

November 2008/\$4

# AIR FORCE

JOURNAL OF THE AIR FORCE ASSOCIATION

MAGAZINE



**The Way It's Going To Be**  
USAF's Top Leaders Chart the Course

**Strategic Alaska**  
**Air & Space Conference 2008**  
**Roles and Missions—Again**



# War won't wait.

The enemy is on the move, and you have to deploy now. Not later, when the parts and supplies become available. Not if they arrive. That's why modern militaries turn to AAR for the logistics support and mobility systems they need.

Empty shelves don't cut it. Neither do empty promises.

When it comes to supporting the warfighter with readiness and sustainment solutions, no one does it better than AAR. Because war won't wait.



30



36



**About the cover:** Two B-1B Lancers from the 7th Bomb Wing, Dyess AFB, Tex. Photo by Richard VarderMeulen. See "The Way It's Going To Be," F. 30.

**2 Editorial: Hard Times**

By Robert S. Dudley  
*Pentagon spending didn't cause the economic crisis, and drastic cuts will not end it, either.*

**30 The Way It's Going To Be**

By John A. Tirpak  
*AFA's Air & Space Conference featured blunt talk from the Air Force's new top leaders.*

**36 The Big Squeeze**

By Marc V. Schanz  
*Job 1 is to extract more power out of today's small force, commanders told AFA's Air & Space Conference attendees.*

**42 On the Minds of the Troops**

By Peter Grier  
*Six of USAF's top enlisted chiefs air out the problems and prospects of today's force.*

**46 Strategic Alaska**

By Marc V. Schanz  
*Billy Mitchell saw its great potential in 1935, and now the rest of the world has finally caught on.*

**50 A New Look at Roles and Missions**

By John T. Correll  
*Sixty years after it was forged, the famous Key West agreement is in for a basic reconsideration.*

**54 Airpower Genesis**

By Rebecca Grant  
*Meet Edgar Gorrell, author of what may be the "earliest, clearest, and least known statement" of US strategic bombing concepts.*

**58 Goering's Big Bungle**

By Walter J. Boyne  
*The Luftwaffe chief must take the blame for the momentous Me 262 screwup.*

**62 AFA National Convention 2008**  
By Tamar A. Mehuron

**68 Top Issues**

*Policy recommendations drawn from AFA's 2009 Statement of Policy, "Air Force Airpower: Year of Decision," adopted by the delegates to the AFA National Convention meeting on Sept. 14, 2008 in Washington, D.C.*

**70 Air Force Association Technology Exposition**

Photos by Guy Aceto  
*The latest and best in aerospace technology was on display at AFA's annual showcase.*

**74 Awards**

Compiled by Tamar A. Mehuron  
*These are the Air Force Association National Awards for 2008.*

**81 Councils**

*Air Force and AFA councils appointed for 2008-09.*

[www.airforce-magazine.com](http://www.airforce-magazine.com)

**4 Letters**

**10 Washington Watch**

**16 Air Force World**

**20 Index to Advertisers**

**26 Senior Staff Changes**

**28 Issue Brief**

**82 Verbatim**

**84 AFA National Report**

**88 Airpower Classics**

**AIR FORCE Magazine** (ISSN 0730-6784) November 2008 (Vol. 91, No. 11) is published monthly by the Air Force Association, 1501 Lee Highway, Arlington, VA 22209-1198. Phone (703) 247-5800. Second-class postage paid at Arlington, Va., and additional mailing offices. **Membership Rate:** \$36 per year; \$90 for three-year membership. **Life Membership (nonrefundable):** \$500 single payment, \$525 extended payments. **Subscription Rate:** \$36 per year; \$29 per year additional for postage to foreign addresses (except Canada and Mexico, which are \$10 per year additional). Regular issues \$4 each. USAF Almanac issue \$6 each. **Change of address** requires four weeks' notice. Please include mailing label. **POSTMASTER:** Send changes of address to Air Force Association, 1501 Lee Highway, Arlington, VA 22209-1198. Publisher assumes no responsibility for unsolicited material. Trademark registered by Air Force Association. Copyright 2008 by Air Force Association.

## Hard Times

**T**HE world may be heading for its worst recession in a quarter of a century—if it's lucky," read an Oct. 13 Bloomberg dispatch.

In that article, experts expressed a belief the new slump would rival the big one that hit the US in 1982. There was hope, stated a former Treasury official, "that it won't become the worst ... since the Great Depression."

If history is a guide, this means trouble for the military. The features of a big recession—slack revenues, heavy social needs—always put pressure on defense.

Already, Rep. John Murtha (D-Pa.), a powerful House defense appropriator, has declared, "The next President is going to be forced to decrease defense spending in order to respond to neglected domestic priorities."

The US military will suffer a setback if that dubious proposition gains too much momentum.

The underlying notion here is that the US military has been burning tax dollars at an unaffordable rate. One popular view of the situation imagines that shooting wars—especially the war in Iraq—has imposed crushing costs on the taxpayer. Another is that the expense of simply maintaining today's 1.4-million-strong US force has gotten wildly out of hand.

Those visions are flawed, as we hope Mr. Murtha and others realize before they get too far along with their prospective cut drills. We would remind them of a simple but frequently ignored truth: Pentagon spending didn't cause today's economic crisis, and drastic cuts will not end it, either.

In this matter, we direct everyone's attention to a July 24 Congressional Research Service report giving a historical view of the costs of the nation's 12 major wars, expressed (as best as can be done) in terms of constant 2008 dollars.

A review of the relevant data, reprinted on this page, is instructive. Some things are well-known. For instance, the table affirms the widely understood fact that World War II was a vast national crusade, consuming in its peak year nearly 36 percent of America's Gross Domestic Product. We see that the cost of the Civil War

dwarfed all other 19th century American wars, as expected.

However, it contains surprises, too. Yes, the Iraq War has cost plenty: \$648 billion to date. The shocking fact is that, even in its peak year—2008—the war consumed just one percent of the nation's GDP, an inordinately small share. That is because the US economy is enormous.

So let's be honest about it; the Iraq War has not bankrupted America or

### Pentagon spending didn't cause the economic crisis, and drastic cuts will not end it, either.

Conflict	War Cost Billions of 2008 \$	War Cost % GDP (High Yr)	Mil Cost % GDP (High Yr)
Revolution	\$1.8	—	—
War of 1812	\$1.2	2.2	2.7
Mexican War	\$1.8	1.4	1.9
Civil War-US	\$45.2	11.3	11.7
Span-Arm War	\$6.8	1.1	1.5
World War I	\$253.0	13.6	14.1
World War II	\$4,114.0	35.8	37.5
Korean War	\$320.0	4.2	13.2
Vietnam War	\$686.0	2.3	9.5
Gulf War	\$96.0	0.3	4.6
Afghan War	\$171.0	0.3	4.0
Iraq War	\$648.0	1.0	4.2

pushed its economy into a recession. The war, whatever else one may think of it, has been affordable. Indeed, its cost doesn't even rise to the standard of the Spanish-American War (1.1 percent of GDP), much less that of Korea or Vietnam—wars of similar scope and duration.

What about the "burden" of overall defense expenditures? Hasn't that risen to unprecedented levels?

Raw numbers, unquestionably, are great—a total of about \$607 billion this year for all US defense functions.

However, that is only part of the story. The table makes a more important point: In the Iraq War's peak year of 2008, total national defense spending—war costs, Energy Depart-

ment nuclear weapons programs, and the works—claimed 4.2 percent of the economy.

As can be seen, that burden is smaller—in most cases, much smaller—than that which was borne by Americans in the peak years of all of the wars of the 20th century. Yet in each case, the American economy came through intact.

When one analyzes other data, the story is much the same: Defense spending isn't the overwhelming economic factor many think it is.

Take, for example, the composition of the federal budget, which once was, but no longer is, dominated by defense spending. In 2008, military functions accounted for only 20 percent of federal outlays, according to the Office of Management and Budget.

The real money-burners are the three big federal entitlement programs—Social Security, Medicare, and Medicaid. Together, they generated fully 52 percent of this year's outlays. They consume some 11 percent of US GDP, and are still growing.

None of this should be taken as an argument for profligate military spending. To the contrary, it should be evident to all that, right now, caution is more vital than ever. We are headed for hard times. We should not spend on defense one dime more than is necessary.

This, however, is a critical moment for America's military. The services, weakened by an ill-advised "procurement holiday" in the 1990s and worn down by seven years of post-9/11 warfare, will require steady funding to replace worn-out gear, fund advanced weapon systems, and attract and retain high-caliber troops.

The Army and Marine Corps are in the midst of major force buildups. The Air Force budget already is \$20 billion short of its annual requirement. The Navy is in similar straits.

With two wars under way and other crises on the horizon, the nation cannot afford an orgy of defense cutting, even if it would make a difference in the health of the economy. The fact that it would do nothing of the sort makes the idea all the more foolhardy. ■



# 144.

## ADVERSARIES DEFEATED. THAT'S AIR DOMINANCE.

AT THE NORTHERN EDGE TRAINING EXERCISE, THE F-22 RAPTOR DELIVERED ON ITS PROMISE. DEMONSTRATING PRECISION ATTACK CAPABILITIES BY DEFEATING THREATS IN THE AIR AND ON THE GROUND. AND COMBINING LETHALITY AND SURVIVABILITY. THE F-22 RAPTOR. AIR DOMINANCE ACHIEVED.



## Needed: UAV Instructor Course

[I am writing in regard to the item in "Air Force World: Weapons School UAV Courses Postponed," September, p. 22.]

Secretary of Defense Robert M. Gates' plan to shut down the UAV instructor course for six months to a year (or more) will have far reaching and detrimental consequences on instructor training. Training is usually one of the last items planned and one of the first to be cut when faced with increased operations tempo. Shutting down operations is easy. It can be done in a day, but reconstituting an organization takes time, especially when the instructors to teach new instructors are gone.

In the mid-1990s, the 42nd Airborne Command and Control Squadron began flying missions over Bosnia, the Middle East, and Haiti, utilizing all personnel to meet the increased ops tempo. This [came] during the personnel drawdown following the Soviet Union collapse. Training nearly came to a standstill because the instructors and STAN/EVAL personnel were overseas flying live missions.

What was to be a few months' TDY over Bosnia extended into years, and in that time squadron personnel retired, separated, made permanent change of station (PCS) moves, or were forced out due to personnel cutbacks. Unit manning fell drastically. Newly assigned personnel sat waiting to begin training.

Squadron leadership decided to theater-qualify (TQ) new personnel in their duties. This meant that trainees received two-thirds of their 12 to 15 training missions and then were sent overseas to fly live missions over combat areas. The justification? The TQ personnel would be sitting next to or near a mission-ready crew member who could explain their duties during the live mission.

When the 42nd ACCS moved from Keesler AFB, Miss., to Davis-Monthan AFB, Ariz., in 1994, all the squadron personnel were supposedly "frozen" to make the move because the unit manning was critically short. Lo and behold, once in Arizona, a look around revealed that many highly trained personnel had PCS'd to other assignments. So much for "freezing" people at the unit.

The best computerized systems are no good if you lack good people to operate them effectively. Being an instructor is

more than pushing buttons and saying, "See, that is how it's done. You are now trained." In six months or a year (or more), people will separate, retire, or make a PCS despite attempts to freeze them in place. Don't stop training, no matter how few you train; that will be better than no one trained at all.

Be careful, Secretary Gates, be very careful, or this situation will rear its ugly head in a year (or two or more) and bite the UAV force in the butt.

Capt. Gregory D. Bova,  
USAF (Ret.)  
Tucson, Ariz.

## It's a Rejection

I must take exception to the "Improvisation Won't Do It" editorial by Mr. Robert S. Dudney in the October 2008 issue of *Air Force Magazine* [p. 2]. Your characterization of land power advocates as being unable to understand the effects-based operations concept and your proclamations about what airmen believe only serve to reinforce the notion that EBO is "some kind of airpower cult" and paint us all with that brush.

I would not presume to speak for General Mattis or anyone else, but I cannot believe that they don't understand EBO. They simply reject it. Do not confuse rejection of the EBO planning construct with rejection of airpower. The two are only connected in the minds of those who consider it USAF's pet project.

Regardless of Lt. Gen. David Deptula's intentions that EBO be a "fairly simple" thing, proponents of prescriptive warfare have hijacked it and made it their own. EBO is their new playbook, and Lieutenant General Deptula is the new Jomini.

Of course, the counter to Jomini is Clausewitz. Ironically, his replacement in

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. (E-mail: 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

## Publisher

Michael M. Dunn

## Editor in Chief

Robert S. Dudney

## Editorial

afmag@afa.org

## Editor

Suzann Chapman

## Executive Editors

Adam J. Hebert, John A. Tirpak

## Senior Editor

Michael C. Sirak

## Associate Editors

Tamar A. Mehuron

Marc V. Schanz

## Contributing Editors

Walter J. Boyne, Bruce D. Callander,

John T. Correll, Rebecca Grant,

Peter Grier, Tom Philpott

## Production

afmag@afa.org

## Managing Editor

Juliette Kelsey Chagnon

## Assistant Managing Editor

Frances McKenney

## Editorial Associate

June Lee

## Senior Designer

Heather Lewis

## Designer

Darcy N. Harris

## Photo Editor

Zaur Eylanbekov

## Production Manager

Eric Chang Lee

## Media Research Editor

Chequita Wood

## Advertising

bturner@afa.org

## Director of Advertising

William Turner

1501 Lee Highway

Arlington, Va. 22209-1198

Tel: 703/247-5820

Telefax: 703/247-5855



Circulation audited by  
Business Publication Audit



# Off to a flying start.

Sikorsky Aircraft's X2 Technology™ Demonstrator has made its first flight, moving the world one step closer to a paradigm shift in helicopter capability and performance.

This next generation in vertical flight will have it all – excellent low speed maneuverability and agility, efficient hovering plus seamless transition to 250-knot cruise speed.

X2 Technology™ from Sikorsky.  
Making helicopter history. Again.



**X2** TECHNOLOGY™  
FULL SPECTRUM PERFORMANCE



**Sikorsky**

A United Technologies Company



modern times was also an airman, Col. John Boyd. I suggest you take time to read Boyd's body of work. Don't bother with the watered down, bumper sticker version peddled in the Air Force. Go read his actual papers and lectures. When you are done, go read Marine Corps doctrine. Do you notice any similarities? Pay particular attention to the discussions of commander's Intent.

Ask the typical airman what the commander's intent for his mission is, and you might get an explanation of a CAS mission or an airlift itinerary. More than likely you will get a raised eyebrow. He doesn't understand the question because neither his squadron commander nor any other leader in his chain has written a commander's intent, save one: the JFACC. The JFACC's intent is dutifully translated to an ATO—the plan. Our typical airman understands the ATO, the SPINs, the ROE. He performs his part in the plan, and if it falls apart, he RTBs and waits for tomorrow's plan. Commander's intent is peripheral at best.

The land forces have no option to RTB; they are in the battle until it ends. If the plan goes awry, they use commander's intent to make decisions about how to proceed in the absence of orders. Every echelon of their chain has produced a commander's intent and mission type orders. It is the backbone of their command and control.

I don't see how anyone could assume that the land forces would draft such guidance in a "vacuum." They are very aware of the importance of "extensive sources of information and analysis." They simply understand that intelligence can be wrong, distorted, or missing. They know that assumptions can be false and analysis is as much art as science. Because the plan is based on imperfect information, it has no hope of surviving first contact with a determined foe. To counter this, the ground force commander arms his lower echelons with delegated decision-making authority and a clearly written commander's intent so they can adapt, and dare I say it, improvise.

What airmen actually believe is that this improvisation is far too chaotic to manage or be effective. For airpower, this may be correct, but for land forces it is a critical part of their ability to survive and thrive in a chaotic environment. That is why you love EBO and they do not. It is why improvisation does not "inspire confidence" in you, but is a source of great confidence for the land power advocate.

You say that EBO has proved effective. Some would say we were fortunate that Iraq had no unknown backup power grid. Some would argue that it was lucky the Serbs reacted as they did instead of hardening their stance in rebellion. Heaven forbid we should face a peer air

power that would actually interfere with the execution of our plan. I won't even address the issue of General Frank's Iraq planning. Hindsight is always 20/20.

You offer us a false choice. We either choose EBO or the "numerous adverse consequences" of the "attritional approach" to war. To accept this choice, we must delude ourselves into believing that there is no creative planning outside of EBO, that we can control the uncontrollable aspects of war with the proper plan or take away the enemy's vote. General Mattis may have saved us from a far greater risk to American military personnel than an imperfect plan. That would be "analysis paralysis" in pursuit of the perfect plan.

The "fairly simple" version of EBO advocated by Lieutenant General Deptula may very well be an effective concept for airpower. It may even deserve a place in joint doctrine. In fact, the very next line of the Aug. 14 memo you quote states that "we must retain and adopt those aspects of effects-based thinking that are useful." Unfortunately, when you belittle land force advocates for being unable to understand the concept without once conceding that they have a point, you betray a zealotry that is unhelpful in promoting the discussion you say you want.

The big question, Mr. Dudney, is whether all parties understand that.

Lt. Col. Deric V. Kraxberger,  
USAF  
Uedem, Germany

#### Airpower on Canvas

I was amazed and thrilled to see Keith Ferris' painting of the P-12s [*"Airpower on Canvas,"* September, p. 52]. Boy, does that bring back memories! I was born in 1920 and all kids of my generation were aircraft crazy. We knew every World War I airplane and all the aces on each side. My favorite book was Floyd Gibbons' *Red Knight of Germany*, about [Manfred] von Richthofen.

The later model with the streamlined engine cowling (was it P-12E?) was my favorite. I lived in Helena, Mont., and every year at the state fair, kids would enter scale models of various planes. Two guys from my neighborhood entered models of the P-12E. They were both in high school; I was in the third grade. The guy who won, Fergus Fay, became a World War II pilot and retired from USAF as a colonel. The other, Frank Reinig, went to Seattle and worked for Boeing. He came home in the early 1930s and told us he was working as a riveter on a new four-engine bomber. He was small and they put him on the wings. He said he could stand up inside. That aircraft was the early B-17.

I also recall that in one of our cold winters in the '30s, a squadron of Curtiss Hawk P-6Es came to Helena from Sel-

fridge Field, Mich., I believe, on a cold weather exercise. My Dad took me down to the Helena Airport to see them leave. Each airplane engine was being warmed by a portable heater. I think there was a canvas hood system over the engine and I think I remember a large flexible hose leading from the heating unit into the canvas hood.

Thanks for your memento of a wonderful time in my life.

Lt. Col. Al Guay,  
USAFR (Ret.)  
Winchester, Va.

What a marvelous accomplishment! When my *Air Force Magazine* arrived today, I was awestruck. Just imagine: Army Air Corps history and art together on the very cover of a true "keeper" magazine. This is the rare one.

Truly it was a joy to read about Keith Ferris and to empathize with him and his opportunities to capture his impressions of aviation during his lifetime of picturing his insights. He truly "fulfilled the mission," to use his own words.

Thank you so very much for such an exceptional artistic, aeronautical combination! I'm an 83-year-old Army Air Corps vet. You can understand how I was [captivated].

Edward E. Childress  
Castro Valley, Calif.

### The Finest Air Force Ring Out There. Period.



Air Force Ring in 14K Gold

When I set out to design a ring worthy of a U.S. Airman, I knew it had to be beyond comparison. It had to be instantly recognizable, affordable to all ranks and of the highest quality. It is just that. Each ring is made one-at-a-time to your exact specifications from the finest precious metals. Cast into a solid piece—without gluing, soldering or any chance of falling apart. Heavy in weight, extreme in detail and made in America by me, Mike Carroll.

#### 30 ORIGINAL DESIGNS

Guaranteed 100%  
Free Brochure

See our full collection at:

**EagleRings.com**  
CARROLL COLLECTION OF U.S. EAGLE RINGS  
16144 W. Port Clinton Road, Prairie View, IL 60069  
888-512-1333



CAMARADERIE,  
ABUNDANT ACTIVITIES  
AND YEAR 'ROUND  
SUNSHINE.

Visit us. Take a tour.  
And welcome to retirement,  
Air Force Villages style.



San Antonio, Texas  
(800) 762.1122  
[www.airforcevillages.com](http://www.airforcevillages.com)

**All Filled Up**

[In reference to the article, "GHQ Air Force," September, p. 62]: Many thanks for this enlightening history. When I reported for extended active duty at Scott Field, Ill., in February 1941, "Headquarters GHQ Air Force" was in very large letters across the front of the Headquarters building. Explanations were skimpy at best and you were left with the idea that it was better left undiscussed. Your history satisfied a large empty space.

Col. Frank W. Ward,  
USAFR (Ret.)  
Battle Creek, Mich.

**Daylight Precision Bombing**

John Correll has written an excellent essay on "Daylight Precision Bombing" [October, p. 60]. However, several key parts of the picture were missing:

First, the cost. Daylight precision bombing over Europe cost the AAF more than 4,000 B-17 Flying Fortresses and their crews (some 40,000 men killed or prisoners), as well as more than 2,000 B-24 Liberators (another 20,000 men).

Second, the alternatives: Could the strategic bombing resources have been better employed? For example, if just 200 additional heavy bombers were used for anti-submarine warfare in 1942, could the Battle of the Atlantic—critical for the

invasion of Europe and the survival of Britain—have been won a year earlier? Or what would the bombing record have been with, say, 2,000 more accurate B-25 Mitchells and B-26 Marauders in place of every 1,000 B-17s? Or, would the Soviets have been able to enter Berlin six months earlier (at tremendous savings in Allied lives) had 4,000 P-51 Mustangs been produced for the Red Air Force in place of 1,000 B-17s and their crews?

The most accurate bomber of the European Theater was the de Havilland Mosquito—a twin-engine, two-place, wooden aircraft that could carry the same bomb load as a B-17, 100 mph faster, for two-thirds the range. Again, the "cost" of a Mosquito was less than one-fourth that of a B-17. What would have been the impact of, say, 4,000 AAF Mosquitos in place of 1,000 B-17s?

Third, the impact: As Correll correctly states, "The German and Japanese economies and their national infrastructures had been devastated to the point that they barely functioned." But being defeated had nothing to do with surrender: Germany did not surrender until Hitler had committed suicide when Red soldiers were in Berlin, fighting a few blocks from his bunker. Similarly, after

intense strategic bombing (of marginal effect) and incendiary bombing (of great effect) the six men who ruled Japan—the Supreme Council for the Direction of the War—had no thought of surrendering until after the second atomic bomb was employed. Fully expecting an invasion, the Japanese planned to resist "to the last man."

These factors—and others—must be considered in a realistic discussion of "daylight precision bombing."

Norman Polmar  
Alexandria, Va.

■ *As usual, Norman Polmar makes good points and adds insight to the issue. B-17 and B-24 losses were greater than they should have been or had to be, a consequence of the notion concocted in the 1930s that bombers did not need fighter escorts. If the P-51s had been in action sooner, the loss rate would have been lower. I don't know enough about the Mosquito to debate its relative merits but as a general proposition would question the wisdom of trading long-range heavy bombers for larger numbers of medium bombers.*

*Indeed, the strategic bombers could have been better employed. Too much of*



**SYMBOLARTS**  
JEWELRY, QUALITY BADGES AND INSIGNIA

freedom is not free

Honoring those who have sacrificed to make it so.

- ★ T-SHIRTS
- ★ HATS
- ★ BELT BUCKLES
- ★ THERMALS
- ★ DOG TAGS

888-379-6265  
[WWW.SYMBOLARTS.COM](http://WWW.SYMBOLARTS.COM)



## Air Force Association

1501 Lee Highway • Arlington, VA 22209-1198

Telephone: (703) 247-5800

Toll-free: (800) 727-3337

**Press 1** if you know your party's extension.

**Press 3** for Member Services.

(For questions about membership, insurance, change of address or other data changes, magazine delivery problems, or member benefit programs, select the "Member Services" option.)

Or stay on the line for an operator to direct your call.

Fax: (703) 247-5853

Internet: <http://www.afa.org/>

### E-Mail Addresses

Field Services.....[fldsvcs@afa.org](mailto:fldsvecs@afa.org)

Government Relations.....[grl@afa.org](mailto:grl@afa.org)

Industry Relations.....[irl@afa.org](mailto:irl@afa.org)

Events.....[events@afa.org](mailto:events@afa.org)

Member Services.....[service@afa.org](mailto:service@afa.org)

Policy & Communications (news media).....  
[polcom@afa.org](mailto:polcom@afa.org)

### Magazine

Advertising.....[adv@afa.org](mailto:adv@afa.org)

AFA National Report.....[natrep@afa.org](mailto:natrep@afa.org)

Editorial Offices.....[afmag@afa.org](mailto:afmag@afa.org)

Letters to Editor Column.....[letters@afa.org](mailto:letters@afa.org)

Air Force Memorial Foundation .....  
[afmf@afa.org](mailto:afmf@afa.org)

For individual staff members  
first initial, last name, @afa.org  
(example: [jdoe@afa.org](mailto:jdoe@afa.org))

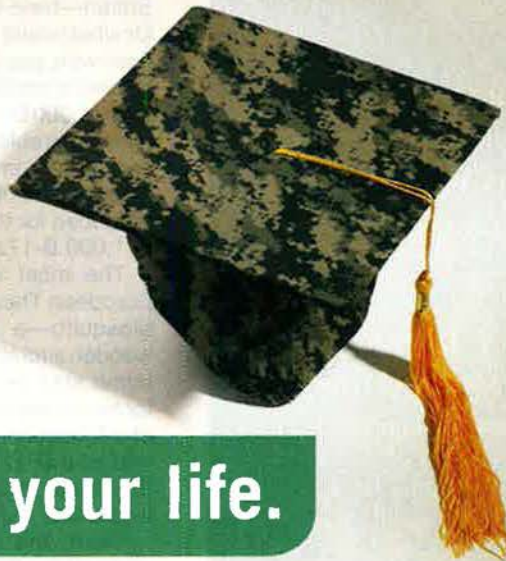
### AFA's Mission

**To educate the public about the critical role of aerospace power in the defense of our nation.**

**To advocate aerospace power and a strong national defense.**

**To support the United States Air Force and the Air Force family and aerospace education.**

# We fit your life.



Strayer University is an  
Air University ABC school

We know the difference a degree can make in your military career, and how difficult it can be to earn that degree with your schedule. That's why we designed our programs to be more flexible and more convenient.

You can attend classes online, on campus, or both. And your military experiences and education will be carefully assessed for college credit, which could mean earning your degree even quicker.

What's more, with your military benefit, our scholarship covers 100% of the undergraduate tuition for active duty military students. And graduate students can qualify for a scholarship that covers a majority of tuition.

