Air Force will see a “gradual erosion” of air dominance over the next two decades due to four factors—not enough Raptors, too few airborne sensors and tankers, the decline of overseas bases, and the proliferation of air defenses.

The Bush Pentagon turned out to be “remarkably poor managers,” Thompson charged. As a result, the Air Force has less influence in the joint command system than at any other time in history. He added that funding for airpower is not going to go up much, no matter who is elected President this month.