See how Strayer University will fit your life.

Classes available  
online or on campus



**1.866.324.5918**

<http://military.strayeruniversity.edu>

Strayer University is regionally accredited by  
Middle States Commission on Higher Education.

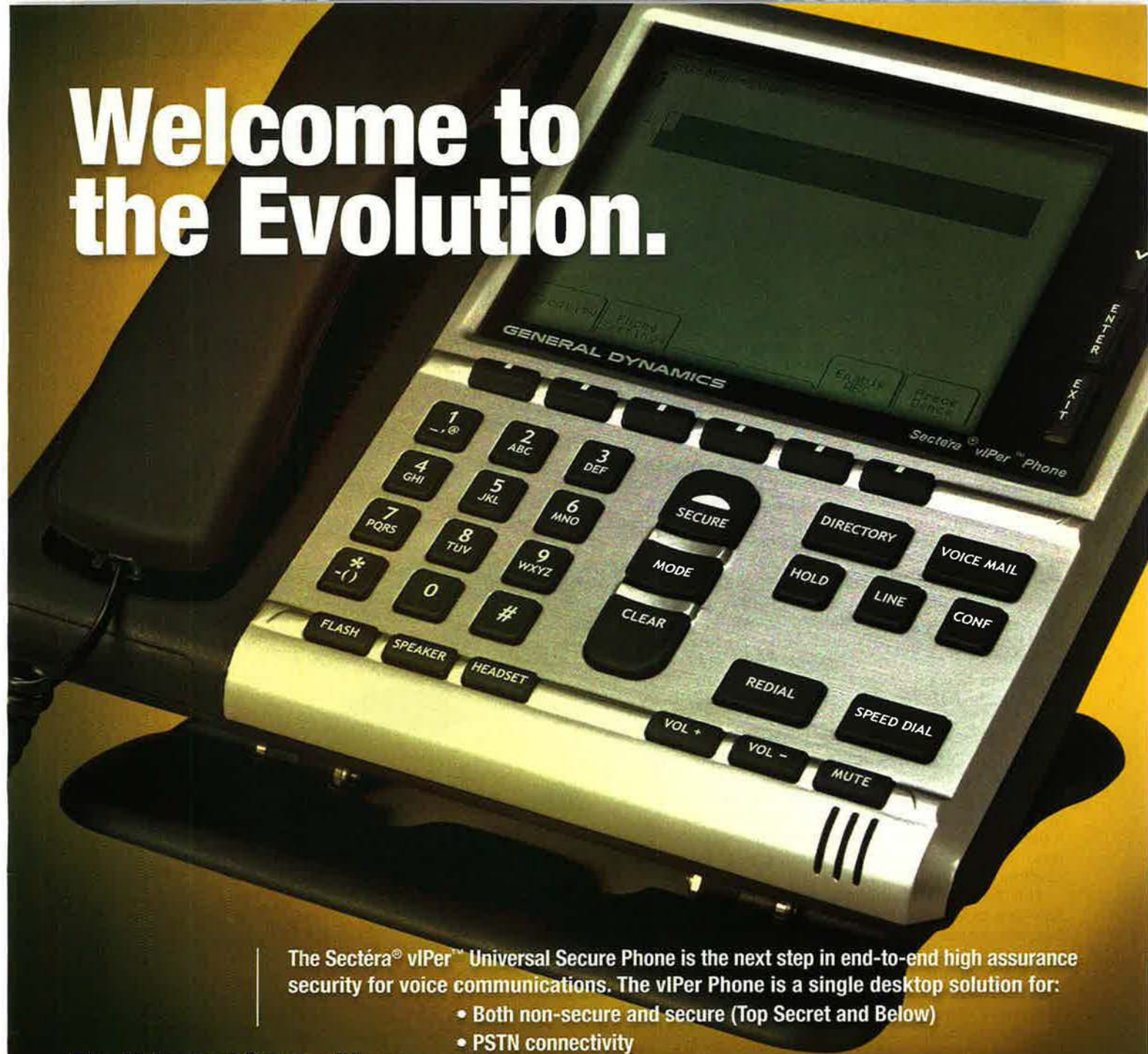
*Eighth Air Force's strength was diverted to Africa and the Mediterranean. Until June 1943, the primary objective assigned to Eighth Air Force was submarine pens, hardened targets against which they had no effective munitions.*

*All hail to the ground forces on both the eastern and western fronts who delivered the final blows in Europe, but their success built on the attrition of Germany by airpower and the destruction of the Luftwaffe.*

*The reason for the surrender of*

*Japan was clearly and unequivocally the atomic bombs. However, conventional bombardment and blockade were contributing factors. The decision to surrender was made by Emperor Hirohito, overriding the objections of several key ministers on the "Big Six" Supreme Council. By various accounts, the Emperor began to realize that the war was lost on March 18, 1945, when he toured areas of Tokyo that had been firebombed by B-29s.—JOHN T. CORRELL*

# Welcome to the Evolution.



The Sectera® viPer™ Universal Secure Phone is the next step in end-to-end high assurance security for voice communications. The viPer Phone is a single desktop solution for:

- Both non-secure and secure (Top Secret and Below)
- PSTN connectivity
- Voice over IP connectivity
- Cost-effective migration from PSTN to VoIP
- STE interoperability

## The Universal Secure Phone

Protect your investment and evolve into the next generation of technology. The versatile Sectera viPer Phone provides the flexibility for multiple networks. All other solutions seem...well, primitive.

781-455-2800/888-897-3148 • [secure.communications@gdc4s.com](mailto:secure.communications@gdc4s.com) • [www.gdc4s.com/viPer](http://www.gdc4s.com/viPer)

*General Dynamics Secure Communications: We Bring You What's Next*

**GENERAL DYNAMICS**  
C4 Systems



## Fixing the “nuclear enterprise”; Air Force and Army shake hands on UAVs ....

WASHINGTON, D.C., OCT. 20, 2008

### Son of SAC

The Air Force should create a new Strategic Command out of the existing Space Command, consolidate all bombers under a single organization, make 8th Air Force responsible exclusively for bombers and no other missions, and otherwise radically overhaul its nuclear enterprise after more than 17 years of “atrophy.”

These were among 33 recommendations offered by the Schlesinger Commission, impaneled by Defense Secretary Robert M. Gates in June after Air Force missteps with the handling of nuclear weapons and associated parts caused the service’s two top leaders to resign.

The panel, headed by former Defense and Energy Secretary James R. Schlesinger, determined that the two incidents—in which live nuclear missiles were inadvertently flown from Minot AFB, N.D., to Barksdale AFB, La., and nuclear fuse components were mistakenly shipped to Taiwan—were symptomatic of waning prestige and resources for the nuclear mission in the Air Force.

Immediate action is needed, the panel said, not only to guarantee the safety of nuclear weapons, but to reassure worldwide allies under the American nuclear umbrella that the mission is taken seriously. Without such reassurance, those allies may seek their own nuclear deterrent, Schlesinger said at a Pentagon press conference to unveil the report.

The Air Force announced some of its responses to the Schlesinger panel in an early October message to Congress. The Air Force will indeed create a new major command, to be headed by a three-star general, with responsibility for the nuclear mission. The new organization will have authority over USAF ballistic missiles and “nuclear capable” bombers, but not the conventional-only B-1Bs. However, the new outfit, not yet named, would support US Strategic Command with both nuclear and conventional capabilities. Moreover, cyber operations will be placed under a new numbered air force under Air Force Space Command and not, as had been planned, a new major command. The Air Force said it planned to release its new “nuclear roadmap” giving details of the restructure later in the fall. The steps followed a September announcement that USAF would expand its Nuclear Weapons Center to oversee all nuclear sustainment and weapon storage.

The Schlesinger panel wants nuclear experience to again be a major factor in promotion of top leaders, and wants a return to teaching deterrence and nuclear concepts in Air Force schools. It also wants the Air Force to put back into the mission about 2,000 people who have migrated to conventional fields, and set up rigorous new policies for the maintenance, inspection, and exercise of nuclear forces.

The Air Force has taken steps in recent weeks to address many of these issues, Schlesinger said, and service leaders are “saying the right things.” He said he no longer thinks

mistakes of the type that launched the inquiries can happen, and that it should take between six months and a year for USAF’s nuclear endeavors to get back up to speed.

“We have the attention of the Air Force,” Gates said at a briefing when the report was released.

The report was the first of two; the second, due in December, will offer observations about the nuclear enterprises of the Navy, Army, and other defense agencies.

Panelists included retired Air Force Gen. Michael P. C. Carns, J. D. Crouch II, former Pentagon acquisition chief Jacques S. Gansler, former Joint Chiefs of Staff vice chair



*They are back in style.*

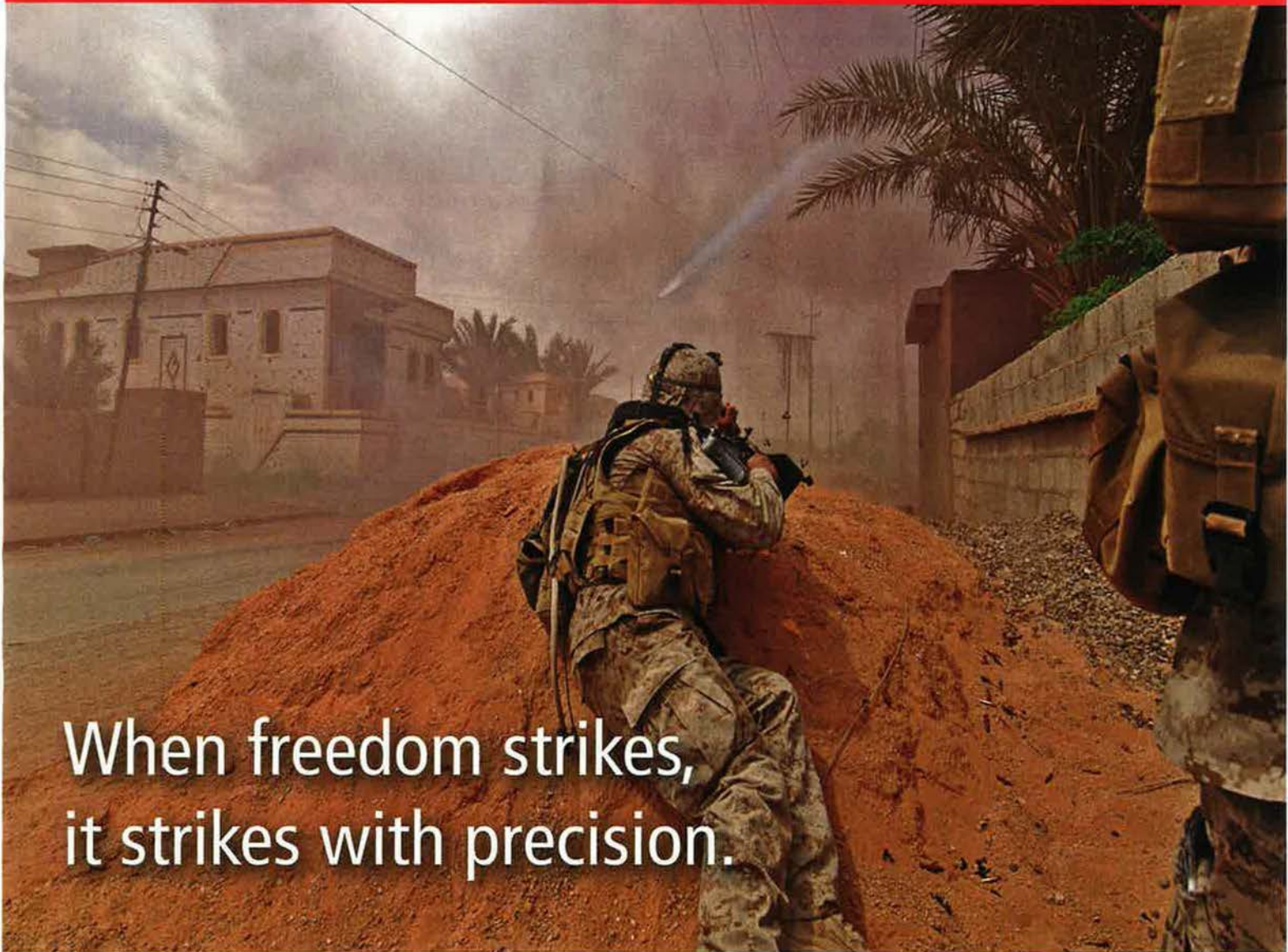
retired Adm. Edmund P. Giambastiani Jr., former Deputy Defense Secretary John J. Hamre, Franklin C. Miller, and Christopher A. Williams.

The 33 recommendations offered by the commission covered leadership and culture, organization, and sustainment, and ranged from major force structure moves to inspections, publications, and professional military education.

The panel said USAF should, by September of next year, change Air Force Space Command to Air Force Strategic Command, which would in turn be the force provider to US Strategic Command. The new outfit would rehighlight the importance of the nuclear mission, promote nuclear specialists, and put greater focus on exercising nuclear systems and stepping up inspections. All bombers would be consolidated under 8th Air Force, which should give up any other functions, such as cyber operations, with those other functions reallocated elsewhere, the panel said. Bombers would still be available for conventional operations, but nuclear operations would be elevated to co-equal status. The reconstituted 8th Air Force would move from Air Combat Command to the new AFSTRATCOM.

Toward fixing the errant fuse issue, the panel suggested

# Air Warfare Systems



When freedom strikes,  
it strikes with precision.

Raytheon provides the world's most comprehensive portfolio of air warfare systems that enable military commanders to shape the battlespace and achieve decisive victory. Backed by a 30-year track record of proven performance, Raytheon solutions deliver cutting-edge responsiveness, accuracy and effects on target. Raytheon air warfare systems can be launched from a wide variety of aircraft, ships and ground locations, and can be integrated easily with existing systems. Regardless of the platform, or the mission requirement, Raytheon enables a significant tactical advantage.

**AMRAAM   HARM   JSOW   MALD™   Maverick   Paveway™   Sidewinder   Tomahawk**

**[www.raytheon.com](http://www.raytheon.com)**

© 2008 Raytheon Company. All rights reserved.  
"Customer Success Is Our Mission" is a registered trademark of Raytheon Company.

**Raytheon**

*Customer Success Is Our Mission*

that the Air Force retain all sustainment of nuclear weapons through Air Force Materiel Command, and the Defense Logistics Agency be taken out of the chain of provenance for nuclear-related materials.

To highlight the importance of the nuclear mission, the nuclear field could no longer be raided either for Air and Space Expeditionary Force assignments or in-lieu-of assignments, and those people would be designated "deployed in-place" for promotion purposes.

Other panel recommendations regarded specifics of inspections, manning levels, and the development of a professional cadre of nuclear-rated officers.

Gates said the panel found no new "consequential examples of mismanagement," but conducted a deeper analysis of the decline in the nuclear culture and mission since the end of the Cold War. He said he's confident that getting the nuclear mission sorted out, and quickly, is "very high priority" for the Air Force, and he's pleased with the progress, but "I won't be completely assured until all of the corrective measures have been taken." He also said he's confident the mistakes that set the whole nuclear review in motion "won't be repeated."

Also in late September, Air Force Chief of Staff Gen. Norton A. Schwartz and then-Acting Air Force Secretary Michael B. Donley announced administrative action against 15 Air Force officers in response to the previous nuclear affairs investigation conducted by Navy Adm. Kirkland H. Donald. Among the officers were six generals. Some of the generals had already requested retirement, some will retire now, but others will be allowed to continue to serve in place, although the reprimands in their files may end their chances for promotion. Schwartz said those disciplined were "good officers" but "they did not do enough" to ensure the safety and effectiveness of nuclear functions under their command.

### Agree To Agree on UAVs

The Air Force and Army have largely agreed on a new joint concept of operations for the use of unmanned aerial vehicles and will reveal it in January, the Army's doctrine chief reported in late September.

Gen. William S. Wallace, head of the Army's Training and Doctrine Command, said he and his Air Force counterpart, Gen. John D. W. Corley, head of Air Combat Command, had resolved most of the issues regarding the combat use of UAVs after almost a year of work and top-level meetings, some of which included the Chiefs of Staff of the two services.

In a late September meeting, Wallace and Corley were expected to "solidify the concept of operations, for presentation to the two Chiefs ... sometime right after the first of the year," Wallace told defense reporters in Washington, D.C. The CONOPS is to spell out not only how UAVs would be employed in the current wars, but in future major combat operations as well.

Agreement had been reached, Wallace said, that the Army would cede high-altitude, "strategic" UAV operations, such as the use of the Global Hawk reconnaissance aircraft, to the Air Force, while USAF would allow the Army to control tactical UAV operations below 10,000 feet.

The real dispute, though, was in the middle, where the Air Force operates the Predator and Reaper UAVs, and the Army operates the Sky Warrior and Shadow. Wallace said the two services had long been trying to determine "what is the common ground" regarding how to divide responsibilities in that area.

That common ground, Wallace said, is an agreement between the services that data collected in the medium-altitude regime—indeed, in any regime—should be available to all US users, and broadcast over the common network.

Procedurally, a last sticking point was in "dynamic retasking"—how to swing a medium-altitude UAV already in flight



USAF photo by TSgt. Sabrina Johnson

*The services will share them.*

from a dedicated Air Force mission to an urgent Army request, or vice versa. Doing so raised all sorts of issues involving communications and ground systems, and even the types of specialists flying the aircraft. The Air Force uses rated officer pilots to fly its medium-altitude UAVs, while the Army uses noncommissioned officers with special training.

The joint force commander is "the ultimate arbiter" of who needs a UAV more in a pinch, Wallace said, but those decisions tend to be made "premission," and there is a desire to work out a handoff procedure that doesn't require going back to the joint force commander on the fly "and playing 'mother may I,'" Wallace explained. He expected that the issue might be solved with a common set of standards and procedures.

The Army has long insisted that it needs its UAVs tethered to divisions so that commanders can have instant access to eye-in-the-sky views without having to wait for a dynamic retasking, while the Air Force has maintained that all UAVs should be under centralized control and dispatched as needed. The Air Force has said its method would make better use of all UAVs available, and that the Army's plan would allow some to be idle.

An experiment earlier this year proved that the Army's Shadow systems could be flown remotely from the US, the way the Air Force operates its Predators and Reapers. But the Army has resisted doing so because it fears an Air Force takeover of its UAVs.

Wallace could not specify a situation where Army forces had requested Air Force UAV support and were denied, but he said there is a "sensing" in the Army that its missions get short shrift in the apportionment process. "I can't give you a specific," Wallace admitted. But, "the anecdotal [message you get] from commanders in theater is that they want more UAVs." He said he doubted it would have been a topic of negotiation "had there not been an issue."

The Air Force is nervous about hundreds of UAVs operating in close proximity with manned aircraft, and has sought executive agency for the systems because, among other reasons, it wants to deconflict the airspace. But Wallace was unmoved by the argument.

"I don't get it," he said, adding that he's unaware of a recent instance where a UAV and a manned aircraft were "bumping into each other." He said that this must be because the "the folks in theater have solved the problem" through the use of procedural controls—such as limiting certain types to certain altitudes—and "our task is to take what the theater has learned about airspace control and make sure everyone knows it, and quit having pillow fights in the back room of the Pentagon."

It isn't necessary to create joint training facilities for Army and Air Force UAV operators, Wallace said. Publishing "a common set of standards" would do the trick, and be cheaper than setting up a joint school. ■

## THE ARMORED SECURITY VEHICLE THAT MORE THAN LIVES UP TO ITS NAME.

When tactical mission requires you to be well outside the wire, make sure your airmen are riding with the toughest/smartest protection on four wheels.

The M1117 ASV from Textron Marine & Land.

This is not some beefed-up truck. It's a true armored vehicle with three levels of designed protection and a v-shaped hull.

The M1117 ASV. For security and protection, it's very hard to beat.

Protects against  
360-degree  
small arms fire,  
anti-tank mines  
under any wheel,  
and overhead artillery  
burst fragments

Exterior: modular  
ceramic appliqué

65+ mph top speed;  
tires have run-flat inserts

[www.textronmarineandland.com](http://www.textronmarineandland.com)

WINNING TECHNOLOGY

**Textron Marine & Land** //  
TEXTRON Systems





A soldier in a desert environment, wearing a tan uniform, is looking down at a device in his hands. The background shows a desert camp with tents and other soldiers.

# *When every minute counts...*

What matters most in that golden hour is connecting survivors to their rescuers. The mission is critical – it's about saving lives. The **HOOK2® Combat Search and Rescue Radio System** uniquely supports all phases of a CSAR event.

*it just works.*

In addition to the direct line-of-sight communications between the trusted **AN/PRC-112G® Radio** and **Quickdraw2® Interrogator**, the new **SATCOM Base Station** enables rescue forces to communicate over-the-horizon with an AN/PRC-112G Radio. Assured communications...when every minute counts.

For more information,  
[www.gdc4s.com/hook2](http://www.gdc4s.com/hook2), Call: 800-424-0052, Email: [hook2info@gdc4s.com](mailto:hook2info@gdc4s.com)

  
**HOOK2**  
GPS CSAR System

**GENERAL DYNAMICS**  
C4 Systems

## Airman Dies in Pakistan Blast

Maj. Rodolfo I. Rodriguez, 34, of El Paso, Tex., died Sept. 20 in Islamabad, Pakistan, of wounds suffered from an improvised explosive device detonated during a suicide attack on a hotel. Rodriguez was assigned to the 86th Construction and Training Squadron at Ramstein AB, Germany.

The blast reportedly killed more than 50 people, including another US service member, Petty Officer 3rd Class Matthew J. O'Bryant, 22, of Duluth, Ga.

## New Leadership Speaks Out

Air Force Secretary Michael B. Donley and Gen. Norton A. Schwartz, Chief of Staff, announced several changes in late August and September as they began to place their mark on the service.

They canceled plans to realign maintenance units for bomber, fighter, and combat search and rescue aircraft with their flying units, believing that maintenance personnel would best sustain and hone their competencies if led by maintenance professionals. They also

axed plans to establish a new center for Common Battlefield Airmen Training and focus instead on optimizing existing training venues.

The leadership also scrubbed plans to field new service dress uniforms, deferring a decision on the Heritage Coat until mid-2009. Instead the focus will be on correcting issues with the present uniforms. And, they directed that, effective Sept. 8, airmen wear a combination of the Air Force's blue uniform on Mondays.

## Airmen Receive Bronze Star Medals

SMSGt. David Smith, a contracting specialist at Tyndall AFB, Fla., received a Bronze Star Medal on Sept. 18 for his actions while deployed to Iraq. During his tour, he often faced hostile fire as he traveled throughout Iraq to support 12 different forward operating bases.

MSgt. David Larriva, an explosive ordnance division superintendent with the 95th Civil Engineering and Transportation Directorate at Edwards AFB, Calif., received a Bronze Star

## Air Force Tanker Re compete Put On Hold

Secretary of Defense Robert M. Gates terminated the reopened KC-X tanker competition on Sept. 10 and announced his intent to leave it in the hands of the next Administration to decide how to replace the Air Force's fleet of Eisenhower-era KC-135s.

Based on talks with senior defense and Air Force officials and with Boeing and Northrop Grumman representatives, Gates said he no longer thought it possible to complete the solicitation process that the Office of the Secretary of Defense had launched in August and meet the goal of awarding a contract by January, especially given the "highly charged environment" surrounding the multibillion-dollar tanker contest.

"I didn't like the smell of approving a potentially hundred-billion-dollar contract or opportunity in the last day or two of being on the job," he told the Senate Armed Services Committee Sept. 23. Gates said Sept. 10 that budget adjustments would be made in Fiscal 2009 and beyond "to maintain the KC-135 at high mission capable rates."

Air Force Chief of Staff Gen. Norton A. Schwartz said Sept. 15 a restarted KC-X tanker program could take as little as eight months and as long as 48 to produce a new winner under the new Administration, depending on the path chosen.

Meanwhile, Rep. John P. Murtha (D-Pa.), chairman of the House Appropriations defense subcommittee, told reporters Sept. 24 that the only realistic way of getting new tankers on the ramp anytime soon is to award dual contracts and not just pick one winner.

"We're not going to have tankers if we don't do that, I'm convinced," he said.

USAF photo by S/A Jonathan Snyder



Medal—his second overall—Aug. 27 for his activities in Iraq. As chief of operations with the 447th Explosive Ordnance Disposal Flight, he led five EOD teams at Sather Air Base and Camp Taji. He earned his first Bronze Star Medal in October 2007 for an earlier Iraq deployment.

#### **McCaffrey Warns About Space**

Retired Army Gen. Barry R. McCaffrey said Sept. 2 the "current \$10 billion

Air Force space strategy is under-resourced and severely constrained" and laid the blame on the "executive and Congressional national security establishment."

Based on his independent assessment of Air Force Space Command, the "next Administration will have at most a year to analyze a series of difficult strategic and investment space decisions before US global superiority will start rapidly eroding," said McCaffrey,

a former national drug czar and currently a recognized pundit on national security issues.

#### **C-17, F-22 Units Reach IOC**

The first of two active duty F-22 fighter squadrons at Elmendorf AFB, Alaska, and the base's active duty C-17 unit were formally declared ready for combat, if called upon, during a ceremony Sept. 5 at the base to celebrate this initial operational capability milestone.



**10.14.2008**

*Up in the Last Frontier of Alaska, Air Force 1st Lt. Matthew Feeman gets himself deeply into the role of "downed pilot" during the most recent Red Flag-Alaska exercise. Here, Feeman, an F-16 pilot, builds a fire to ward off the Alaskan cold somewhere on Eielson Air Force Base. He must survive and escape from would-be captors in order to say he had a successful mission. Feeman is assigned to the 80th Fighter Squadron, an F-16 unit at Kunsan AB, South Korea.*

The 90th Fighter Squadron operates F-22s (with 19 of its 20 aircraft in place as of mid-September), while the 517th Airlift Squadron flies eight C-17s. Both are part of the 3rd Wing.

Supporting them, respectively, under the Air Force's Total Force associations are Air Force Reserve Command's 477th Fighter Group and the Air National Guard's 176th Wing.

Pacific Air Forces expects Elmendorf's second F-22 unit to reach IOC next summer.

Elmendorf received its first C-17 in June 2007 and its first F-22 in August 2007.

**Airmen in Storm Relief Effort**

Thousands of active duty, Air National Guard, and Air Force Reserve Command airmen took part in relief missions in late August and September to help residents of the Gulf Coast prepare for the onslaughts of Hurricanes Gustav on Sept. 1 and Ike on Sept. 13 and then deal with their aftermaths.

Among the myriad activities, airmen from numerous states helped evacuate elderly and special-needs residents in the paths of these storms on C-130 and C-17 transports. Airmen also brought in relief equipment and supplies, analyzed overhead imagery to help assess damage, and provided communications and command and control capability.

WC-130J weather-monitoring aircraft tracked both tempests as well as Tropi-



USAF photo

**Goodbye To All That:** *MH-53 Pave Lows from the 20th Expeditionary Special Operations Squadron fly a night mission over Iraq on Sept. 27. This mission would be their last in the Pave Low, which is being retired after almost 40 years of service.*

cal Storm Hanna on the southeastern US coast. HH-60 rescue helicopters brought stranded Texas residents to safety after Ike, while modified C-130s sprayed areas of Louisiana to prevent fly and mosquito outbreaks.

**Tennessee ANG Facility Opens**

The Tennessee Air National Guard's 164th Airlift Wing opened its new \$245 million facility at the southeast corner

of Memphis Airport Sept. 6. The 118-acre, state-of-the-art complex is one of the largest ANG building projects ever. It will serve as home to the nine C-5A transports that the wing has been operating since 2004. Previously, the wing flew smaller C-141 transports.

Among the complex's features are 28 acres of 14-inch-thick pavement to park the C-5As and three massive hangars that encompass 320,000 square feet, the wing said. Construction of the facility began in June 2006.

**ABL Achieves First Light**

The high-energy laser installed earlier this year on the Airborne Laser aircraft was fired for the first time aboard the platform in a ground test Sept. 7 at Edwards AFB, Calif., according to prime contractor Boeing.

The "first light" event was a significant milestone on the path to ABL's airborne attempt next year to shoot down a boosting ballistic missile, the company said. The ABL is a modified Boeing 747-400F with a megawatt-class laser fired out of its nose turret.

**New Space Radar Plan Sought**

The Office of the Undersecretary of Defense for Acquisition, Technology, and Logistics in August issued a request to industry for information on commercial and international space radar systems that may be leveraged by the US military to meet its surveillance needs.

The ATL office said it was interested in learning more about currently operating satellites as well as low-cost, low-risk systems that could be developed readily. "Funding has been

**Generals Disciplined Over Taiwan Incident**

The Air Force's leadership took administrative action against six general officers and nine colonels in September for being "deficient" in overseeing the service's ICBM force, leading to the errant shipment of four Minuteman III nosecone assemblies to Taiwan in 2006.

"These officers are good people with otherwise distinguished careers spent in faithful service to the nation," Gen. Norton A. Schwartz, Chief of Staff, said Sept. 25 during a Pentagon press briefing held with then-Acting Air Force Secretary Michael B. Donley. Schwartz continued: "But they did not do enough to carry out their leadership responsibilities for nuclear oversight. For that, they must be held accountable."

Of the six generals, Lt. Gen. Kevin J. Sullivan, deputy chief of staff for logistics, installations, and mission support, received the harshest sentence with a letter of reprimand; he requested retirement. The remaining five got letters of admonishment. They are: Lt. Gen. Michael A. Hamel, former commander of the Space and Missile Systems Center, who retired Oct. 1 under plans announced before the Taiwan incident came to light in March; Maj. Gen. Roger W. Burg, commander, 20th Air Force, who remained in this post; Maj. Gen. Kathleen D. Close, commander of the Ogden Air Logistics Center, who stayed in her position; now-retired Brig. Gen. Francis M. Bruno, former director of logistics for Air Force Materiel Command, who, like Hamel, retired Oct. 1 under previously announced plans; and Brig. Gen. Arthur B. Cameron III, director of resource integration on the Air Staff, who had finished a tour in July as commander of Ogden's 309th Maintenance Wing and moved on to his current assignment prior to this discipline.

Of the nine unnamed colonels, five received reprimands (with two removed from command), three admonishments, and one a letter of counseling.

Copyright © 2008 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, Nomex®, Nomex Limitedwear and Kevlar® are trademarks of E. I. du Pont de Nemours and Company or its affiliates.



**WHEN THINGS CAN HEAT UP IN THE BLINK OF AN EYE,** there's a company working behind the lines to help keep you safe—DuPont. Our scientists and engineers pioneered the use of DuPont™ Nomex® brand fiber for personal protection in U.S. Navy flight suits. Pilots have recognized its superior thermal performance for over 40 years. And today, we're collaborating closely with U.S. military personnel to design, engineer, and test their new technologies. So flight crews, maintenance workers, and ground troops are protected against the potential fire hazards they face every day. And many innovative solutions are in the field right now, like the Multi Climate Protection System for superior thermal protection in cold, harsh weather conditions, lightweight Nomex® Limitedwear to help guard against burn injuries, and combat gloves that combine the fire resistance of Nomex® with the strength of DuPont™ Kevlar®. [nomex.com](http://nomex.com)

**BE NOMEX® READY.**



**Nomex.**

requested for providing space radar data and/or a new acquisition which could begin in [Fiscal Year] 2009, with initial government operation of the first vehicle expected in FY12," stated the office's notice.

The Air Force has led DOD's pursuit of various space radar projects over the years to provide capability such as synthetic aperture radar imagery, surface moving target indication, and open-ocean surveillance. But for various reasons, these efforts have floundered. Most recently, the Air Force-Intelligence Community Space Radar program was terminated in March over its hefty projected cost.

### Pilot Error Blamed

The midair collision of two F-15Cs Feb. 20 over the Gulf of Mexico was the result of pilot error and not mechanical



**Extraction:** SSgt. Ben Vorheis, a flight engineer with the 66th Expeditionary Rescue Squadron, inspects a HH-60 Pave Hawk before a proficiency training exercise at Joint Base Balad, Iraq. The Pave Hawk crews teamed with Balad pararescuemen, practicing alternate infiltration and exfiltration techniques.

USAF photo by SSgt. Samuel Morse



**Boots Off the Ground:** Airmen ride on top of a Humvee as it fords a river in Afghanistan. The USAF members were traveling to a rural village to drop off badly needed supplies.

failure, stated the accident investigation board report released Aug. 25. Both pilots failed to clear their flight paths and anticipate their impending high-aspect, midair impact, according to Brig. Gen. Joseph Reyres Jr., Air Combat Command's inspector general, who led the investigation.

Capt. Tucker Hamilton ejected on impact and survived, while 1st Lt. Ali Jivanjee was fatally injured in the collision. Both pilots were assigned to the 58th Fighter Squadron at Eglin AFB, Fla., and were flying a one vs. one high-aspect basic fighter maneuver south of Tyndall AFB, Fla.

### Lawmakers Question NORAD Move

Rep. Ike Skelton (D-Mo.), chairman of the House Armed Services Committee, and Rep. Mark Udall (D-Colo.) on Sept. 18 called on Secretary of Defense Robert M. Gates "to retain redundant operations" of NORAD functions at Cheyenne Mountain, Colo., until completion of a thorough review of the risks involved with the movement of these functions to the new combined NORAD-US Northern Command control center at Peterson AFB, Colo. The center opened May 29.

A Government Accountability Office report on the move issued Sept. 18 stoked the lawmakers' concern by reporting that the Pentagon had still not objectively—at least to GAO's satisfaction—weighed the costs and benefits and factored the potential vulnerabilities.

But, in a response also released Sept. 18, Air Force Gen. Victor E. Renuart Jr., commander both of NORAD and NORTHCOM, countered that the commands have multiple redundant and distributed nodes of command and control to guarantee that there is "no single point of failure." Further,

## Index to Advertisers

AAI .....	Cover III
AAR .....	Cover II
Air Force Villages .....	7
Alenia .....	29
Bell Helicopter .....	35
Boeing .....	39, 44-45, Cover IV
C-27J Team .....	29
Dupont .....	19
Eagle Rings .....	6
General Dynamics .....	9, 14-15, 27
KBR .....	23
Lockheed Martin .....	3, 25
Pratt & Whitney .....	21
Raytheon .....	11
Sikorsky .....	5
Spirit Air .....	41
Strayer University .....	8
Symbo Arts .....	7
Textron .....	13
USAA .....	69
AFA Gear .....	87
AFA Member Get a Member .....	86
AFA Spotlight on .....	86
AFA Technology Expositions .....	87
AFA Upcoming Events .....	83

# Powering Freedom.®



Pratt & Whitney designs and builds the most advanced military engines in the world. These engines provide reliable and affordable power for the C-17 Globemaster III airlifter. Pratt & Whitney engines also power cutting-edge F-35 Lightning II and F-22 Raptor fifth-generation fighters. In fact, 27 nations count on Pratt & Whitney engines so they can accomplish their missions. From design to maintenance, we power freedom every day. **The Eagle is everywhere.™**

 **Pratt & Whitney**  
A United Technologies Company  
[www.pw.utc.com](http://www.pw.utc.com)

## New UAV Pilot Training Launched

The Air Force envisions building a force of 1,100 unmanned aircraft operators—up from today's pool of about 450—by Fiscal 2012 under two new initiatives announced in September. This force of unmanned pilots, which will be second in size only to the service's F-16 pilot community, will support 50 continuous combat air patrols of MQ-1 Predator and MQ-9 Reaper unmanned aerial vehicles, Air Force officials said.

Under the first initiative, begun in October, the Air Force planned to select about 10 percent of its graduates from undergraduate pilot training—about 100 airmen—for training in UAV operations at Creech AFB, Nev., Gen. Norton A. Schwartz, Chief of Staff, announced Sept. 16 in his address at the Air Force Association's Air & Space Conference in Washington, D.C.

The second, more radical concept entails creating a new career field for UAV operators who are taught only to fly UAVs. The service plans to fill this field with active duty officers from various technical and nontechnical backgrounds.

These initiatives will develop a new cadre of UAV operators that do not have experience as rated pilots operating manned combat aircraft—as has been the Air Force's policy to date. (See "The Way It's Going to Be," p. 30.)

"we in the military are good stewards of taxpayer dollars and ... our decisions, ultimately, make this nation safer," he said.

### ANG, Reserve Meet Strength Goals

For the first time in five years, the Air National Guard met its end strength goal, reaching the desired Fiscal 2008 level of 106,700 enlisted and officers,

the National Guard Bureau announced Sept. 10.

Meanwhile, Air Force Reserve Command announced Sept. 2 that it met and eclipsed its recruiting goal in Fiscal 2008, marking the eighth consecutive year of doing so.

The Air Guard recruited 1,194 in August, which was 107 percent of its goal of 1,116. Through August,

it had retained 16,518 personnel, 107.3 percent of its goal of 15,390. Numerous factors made reaching the goal possible, including "the constant leadership focus on recruiting" by the ANG leadership, adjutants general, and wing commanders, said Lt. Col. Randy Johnson, chief of ANG recruiting and retention.

### Vietnam MIAs Found

The remains of Capt. James E. Cross, of Warren, Ohio, and Capt. Gomer D. Reese III, of Scarsdale, N.Y., have been identified, DOD announced Sept. 25. Cross and Reese were flying a U-17B light aircraft on an orientation flight on April 24, 1970, over Xiangkhoang Province, Laos, when their aircraft was struck by enemy ground fire, crashed, and burned, with no signs of survivors.

Based on surveys and excavations of the crash site between 1994 and 1998, in 2004, and in 2007, US and Laotian officials recovered human remains and crew-related items that led to the identification of both airmen, DOD said.

### TSAT Selection Set for December

The Air Force's choice either of Boeing or Lockheed Martin to build the Transformational Satellite Communica-

USAF photo by MSgt. Bill Huntington



**Testing A-10s:** A crew chief from the 442nd Fighter Wing, Whiteman AFB, Mo., marshals in the first A-10 Warthog to arrive at Selina Arpt., Kan., for Hawgsmoke, USAF's biennial A-10 bombing and tactical gunnery exercise. Hog pilots are tested on flight leadership, target acquisition, and weapons delivery.



# Supporting your **MISSION**

KBR delivers a targeted portfolio of solutions to help you achieve your mission objectives anywhere in the world. With more than 60 years of field-tested experience, you can trust KBR to provide services that are responsive, deployable and sustainable so you can concentrate on your assignment.

Whether you require airfield management, bare base construction, facility operations, program management for complex projects, integrated security solutions or logistics support, KBR has the global resources to help you meet your every challenge.

For more information, contact KBR at 703.526.7500, or visit us online at [www.kbr.com](http://www.kbr.com).

Agile Combat Support  
**ANYTIME, ANYWHERE**

**KBR**

### Operation Iraqi Freedom—Iraq

#### Casualties

By Oct. 16, a total of 4,185 Americans had died in Operation Iraqi Freedom. The total includes 4,174 troops and 11 Department of Defense civilians. Of these deaths, 3,385 were killed in action with the enemy while 800 died in noncombat incidents.

There have been 30,723 troops wounded in action during Operation Iraqi Freedom. This number includes 17,179 who were wounded and returned to duty within 72 hours and 13,544 who were unable to return to duty quickly.

#### C-130 Unit Marks 25,000th Combat Sortie

Joint Base Balad's 777th Expeditionary Airlift Squadron completed its 25,000th combat sortie on Sept. 3. The C-130 squadron has been operating from the base since February 2006 and has carried approximately 210,000 passengers and more than 98 million pounds of cargo since then.

According to wing officials, this has taken more than 11,000 convoy vehicles off roads that would expose supply lines to improvised explosive devices.

As of Aug. 26, Air Forces Central reported that more than 8.5 million pounds of goods had been airdropped, reaching an all-time high for tactical airdrops. This equated to more than six times the amount dropped in 2005 and three times the amount dropped in 2006, according to AFCENT officials.

### Operation Enduring Freedom—Afghanistan

#### Casualties

By Oct. 16, a total of 609 Americans had died in Operation Enduring Freedom. The total includes 608 troops and one Department of Defense civilian. Of these deaths, 394 were killed in action with the enemy while 215 died in noncombat incidents.

There have been 2,522 troops wounded in action during OEF. This number includes 900 who were wounded and returned to duty within 72 hours and 1,622 who were unable to return to duty quickly.

#### Willow Grove A-10s Complete Final Deployment to Bagram

Members of the Pennsylvania Air National Guard's 111th Fighter Wing wrapped up what they anticipate to be their last overseas deployment with A-10 Thunderbolt IIs when they returned in September from a 45-day rotation to Bagram AB, Afghanistan.

The unit, which hails from NAS JRB Willow Grove, will be transitioning to a joint interagency installation as a result of BRAC 2005 and is scheduled to lose its A-10s beginning in spring 2009.

According to officials with the 103rd Expeditionary Fighter Squadron at Bagram, the Willow Grove A-10s dropped more than 30,000 pounds of ordnance and fired more than 25,000 30 mm cannon rounds during the unit's deployment.

tions System spacecraft will come "no earlier than the middle of December," Gary E. Payton, deputy undersecretary of the Air Force for space programs, told reporters Sept. 25.

Part of the reason is that the Air Force is being "as thorough as possible" in its evaluation of the bids so that it has a rock-solid case for why it picked the winner in the event that the losing bidder opts to challenge the decision. Admittedly, this approach "has taken more time," Payton said. The Air Force expects to launch the first TSAT satellite in 2018.

Meanwhile, the service informed Congress in early September that the

Advanced Extremely High Frequency Satellite Communications System (AEHF) program had breached Nunn-McCurdy cost-monitoring thresholds. This means that the Air Force and Office of the Secretary of Defense must certify to Congress that the program warrants continuation, despite the cost increases. Payton said the goal was to finish this process by mid-October.

#### C-130 AMP Gears Up

Boeing announced in September completion of the developmental stage of the Air Force's C-130 Avionics Modernization Program and the company's readiness to move the project into low-

rate initial production early in 2009. John J. Young Jr., undersecretary of defense for acquisition, technology, and logistics, was expected to decide in mid-November whether to allow the AMP to move into production.

Under AMP, the Air Force is upgrading the cockpits of 221 combat-delivery C-130H2, H2.5, and H3 aircraft. During LRIP, the Air Force intends to procure 26 AMP kits over four production lots. Boeing will install 11 of the kits, the Air Force 11, while two competitively selected contractors each install two. In early 2012, the Air Force will then pick one company to build and install the upgrades during full-rate production.

#### Battlefield Airman Gear on Tap

The Air Force said in September it expects to issue the Airman Battle System-Ground ensemble—a new set of protective clothes and equipment optimized for airmen serving in ground roles in combat—around February for a testing phase of about 18 to 24 months. However, several airmen are already wear-testing it in Southwest Asia.

The ABS-G is designed to enable airmen to function effectively in ground combat operations. It is basically a tactical, fire-resistant adaptation of the current Airman Battle Uniform, with coat, pants, and battle shirt that integrate with body armor. The new ensemble provides "the highest level of utility, comfort, and protection," said Lt. Gen. Gary L. North, Air Forces Central commander.

#### C-5 Upgrade Testing Advances

Developmental flight testing wrapped up in August on the one C-5A and two C-5B Galaxy transports fitted with new cockpits under the Avionics Modernization Program and new propulsion under the Reliability Enhancement and Re-engining Program. The Air Force expects to commence operational testing of them in mid-2009.

These three aircraft, now designated C-5M Super Galaxys, showed roughly a 20 percent improvement in fuel efficiency and a takeoff reliability of 82 percent to 85 percent during the flight trials, according to lead contractor Lockheed Martin. The latter point is important since the C-5s with RERP upgrades must demonstrate at least 75 percent takeoff reliability for that program to enter full-rate production.

USAF intends to convert 52 of its 111 C-5s to the M configuration by around 2016. The remaining 59 C-5s—all A models—will receive only new avionics. In September, the first of these C-5As was inducted into the AMP.

#### Hypersonic Centers Eyed

The Air Force and NASA in September announced plans to establish



## The USAF and the A-10 Prime Team.

Only a partnership this strong  
could bring technology this precise.

For over a decade, the Lockheed Martin-led A-10 Prime Team and the U.S. Air Force have worked together to renew the premier Close Air Support aircraft for 21st century battle. With the Precision Engagement program, we've done just that. Bringing modern avionics, advanced targeting pods and other transformational technology to bear as the A-10C. And earning a Top 5 DoD Program Award for our combined efforts. But that's just the beginning of our commitment to long-term modernization, sustainment and partnership. Together, we assure success.

**NORTHROP GRUMMAN**

**LOCKHEED MARTIN**



**SOUTHWEST  
RESEARCH  
INSTITUTE®**

## Senior Staff Changes

**RETIREMENTS:** Lt. Gen. Michael A. Hamel, Lt. Gen. Kevin J. Sullivan, Maj. Gen. John T. Brennan.

**NOMINATIONS:** To be **Lieutenant General:** John C. Koziol. To be **Major General:** Stephen L. Hoog.

**CHANGES:** Maj. Gen. (sel.) Brooks L. Bash, from Commanding General, Coalition AF Transition Team, Multinational Security Transition Command-Iraq, Baghdad, Iraq, to Dir., Air, Space, & Info. Ops., AMC, Scott AFB, Ill. ... Brig. Gen. Joseph D. Brown IV, from Dep. Cmdr., Combined Air Ops. Ctr. 6, Allied Air Forces Southern Europe, NATO, Eskisehir, Turkey, to Dep. Dir., Nuclear Ops., STRATCOM, Offutt AFB, Neb. ... Maj. Gen. William A. Chambers, from Dir., Comm., OSAF, Pentagon, to Dir., Air & Space Ops., USAFE, Ramstein AB, Germany ... Brig. Gen. Daniel R. Eagle, from Dir., Intel., USAFE, Ramstein AB, Germany, to Dep. Cmdr., Combined Air Ops. Ctr. 6, Allied Air Forces Southern Europe, NATO, Eskisehir, Turkey ... Maj. Gen. Frederick F. Roggero, from Dir., Air, Space, & Info. Ops., AMC, Scott AFB, Ill., to Chief of Safety, USAF, Pentagon ... Brig. Gen. Robert H. Holmes, from Dep. Dir., Ops.-Force Protection, CENTCOM, MacDill AFB, Fla., to Dir., Interagency Task Force, Ctr. for Spec. Ops., SOCOM, MacDill AFB, Fla. ... Maj. Gen. James P. Hunt, from Dir., Air & Space Ops., USAFE, Ramstein AB, Germany, to Dir., AF Quadrennial Defense Review, Office of the Asst. Vice C/S, USAF, Pentagon ... Maj. Gen. Gary T. McCoy, from Dir., Log. Readiness, DCS, Log., Instl., & Mission Spt., USAF, Pentagon, to Cmdr., AF Global Log. Spt. Ctr., AFMC, Scott AFB, Ill. ... Maj. Gen. (sel.) Darren W. McDew, from Dir., Public Affairs, OSAF, Pentagon, to Dir., Comm. & Public Affairs, OSAF, Pentagon ... Maj. Gen. Robert H. McMahon, from Dir., Maintenance, DCS, Log., Instl., & Mission Spt., USAF, Pentagon, to Dir., Log., DCS, Log., Instl., & Mission Spt., USAF, Pentagon ... Maj. Gen. Stephen D. Schmidt, from Cmdr., E-3A Component, NATO Airborne Early Warning Force, NATO, Geilenkirchen AB, Germany, to Cmdr., NATO Airborne Early Warning Force, NATO, Casteau, Belgium ... Brig. Gen. William W. Uhle Jr., from Asst. Vice Cmdr., 3rd AF, USAFE, Ramstein AB, Germany, to Dep. Dir., Strategic Planning & Policy, PACOM, Camp H. M. Smith, Hawaii.

**SENIOR EXECUTIVE SERVICE CHANGES:** Timothy K. Bridges, to Dir., Comm., Instl., & Mission Spt., AFMC, Wright-Patterson AFB, Ohio. ... Rebecca L. Davies, to Dir., AF Acq. Ctr. of Excellence, Office of the Asst. SECAF, Acq., Pentagon ... Robert M. Moore, to Dir., AF Real Property Agency, Office of the Asst. SECAF, Instl., Env., & Log., San Antonio. ■

three National Hypersonic Science Centers that support industry and university-level research to advance understanding of hypersonic flight. The Air Force Office of Science Research and NASA's Fundamental Aeronautics Program plan to set aside as much as \$30 million to fund the centers over five years, NASA said Sept. 22.

The centers will have three focus areas: hypersonic air-breathing propulsion, hypersonic materials and structures, and hypersonic laminar-turbulent transition. These are "the biggest hurdles to successful hypersonic flight," said NASA's lead hypersonic investigator, James Pittman. The first contract awards are anticipated next February.

## Obituaries

■ Robert M. DeHaven, 86, a World War II fighter ace who shot down 14 Japanese aircraft in the Pacific and went on to become a Hughes Aircraft executive, died July 10. The *Los Angeles Times* said he died at a hospital near his Encino, Calif., home after a long illness. DeHaven joined the Army Air Forces in 1942, serving with the 7th Fighter Squadron, "The Screamin' Demons" of the 49th Fighter Group stationed in New Guinea. He achieved 10 of his aerial victories in the cockpit of a P-40 and four in the seat of a P-38 after the unit converted to the Lightning in mid-1944. After the war, he became personal pilot to Howard Hughes and joined Hughes Aircraft as a test pilot. He rose to director of flight-test division before retiring in the 1980s.

■ Retired Col. Donald J. M. Blakeslee, a high-scoring ace of World War II, died Sept. 3 at age 90 in Miami, according to a notice in the Fort Lauderdale *Sun Sentinel*. According to the official Air Force record, Blakeslee scored 11.5 victories as a member of the Army Air Forces. He joined the Royal Canadian Air Force in 1940, arrived in Britain in May 1941, and, according to various accounts, scored three kills by 1942, at which time he transferred to an American Eagle Squadron with the Royal Air Force. He shot down two more enemy aircraft before the AAF incorporated his unit in September 1942. He flew Spitfire, P-47, and P-51 fighters. He took command of the 4th Fighter Group in January 1944. Blakeslee saw action in the F-84 during the Korean War, leading, for a time, the 27th Fighter-Escort Group. ■

## News Notes

■ Gen. Duncan J. McNabb assumed command of US Transportation Command Sept. 5 at Scott AFB, Ill. McNabb served at Scott as head of Air Mobility Command for two years before becoming vice chief of staff in September 2007.

■ The last flying Douglas C-133A Cargomaster transport aircraft touched down Aug. 30 at Travis AFB, Calif., where it will reside on static display as part of the future Jimmy Doolittle Air Museum. It had been flying for several years in Alaska as a commercial freighter.

■ Three members of a Minuteman III ICBM launch crew assigned to the 91st Missile Wing at Minot AFB, N.D., were decertified from missile operations for falling asleep July 12 in a crew rest area while in possession of classified

launch code devices, the Air Force announced Aug. 29.

■ Failure of a brake metering valve caused a B-1B bomber to roll forward into two rescue vehicles after engine shutdown March 7 at Andersen AFB, Guam, Air Combat Command said Sept. 3. Damage to the B-1B and the two vehicles totaled \$5.8 million.

■ Edmund Zelnio, a sensor researcher in the Air Force Research Laboratory, won the 53rd annual DOD Distinguished Civilian Service award, the Air Force said Sept. 9.

■ The Air Force on Aug. 27 released a revised mission statement, reading: "The mission of the United States Air Force is to fly, fight, and win ... in air, space, and cyberspace."

■ The last F-16 assigned to the Illinois ANG's 183rd Fighter Wing de-

parted Springfield's Abraham Lincoln Capital Airport on Sept. 23, ending the unit's 19-year history with the fighter.

■ The US in early September concluded its humanitarian relief mission to the Republic of Georgia after the flight of 62 air sorties by Air Force C-17s and C-130s and Navy C-9, C-130, and C-40 aircraft, plus sealift.

■ Mississippi officials on Sept. 16 announced USAF plans to bring to Key Field in Meridian a temporary mission qualification training detachment for up to seven RC-12 intelligence-surveillance-reconnaissance aircraft.

■ A federal jury on Sept. 3 convicted J. Reece Roth, a retired professor, of violating the Arms Export Control Act by transferring abroad sensitive data on plasma guidance for UAVs while working on two projects for the Air Force. ■



**TNE®: The G.H.O.S.T. behind the network.**

Photo courtesy of the Department of Defense

The **Trusted Network Environment (TNE)**, a member of the General Dynamics High Assurance Open Scalable Technologies (G.H.O.S.T.) suite, allows a single workstation connection to different security domains at the desktop. It also supports a multi-level information warehouse from a single datastore at the backend. This solution can easily scale to meet the end user's needs, saving both time and money. Plus, it keeps your secure system just that – secure.

## **G.H.O.S.T. = Information Assurance**

TNE incorporates:

- A proven, certified and accredited enterprise solution that has been deployed over ten years
- A Commercial Off-the-Shelf-based solution
- A Scalable Multi-Level Security suite
- Cross domain applications

For more information, call 866-400-0195 or 480-441-5448 or email [IASystems@gdc4s.com](mailto:IASystems@gdc4s.com) or visit [www.gdc4s.com/GHOST](http://www.gdc4s.com/GHOST)



**GENERAL DYNAMICS**  
C4 Systems

## Raptor Roulette

*"None of the funds in this act may be used to approve or license the sale of the F-22A advanced tactical fighter to any foreign government."*

Those 26 words, known to all as the "Obey amendment," for a decade have guided US export policy for the F-22 Raptor. Named for Rep. David R. Obey (D-Wis.), the amendment, in one version or another, has appeared in every Defense Department appropriations act since 1998.

The ban is not necessarily permanent. Obey himself said in 2006, "Times may have changed, but I don't know that we are yet at the point that would justify removing these limitations."

This is not an academic debate. Australia, Japan, and Israel have expressed interest in buying the Raptor, and the possible end of the fighter's production run will inevitably increase calls to keep the F-22 line open.

Asked about Australia's interest, Defense Secretary Robert M. Gates said DOD officials "in principle have no objection to it," but, until the statute is changed, "we are not able to sell it to any country."

Raptor exports would improve the security of allies, increase US interoperability with friendly air forces, foster long-term military relationships, protect American jobs, keep open a vital fifth generation fighter production line, and reduce the cost of F-22s procured by USAF itself.

However, the Raptor is not like other fighters; a major, asymmetric US advantage could be lost if global malefactors ever laid hands on F-22 engine, avionics, or stealth technologies. Obey cites this danger as justification for the ban. Critics say his real goal is to hasten the end of the F-22 program.

Then there is the case of Iran's F-14s, the sine qua non of fighter export problems. The US sold top-of-the-line Tomcats to Tehran shortly before the 1979 Islamic revolution toppled the Shah and, with him, the US-Iran military relationship.

Venezuela—a belligerent pro-Communist dictatorship under Hugo Chavez—still flies F-16s it purchased in 1982.

It is hard to imagine a similar fate befalling Japan, Israel, or Australia, but a government does not have to fall for technology to spread. Business deals based on offsets and co-production can send high technology directly to customers. Many US allies have been accused of surreptitiously re-exporting military technology.

By itself, the existence of advanced technology is not a definitive reason to block export of a particular weapon. One of the highest profile fighter sales in recent years was the sale to the United Arab Emirates of Block 60 F-16s, fighters far more advanced than any F-16 currently flown by the US Air Force.

Japan clearly can afford F-22s, and has long flown F-15s. Japan, however, prefers co-production arrangements that, almost by definition, bring about a transfer of technology and, if Tokyo succeeds in acquiring the F-22, Washington might find it politically difficult to deny the Raptor to South Korea and perhaps Taiwan.

Australia is planning to purchase both the F/A-18 Super Hornet and the F-35, but top government officials also express interest in the F-22. "I intend to pursue American politicians for access to the Raptor," Defense Minister Joel Fitzgibbon recently said. "I want it to be part of the mix."

Israel already flies US-built F-15 and F-16 fighters, and clearly needs to maintain advanced air capabilities. Israel's track record



USAF photo by CMSgt. Gary Emery

**A South Korean F-15K (top) and an Iranian F-14: the good and the bad of fighter exports.**

on tech transfers, however, has been less than sterling. Moreover, the US might have to "balance" Raptor sales to Jerusalem with comparable sales to Saudi Arabia or the UAE.

Simply put, any F-22 sale at all may throw open the door for many more. Still, policy-makers should focus on two facts:

First, the Iran and Venezuela mistakes happened some three decades ago and haven't been repeated.

Second, the actual sale is not the true end of the story.

One analyst, USAF Col. Matthew H. Molloy, in 2000 called attention to a "maintenance hedge," a degree of residual control that exists even after fighters are exported. This hedge, he said, "was so effective against Iran that their most capable air defense interceptor [the F-14] became a white elephant after US support was terminated." He went on, "When Venezuela bought [F-16s] without a viable maintenance or training program, the aircraft were reduced to symbolic functions only."

Sales of "off-the-shelf" F-22s are highly unlikely: Raptors would be modified prior to export to protect American secrets. Because of the strictures of the Obey amendment, though, the Air Force can't study what modifications are needed, how much they cost, or how long they would take.

"We're in a position where we take no action until authorized because there's a specific prohibition," said Lt. Gen. Mark D. Shackelford, the Air Force's top uniformed acquisition officer. USAF therefore takes no position on whether the F-22 should be exported.

Inability to perform preparatory studies is significant because "the F-22 was not built with foreign military sales in mind," Shackelford said. If legislative approval is granted, the Air Force would work with Lockheed Martin to determine the changes needed to make the F-22 exportable. Such design studies and modifications could cost a billion dollars.

F-22 exports should be decided on their merits—whether they would improve overall US national security. Time is running out to make that determination, however. Unless the new Administration decides to continue production, the last Raptor will be delivered at the end of 2011.

**More information:** <http://openrcs.com/document/RS22684>



# THE C-27J JOINT CARGO AIRCRAFT. ON TIME. ON TARGET.



The C-27J JCA is the most effective and responsive way to meet time-sensitive, mission-critical medium airlift cargo requirements for today's warfighters. The C-27J JCA Team is honored to deliver JCA #1. On Time. On Target.

[WWW.C-27J.COM](http://WWW.C-27J.COM) **C-27J JCA TEAM**



L-3 | Alenia North America | GMAS | Honeywell | Rolls-Royce

**AFA's Air & Space Conference featured blunt talk from the Air Force's new top leaders.**

# The Way It's Goin

*As seen through night-vision goggles, a B-2 stealth bomber prepares to refuel from a KC-135 tanker.*





AIR & SPACE  
CONFERENCE  
AND TECHNOLOGY EXPOSITION  
2 · 0 · 0 · 8

# g To Be

By John A. Tirpak, Executive Editor

**T**he Air Force has been making a powerful, though often unrecognized, contribution in today's wars, but recent missteps in acquisition and nuclear affairs have hurt the service's credibility and stature. Aggressive steps are being taken to earn back the confidence of the nation and the other services, top USAF officials declared in September.

In remarks at AFA's Air & Space Conference in Washington, D.C., the Secretary of the Air Force, Michael B. Donley, and USAF Chief of Staff, Gen. Norton A. Schwartz, pledged energetic moves to get the service's nuclear and acquisition enterprises on track.

The two announced a flurry of reviews and corrective actions meant to respond to recent problems. They also moved to erase any lingering doubts about the Air Force's commitment to unmanned systems by announcing broad changes aimed at giving the missions of the robot aircraft status equal to those of their manned counterparts.

Donley said the nation's defense strategy is shifting more toward irregular warfare, and this will require change in budget priorities. Schwartz pointed out that the Air Force's unique and broad capabilities offer dissuasion and deterrence beyond that offered by a nuclear arsenal alone.

With reporters, Schwartz acknowledged that restoring the Air Force's reputation for nuclear and acquisitions excellence won't happen swiftly. "It will take us ... a couple of successes to get back to straight and level," he observed.

Schwartz said that the June ouster of Michael W. Wynne and now retired Gen. T. Michael Moseley probably would not unduly hurt service morale nor obscure the Air Force's wartime successes.

He added that whenever the question is asked, "What are we doing to support the joint fight, ... there is never a shortage of impressive answers." Schwartz and Donley each quoted imposing statistics describing the vast number of USAF aircraft sorties flown to support ground forces with precision firepower, to bring supplies by air, to evacuate the wounded, and to provide intelligence-surveillance-reconnaissance capability to all branches of the military, while flying air defense missions at home.

They highlighted the role played by ground-based airmen, integrated with their Army and Marine Corps brethren,

DOD photo by USAF SSGT Jeremy M. Wilson

USAF photo by TSgt. Erik Gudmundson



*An MQ-9 Reaper UAV rolls out of its hangar at Joint Base Balad, Iraq. A Reaper on Aug. 16 dropped a 500-pound laser guided bomb, the aircraft's first use of weapons in Iraq.*

directing air support, and performing other tasks that directly aid in the fight.

Even so, said Schwartz, "we must be careful to listen to those who depend on us. The Air Force is taking a hard look at what we do, how we do it, and why. We must do this to restore and regain our stature as professionals and uncompromising joint warfighters."

The sudden removal of top Air Force leaders in June has left the service struggling with the issue of accountability in the past few months, Schwartz said.

"We are going through some rough air in the realm of nuclear deterrence right now, and rightly so," Schwartz observed. "Stated simply, overtime, we lost our way." He was referring to the lower status and funding that USAF's nuclear mission has received since the Cold War ended.

"We have to ... recommit ourselves to the exacting discipline of nuclear surety," Schwartz said.

(Within a week, Schwartz and Donley released the names of six Air Force general officers receiving formal reprimands in the mistaken transfer of nuclear fuses to Taiwan in 2006. See "Air Force World: Generals Disciplined Over Taiwan Incident," p. 18.)

Schwartz said he will create a mentoring program, composed of recognized experts in the nuclear mission—some of whom may be retired—to give those now entering the field "insight, wisdom, and best practices for these critical skill sets."

He promised that the Air Force will "take a hard look" at the recommendations of the various blue-ribbon panels and reviews of the nuclear enterprise and decide how large organizational portfolios should be, and "ask ... how many different missions can a commander give full attention?"

However, "the key message is this: The Air Force will reinvigorate the nuclear en-

terprise and restore America's confidence in our commitment to performing these vital missions." Schwartz added, "It's a 'back to basics' approach."

Donley, in his keynote speech, said that some steps are already being taken. The Nuclear Weapons Center's role in weapons sustainment will be expanded, and the nuclear enterprise will have "a more centralized inspection process," which will enhance standardization. This will improve the ability "to track unit compliance and effectiveness over time."

#### Fair and Open Competition

More work will have to be done on how to improve focus on the nuclear capabilities of the bomber force, Donley noted, especially since the bomber force is "relatively small" and will remain so for the near future.

Schwartz said he wants to focus greater attention on the Air Force's relationship with industry, which has suffered in the acrimonious legal and political dispute over the now-terminated KC-X aerial tanker competition, the CSAR-X heli-

copter project, and long-delayed satellite procurements.

Acquisition professionals on both sides work hard, he said, but "when the work is done, we have only modest success to show in terms of getting across the goal line." Even then, it doesn't seem certain that USAF has succeeded in getting "what we really need to provide" to combatant commanders, Schwartz observed.

"The unfortunate deterioration" of the Air Force's relationship with industry stems from "hyperbole, insensitivity, and a lack of proper communication," he asserted, noting that the failed KC-X contest suffered from excessive "emotion."

He promised that competitions in the future will be "fair and open" but aimed at getting "needed performance, not excessive performance." He later said the Air Force has a tendency to "chase" the next level of technology to the detriment of fielding sufficient gear in a timely fashion.

Schwartz noted, "We must collectively get back to the basics of military require-



*Airmen at Minot AFB, N.D., review nuclear cruise missile serial numbers on a B-52's rotary launcher. Gen. Norton Schwartz, Chief of Staff, says airmen must recommit themselves to "the exacting discipline of nuclear surety."*

USAF photo

ments driving procurement programs, including the long-term reliability of industrial partners. I see this as a matter of trust. ... The health of Department of Defense acquisition is at stake."

Donley said the "immediate concern" in USAF acquisition is to manage programs so they can "withstand the protests that seem to be becoming a more prevalent part of the procurement process."

He said all is not gloom: The Pentagon has had successes with the quick development and fielding of UAVs, mine-resistant vehicles, and the ROVER system, but "in most areas, I share the concern of many that recapitalization of our Air Force is not adequately funded and will take too long."

Gen. Bruce Carlson, head of Air Force Materiel Command, said in a panel discussion with other four-star generals that more personnel are needed to fully staff the acquisition workforce. Funding cuts over 15 years have "decimated" the career field, he said, adding, "We're seeing some of the ramifications."

Donley said he supported Defense Secretary Robert M. Gates' decision to hand the tanker program off to the incoming Administration, saying, "All of us need to reflect on what we have just been through," and that a "cooling off period" is needed. However, going forward, "we're going to need a new approach." He said USAF will work with the Government Accountability Office, which adjudicates protests, to see how the service can better document its decision-making and "withstand contractor protests." Two further "deeper looks" at Air Force acquisition are under way, Donley said, one internal and one by a federal agency.

Schwartz also took retired generals to task for muddying the public debate on vital programs, exhorting them to keep out of the process. Though they have a right to "make a living" working for the defense industry, retirees shouldn't tout their opinions as proceeding solely from their previous active service.

"What I think we need to avoid is to have Americans believe their military leadership can be bought," Schwartz said at the press conference.

Replacement of the KC-135 tanker can't be allowed to languish, Schwartz insisted, saying the nation should be alarmed at the prospect of a potential fleetwide grounding of the type.

"Our worldwide presence and operations would stop," he said flatly. "Without tankers, ... we're not global. We'd be a formidable self-defense force," unable

to project power or "hold the bad guys at risk in their own backyards."

The nation "cannot wait for the moment of crisis to wake up and realize the urgency of tanker recapitalization."

Gates chided the Air Force earlier this year for being slow to respond to field commander demands for the intelligence products provided by unmanned aerial vehicles. In response, the Air Force will put greater emphasis than ever before on UAVs and the people who operate them.

### A Dedicated Cadre for UAVs

Unmanned systems "have surpassed all expectations" of what they can deliver, in both ISR and strike, Schwartz said, and they must now take their rightful place alongside manned systems as one of the key capabilities offered by the Air Force.

He said the service is "dedicated to increasing equipment, training, and operational capacity [in UAVs] as quickly as possible to help win the fight," and will lead in developing more effective ways to use them.

The Air Force has beaten Quadrennial Defense Review requirements by two years in fielding 27 UAV combat air patrols over Iraq and Afghanistan, Donley said, and fielded more than 4,000

ROVER systems, which allow ground and air forces to see a common picture of the battlefield and simplify the direction of close air support.

Schwartz announced the creation of an unmanned aircraft systems career field. In the near-term, to produce more operators quickly, 100 new graduates from pilot training will go directly into UAVs, and this will continue "as long as the need exists." Until now, the Air Force has drawn on experienced pilots as UAV operators.

He wants to increase the number of UAV pilots from 450 today to 1,100 in five years.

"Ultimately, our intent is to form a dedicated cadre of professional [UAV] operators," who will in time be able to operate several UAVs at once. They will have a distinct training pipeline, which will be launched immediately, using active duty volunteers as well as "some from the retired ranks who possess appropriate skills."

The Air Force will also work with the Federal Aviation Administration on getting UAVs certified for flight in civil airspace, Schwartz said.

"There can be little doubt about the relevance and potential" of UAVs, he continued, and there will be "full institutional



A Minuteman III ICBM carrying three unarmed test warheads launches from its silo at Vandenberg AFB, Calif.

USAF photo by Joe Davilla



**US Air Force Special Operations Command combat controllers and pararescuemen scramble out of a UH-1 Huey during a training mission at Eglin AFB, Fla.**

integration of these capabilities” in the Air Force. The UAV will be embraced in Air Force culture, and he pledged that the career field will not be “a leper colony” or an agency of expedience.” The UAV operator will enjoy status equal to the pilot of manned aircraft, or an air battle manager, he pledged.

The ratio of unmanned to manned aircraft bought every year is rising, Donley noted. Right now, UAVs provide just two percent of the inventory, he said. In the coming years, the number procured each year will be “anywhere from 25 to 50 percent of new tails.”

He added that a lot of work must be done to institutionalize the UAV in the Air Force, to make it applicable to wars beyond Iraq and Afghanistan, and not create a “one-war wonder.”

Gates’ decision to halt the drawdown of the Air Force at 330,000 active duty personnel, rather than letting it reach its planned 316,000, will give the service “headspace to rebalance our skill sets” in shorthanded fields, Donley explained. Some of the billets retained will be applied to emerging missions, such as cyber operations. Others will be targeted at staffing up the nuclear mission and increasing the ranks of maintainers, who are struggling to keep aging airframes flying. The ISR field will claim some of the recovered slots, while other “stressed career fields” will absorb the rest, Donley said.

National strategy is changing, shifting more toward irregular warfare, Donley said. Since the end of the Cold War, national strategy has called for a force able to fight two major theater wars almost at once, and that strategy was “the primary driver” of budgets.

Now, there is “a realization that near-term operational requirements at the low end of the conflict spectrum seem not only more likely, but more persistent.” He said the upcoming QDR will hash out what this means for the Air Force, but he hinted that “the demand curve continues to shift toward joint enabling capabilities.”

### Midterms

Donley said he has ordered a series of “midterm studies” to explore how the Air Force will fit in with a changing national strategy. On the list of topics are irregular warfare, cyber-war, UAV roadmaps, and space management and organization.

While there’s been “considerable progress” in IW, with evolved mission planning, a new IW Center of Excellence in 2006, and a new service doctrine last year, Donley said “to be truly effective in today’s strategic context, the Air Force must continue to elevate its progress to the strategic level.” He later told reporters that he meant USAF must figure out how best to position itself for IW, “not just in a continuing tactical sense, but at the ... higher doctrinal level—what is the role of airpower in this construct?” That’s a subject of hot debate, and “I’d like to see a broader strategic consensus in the Air Force about our role at the lower end of the conflict spectrum,” Donley said.

There is a broad review of USAF space under way. Donley said the review will have three facets: First will be “critical issues” about how USAF is organized for space today, and what’s not working. Second will be a discussion of what USAF already does well in space, and third will be about how USAF can strengthen its space management and

organization. Donley said these topics are ripe for QDR discussion and the transition.

The Air Force has had to manage replacement of war losses, flying hours funding, wartime demands for ISR platforms, etc., through supplemental budgets over the last seven years, but the use of supplementals can’t go on forever, Donley said. He said USAF has begun a “planning effort to merge a portion of our enduring wartime costs into our baseline budget.”

He later told reporters that UAVs are “a good example” of a supplemental-funded capability that has to move to the baseline budget, but it won’t happen before the Fiscal 2011 budget cycle. They are “a big chunk of the capability [funded by supplementals] that needs to move back into the institutional Air Force.”

A package of options on issues such as continued production of the F-22 and C-17 is being developed for the next Administration. Donley guessed the incoming leadership will evaluate the programs in a broader context. “The F-22/F-35 relationship is a good example,” he said. With regard to the F-22, Donley said his whole focus is to “make sure we have some kind of a [production] bridge in place,” so the new leadership can make a choice.

Schwartz said that he and Donley “are going to pin down what we think [is] the right number” of F-22s and C-17s to buy. However, he believes there’s “a legitimate argument” to keep both aircraft in production until other, roughly comparable aircraft are also in production and there can be a “handoff,” Schwartz said.

He also said “it’s pretty clear to me” that there is a need for an aircraft like the C-27J. “The battlefield has changed. It’s not main base to main base anymore,” but resupply has become more “distributed” directly to field operating locations. He said that the Air Force’s stated need for 24 C-27s is “appropriate.”

Donley offered no ambiguity about the need for the next bomber. He told reporters that the 2018 bomber is a “vital program for the country, in my view, and we will certainly make a fact-based but strong argument for [it] ... as we move into the spring and summer of [2009].”

Although USAF faces a lot of studies and issues requiring quick decisions, Schwartz said he and Donley are not seeking to remake the Air Force. “We basically ... are talking about emphasis [and] focus,” said the Chief of Staff. “This is not major surgery.” ■



**UNLIKE ANYTHING. READY FOR EVERYTHING.**

**Bell**  
Helicopter  
A Textron Company

The CV-22 revolutionizes the art of insertion and extraction. It supplies an unmatched combination of speed, range, altitude and payload in a vertical lift aircraft. Giving you the flexibility to deliver forces anywhere. Even the middle of nowhere.

 **BOEING**

© 2008 Bell Helicopter Textron Inc. Boeing, all rights reserved.





USAF photo by Todd Berenger



# The Big Squeeze



CV-22 Ospreys, such as these, have reached Air Force Special Operations Command.

**Job 1 is to extract more power out of today's small force, commanders told AFA's Air & Space Conference attendees.**

By Marc V. Schanz, Associate Editor

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-

**T**he 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 aircraft and special operations to intelligence-surveil-

lance-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

tional 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 altim-

eters, 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 USAF'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 tasks 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.

USAF photo by TSgt. Erik Gudmundson



*The sun beats down on a C-17 (background) at Joint Base Balad, Iraq.*

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-



Photo by Rick Linneros

*F-22s such as these, exercising over the East Coast, are being deployed to Guam and assigned to Alaska and Hawaii.*





LOGISTICS

MAINTENANCE

MODIFICATIONS

UPGRADES

TRAINING

SERVICES

## READINESS FOR TODAY AND TOMORROW.

Today, as demands on the warfighter increase, Boeing is delivering innovative customer solutions to ensure total readiness. For airlifters, fighters, rotorcraft, tankers, weapons, bombers, satellites and network systems. Boeing brings together an unmatched breadth of expertise for total life-cycle sustainment. It's a commitment of unequivocal support for the warfighter, now and in the future.

 **BOEING**

Brad Sterett  
Tactical Aircraft  
Product Support

USAF photo by SSGT Samuel Rogers



*In an exercise off the Djibouti coast, USAF pararescuemen jump from an HC-130. The challenges in Africa will be significant because of its size and gaps in infrastructure.*

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-recognition, 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. ■



Attention enemy subs:  
You can't hide,  
so go ahead and run.

At Spirit AeroSystems, we have been chosen by Boeing to help build the P-8A Poseidon – an extraordinary new military aircraft that will find enemy submarines and, if necessary, destroy them. Efficient new processes we've put in place enable us to save taxpayers money while reducing turnaround time. We're proud to be on Boeing's roster of blue-ribbon partners. We're prouder still to contribute to the well-being of our homeland. Visit us at [spiritaero.com](http://spiritaero.com).

YOUR VISION TAKES FLIGHT.





Six of USAF's top enlisted chiefs air out the problems and prospects of today's force.

# On the Minds of the Troops

By Peter Grier

Photo by Guy Acosta



L-r: CMSgt. Stephen Sullens, CMSAF Rodney McKinley, CMSgt. Kenneth McQuiston, CMSgt. Richard Small, and CMSgt. Arvin Davis answer questions from airmen at AFA's Air & Space Conference in September. Not pictured: CMSgt. Richard Smith.

**I**n the recent past, enlisted USAF airmen who deployed to Iraq or Afghanistan often lacked required training before taking part in dangerous combat missions. That has changed, said CMSAF Rodney J. McKinley, speaking at AFA's fifth annual Air & Space Conference in Washington, D.C.

"We are very confident that we're not going to send any airmen in harm's way without the training required to make them successful and safe wherever they're going," McKinley said at a forum on enlisted issues.

The 15th Chief Master Sergeant of the Air Force, USAF's top enlisted man said such needs are being fulfilled with a wide range of efforts, ranging from a multiservice program at Camp

Bullis in San Antonio, and training at McGuire AFB, N.J., down to programs at individual wings throughout the nation.

## Target: Physical Training

"We are filling all our requirements now by training our airmen before they go," he said.

Partly for that reason, the Air Force has decided not to proceed with a Common Battlefield Airman Training program. Just getting the proposed CBAT up and running would have taken \$275 million and 1,000 trained personnel. It would also have duplicated new training efforts already established throughout the military, according to McKinley.

McKinley, along with some of

the service's command chief master sergeants, fielded questions from airmen on Sept. 16. With McKinley were CMSgt. Stephen C. Sullens (Air Combat Command), CMSgt. Richard A. Smith (Air National Guard), CMSgt. Kenneth L. McQuiston (US Transportation Command), CMSgt. Richard T. Small (Air Force Space Command), and CMSgt. Arvin K. Davis (Air Force Academy).

Sullens defended the decision to kill the long-planned CBAT program, asking, "Do we need to spend a quarter of a billion dollars in the immediate future to improve three percent or four percent? ... I would probably have to tell you, 'No.' ... We have other more pressing needs right now."

McQuiston added that, of all the services TRANSCOM deals with, the Air Force has been the most responsive in preparing personnel for the battlefield. Every group that goes out "is much better prepared, and they learn a great deal from everyone that returns," he said.

The often-questioned Air Force fitness program helps with deployments as well. "If you are wounded in combat, and you are physically fit, you have a better chance of survival. It also has a big impact on Tricare and the amount of money we spend to keep the force healthy," said McKinley.

But doing the physical training test once a year may not be enough. Perhaps commanders should be able to hold them at random. "I'd expect that to be coming before too long, ... with more teeth put into it," said McKinley.

The service should also fix the "horrible" PT uniform it has right now,



**Airmen take cover during combat skills training at Ft. Bragg, N.C. Topics covered include convoy operations, weapons, and lifesaving skills training.**

in his opinion: "I'm mainly talking about the shorts. We all know that," said McKinley, to laughter from the crowd.

Unmanned aerial vehicles were another hot issue the chiefs addressed. Specifically, why can't enlisted personnel become UAV pilots?

That is far from a settled point. "This is where our Air Force is going," noted McKinley. "We are going to be using more and more of these, because they are just fantastic weapons."

One manning option may be "group piloting," according to ACC's Sullens. In the future, the person who puts a UAV up in an intelligence-surveillance-reconnaissance orbit may be enlisted, while a rated officer "kind of waits in the wings, hovering over a group of seven or eight UAV pilots," so someone can step in to fire weapons.

This January will mark the first time in 40 years that there has been a Presidential transition during a war. For the average airman, this transition may have little impact.

"I try to tell the folks at the academy, along with the cadets, don't worry about that," said Air Force Academy command chief Davis. It will take time for top-level policy changes to trickle down to rank-and-file airmen.

### No Weekend Warriors Here

But for the Air National Guard, the election may instigate quicker changes. Many governors will change, bringing



**SSgt. Kevin Bliem, a crew chief with the 455th Expeditionary Aircraft Maintenance Squadron, marshals an A-10 attack fighter at Bagram AB, Afghanistan.**

in new adjutants general to oversee state operations.

The Air Guard "is made up of 54 different air forces that work for 54 different adjutants general and governors—so some of us will have the double whammy," said ANG chief Smith.

Years of overseas deployments have made the old phrase "weekend warrior" obsolete. Guardsmen "sell insurance, they work at a factory, they're patrolmen, and getting off from work for an

AEF deployment for four months is difficult," Smith said.

Support for families of deployed airmen is a big issue in part because many Guard personnel live far from military bases. Unlike active duty airmen, they often have no professional family readiness personnel close by.

Yet "we've been deploying along with the Air Force since the [1991] Gulf War, and through all this our retention has remained strong," at an annualized rate of about 92 percent, said Smith.

Sullens added that the biggest challenge with the Total Force right now is "the ability to truly use a chief as a chief in any duty, or a master sergeant as a master sergeant in any duty." Sometimes legal or regulatory restrictions keep Total Force airmen from being interchangeable.

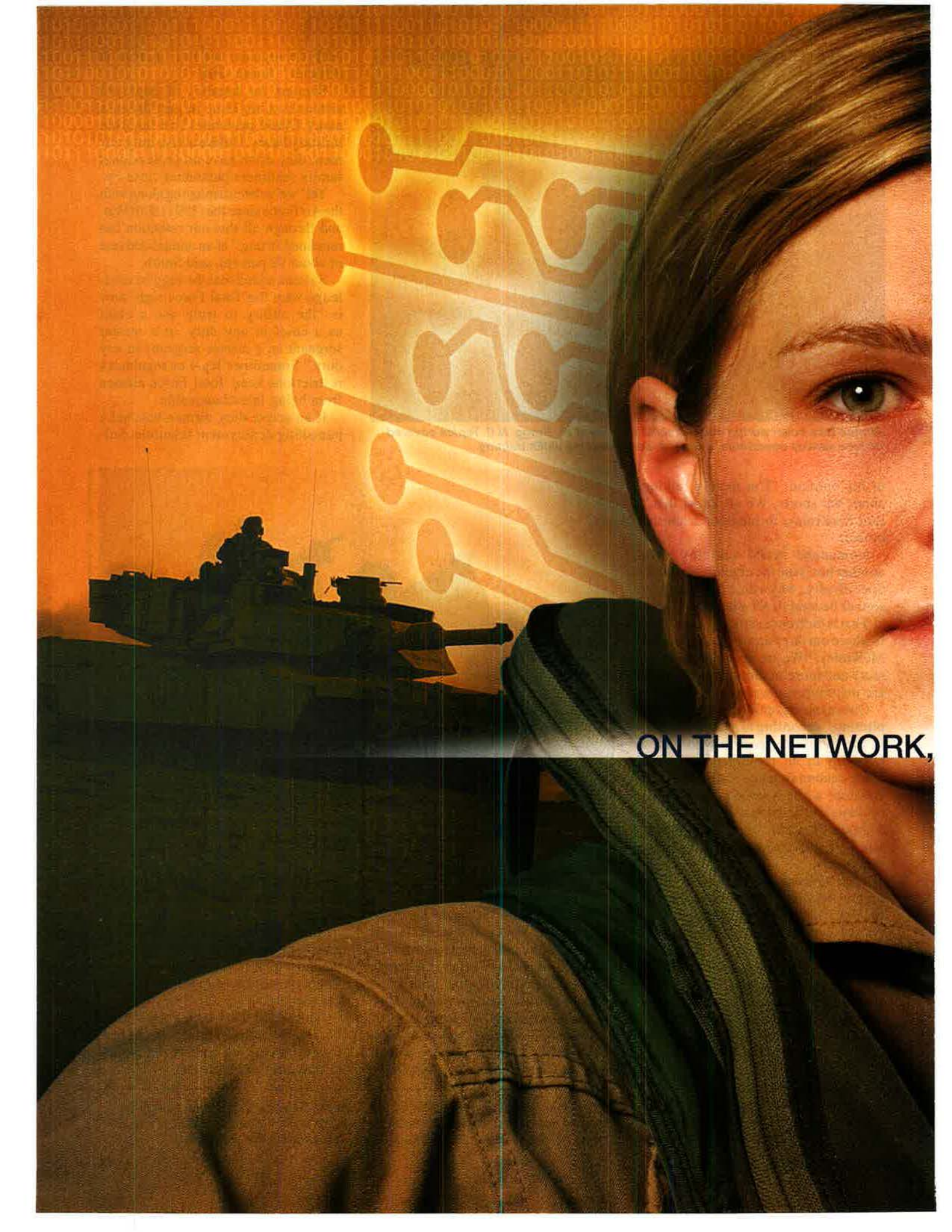
If an active duty airman has had a punishing deployment schedule, Sul-

lens asked, why can't that position be turned over to the Guard or Reserve temporarily?

Similarly, when the time comes to pick the next ACC command chief, if the most qualified candidate happens to be a reservist, shouldn't he or she get the job?

"Instead of truly taking the big Air Force approach and doing what is best for the service, we bend to that policy or that law," said Sullens. ■

*Peter Grier, a Washington editor for the Christian Science Monitor, is a longtime defense correspondent and a contributing editor to Air Force Magazine. His most recent article, "The Nuclear Wake-Up Call," appeared in the June issue.*



ON THE NETWORK,



NO WARFIGHTER STANDS ALONE.

A fully networked military connects all warfighters, so each is stronger and safer. By seamlessly integrating joint assets in real time, all forces have the right information at the right time for faster, more decisive action. Boeing's leadership in network-enabled operations and logistics for combat systems, aircraft, satellite and communication systems is helping bring the benefits of this transformation to our forces today.

To ensure no warfighter ever stands alone.

 **BOEING**

Billy Mitchell saw its great potential in 1935, and now the rest of the world has finally caught on.

# Strategic Alaska

By Marc V. Schanz, Associate Editor



USAF photo by SrA. Garrett Hothan

**M**ore than ever before, the Air Force is paying close attention to its force structure in Alaska. Indeed, a major rush of events in the High North has propelled the 49th state up to the top ranks of service thinking.

A resurgent Russia has ramped up its long-range bomber flights nearby. A changing Arctic climate has uncorked a flurry of activity in the region as once inaccessible resources now seem ready for exploitation. Alaska's strategic Arctic location is viewed as useful for missile defense, air defense, and force deployments to locations ranging from Europe to East Asia and beyond. And the military training space available to USAF there is huge and varied.

For these and other reasons, the Air Force has started beefing up its forces in the state. A visitor there sees that the service has been sending its newest and most advanced equipment for Alaskan service, including brand-new F-22 fighters and C-17 transports.

"From an airman's perspective, [it's] probably the most strategic location," said Lt. Gen. Dana T. Atkins, commander of Alaskan Command and Alaskan NORAD region. The state's geographic location "makes it hugely of strategic import to the United States and really important in a global context."

From Alaskan bases, the Air Force can gain quick access both to the Pacific and European Theaters. Transiting across the Arctic, forces could arrive in Europe faster than if flying from the East Coast of the US, Atkins pointed out. This responsive location has helped to push Alaska to the forefront of USAF's investment queue.

The reinvigoration of Russian bomber patrols over Arctic waters in August 2007 was an opening push of that country's increasingly assertive power projection efforts. NORAD's US and Canadian fighters have repeatedly intercepted Russian flights skirting Alaskan airspace.

New F-22s at Elmendorf Air Force Base took center stage last fall when

*C-17s are surrounded by low clouds on the runway at Elmendorf AFB, Alaska. At right, a map illustrates Alaska's strategic location.*

Raptors stepped in to fill the role of the temporarily grounded F-15 fleet to intercept Russian Tu-95 Bear bombers.

## The Air Sovereignty Mission

Many of the Raptor pilots leveraged their F-15 backgrounds, and the scrambles led to the development of a new training plan for the air sovereignty mission, said Lt. Col. Orlando Sanchez, director of operations for the 525th Fighter Squadron at Elmendorf. While F-22s are no longer on alert, they may perform intercepts in the future.

The commander of Russia's Air Force, Col. Gen. Alexander Zelin, said in April the country will increase its strategic patrols to as many as 30 a month.

"It's been interesting in the last few years," said Gen. Carrol H. Chandler,



chief of Pacific Air Forces, in September. "When I was ... Alaskan Command commander, we had one intercept in the time that I was there. The Russians have continued to put emphasis on long-range aviation; they've continued to put emphasis on presence in the Arctic. ... Those numbers have picked

continental shelves, according to senior Russian military officials. Geologists believe major oil and gas deposits could potentially become available as the polar ice cap slowly recedes with warming temperatures—a fact that is the focus of increasing attention to the nations claiming Arctic waters.

ing capability. "But you know we're constantly testing each others' intel ability, we're constantly testing each others' reaction ability, and that's just part of it."

A big issue in the mix is the filing of standard international flight plans by the Russians, Atkins said. If an aircraft ap-



Staff illustration by Zaur Eylanbekov

up considerably over the last three to four years."

Chandler suspects that a "competition for resources" will continue, and perhaps intensify, in the Arctic.

Last year, Russia publicized a submarine trip to the bottom of the seabed at the North Pole—where the crew deposited a titanium Russian flag, symbolically marking territory.

The Canadians derided the expedition as a "stunt," with Prime Minister Stephen Harper making a trip to Canada's Arctic region to unveil several major military investments, and following with a new defense strategy, outlining new capabilities in the North.

Russia's focus on Arctic operations is a part of the country's push to assert its own interests over Siberia's extended continental shelf—the largest and least explored so far of the world's

"I don't see that abating anytime in the near future, and the Russians certainly have the resources at this point" to continue to push into the region, said Chandler.

### A Resurgent Russia

While Russia's Arctic bellicosity has been on the rise, commanders in the region say the moves have to be kept in perspective.

"Is it Cold War games all over again? I don't think so," said Brig. Gen. Thomas L. Tinsley, who led the 3rd Wing at Elmendorf until his death in July. The moves are not hollow, however, and represent Russia's "desire to bring their Air Forces back up to the speed they were."

Tinsley noted that Russia has doubled the fuel it allots to its strategic aviation forces in order to bring back lost train-

proaches a nation's sovereign boundary with a flight plan, things would be a lot less complicated, he said. The problem with the Russian long-range bomber missions is that "what we've witnessed ... is these flights occur without these flight plans."

This is one of the goals of improved mil-to-mil relations with the Russian Far East Military District commanders, Atkins added. "It seems too simple to say that, but if they would just adhere to the protocols that we have all accepted, then I think a lot of the perceived tension will evaporate."

The US Coast Guard cooperates closely with the Russians just across the Bering Strait on issues ranging from fishing to limiting piracy, Atkins said. This month a survival search and rescue exercise was to be conducted, and this past summer US forces participated in



**An F-15C from the 60th Fighter Squadron takes off from Elmendorf Air Force Base on a Red Flag-Alaska mission.**

a homeland defense exercise where a simulated hijacking took place—with command and control elements in both Alaska and Russia simulating the tracking and handing off of the aircraft.

Both Atkins and Gen. Victor E. Renuart Jr. at NORAD have been working to invite some of the Russian Far East Military District commanders to visit Alaska to continue building between the two militaries professional relationships—which haven't always been as close as the Coast Guard's.

"I'm the new guy. I'm going to try to keep building that professional rapport," Atkins quipped. "It would be great to get a rapport like the [Coast Guard's]. ... I'd like to achieve the same kind of professional tie."

In addition to renewed tensions with Russia, increased air and maritime traffic is a growing concern at Alaskan Command. Climate conditions have revealed a host of new Arctic transnational issues.

Navy Capt. Tom Meadows, ALCOM's director of plans and policy, has worked on the command's climate change studies in the Arctic since early 2007, when then-commander Air Force Lt. Gen. Douglas M. Fraser put together a symposium to talk about the changing climate in the region and its strategic implications. It "was a bit of an eye opener for some drastic changes that were taking place," Meadows recalled.

The driver of all the renewed activity is the size of the polar ice cap during the summer months, which, according to Meadows, reached a record low point in December 2007. This year "is

likely to be another record low point," Meadows said.

Russia, Canada, Norway, the US, and Denmark (through Greenland) are in the process of researching the polar seabed to support their respective claims for extended continental shelves. The disputes, which are being addressed in several transnational forums, have long-standing implications for access to resources ranging from petroleum to natural gas and minerals that are assessed to be under the Arctic Cap.

### A Tyranny of Distance

The Arctic may become a busier maritime route. With less ice-cap restrictions, it becomes beneficial to move global commerce across the north rather than through traditional routes.

"Who's going to protect those airways and waterways?" Tinsley asked. "Those domains are very important to us."

The Air Force's Elmendorf and Eielson Air Force Bases have seen wholesale changes over the past year.

Until 2007, Elmendorf hosted a pair of F-15C squadrons, an F-15E squadron, and C-130s for tactical mobility.

Up at Eielson, the 354th Fighter Wing featured a squadron of F-16s and an A-10 squadron.

Most of these aircraft are now gone, replaced by state-of-the-art successors or equipment tailored to unique missions.

Atkins said the Pacific Theater's tyranny of distance makes it no accident that the only C-17 squadrons permanently stationed outside the continental



**An Elmendorf-based F-22 intercepts a Russian Tu-95MS Bear bomber near Alaska.**



**An F-22 Raptor arrives at Eielson Air Force Base.**

US are in Hawaii and Alaska. Today, eight C-17s call Elmendorf home—part of Elmendorf's mission transition to take advantage of the base's strategic operating location.

Previously, C-17s flying from the continental US would have to lay over in Alaska or Hawaii before proceeding west, to allow for crew swaps or rest time.

Due to Alaska's location, a C-17 is now a day closer to most destinations across the Pacific—and only eight hours from Germany over the North Pole.

In May, US Pacific Command used two C-17s, one flying from Elmendorf, to speed over 175,000 pounds of relief supplies to China in response to the devastating Sichuan earthquake.

"We can reach any critical point in the world in less than 10 hours," Lt. Col. Dave Almand, commander of Elmendorf's 517th Airlift Squadron, said last year.

In addition to a new strategic lift capability, Alaska is one of two locations outside the continental US that will host the Air Force's top-of-the-line combat aircraft—the F-22A Raptor. Elmendorf's 90th Fighter Squadron gained a squadron of Raptors in 2007—the first squadron outside the continental US. The 525th FS reactivated, and also received Raptors. (One F-15C squadron, the 19th FS, remains at Elmendorf.)

At Eielson, the Air Force stood up a new aggressor squadron for Red Flag-Alaska. The base brought in Block 30 F-16s for the 18th Aggressor Squadron.

"The ability for our pilots to leverage that capability is tied to the right airspace and range environments," Atkins said of the Raptor. "And Alaska affords that."

### **A Training Ideal**

By the end of 2009, about 40 Raptors will be stationed at Elmendorf, said Sanchez, the 525th FS DO. Other than the extreme climate, Alaska is prime Raptor training space.

In Alaska, Sanchez's pilots can train with an E-3 AWACS squadron—which is just across the ramp—as well as F-15Cs, he said. Coupled with the new aggressors at Eielson and the tanker support of the Alaska Air National Guard's 168th Air Refueling Wing, the Raptor is well-supported to train for a variety of missions over Alaska's sprawling military airspaces—the Pacific Alaskan Range Complex.

"It's going to grow into another premier fighter training ground," Sanchez, a former F-15C weapons officer and USAF Weapons School instructor, said of Alaska.

"Most bases, to get that kind of training, they would have to deploy to a Red Flag or Nellis. ... We have a pretty good training setup, with Northern Edge and Red Flag-Alaska."

Alaska's capabilities are of great importance in a wide range of contingencies and war plans across the Pacific. "We're not in [war plans] as a maybe. We're in as a must," said Tinsley.

The 3rd Wing's F-22 Raptors deployed to Guam for the first time this July.

While much of Alaska's new capabilities have bedded down, the near future holds more change.

A big push will be to get appropriate hangar space for arriving aircraft. Elmendorf currently features a seven-bay hangar, used by Raptor maintainers, which formerly housed C-130s and F-4s. A new facility is due by 2011, Sanchez said.

Currently, the F-22s and F-15Cs share ramp space, but the milcon program is well under way to expand facilities. "Eventually we will have hangared space for all the aircraft," Sanchez said. "We'd prefer to have [the crew chiefs] inside, but we ... have space for major maintenance" right now.

The base is in the middle of significant infrastructure upgrades for the new fighters. A Low Observable Component Repair Facility—a climate-controlled repair structure for stealth materials—was completed this past summer, and a new operations and maintenance squadron building is anticipated by 2011.

On the mobility side, upgrades and construction on the books include a new dual-bay hangar, new operations buildings, and improvements to assault landing zones on the PARC.

In July, the 517th Airlift Squadron performed the first dirt assault landing with a C-17 in Alaska on a strip near Ft. Greely.

Alaska's range space, what commanders call some of the best in the world, will also be the focus of increased investment. The large investment being made in improving the capabilities of the PARC—upward of \$57 million over the next several fiscal years—will directly benefit Raptor training and the Red Flag-Alaska exercise. From bombing ranges to simulated integrated air defense systems, Raptor pilots will be getting a more robust experience up north as the ranges mature.

The Air National Guard's 176th Wing at Kulis Air National Guard Base will also move its HC-130s, C-130s, and HH-60s to Elmendorf—and a raft of modifications to older structures and new construction will follow the BRAC-directed move.

For all of the shifts and changes, this much is clear: The cumulative power of airpower in the state is great. It is only fitting for a place that Brig. Gen. Billy Mitchell, way back in 1935, called "the most strategic place in the world." ■

Sixty years after it was forged, the famous Key West agreement is in for a basic reconsideration.

# A New Look at Roles and Missions

By John T. Correll



James V. Forrestal.

**R**oles and missions of the armed forces were not a problem until the 20th century. Before that, the Army fought on land and the Navy fought at sea and their actions seldom overlapped.

By World War II, that was no longer the case as Army and Navy forces fought together under joint theater command. However, it was chiefly military aviation, operating over both land and sea, that knocked down the old dividing lines of service responsibility.

Before the war ended, the Army Air Forces had come close to achieving the status of a third service, with membership on the Joint Chiefs of Staff. The aircraft carrier had replaced the battleship as the principal ship of the Navy. Fearing a possible loss of naval aviation, the Navy opposed the National Security Act of 1947, which unified the armed forces and created the Air Force as a separate military service.

In March 1948, Secretary of Defense James V. Forrestal gathered the service Chiefs at Key West, Fla., in an attempt to settle the contentious issue of roles and missions. That conference, along with a follow-up meeting five months later in Newport, R.I., established the service roles and missions essentially as they are today.

Now, 60 years later, Rep. Ike Skelton (D-Mo.), chairman of the House Armed Services Committee, believes the time has come to revisit the Key West agreement. At Skelton's instigation, the 2008 defense authorization bill directed the Pentagon to conduct a major review of roles and missions.

The DOD findings will be forwarded to Congress along with the budget submission in February as the basis for a fundamental review by Congress of defense functions.

"This review will carefully examine whether the Department of Defense is truly developing the core competencies and capabilities to perform the missions assigned to it, and whether these capabilities are being developed in the most joint and efficient way by the military services," Skelton said. "This question has not been seriously examined within the Pentagon for decades, with no truly significant changes made since the Key West agreement in 1948."

"Roles" and "missions" are often used interchangeably, but, to be precise about it, roles are the broad and enduring purposes of each service, as established in law by Congress. Since 1956, the legal basis for roles has been Title 10 of the US Code. From that starting point, the President and Secretary of Defense assign primary and collateral missions—the specific tasks that amplify those statutory responsibilities.

In a sense, Skelton is right, in that the basic roles and missions established at



Dwight D. Eisenhower.

Key West and Newport are still in effect. However, there have been numerous adjustments and additions—some of them major—over the years, and the current review merely is the latest in a series of proposals for change.

As was the case at Key West, all of these reviews have focused mainly on questions about airpower.

The early years of the postwar period saw the nation's air arm make peace with the Army, at least for a while. In 1943, the Army recognized airpower on a par with land power and said neither was an auxiliary of the other. Army leaders, including Gen. George C. Marshall and Gen. Dwight D. Eisenhower, supported the creation of the Air Force as a separate military service.

The means by which this was to be achieved was unification of the armed forces into a single organization with three co-equal branches, Army, Navy, and Air Force. The Navy was opposed. It had its

own air force—Naval Aviation—and its own ground force—the Marine Corps—and it wanted to keep them.

Navy leaders feared that naval aviation might be lost in unification, as had been the case in Britain in 1918 when London merged the Royal Naval Air Service into the Royal Air Force. The apprehension was not completely baseless. Gen. Carl A. Spaatz, the postwar Chief of the Army Air Forces, had expressed interest in naval aviation joining the new Air Force, although he soon dropped the idea.

There was similar concern that the Army might try to take over the Marine Corps. Then and later, much was said about

The National Security Act assigned general roles to the services: land combat to the Army, naval combat to the Navy, and sustained offensive and defensive air combat and operations to the Air Force. The same day, Truman issued Executive Order 9877 adding specificity and detail on roles and missions. The Navy was responsible for control of the sea and the air above it and the Air Force was responsible for combat in the air, including strategic bombardment, airlift, and tactical support of ground and naval forces. Again the Navy objected. If missions were defined in terms of medium of operation (land, sea, air), that was a threat to naval aviation.



*Sen. Barry Goldwater and Gen. David C. Jones.*

the special Marine Corps capability for amphibious warfare. In fact, the biggest amphibious operation of World War II, the D-Day landings in Normandy, had been conducted by the Army.

The Navy also recognized the primacy that nuclear weapons would have in the future, and it wanted to control some or all of the strategic power projection mission.

Congressional support for the Navy was strong. To secure unification, proponents of a separate Air Force made concessions regarding the control of naval airpower and the status of the Marine Corps.

On July 26, 1947, President Truman signed the National Security Act, creating the National Military Establishment with a Secretary of Defense, Joint Chiefs of Staff, and co-equal Air Force, Army, and Navy departments. (In 1949, the NME became the Department of Defense.) The first Secretary of Defense was Forrestal, who had been Secretary of the Navy.

Ironicly, it was Forrestal, who had opposed unification when he was Secretary of the Navy, who was charged with restoring peace between the services and making the National Military Establishment work. In aid of that, he met with the Joint Chiefs on March 11 to 14 in Key West.

### **The Key West Agreement**

The Chiefs drafted a new roles and missions statement, a paper titled, "Functions of the Armed Forces and the Joint Chiefs of Staff." In turn, Truman revoked Executive Order 9877 and Forrestal issued the "functions paper" in its stead April 21. The paper, which became known as "the Key West agreement," reaffirmed primary service responsibilities and assigned secondary or "collateral" missions.

The Navy agreed not to pursue its own strategic air force. However, the paper confirmed its authority to use airpower forces to attack specific targets, including inland targets, related to its

primary missions. The Air Force agreed that carrier aviation would be left with the Navy. Everyone further agreed the Marine Corps would not become "a second land Army."

Then came a supplement to the agreement, crafted at the follow-on meeting at Newport in August. The supplement redefined the term "primary mission" in a way that would fail to exclude the Navy from a role in strategic air operations. Despite the Navy's promise not to create a strategic air force, it charged ahead with a program to develop a "supercarrier" big enough and strong enough to handle nuclear bombers and challenge the Air Force B-36 for the strategic power projection mission. It also planned to field, by 1950, two aircraft, the AJ-1 Savage and P2V-3C Neptune, to carry nuclear bombs.

In April 1949, Secretary of Defense Louis A. Johnson, who succeeded Forrestal, canceled the supercarrier, setting off the so-called "Revolt of the Admirals." The Navy organized a special unit, Op-23, that conducted an all-out, unrestrained attack on the B-36. The low point of this campaign was the appearance of an "anonymous" document alleging fraud and misconduct in the B-36 program. It was soon discovered that it had been written by an assistant to the undersecretary of the Navy, aided by the assistant head of Op-23.

The Navy overplayed its hand in the attack and Gen. Omar N. Bradley, Chairman of the Joint Chiefs of Staff, declared that the real issue was refusal by the Navy "in spirit as well as deed" to accept unification. Air Force arguments and the Navy's loss of credibility carried the day. The B-36 went ahead and the supercarrier did not.

Marine Corps backers also pushed against the agreed roles and missions limits. In August 1950, Rep. Gordon L. McDonough (R-Calif.) wrote to President Truman proposing Marine representation on Joint Chiefs of Staff. Truman replied: "For your information, the Marine Corps is the Navy's police force, and as long as I am President that is what it will remain. They have a propaganda machine that is almost equal to Stalin's."

McDonough made the letter public and Truman was forced to publicly "regret the unfortunate choice of language." The Marine Corps has since attained JCS membership. Although it is still part of the Navy Department, it has effectively become a fourth service and a second land army, but the grief



Sen. Sam Nunn, Democrat of Georgia.

heaped on Truman is well-remembered, and subsequent roles and missions reviews have treated the Marine Corps with great caution.

During the first decade under unification, DOD handled several mission realignments internally. The Air Force and Navy in 1948 merged their air transport services to form the Military Air Transport Service. The Army retained its light transports until transferring them to Air Force during the Vietnam War. A more complicated issue was whether guided missiles were artillery (Army), pilotless aircraft (Air Force), or something altogether different. The key point was resolved by several decisions in the 1950s that gave the ICBM mission to the Air Force. USAF thus had two-thirds of the strategic triad, with Navy submarine-launched ballistics missiles being the other third.

After his 1953 inauguration as President, Eisenhower became the driving force behind the next major change in centralization of authority. In a message to Congress, he declared “separate ground, sea, and air warfare is gone forever” and called for realignment of roles and missions.

The Air Force and the Army supported Eisenhower. The Navy and the Marine Corps opposed him. Spaatz, offering his opinion from retirement, proposed “complete integration” of the armed forces into a single service, but Eisenhower’s program did not go that far. As a popular President who had been a five-star general, Eisenhower had unbeatable credibility and Congress gave him most of what he asked for.

Under the Defense Reorganization Act of 1958, the services retained their

legal, Title 10 roles. However, they lost their Presidentially assigned operational missions. Those were transferred to unified and specified commands on a geographical and functional basis.

Thereafter, the sole purpose of each armed service would be to organize, train, and equip forces for the combatant commands.

A new chain of command bypassed the services altogether. It ran from the President to the Secretary of Defense and through the Joint Chiefs of Staff to the unified and specified commands. The warmaking powers of the United States, it was said, were vested in the President, Secretary, and eight warlords—the heads of seven unified commands and one specified command, Strategic Air Command.

Over the years, the actual number of combatant commands has varied. Among the more important additions and deletions since 1958 have been these:

- US Central Command, formed in 1983. CENTCOM, which grew out of the Rapid Deployment Joint Task Force, would take the lead in the Persian Gulf War in 1991 and later actions in Iraq and Afghanistan.

- US Space Command, formed in 1985. No single service was assigned the primary role for space. Space Command folded in 2002, with many of its missions transferred elsewhere.

- US Special Operations Command, formed in 1987. It was brought into being at the express direction of Congress and over opposition of the Joint Chiefs. SOCOM is unique among the unified commands in that its authority was statutorily stated—and thus protected—in Title 10.

- US Transportation Command, formed in 1987. It integrated the forces and operations of Air Force airlift and tankers, Navy sealift, and Army ground transport.

- Strategic Air Command, disestablished in 1992. A foundational Air Force entity, SAC was the most prominent of the specified commands. Its nuclear and nuclear-related missions, by and large, moved to...

- US Strategic Command, formed in 1992. Strategic Command assumed not only many of SAC’s duties but also absorbed many of those discharged by US Space Command until its demise in 2002.

In the opinions of many, the services continued to dominate the unified and specified commands, and the joint organization was ineffective in making

decisions. There were various calls for reform, but the critical push came from Air Force Gen. David C. Jones in his last days as Chairman of the Joint Chiefs of Staff. In testimony to the House Armed Services Committee in 1982, Jones said that commanders of the combatant commands and the Chairman of the Joint Chiefs did not have the authority that they needed.

Among those who heard the testimony was Rep. Ike Skelton, then a junior member of the committee. He was impressed that Jones took a position opposed by the Department of Defense and most of his colleagues. Skelton recalled the moment in launching his program for review of roles and missions in 2008.

The Goldwater-Nichols Department of Defense Reorganization Act of 1986 gave theater commanders more control over the forces of all services, transferred some authority from the services to joint structures, and strengthened the position of the Chairman of the Joint Chiefs of Staff. The legislation was forced by Congress on a reluctant Pentagon.

“The Goldwater-Nichols Act clarified the chain of command from the President to the Secretary of Defense to the unified commanders,” said Department of Defense historians Roger R. Trask and Alfred Goldberg. “The commanders in chief of the unified commands came directly under the Secretary—the Chairman and the JCS were not in the command chain.”

### The Era of “Jointness”

Goldwater-Nichols ushered in the era of “jointness.” It also required that every three years, the Chairman of the Joint Chiefs of Staff submit a full report on roles and missions. In the first such report in 1989, Adm. William J. Crowe Jr. said that roles and missions were fundamentally sound as written.

When the Cold War ended, Sen. Sam Nunn (D-Ga.), chairman of the Senate Armed Services Committee, led a charge to revisit and revise service roles and missions. In a speech to the Senate in July 1992, Nunn called for “a no-holds-barred, everything-on-the-table” review. He said the Key West agreement had left the job unfinished and that it was time to correct the “redundancy and duplication” that existed among the armed forces.

Nunn targeted 10 areas, the first and foremost of which was tactical airpower. How should the job be divided between land-based air and carrier air? Nunn said it was not a question of putting either the Navy or the Air Force completely out of



Rep. Ike Skelton, Democrat of Missouri.

the power projection business. It was a matter of force mix. With each of the four services operating tactical aircraft, he said “we must find ways to save billions of dollars with streamlining and eliminating the duplication in this area.”

The big issue (as framed by a *New York Times* editorial in November 1992) was “Who Needs Four Air Forces?” Nunn also pointed out—although it never became a matter for the headlines—that both the Army and the Marine Corps had light infantry divisions.

The Pentagon’s response was in a lengthy report in February 1993 by Gen. Colin L. Powell, Chairman of the Joint Chiefs of Staff.

“Today, the fact that all [services] have airplanes and helicopters causes some to argue that America has ‘Four Air Forces,’ implying we have three more than we need,” Powell said. “In fact, America has only one air force, the United States Air Force, whose role is prompt and sustained offensive and defensive air operations. The other services have aviation arms essential to their specific roles and functions but which also work jointly to project America’s airpower.”

Powell stepped gingerly around the issue of two land armies: “The capabilities of the contingency and expeditionary forces in the Army and Marine Corps provide decision-makers with valuable alternatives and should be retained. The possibility of further decreases in the Army’s light infantry will be studied as force structure is reduced.”

Powell’s report did not sit well with lawmakers who had hoped to save billions with consolidations and realignments. In 1994, Congress instructed the Secretary of Defense to appoint a commission of

seven private citizens to study roles and missions. Lest there be any doubt about the focus, the Congressional Research Service produced a study, “Four US ‘Air Forces’: Overlap and Alternatives.”

### Conventional Wisdom Is Wrong

The commission got plenty of advice. In October 1994, two weeks before he retired, Gen. Merrill A. McPeak, the ever-amazing Air Force Chief of Staff, proposed that the Air Force close air support mission be transferred to the Army. As soon as McPeak was gone, the Air Force disavowed the idea and nothing came of it.

The commission’s report in May 1995 surprised its sponsors. It said that “popular perceptions of large-scale duplication among the services are wrong,” repeated Powell’s conclusion that “America has only one Air Force” but that “the other services have aviation arms essential to their specific roles and functions.” It advised that radical restructuring of operational functions was not needed.

That was the last high-visibility review of roles and missions until now.

In recent years, the Quadrennial Defense Review has become the main venue for scrutiny of DOD and the services. Language in Title 10 directs the JCS Chairman to assess roles and missions, consider “unnecessary duplication of effort among the armed forces,” and provide that assessment to the Secretary of Defense in time for inclusion in a QDR.

The three QDRs to date—conducted in 1997, 2001, and 2005—have said nothing of consequence about roles and missions. That does not mean no issues or questions have arisen. For example, the Air Force has repeatedly sought primary responsibility for space and for unmanned aerial vehicles, and has repeatedly been rebuffed. Responsibilities are scattered and unclear on cyber warfare and on intelligence-surveillance-reconnaissance. The armed forces are increasingly involved in peacekeeping and non-military roles that look much like “nation building,” which had previously been disclaimed as a proper mission for the military.

The current inquiry began in July 2007 when Skelton’s House Armed Services Committee created a panel on Roles and Missions, chaired by Rep. Jim Cooper (D-Tenn.). Skelton concurrently moved

to put a requirement for a major Pentagon roles and missions review in the defense authorization bill for 2008. The bill calls for another such report to Congress in 2011 with reports every four years thereafter.

DOD’s internal review, launched in May, has been conducted by seven roles and missions teams, which looked at duplication of capabilities and efforts among the services as well as six other specific issues: unmanned aerial systems, intratheater airlift, cyber operations, irregular warfare, internal department organization and responsibilities, and interagency roles and missions capabilities. The Pentagon hopes to finish its study in late November, work it with Administration and Presidential transition team members in December, and turn it in to Congress before the FY 2010 budget is submitted in February.

Meanwhile, Cooper’s panel in January published a report, consisting largely of a collection of perspectives and articles and columns reprinted from newspapers and magazines, but there are indications of the panel’s view. Even though “the military has been left carrying the burden of the failures of our national security institutions,” the panel said, “our military has resisted change just as they have past efforts at reform. The Air Force and Navy are re-emphasizing more traditional threats and downplaying the unexpected threats we face today. The other two services, the Army and Marines, try to tinker at the margins of their mission even as they suffer most from the current overstretch.”

Cooper hit a similar theme in an article in *Armed Forces Journal* in March 2008. Despite a budget of \$600 billion a year, he said, the Pentagon “still produces a military that is overstretched. At least part of the problem is a system focused on creating the ideal military establishment to fight large-scale conventional wars such as World War II instead of the smaller, complex conflicts we face today.”

These thoughts resemble the emphasis on current operations and irregular warfare by Secretary of Defense Robert M. Gates and the chastisement of the services, mainly the Air Force, for “next-war-itis,” the Gates term for excessive concern with potential threats and conventional conflicts of the future. No doubt more will be heard about that in the coming round on roles and missions. ■

---

*John T. Correll was editor in chief of Air Force Magazine for 18 years and is now a contributing editor. His most recent article, “Daylight Precision Bombing,” appeared in the October issue.*

Meet Edgar Gorrell, author of what may be the “earliest, clearest, and least known statement” of US strategic bombing concepts.

# Airpower Genesis

By Rebecca Grant

**H**e was a young Army officer, keen on flying. Within five years of exiting West Point, he had learned to pilot an aircraft, chased Mexican bandits south of the border, and acquired an MIT degree in aeronautical engineering. More importantly, this airman was the first US military man to produce a comprehensive and detailed plan for strategic bombing.

Who was it? Billy Mitchell? Benny Foulois? Hap Arnold? No, Edgar Staley Gorrell.

Few today have even heard of Gorrell, much less know anything about his foundational role in development of long-range airpower. Yet it was his straightforward exposition of potential targets, mission profiles, and objectives that gave a conceptual form to most aspects of World War II's vast Combined Bomber Offensive.

And he did it 25 years earlier—during World War I.

Gorrell's signature piece was a US Air Service paper entitled “Strategical Bombardment,” which he penned in France in November 1917. It was an action plan for what Gorrell called “a new policy of attacking the enemy” with sustained, strategic bombardment, day and night. This was the first official, stand-alone exposition of strategic bombardment an airman ever produced.

The “earliest, clearest, and least known statement of the American conception of the employment of airpower” was the way it was described, years later, by Laurence S. Kuter, a senior World War II planner who retired as a general in 1962.

“Nap” Gorrell was born in Baltimore in 1891 and graduated from West Point in 1912. He served two years in

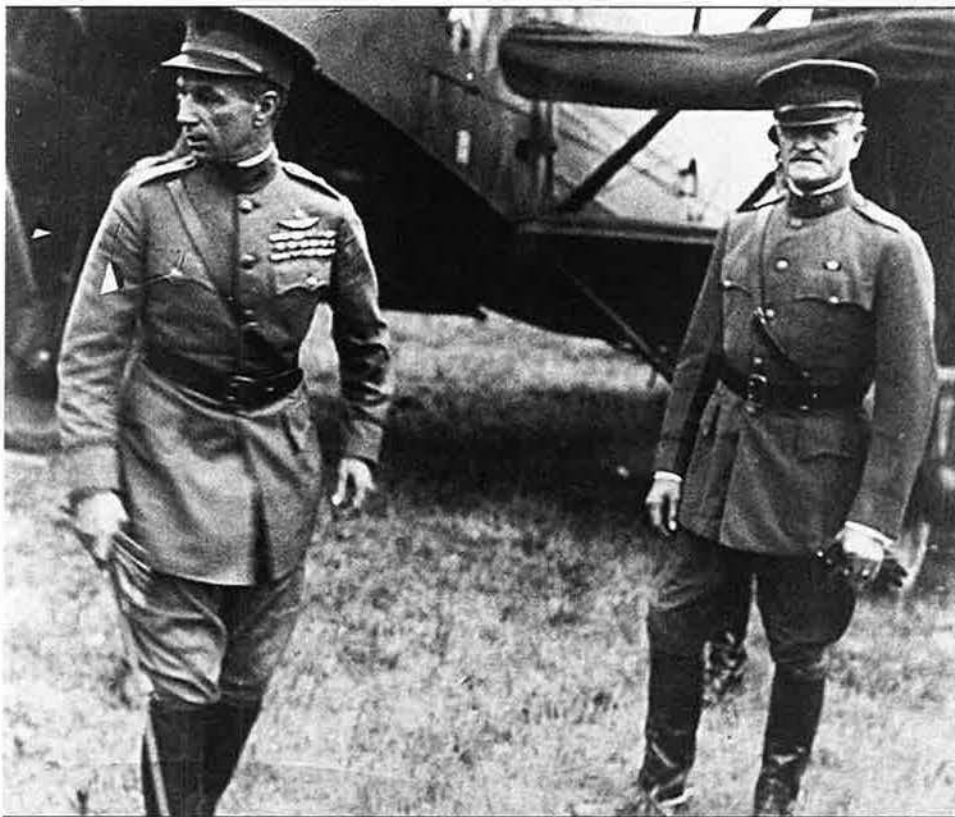


*Lt. Herbert Dargue and Lt. Edgar Gorrell, photographed in Mexico during the Punitive Expedition in 1916.*

Alaska, then entered pilot training at North Island, in San Diego, in 1915. It was the next year, though, that he experienced the gritty side of airpower, up close and personal, in Mexico.

He was part of a small group of airmen selected for the first Army air operation, the so-called Punitive Expedition into Mexico. It was mounted after Mexican revolutionary Francisco





Bettman-Corbis photo

**Mitchell (l) and Pershing in France during World War I. Mitchell and Pershing built on Gorrell's targeting plans and a desire for American-only units.**

“Pancho” Villa and 500 gunmen on March 9, 1916 crossed the border and attacked the US Army’s 13th Cavalry Regiment based in Columbus, N.M. Ten US soldiers and eight civilians were killed.

President Woodrow Wilson responded on March 15 by ordering Brig. Gen. John J. “Black Jack” Pershing to lead an expedition to track down Villa. The Mexican Expedition began the next day, March 16, 1916. Because Villa had scattered his forces, Pershing brought along some of the aviation section’s new airplanes to provide the needed reconnaissance. Deployment of the 1st Aero Squadron thus became the first expeditionary operation by America’s airmen.

And a modest beginning it was. On March 13, 1916, 11 junior officers and 82 enlisted men departed Ft. Sam Houston, Tex., for Columbus. They set out with a force of eight Curtiss JN-3 two-place biplanes, 10 trucks, and one automobile. Reconnaissance flights got under way on March 16. Within days, the number of operational aircraft was whittled down by accidents and weather, while operations constantly ran afoul of mountains and stone-throwing Mexican mobs.

Gorrell and his squadron mates persevered through rain, hail, and forced

landings. The venture gave Gorrell a firsthand look at operations and the limits of equipment and organization. They stuck it out until Aug. 15, 1916. For Gorrell and his fellow aviators, it was a good introduction to the vastly bigger challenge to be faced when the US entered the World War in April 1917.

### **Bombing Day and Night**

Within a year of leaving the heat and dust of Mexico, Gorrell was in Paris, serving as chief of the Technical Section, Air Service, American Expeditionary Forces. It was a frenetic period as the American aviators struggled to work out a plan for expansion and for procuring Allied aircraft for Air Service use.

Strategic bombing was a fact of life by 1917. British Handley Page bombers began action in France that spring, and a solo Handley Page bombed the Ottoman Empire capital of Constantinople from a base in Greece.

On the German side, the Gotha bomber was replacing the Zeppelins, which had been bombing London since 1915 but were now vulnerable to pursuit aircraft. The Gothas made their presence felt, bombing London in broad daylight on June 13, 1917. They followed it up with a bigger raid by 22 Gothas on July

7, 1917 and commenced night bombing of London that August.

By fall, the new Gotha GV was in the air. It had a range of more than 500 miles and carried two to three machine guns and bombs. At 40 feet long, with a 77-foot wingspan and a height of 14 feet, the Gotha GV was an aerial monster.

What would the fledgling American air service do in this changing environment? Among other things, it contributed mightily to the conceptualization of long-range attack. Richard J. Overy, a noted historian of airpower, wrote that “if any have claim as the originator of American strategic bombardment,” it would have to be either Maj. Raynal C. Bolling, a corporate lawyer-National Guardsman who headed the aeronautical mission to Europe, or Gorrell.

Bolling in August 1917 backed more bomber production on the grounds that night bombing on a sufficiently great scale might “determine the whole outcome of military operations.” Gorrell had his own ideas.

Gorrell and Bolling needed to deliver detailed recommendations. This led Gorrell methodically to lay out a clear strategic, operational, and tactical rationale for building up a bomber force.

What worried Gorrell most were reports that Germany was ramping up its bomber production with a view to raiding not only cities, but Allied lines when offensives resumed in spring 1918. At least 25 German airplane factories had extended output. Even portions of the Zeppelin Works were preparing to build bombers, especially the four-engine Zeppelin Staaken, which could operate for eight hours and could carry more than 5,000 pounds of bombs.

Gorrell felt both sides had come to the same conclusion. It was, “that to affect the armies in the fields, it is necessary to affect the manufacturing output of the countries.”

He anticipated that, by spring 1918, the Allies would be “visited by bomb-dropping airplanes, both by day and by night, and will be confronted with the enemy’s superiority in the air.” To Gorrell, the best answer was to strike first. He called for a capability to “wreck Germany’s manufacturing centers, but wreck them more completely than she will wreck ours next year.”

Gorrell’s plan covered every aspect of strategic bombing in a logical pro-



*Gorrell (back row, center) served on the Baker Board, a committee formed in 1934 to examine Army Air Corps problems. Other luminaries included Maj. Gen. Benjamin Foulois (seated, far left), Jimmy Doolittle (standing, second from left), and Maj. Gen. Hugh Drum, Army deputy chief of staff (seated, third from right).*

gression, from overall objectives and target lists to a formula for rail transport of ordnance. Gorrell did not discount tactical bombing of troops by the faster, shorter-range day bombers. He wrote that the value of tactical bombing in support of Army operations was self-evident, and he expected it to increase.

However, “strategical” bombing (as the language of the day often phrased it) was going to take more thought, preparation, and training.

Gorrell was not writing for some historical record but for immediate action. He presented a detailed plan that started with the logic of attacking industry. Artillery shells and airplane manufacturing were top priorities. Gorrell wrote that, in Stuttgart, the Mercedes engine factory (which supplied engines for the Gotha) was near the Bosch magneto factory. If bombers could “inflict damage on one or both of these plants, the output of German airplanes will cease in proportion to the damage done.”

Based on British and American analysis, Gorrell concluded—as others would later do—that there were “a few certain indispensable targets without which Germany cannot carry on the war.” He divided them as being within four geographical groups: Dusseldorf, Cologne, Mannheim, and the Saar Valley. The Saar Valley targets would be especially good when weather blocked attacks on the Rhine Valley cities. Gorrell then provided a meticulous analysis of why bombers

should be based in the Toul region to achieve the shortest go-and-return distances to the targets.

Most of all, Gorrell saw an opening for an American bombing campaign. Though the targets and plans he proposed were similar to those of Britain, there was room for America to make its mark—an important theme for most of the top Army officers who arrived with Pershing.

#### **Success at St. Mihiel**

America had come to France to make its military debut with the continental powers, and they hungered for a way to show the Europeans a thing or two. Such drive animated Pershing’s plans for attacks with American-only units, and would propel Brig. Gen. Billy Mitchell to success at St. Mihiel in the fall of 1918.

About the only thing missing from Gorrell’s plan was a sustained discussion of bomber survivability. Attribute that, perhaps, to the inexperience with combat and to the technologies of the day. It was not until summer 1918 that American fliers began to experience firsthand the vulnerability of slower bombers to faster fighters and the growing lethality of anti-aircraft fire.

Aside from that, the Gorrell plan was striking for how its logic carved the enduring features of a bombing campaign. Questions raised by Gorrell would surface again and again for commanders, aviators, and analysts alike.

At the time, however, Gorrell’s visionary plan had nowhere to go. It was eclipsed in part by the February 1918 debut of the first fully trained combat Air Service units on the Western Front. Gorrell himself moved on quickly to other work for the Air Service.

The problem was not lack of vision but lack of production. American airmen in France had few US-built airplanes and could do no more than wait for the production of their Spads, Breguets, and de Havillands. In fact, when Mitchell led the air campaign at St. Mihiel in September 1918, Britain gave him temporary use of their bombers for the preliminary night strategic attacks.

Gorrell’s work at headquarters earned him promotion to colonel in October 1918, at the age of 27. His contributions continued—Gorrell was determined not to let America enter another war unprepared to fight in the air.

Step 1 was to determine solid requirements for the Air Service based on hard analysis of the extensive operations in 1918, plus lessons from the Allies.

Gorrell had seen a “hot wash” history by the First Army Air Service—the organization that had been directly under Mitchell’s command at St. Mihiel. It was Gorrell’s idea to get the new Air Service Chief, Gen. Mason M. Patrick, to sign off on a bigger project. Done right, it would capture tactical lessons and lay the basis for future planning and appropriations as airpower expanded within the US Army. The AEF was writing a full war history under the direction of Pershing’s operations chief, Brig. Gen. Fox Conner. A top-notch report from the Air Service was indicated.

During the first weeks of 1919, Gorrell’s researchers gathered reams of information ranging from firsthand pilot reports to a full-fledged bombing survey. Rumor had it that aircrews took to filling out a standard form stating “no significant lessons learned” in order to get Gorrell’s team off their backs.

But the result was impressive both in scope and in the way it foreshadowed so many of the challenges of World War II.

The final product ran to more than 280 volumes and required two volumes just to contain its index. Copious though it was, the plain-speaking and detailed work—and many photographs—brought to life the everyday operations and the longer-term vision of the Air Service.

Not surprisingly, "Gorrell's History" became the lead source for the Air Service's final report and for subsequent World War I Air Service histories.

Gorrell was not yet 30 years old when he wrote the history, and he had high hopes for it. He anticipated it would "be made available to the air officers under the American flag everywhere so they could take it home to their quarters and study it, perhaps pipe in mouth and carpet-slipped feet on the desk, learning now of one event and later of another, and calmly and gradually profiting by the lessons learned and the mistakes made by those who had pioneered."

Nor had he forgotten strategic bombing. Gorrell got the Air Intelligence Section to produce a strategic bombing assessment using a combination of site photographs, interviews, and estimations of financial impact on bombed factories, towns, and railroads. Gorrell did not just survey US efforts. He had the team take into account all results of Allied bombing to which they had access.

### A Massive Undertaking

The First Army G-2 rustled up the manpower for the survey "to secure as complete and reliable information as possible upon which the Air Service may base its future bombing plans."

The result was a compendium of material damage recorded in 66 of 140 bombed cities that the team was able to visit. The survey counted casualties, took pictures, and tabulated damage costs in German marks, giving at least a sense of how sustained bombing might alter warfare in the future.

The report also looked into the costs of protection against air raids, such as paying for air defense guns and dedicated pursuit airplanes.

The final result was astonishing in detail. It concluded the overall night bombing effort inflicted a monetary cost on Germany that more than justified what the Allies spent for its bombing forces during the war.

The survey also delivered some trenchant criticisms. Specifically, it was better to bomb "some definite objective of military value in [a] town," not just to bomb the town itself. The major exception was when a pattern of bombs over cities such as Cologne, Frankfurt, Bonn, or Wiesbaden shuttered factories.

Gorrell's survey warned against taking the theory of morale effects too far. "This investigation has decidedly shown that the enemy's morale was not sufficiently affected to handicap the



Colonel Gorrell receives a Companion of the Distinguished Service Order decoration from British General David Henderson in France in April 1919.

enemy's fighting forces in the field," it said. The occasional practice of bombing a target just once or twice was also found "erroneous."

What is most striking today is how the challenges documented in Gorrell's history outlined the major doctrinal elements of air warfare.

The suggestions for future campaigns outlined directly the big issues that would emerge 20 years later in World War II.

Targets, in order, should be war industries, railroad lines, and enemy troops in the field. Above all, the report recommended: "The operations of a bombardment aviation must be an integral part of the mission of the entire air force and consequently of the ground forces and the army as a whole."

Gorrell resigned his commission in 1920 and led a glamorous business career. He was a leader in the automotive and aviation industries and lectured on manufacturing, civil aeronautics, and the lack of war preparedness. One of his lectures in these years was pointedly titled: "What! No Airplanes?"

Several times, he testified before Congress.

Still in his 40s, Gorrell lived to see the German Air Force rearm and Japan launch its opening conquests in Asia. He thought the US was just about as unprepared as it had been for World War I. In 1940, Gorrell regretfully noted that his history was languishing "in the vaults of the War Department in Washington, some of the pages torn, some yellowing."

Gorrell died in 1945, but not before his work found its audience. Young aviators had access to his strategic bombing plan, the Air Service report, and the bombing survey in the library of the Air Corps Tactical School.

The influence of Gorrell's work is seen in Air War Planning Document 1, prepared by airmen of the Air Corps Tactical School. In 1941, AWPDP-1 boldly called for more than 100,000 aircraft and two million airmen to defeat the Axis powers. The lessons of strategy, tactics, training, basing, and production had been overlooked for more than a decade, but an inspired new generation relearned them just in time for World War II. ■

---

*Rebecca Grant is a senior fellow of the Lexington Institute and president of IRIS Independent Research. She has written extensively on airpower and serves as director, Mitchell Institute, for AFA. Her most recent article for Air Force Magazine was "The Stuka Terror," which appeared in the October issue.*

The Luftwaffe chief must take the blame for the momentous Me 262 screwup.

# Goering's Big Bungle

By Walter J. Boyne

**T**he fabled Messerschmitt Me 262, the world's first operational jet fighter, has had more "might have been" stories attached to it than any other aircraft.

Some suggest that the jet aircraft would have thwarted the D-Day invasion and led to vastly different outcomes for the war, if only German leaders had given it sufficiently high priority and accelerated its introduction. Most of these scenarios blame Adolf Hitler for destroying the aircraft's war-winning possibilities by insisting that it be used as a bomber rather than as a fighter.

This theory is shortsighted. Hitler can't be blamed for ruining the Me 262. The real culprit would be none other than Hermann W. Goering, chief of the



AP photo

Photo from Eddie Creek collection



**Photo at top left: Adolf Hitler confers with high Nazi officials, including Reichsmarschall Hermann Goering (far right). Below left: An Me 262 lands at Lechfeld, Germany.**

Luftwaffe and the Reich's second-highest ranking official.

Exactly how much damage Hitler did to the Me 262 remains a source of controversy. Me 262 production was delayed "because Hitler intervened in 1944 with an ill-timed order to convert the Me 262 to a fighter-bomber," stated the *US Strategic Bombing Survey*. "Virtually every manufacturer, production official, and air force general interrogated by the survey, including Goering himself, claimed to have been appalled by this order."

## Project 1065

Germany's Project 1065, which led eventually to the Me 262, was to design an aircraft for test engines promised for 1939. The new aircraft, while a research vehicle, was intended to be developed into a Luftwaffe fighter. The initial design reflected the general lack of knowledge about both the jet engine's potential power and its potential difficulties. Project 1065 was a simple, low-wing monoplane with the characteristic straight Messerschmitt single-spar wing and a conventional "tail-dragger" landing gear. The engines were mounted in the wing roots.

As the engine grew in size and weight, the original Project 1065 was redesigned as a much larger aircraft, with engines moved from the wing roots to nacelles beneath the wing. Having learned much from the ill-fated placement of the Bf 109 landing gear, the Me 262's gear retracted inward, being stored in an enlarged forward lower fuselage area that gave the fighter its shark-like appearance.

The increase in weight of the BMW engine prompted the Messerschmitt engineers to employ a fix long used by aeronautical engineers—sweeping the wing back to adjust the center of gravity. The design eventually had about 18 degrees of sweep-back, enough to give it a modern appearance and help somewhat in reducing drag at high speeds.

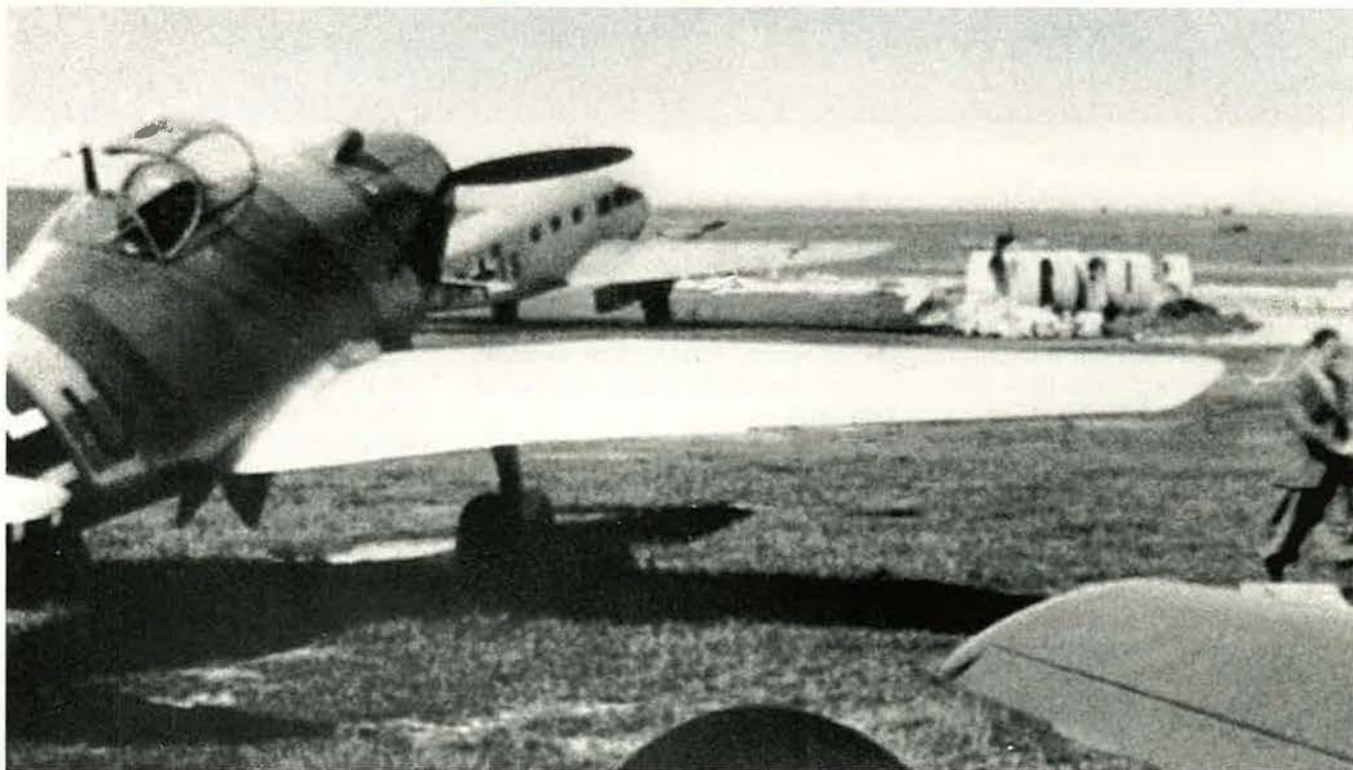


Photo from Eddie Creek collection

Yet when Hitler made these recommendations, so often cited as detrimental to the Me 262, the aircraft's fate was already decided.

"By May 1945, 1,400 jets had been produced," the USSBS continued. "Had these planes been available six months earlier with good quality pilots, though they might not have altered the course of the war, they would have sharply increased the losses of the attacking forces."

Surprisingly, the Fuehrer's net effect on the fate of the twin-jet fighter may have been more helpful than harm-

ful. Hitler's intense and often quite knowledgeable interest in armament production spurred weapons development. His selection of Albert Speer as Reich minister for armaments and munitions did much to overcome the inherent faults in the chaotic German management systems.

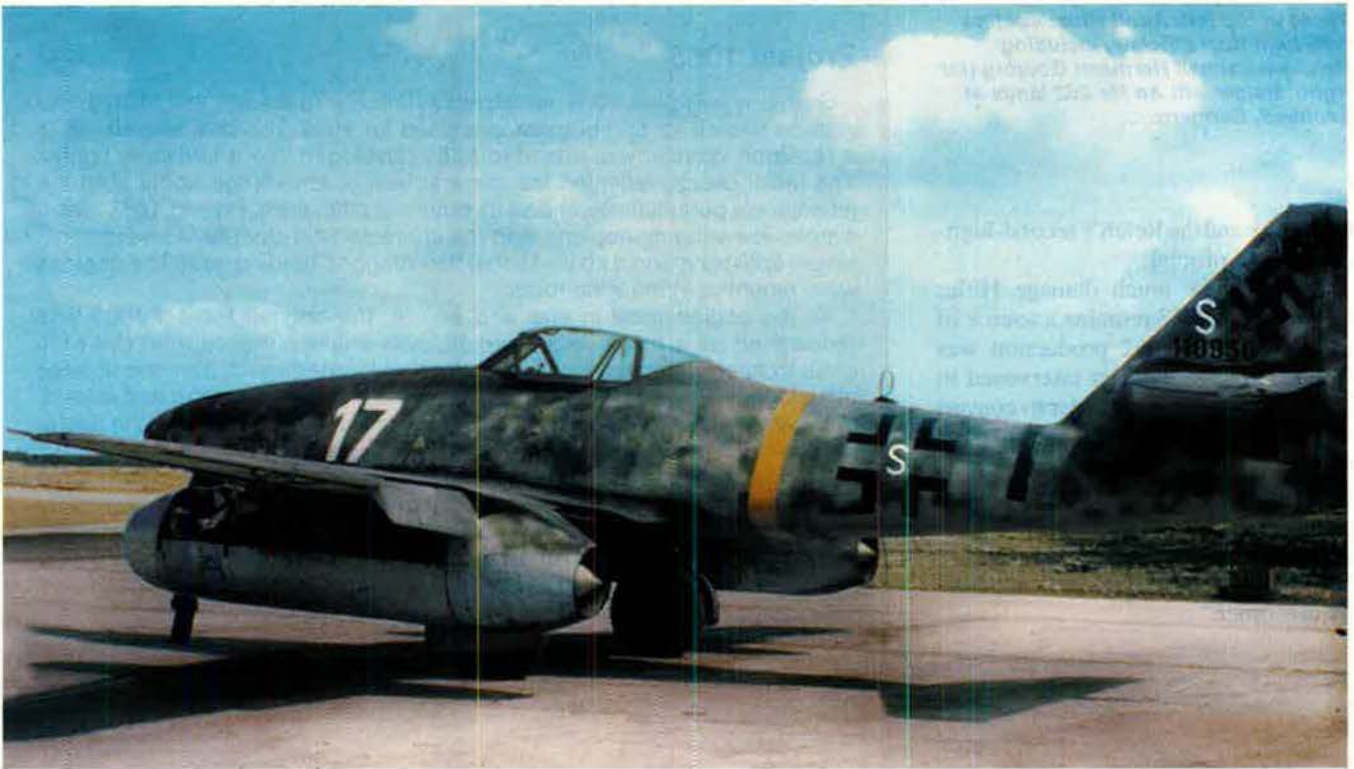
### Fatal Optimism

The real causes of the Me 262's lack of effect came instead from the conflicting personalities and decisions that characterized the Nazi regime—and one baleful decision made by Goering.

**The first Me 262V1 prototype, seen here, was outfitted with a Junkers Jumo 12-cylinder liquid-cooled piston engine and propeller.**

In February 1940, long before France was defeated, Goering decreed that the development of jet engines be stopped—because the war would be over by 1941.

His words had immediate effect—only about 35 engineers were left on the jet engine program. The first large order for jet engines (80) did not occur until 1942.



If Goering or one of his subordinates had possessed the vision to give research in metallurgy and jet engines the very highest priority in February 1940, it is possible that German jet fighters could have been introduced in 1943, when they could have been used to much more deadly effect.

Hitler's big mistake was in selecting the corrupt dilettante Goering to lead the Luftwaffe.

The first prototype, the Messerschmitt Me 262V1, flew on April 18, 1941, powered not by jets but by a workhorse Junkers Jumo 12-cylinder liquid-cooled piston engine used on aircraft such as the famous Ju 87 Stuka. Test pilot Fritz Wendel (who held the world's absolute speed record of 469.22 mph) found the aircraft to have relatively pleasant flight characteristics—once airborne.

The piston engine was fortuitously retained on the next major test flight, when two BMW 003 engines were fitted to the prototype. Wendel's flight was hair-raising, as both jet engines failed shortly after a long takeoff run. His skills—and the pounding piston engine—allowed him to drag the airplane around the pattern for a quick landing.

In the meantime, Anselm Franz was developing what he later described as his "bread-board" jet engine, the Junkers Jumo 004. Two were installed in the Me 262 V3 prototype.

The intrepid Wendel attempted a takeoff early on the morning of July 18, 1942. The tail-down attitude of the aircraft caused the jet exhaust bouncing off the tarmac to blank out the elevators, forcing him to abort on the short hard-surface runway at Leipheim.

### More Bad Decisions

Analysis suggested a risky fix. He was to "tap" the brakes at about 112 mph so that the nose would dip down and the tail would lift. He did just that at 8:40 a.m., and launched the world's first operational jet fighter into the air and into legend.

Despite its evident potential, the Me 262's progress was hindered by a variety of ill-advised decisions, some made long before, and some continuing to be made by a mixed bag of people. Wilhelm E. Messerschmitt himself was more concerned about maintaining the current high profits from the Bf 109 and the projected Me 209 production lines than about allocating sufficient resources to Me 262 development.

Incalculable damage was also done by Gen. Ernst Udet, head of the technical department. Udet was Germany's greatest living ace from World War I, with 62 victories. A great aerobatic pilot, he was also a totally incompetent manager and an alcoholic.

*This Me 262, designated as a training aircraft, was captured at Lechfeld, Germany, in 1945.*

Reichsmarschall Goering had selected him for the post, partly because of their World War I association, and partly because his very incompetence rendered him less of a threat. Udet committed suicide on Nov. 17, 1941, and was succeeded by Field Marshal Erhard Milch.

Milch had both industrial and command responsibilities in World War II. This made him conservative, and he did not embrace the introduction of the Me 262 at a time when he was struggling to increase German aircraft production.

Into 1943, Milch sided with his longtime enemy, Messerschmitt, in preferring the Me 209. His position was supported at the time by the general of the fighter arm, Maj. Gen. Adolf Galland.

Things began to change on April 22, 1943, when Galland finally got to fly the airplane. A 104-victory ace, Galland saw the Me 262 as a solution to the current Allied aerial strength and to their imminent aerial superiority. Milch soon committed himself to mass production of the Me 262 at the expense of the Me 209.

Supervising everything, if in an

indolent, capricious manner, was Goering.

While the bureaucratic and developmental battles were raging, the crucial work for the Me 262 program was conducted by Franz's team at Junkers. Their initial Jumo 004A design was built in small numbers, and could thus obtain the necessary high-grade steel that the temperatures generated by a jet engine required.

Unfortunately for the engine, Germany was in desperate straits for such materials as chromium, molybdenum, nickel, titanium, and tungsten. The new advanced submarine construction program had a higher priority than jet engines. The production engine was therefore built with only about one-third of the vital high-grade steel. The primitive turbine blade design, rigidly mounted, imposed such stress that the inferior metal used in the compressor blades failed often and early.

These and other factors resulted in a service life of only 10 to 25 hours for a 004B4 engine.

The limping Me 262 program had completed only a few prototypes by mid-1943, but their performance commanded ever greater respect. At this time, Hitler asked Milch not to risk reducing the number of other fighters produced by diverting too much effort to the Me 262.

Shortly thereafter, in pondering how to defeat the inevitable Allied invasion of France, Hitler gave birth to the concept of using fast bombers to break through the Allied air superiority. Whether they dropped bombs accurately or not, he believed a constant bombing of the invasion beaches would keep the enemy heads down for those vital first few hours.

He passed his ideas on to Goering. On a visit to the Messerschmitt plant on Nov. 2, 1943, Goering asked Willy Messerschmitt if the Me 262 had any bombing capability.

The wily Willy, knowing full well that little or no effort had been given to making the Me 262 a bomber, answered that it could carry two 1,100-pound or one 2,205-pound bomb, and that the design changes necessary to do so could be done in two weeks or so.

Meanwhile, the Me 262 was committed to full production. On Dec. 5, 1943, Hitler asked that jet fighter-bombers be developed for front commitment by the spring of 1944. He intended to use them to keep the enemy heads down.

## The Jet Competitor

Messerschmitt's archrival, the Ernst Heinkel Aircraft Co., used its own resources to develop both jet engines and a prototype fighter, the He 280. Heinkel was awarded a contract for its development in March 1940, as a backup to the Me 262. The He 280 made its first powered flight on April 2, 1941, 15 months before the Me 262 took to the skies. The He 280 never reached operational service, however, as neither Udet nor Milch was enthusiastic about the radical nature of a jet fighter. Nonetheless, test results were encouraging and the aircraft demonstrated its combat potential in a convincing "dogfight" with a Focke Wulf Fw 190.

Early in 1943, a contract was let for 300 He 280B-1 fighter-bombers, powered by the Junkers Jumo 004 engines and capable of a top speed of 547 mph.

Heinkel's manufacturing capacity was already overwhelmed, and so the Siebel firm was to build the He 280B under contract. However, with the characteristic quick flip-flop Luftwaffe management of the time, the He 280 program was officially canceled on March 27, 1943. The Me 262 had superior range, and both aircraft required the scarce Junkers Jumo 004 engine.

Heinkel would re-enter the jet fighter field with the notorious He 162 Volksjaeger in the fall of 1944.

Hitler had now conferred top priority status on the program, something that accelerated it, and which more than offset the harm caused by his later insistence on employing the aircraft as a fighter-bomber. But in totalitarian Germany, bombed by day and night and beset by overlapping chains of command, conflicting priorities, and competing forces within the Nazi party, Hitler's orders often did not have much effect.

### Too Little, Too Late

Actual Me 262 production proceeded slowly, so that it was not until April 1944 that preproduction aircraft were allocated to Erprobungskommando 262, to train pilots and develop combat tactics. The next month, Hitler discovered that no Me 262s were ready to deliver bombs. Hitler famously remarked that not a single one of his orders had been obeyed.

Goering jumped on the blame bandwagon with a bit of spin, declaring that the airplane was now a "superspeed bomber."

Time was running out for Hitler, Germany, and the Me 262 program. On June 8, 1944—two days after the Nazis needed the Me 262 the most—Hitler ordered that the initial production of the Me 262 be as a bomber only. This had the usual effect of disrupting production

lines, priorities, and deliveries, but still had no real effect on the program. The 004B engine went into full production for the first time that month.

Production increased slowly, and it was not until September 1944 that there were enough engines in the pipeline to permit delivery of 90 Me 262s. By then, it was far too late to have a significant influence on the war.

About 1,400 Me 262s were completed, and it is estimated that some 300 actually reached combat.

April 10, 1945 epitomized the futility of the Luftwaffe's efforts in the face of Allied air dominance. On that date, some 60 Me 262s engaged more than 1,000 Allied bombers and fighters. Twenty-seven Allied aircraft were shot down, but 31 Me 262s, more than half the defending force, were lost.

The slow introduction of both the aircraft and the engine, at a time when Allied strength was building, meant that Hitler's decision on the use of the Me 262 as a fighter-bomber had no effect whatsoever on the outcome of the war.

The first Allied jet, Britain's Gloster Meteor, also entered service in 1944, and the United States had its own jet fighter under development. The Me 262 was the first of its kind, and fearsomely advanced, but for Nazi Germany, it was too little, too late. ■

---

*Walter J. Boyne, former director of the National Air and Space Museum in Washington, D.C., is a retired Air Force colonel and author. He has written more than 600 articles about aviation topics and 40 books, the most recent of which is Super-sonic Thunder. His most recent article for Air Force Magazine, "The Teaball Tactic," appeared in the July issue.*



# Air Force Association **National**





# Convention 2008

By Tamar A. Mehuron, Associate Editor



*(This page, l-r): Gen. Norton Schwartz, USAF Chief of Staff, AFA Chairman of the Board Robert Largent, and CMSAF Rodney McKinley pay respects at the AFA Memorial Service and wreath-laying, held at the Air Force Memorial on Sept. 14.*

**T**he Air Force Association's premier fall events provided a public debut for USAF's new leaders—Michael B. Donley, Secretary of the Air Force, and Gen. Norton A. Schwartz, Chief of Staff. Both cut prominent figures at AFA's Air & Space Conference and Technology Exposition, held in September at the Marriott Wardman Park Hotel in Washington, D.C.

The conference and expo ran in conjunction with AFA's National Convention, which saw hundreds of AFA delegates and some 6,300 conference attendees welcome Donley and Schwartz.

The new leaders headlined the week's proceedings with major addresses, visits to the Technology Exposition, and exchanges on Capitol Hill with AFA delegates, Congressional leaders, and the 12 Outstanding Airmen of the Year.

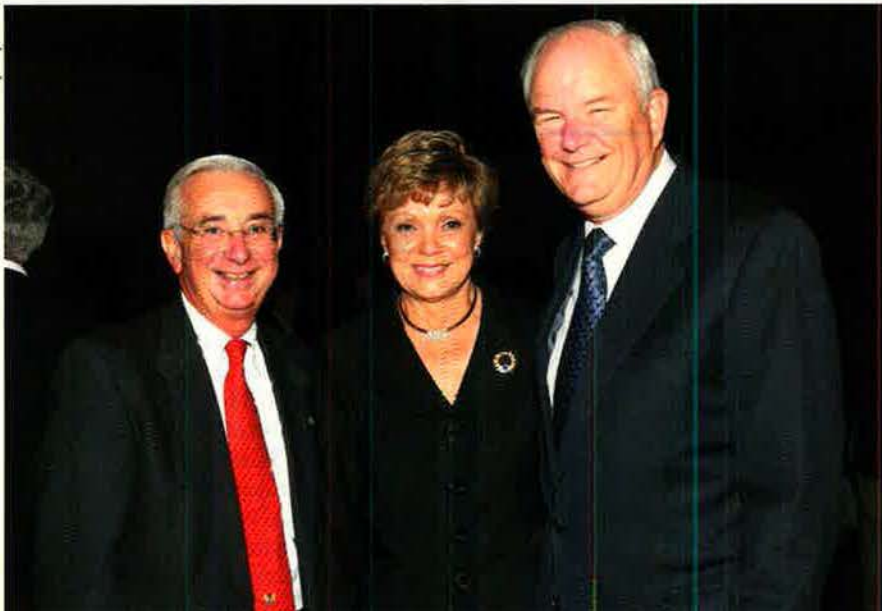
Opening the week-long forum was AFA's National Convention, held Sept. 12-14. Delegates then mingled with attendees at the Air & Space Conference and companion Technology Exposition, held Sept. 15-17.

Joining the crowd for the fourth consecutive year were students from USAF's Air Command and Staff College, Maxwell AFB, Ala. Some 338 students from the Class of 2009 attended the conference's workshops, speeches, and briefings. They were able to visit 144 exhibits at the Technology Exposition. Their participation was made possible through a grant from Boeing.

The Air & Space Conference and Technology Exposition drew 134 news media representatives.

On Sunday morning, Sept. 14, AFA delegates and members and airmen gathered at the Air Force Memorial to honor the memory of fallen compatriots. Donald J. Harlin, AFA National Chaplain, officiated. The official party—Schwartz, CMSAF Rodney J. McKinley, and AFA Chairman of the Board Robert E. Largent laid a memorial wreath. The 2008 memorial tribute list was read by Largent, Vice Chairman of the Board for Field Operations Joseph E. Sutter, and Vice Chairman of the Board for Aerospace Education S. Sanford Schlitt.

Schwartz delivered the conference welcome on Monday, Sept. 15. In the evening, AFA feted the 12 Outstanding Airmen at a reception underwritten by Northrop Grumman. Gen. Stephen R.



Lorenz, commander, Air Education and Training Command, delivered the address, and McKinley served as toastmaster. On Tuesday, Sept. 16, the Outstanding Airmen, along with AFA and USAF leaders, met with their Congressional representatives on Capitol Hill. The weeklong activities of the Outstanding Airmen were underwritten by ATK Corp.

On Sept. 17, a reception sponsored by Lockheed Martin began the festivities at AFA's Air Force Anniversary Dinner. Col. Jay B. Welch, USAF (Ret.), served as master of ceremonies. Singer Andy Childs provided musical entertainment. At this dinner, AFA honored:

- Gen. Bruce Carlson, commander of Air Force Materiel Command, with the H. H. Arnold Award, recognizing the year's most significant contribution by a military member to national security.

*Above: (l-r) Joseph Sutter, AFA Chairman of the Board (then AFA Vice Chairman, Field Operations), Barbara Wynne, and former Secretary of the Air Force Michael Wynne at the AFA Field Awards Dinner on Sept. 13. Right: Sanford Schlitt, AFA Vice Chairman, Aerospace Education, at an AFA business session. Below: (l-r) Secretary of the Air Force Michael Donley and Gen. Ronald Keys, USAF (Ret.), former head of Air Combat Command.*



- Retired Army Gen. Barry R. McCaffrey with the W. Stuart Symington Award, recognizing the year's top civilian contributor to national defense.

- Bell Helicopter Textron and Boeing, providers of the Air Force's V-22 Osprey, with the John R. Allison Award for the top industrial contribution to national defense.

- Col. George E. Day, USAF (Ret.); Gen. David C. Jones, USAF (Ret.), former Chairman of the Joint Chiefs of Staff; and Harold Brown, former Secretary of Defense and Secretary of the Air Force, with Lifetime Achievement Awards.

#### **AFA Education Award**

Leo Murphy, a teacher at Choctawhatchee and Crestview High Schools in Fort Walton Beach, Fla., won the AFA National Aerospace Teacher of the Year Award, as the



Other Senators attending the reception were Sen. Sherrod Brown (D-Ohio) and Sen. Jon Tester (D-Mont.). Other Congressmen were Rep. Sam Johnson (R-Tex.), Rep. Ron Klein (D-Fla.), Rep. Donald A. Manzullo (R-Ill.), Rep. John Mica (R-Fla.), and Rep. Robert Wittman (R-Va.).

Air Force leaders at the event were Donley, Schwartz, McKinley, Carlson, Lorenz, Gen. Roger A. Brady, commander, US Air Forces in Europe, Gen. John D. W. Corley, commander, Air Combat Command, Gen. C. Robert Kehler, commander, Air Force Space Command, Lt. Gen. Craig R. McKinley, director, Air National Guard, Lt. Gen. Richard Y. Newton III, deputy chief of staff, manpower and personnel, and Maj. Gen. David S. Gray, director, Global Reach Programs, Office of the

year's outstanding science, technology, engineering, or mathematics teacher.

### Congressional Activity

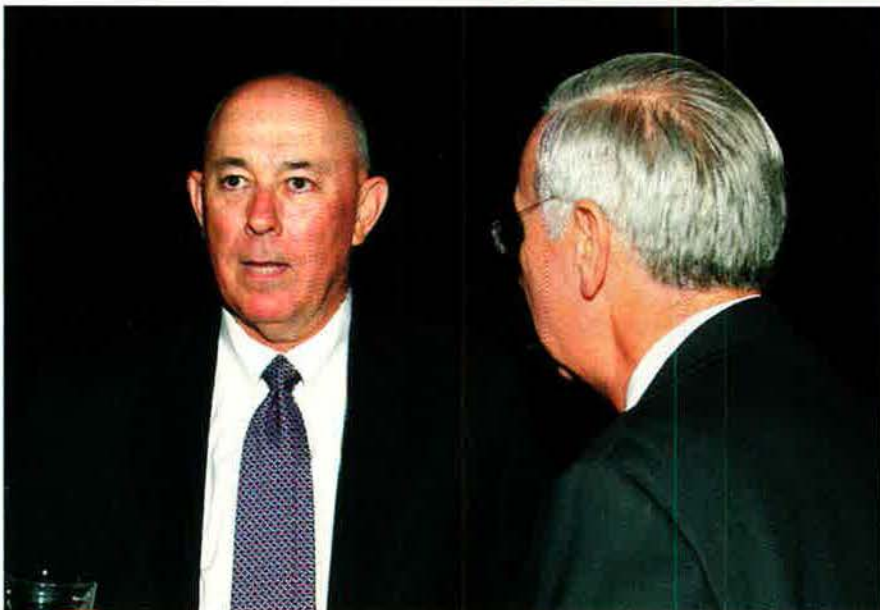
AFA delegates from more than 25 states gathered at the Senate's Everett Dirksen building for a reception Tuesday morning with members of Congress, senior professional staff members, and USAF leadership. Attendees included Sen. Ben Nelson (D-Neb.), a member of the Senate Armed Services Committee. Sen. Robert Bennet (R-Utah) of the Senate Appropriations Committee also attended the reception, as did Rep. Rob Bishop (R-Utah) and Rep. Mike Conaway (R-Tex.), members of the House Armed Services Committee. Members of the House Appropriations Committee included Rep. F. Allen Boyd Jr. (D-Fla.) and Rep. Dennis Rehberg (R-Mont.).



*Top: Vivian Dennis, a delegate from the Edward J. Monaghan Chapter (Alaska), at an AFA business session on Sept. 14. Above: AFA National Treasurer Steven Lundgren (Alaska) at the Sept. 13 Board of Directors meeting. Left: a group of airmen from Langley AFB, Va., entering the Air & Space Technology Exposition hall.*



*Above: (l-r) AFA National Secretary Judy Church and then-AFA Board Chairman Robert Largent at a Sept. 12 meeting. Right: (l-r) Steve Lundgren and newly elected Vice Chairman of the Board, Field Operations, James Lauducci. Below: AFA Chairman of the Board Joseph Sutter (r) talks things over with retired Gen. T. Michael Moseley, former Air Force Chief of Staff, at AFA's Field Awards Dinner.*



Assistant Secretary of the Air Force for Acquisition.

**Election of Officers**

Joseph E. Sutter, of Knoxville, Tenn., was elected AFA Chairman of the Board for a first term. James R. Lauducci, of Alexandria, Va., was elected Vice Chairman of the Board for Field Operations for a first term. S. Sanford Schlitt, Sarasota, Fla., was re-elected Vice Chairman of the Board for Aerospace Education for a second term. Judy K. Church, Lenexa, Kan., was re-elected AFA National Secretary for a third term, and Steven R. Lundgren, Fairbanks, Alaska, was re-elected AFA National Treasurer for a fourth term.

**Other Elections**

Elected to the Board of Directors for three-year terms were Emil M. Friedauer,

Mary Esther, Fla.; Scott P Van Cleef, Fin-castle, Va.; and Leonard R. Vernamonti, Clinton, Miss.

Five new Region Presidents were elected. Newly elected are Mark J. Dierlam (South Central Region), Frank J. Gustine (Midwest Region), Wayne R. Kaufmann (Far West Region), Robert Nunamann (Northeast Region), and Fred Rosenzelder (Northwest Region).

**Other AFA Business**

At the National Convention, there were 234 registered delegates representing 44 states and the District of Columbia. Holding meetings were the Air Force's Air National Guard Council, Company Grade Officer Council, Enlisted Council, and Reserve Advisory Council.

Delegates approved the 2009 Statement of Policy and 2009 Top Issues. They were

also briefed on the AFA Strategic Plan for 2009-13, which was approved by the Board of Directors on Sept. 13. The plan contained an important change to the third element of AFA's "Educate, Advocate, Support" mission statement, adding the words "aerospace education." That portion of the mission now reads, "Support the Air Force, the Air Force family, and aerospace education." The delegates also considered and acted on four Field Resolutions after taking into account the recommendations of the Executive Committee and the Board of Directors.

They did not concur with a resolution to return to the requirement for a chapter to send a quarterly newsletter to each member, voting instead to retain the more flexible policy instituted in 2007 allowing chapters to poll members once each year and then service only those desiring to receive the newsletter. They did, however, concur with the sense of another part of the resolution that there needed to be better training of chapter leaders.

The delegates also did not concur with a resolution to return to the chapter payment formula used prior to 2008 until such time as the group exemption for chapters as 501c(3) organizations is approved. In this they also reiterated that membership recruitment was an important part of every chapter's mission.

They also did not concur with a resolution to provide each surviving spouse of a member a free copy of *Air Force Magazine*, recognizing that this general topic was being worked by the leadership as part of the overall AFA Membership Strategy, still being formulated.

Finally, the delegates voted to reverse the 2006 decision to merge the positions of National Secretary and National Treasurer and approved making the necessary changes to the Constitution to reflect that decision.

**Acknowledgments**

Parliamentarian for the AFA National Convention was Joan Blankenship. Inspectors of Elections were William R. Goerges (Chairman), James F. Diehl, and Thomas W. Gwaltney. Joan Sell chaired the Credentials Committee, serving with Marguerite H. Cummock and Deann Faiferlick.

The association is particularly grateful to a corps of volunteers who assisted the staff in convention support: Michael Arth, Lt. Col. Daniel Twomey Jr., 1st Lt. Robert Wray, 2nd Lt. Justin Mastrangelo, CMSgt. Debbie Snyder, Charlie Tippet, Meghan Gunther, Matthew Schneider, and Leola Wall. ■



*Rebecca Grant unveils the logo for the new General Billy Mitchell Institute for Airpower Studies on Sept. 16.*

**In the Spirit of General Billy Mitchell**

A new voice for airpower in the nation's capital was formally launched on Sept. 16 at the Air Force Association's Air & Space Conference. Its name: the General Billy Mitchell Institute for Airpower Studies.

The institute, honoring America's most famous airman, will produce independent, high-quality, policy-oriented research on key airpower topics, especially the key role of airpower in the defense of the nation. It supplants the Eaker Institute, founded by AFA in 1996, as a center of AFA research efforts.

Then-AFA Chairman of the Board Robert E. Largent, unveiling the Mitchell initiative at an evening reception, said it represents AFA's "new commitment" to a vital mission. He announced the selection of Rebecca Grant, one of Washington's foremost airpower analysts, as the Mitchell Institute's first director.

Joining Largent and Grant was Gen. Stephen R. Lorenz, the commander of Air Education and Training Command. Lorenz's grandfather flew with Billy Mitchell in the early 1920s experiments that proved an aircraft could sink a battleship.

Earlier at the conference, Grant presented the first Mitchell Institute product, the 27-page study, "Losing Air Dominance." It can be found at [www.afa.org/mitchell/studies](http://www.afa.org/mitchell/studies).



*Gen. Norton Schwartz (l), USAF Chief of Staff, and Gen. Bruce Carlson, Air Force Materiel Command, address the crowd at the Four-Star Forum.*



The following recommendations for the federal government are drawn from the Air Force Association's 2009 Statement of Policy, "Air Force Airpower: Year of Decision," adopted by the delegates to the AFA National Convention on Sept. 14, 2008, in Washington, D.C. The full text is available at [www.afa.org/AboutUs/PolicyIssues.asp](http://www.afa.org/AboutUs/PolicyIssues.asp).

# 1

## **Support Our Nation's Airmen**

- Tailor Air Force manning to be sufficient to support 10 air and space expeditionary forces, or AEFs.
- Get the CSAR-X aircraft in action and saving lives.
- End the practice of assigning Airmen to serve in place of ground forces, return them to their specialties, and focus them on meeting the growing demand for airpower.
- Compensate, equip, and man the Guard and Reserve in consonance with their increased contribution to the Global War on Terror.

# 2

## **Recapitalize the Aging Fleet**

- Speed acquisition of F-35 fighters and fund a full force of 381 F-22 fighters to prevent a future fighter shortage.
- Do whatever is needed to end further delays in acquisition of much-needed new aerial tanker aircraft.
- Continue to focus on increasing both numbers and capability of UAV systems and enhancing Air Force and Army cooperation in this vital area.
- Allow the Air Force to manage and modernize its fleet and rid itself of many aging low-value, high-cost aircraft.

# 3

## **Secure Space and Cyberspace**

- Modernize and fully fund vital space and cyberspace systems and ensure their security, as they are essential to every operation and will only grow in importance.

# 4

## **Strengthen the Foundation**

- Invest in technical education to bolster a foundation the nation needs for defense.
- Expand national programs encouraging the study of science, technology, engineering, and mathematics.
- Recognize the importance of research and development to future national well-being.

# 5

## **Invest in Air Force Capabilities**

- Support the Air Force need for an additional \$20 billion a year in funding for modern weapon systems.
- Immediately raise basic (non-war) defense spending to 4.5 percent of gross domestic product, and, over several years, raise the nation's defense commitment to 6 percent of GDP.

# USAA MEMBERSHIP IS EXPANDING.



INSURANCE

BANKING

INVESTMENTS

MEMBER SERVICES

**YOU MAY NOW BE ELIGIBLE FOR THE BENEFITS OF USAA.** This means you may be able to enjoy the full range of financial products and solutions that USAA offers. Membership has been expanded to include retired military personnel, regardless of when they served, and those who have honorably separated from the military since 1996. Once you become a member, your children may also be eligible to enjoy the exclusive benefits of your USAA membership. It would be an honor to serve you and your family, just as we have served military members for over 85 years.

» CALL 800.531.USAA TODAY OR GO TO [USAA.COM/JOIN](http://USAA.COM/JOIN) TO SEE IF YOU ARE ELIGIBLE.



**USAA** We know what it means to serve.®

[USAA.COM](http://USAA.COM)

Use of the term "member" or "membership" does not convey any legal, eligibility or ownership rights. Eligibility guidelines are subject to change without notice. USAA means United Services Automobile Association and its affiliates. Property and casualty insurance provided by United Services Automobile Association, USAA Casualty Insurance Company, USAA General Indemnity Company, Garrison Property and Casualty Insurance Company, USAA County Mutual Insurance Company and USAA, Ltd. (Europe), and is available only to persons eligible for P&C group membership. Each company has sole financial responsibility for its own products. © 2008 USAA. 62311-0808

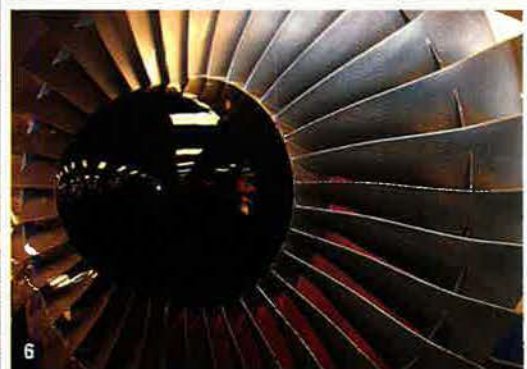


# Air Force Association **Technology**

The latest and best in aerospace technology was on display at AFA's annual showcase.



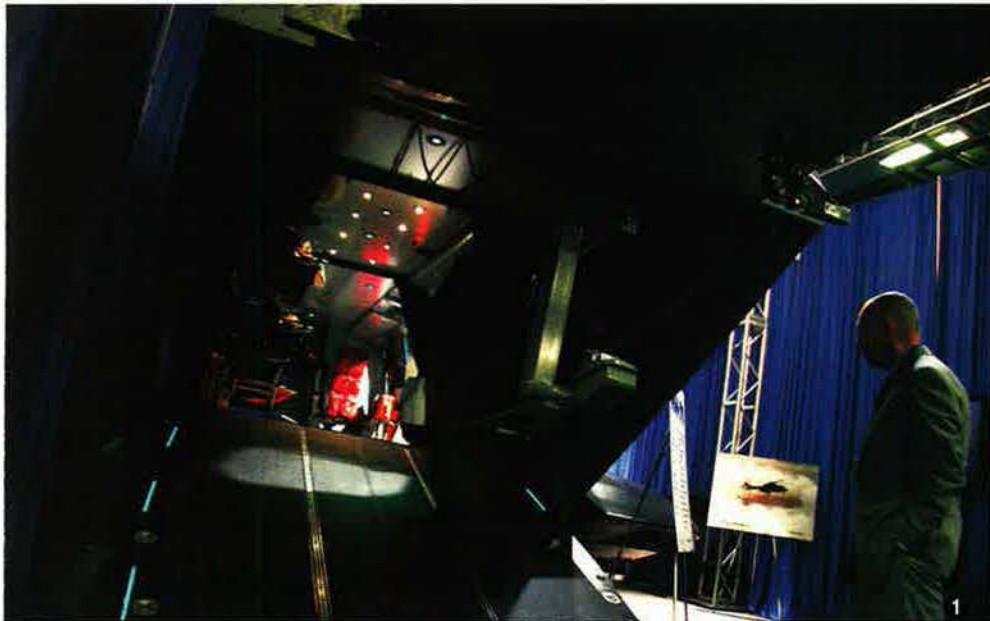
1| Visitors were greeted by a menacing model of a Boeing F-15E, bristling with air-to-air missiles, small diameter bombs, and targeting pods. 2| At the Raytheon booth, hands-on displays showed battle management concepts. 3| and 4| Boeing's next generation airlifter concepts feature a common fuselage with a variety of wing and propulsion ideas, including vertical takeoff/landing and conventional layouts. 5| Raytheon's presentation showed off a laser guided bomb, Maverick missile, and an AM-RAAM radar missile. 6| The fan assembly of the C-17's F117 engine. 7| The Pratt & Whitney logo inside a full-scale mock-up of the F135 engine that powers the Lightning II stealth fighter.





# Exposition 2008

Photos by Guy Aceto



11| A full-scale mock-up of the Lockheed Martin HH-71 entry in the CSAR-X search and rescue helicopter contest. 12| Boeing's HH-47 CSAR-X full-size mock-up, complete with "rescued airman," was also available for inspection. 13| Air Force Special Operations Command is interested in a gunship variant of the C-27J Joint Cargo Aircraft. L-3 obliged with this model of its notional AC-27J Stinger II. 14|, 15|, and 16| In cutaway model form, the Lockheed Martin HH-71, the Boeing HH-47, and the Sikorsky HH-92 CSAR-X competitors. All three would be larger, more powerful, and more heavily armed than the HH-60 Pave Hawk USAF seeks to replace.



111 MBDA's booth featured a large F-35 model launching an ASRAAM. 121 (L-r) Air Force Secretary Michael Donley, Chief of Staff Gen. Norton Schwartz, and Gordon England, deputy secretary of defense, tour the exhibit hall. 131 SrA. Adrianna Valenti (l) and A1C Lanita Williams of the 36th Intelligence Squadron at Langley AFB, Va., take in the state-of-the-art exhibits.

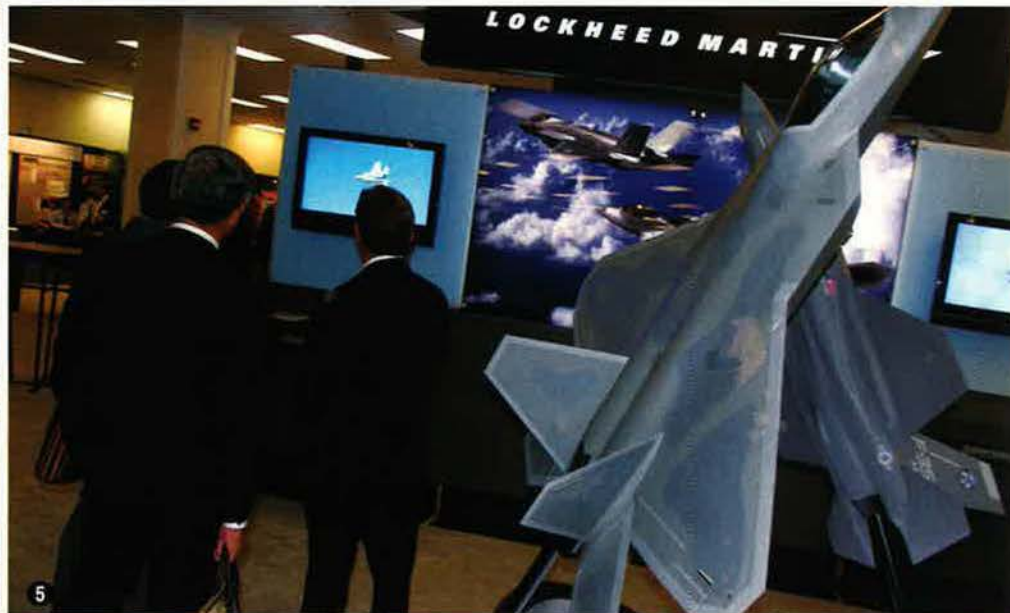


141 SSgt. Christopher Bounds, an Air Force Special Operations Command security forces airman, explains the DAGRE program's functions to CMSgt. Richard Small. Deployed Aircraft Ground Response Element airmen provide a range of classified services in hostile or austere areas. 151 The HH-71 mock-up's wind-mounted gun gave a realistic edge to the exhibit. 161 Maj. Jason Koler gets briefed on flat panel displays at the Raytheon booth. 171 A heavily armed model of an MQ-9 Reaper unmanned combat aircraft, made by General Atomics Aeronautical Systems, seemingly soars over the exhibit hall.





111 Northrop Grumman offered a 3-D display of its 2018 bomber concept's lineage. 121 Lt. Cmdr. Josh Keever, a student at Air Command and Staff College, checks out SAIC's reconfigurable cockpit trainer. 131 Textron Systems exhibited an M1117 Guardian, an armored security vehicle. This particular vehicle had just come off the battlefield in Iraq. 141 Emily Taylor-Norris of the AFSO21 initiative office talks with Gen. Norton Schwartz prior to the Anniversary Dinner.



151 An intertwined F-22 and F-35 form the centerpiece of Lockheed Martin's booth, underscoring USAF's stated position that both are needed. 161 A KC-30 tanker with boom and drogues deployed

sails through the European Aeronautic Defense and Space-North America booth. The hard-fought tanker contest had been terminated a few days before the conference. ■



# Air Force Association **National Awards 2008**

## National Aerospace Awards

### Award

#### H. H. Arnold Award

*AFA's highest honor in national security to a member of the armed forces*

#### W. Stuart Symington Award

*AFA's highest honor in national security to a civilian*

#### John R. Alison Award

*AFA's highest honor for industrial leadership*

#### Lt. Gen. Claire L. Chennault Award

*Outstanding performance in aerial warfare tactics*

#### David C. Schilling Award

*Outstanding contribution in flight*

#### Theodore von Karman Award

*Outstanding contribution in science and engineering*

#### Gill Robb Wilson Award

*Outstanding contribution in arts and letters*

#### Hoyt S. Vandenberg Award

*Outstanding contribution in aerospace education*

#### Thomas P. Gerrity Award

*Outstanding contribution in systems and logistics*

#### Department of Veterans Affairs Employees of the Year

*Outstanding Performance by VA employees*

### Recipients

**Gen. Bruce Carlson, USAF**  
Commander, Air Force Materiel Command, Wright-Patterson AFB, Ohio.

**Gen. Barry McCaffrey, USA (Ret.)**  
Former commander of United States Southern Command, Miami.

**Bell Helicopter Textron, Inc., and Boeing Integrated Defense Systems**, the CV-22 Osprey.

**Maj. Richard J. Piazza**, 23rd Operations Support Sq., Moody AFB, Ga.

**906th Air Refueling Squadron**, Grand Forks AFB, N.D.

**The Mitre Corp.**  
Bedford, Mass.

**Lawrence Wright**, author, *The Looming Tower: Al Qaeda and the Road to 9/11*.

**Gen. William R. Looney III, USAF (Ret.)**, Former commander, Air Education and Training Command, Randolph AFB, Tex.;  
**Gen. Stephen R. Lorenz**, commander, Air Education and Training Command, Randolph AFB, Tex.

**Maj. Benjamin W. Spencer**, commander, 1st Special Operations Equipment Maintenance Squadron, Hurlburt Field, Fla.

**Larry L. Thornton**, National Memorial Cemetery of the Pacific, Honolulu;  
**Mary Farquhar**, VA Regional Office, St. Petersburg, Fla.



*Gen. Bruce Carlson, commander, Air Force Materiel Command, Wright-Patterson AFB, Ohio, received the H. H. Arnold Award, AFA's highest honor to an armed forces member in the cause of national security.*



*Retired Army Gen. Barry McCaffrey, former commander of US Southern Command, was awarded the W. Stuart Symington Award, AFA's highest award to a civilian in the cause of national security.*



*(L-r): AFA Board Chairman Robert Largent, Chris Chadwick on behalf of Boeing, Maj. Gen. John Alison, USAF (Ret.), and Richard Millman on behalf of Bell Helicopter Textron. Boeing Integrated Defense Systems and Bell Helicopter Textron, Inc., received AFA's award for outstanding industrial leadership.*



(L-r): Gen. David Jones, USAF (Ret.), and Col. George Day, USAF (Ret.), both recipients of AFA's Lifetime Achievement Award.



Harold Brown, former Secretary of the Air Force and former Secretary of Defense, recipient of AFA's Lifetime Achievement Award.

## Crew Awards and Team Awards

**Airborne Battle Management Crew;** Crew Four, 16th Air Command & Control Sq., Robins AFB, Ga. Best airborne battle management crew.

**Brig. Gen. Ross G. Hoyt Award;** Crew of Woody 26, 67th Special Operations Sq., RAF Mildenhall, England. Best air refueling crew.

**Gen. Curtis E. LeMay Award;** Crew of Bone 11, 9th Bomb Sq., 7th Bomb Wing, Dyess AFB, Tex. Best bomber aircrew.

**Gen. Jerome F. O'Malley Award;** Crew of Python 76, 97th Intelligence Sq., 488th IS, 338th Combat Training Sq., 38th Reconnaissance Sq., 561st Joint Tactics Sq., 55th Wing, Offutt AFB, Neb. Best reconnaissance crew.

**Gen. Thomas S. Power Award;** Crew of S-230, Capt. William J. Burich, 1st Lt. Mitchell W. Patton, 341st Missile Wing, Malmstrom AFB, Mont. Best missile combat crew.

**Best Space Operations Crew;** Charlie Crew, 21st Space Wing, Peterson AFB, Colo. Best space operations crew.

**Lt. Gen. William H. Tunner Award;** Crew of Crome 46, 2nd Airlift Sq., Pope AFB, N.C. Best airlift crew.

**Lt. Gen. Howard W. Leaf Award;** Air National Guard/Air Force Reserve Command Test Center, ARC-210 Test Team, Tucson, Ariz. Best test team.

## Professional, Management, and Civilian Awards

Award	Recipient
Gen. Billy Mitchell Award for C4 Excellence	SMSgt. Matthew S. Miller, 375th Airlift Wing, Scott AFB, Ill.
Gen. George C. Kenney Award	561st Joint Tactics Sq., Nellis AFB, Nev.
CMSAF Thomas N. Barnes Award	SSgt. Paul W. Hiller, 1st Special Ops Aircraft Maintenance Sq., Hurlburt Field, Fla.
Paul W. Myers Award for Physicians	Lt. Col. Kirk A. Milhoan, Wilford Hall Medical Center, Lackland AFB, Tex.
Verne Orr Award for Human Resources	437th Airlift Wing, Charleston AFB, S.C.
Juanita Redmond Award for Nursing	Capt. Becky M. Bautch, Elmendorf AFB, Alaska
Stuart R. Reichart Award for Lawyers	Col. Evan L. Haberman, Det. 3, Bolling AFB, D.C.
Personnel Manager of the Year	MSgt. Tracy S. Deason, Air Force Personnel Center, Randolph AFB, Tex.
Civilian Wage Employee of the Year	Dennis R. Tolliver, Beale AFB, Calif.
Civilian Program Specialist of the Year	Jennifer M. McMillan, Wright-Patterson AFB, Ohio
Civilian Program Manager of the Year	Debra A. Fogle, Kirtland AFB, N.M.
Civilian Senior Manager of the Year	Timothy M. Boudreaux, Space Innovation & Development Ctr., Schriever AFB, Colo.
AFROTC Cadet of the Year	Ryan W. Castonia, Massachusetts Institute of Technology
CAP Aerospace Education Cadet of the Year	David M. Trick, Maryland Wing, Civil Air Patrol
Joan Orr Award for Air Force Spouse of the Year	Melanie R. Huk, Aviano AB, Italy
Air Force Chaplain Service Award	Lt. Col. Steven E. West, Whiteman AFB, Mo.
Air Force Chaplain Service Award	Capt. Erik G. Harp, Ramstein AB, Germany
Management Award—Executive Division	Kay L. Lee, 577th Aeronautical Systems Gp., Wright-Patterson AFB, Ohio
Management Award—Middle Division	Lt. Col. Donald D. Lytle, Tinker AFB, Okla.
Management Award—Junior Division	Capt. Joshua L. McAllister, Wright-Patterson AFB, Ohio

## Citations of Honor

For the outstanding contribution of an individual or organization to the development of aerospace power.

Recipients	Achievement
327th Aircraft Sustainment Gp./B-52 Aircraft Fischer-Tropsch Fuel Mgmt. Demo Team, Tinker AFB, Okla.	Team completed USAF's fast-paced alternative fuel demonstration on time and under budget, enabling USAF to certify the synthetic blended fuel for worldwide use on B-52 bombers.
31st Intelligence Sq., Ft. Gordon, Ga.	Highly skilled linguists and analysts established new national-tactical integration mission products, including technical target databases, which improved intelligence-surveillance-reconnaissance capability for Operation Iraqi Freedom and Operation Enduring Freedom.
SMSgt. Gabriel Hage, Randolph AFB, Tex.	Led 165 airmen engaged in combat convoy missions, inspiring airmen to keep mission focus when unit suffered two killed in action and four wounded; received Bronze Star Medal for meritorious service; volunteered for Operation Warm Heart to send mail and packages to combat theater.
3rd Special Operations Sq., Nellis AFB, Nev.	Flew nearly 1,578 combat sorties, amassing 30,438 hours with MQ-1 Predator unmanned aerial vehicle while manned at less than 50 percent of authorized strength; aided killing or capture of 1,695 insurgents and detection of numerous improvised-explosive-device emplacements.
MSgt. William L. Newman, 33rd Fighter Wing, Eglin AFB, Fla.	Served as an independent duty medical technician in Operation Iraqi Freedom, providing medical support during combat operations, including the 23-hour battle at An Najaf; supervised aeromedical evacuation for airmen and soldiers.

## Air National Guard and Air Force Reserve Command Awards

Award	Recipient	Achievement/Employer
Maj. Gen. Earl T. Ricks Award	Crew of Yankee 02, 106th Rescue Wing, Francis S. Gabreski ANGB, N.Y.	Best ANG unit airmanship
Outstanding Air National Guard Unit	110th Fighter Wing, W. K. Kellogg Arpt., Mich.	Top ANG unit of the year
George W. Bush Award, Officer	Capt. Michelle R. Mulberry, 187th Aeromed. Evac. Sq., Cheyenne, Wyo.	Cheyenne Regional Medical Center, Cheyenne, Wyo.
George W. Bush Award, Enlisted	SSgt. Daniel R. Wilcox, 142nd Civil Engineer Sq., Portland, Ore.	Oregon Mutual Insurance Co., McMinnville, Ore.
President's Award for AFRC	Crew of Reach 5141, 729th Airlift Sq., March ARB, Calif.	Best AFRC aircrew of the year
AFRC Citizen Airman Award, Officer	Lt. Col. Douglas B. Cox, USAFR Military Judge, Bolling AFB, D.C.	XO Communications, headquartered in Herndon, Va.
AFRC Citizen Airman Award, Enlisted	SrA. Chad R. Rasmusen, 419th Maintenance Sq., 419th Fighter Wing, Hill AFB, Utah	Whitewater Whirlpool Baths & Systems, Lindon, Utah

**AFA Member of the Year**



*John Politi, Alamo Chapter (Tex.), recipient.*

**D. W. Steele Sr. Memorial Award**

(AFA Unit of the Year: Lance P. Sijan Chapter)



*(L-r): Outgoing AFA Chairman of the Board Robert Largent, George Cavalli (President, Lance P. Sijan Chapter, Colo.), and incoming AFA Chairman of the Board Joseph Sutter.*

**Distinguished Sustained Aerospace Education Award**



*Richard Ortega, recipient, with his wife, Wynelle.*

**Arthur C. Storz Sr. Membership Award**

*Presented to the AFA chapter or individual member producing the highest number of new members during the 12-month period ending June 30, 2008, as a percentage of total chapter membership as of July 1, 2007. This award is based on both the quantity of new members as well as sustained new member recruitment.*

**Chapter Award**

**Meridian, Miss.**  
President Langford Knight

**Jack Gross Awards**

*Presented to the chapter in each size category with the highest number of new members as a percentage of chapter size at the beginning of the membership year. A minimum of 10 is required.*

**Small Chapter**  
**Meridian, Miss.**  
President Langford Knight

**Medium Chapter**  
**W. J. "Pete" Knight, Calif.**  
President Randolph Kelly

**Large Chapter**  
**Ute-Rocky Mountain, Utah**  
President Jay Mosley

**Extra Large Chapter**  
**Montgomery, Ala.**  
President Thomas W. Gwaltney

**Chapter Larger Than 1,500**  
**Lance P. Sijan, Colo.**  
President George T. Cavalli

**AFA National Aerospace Teacher of the Year**



*(L-r): Sanford Schlitt, AFA Vice Chairman of the Board for Aerospace Education, AFA National Aerospace Teacher of the Year Leo Murphy, and outgoing Chairman of the Board Largent.*

## 2008 AFA Membership and Activity Awards (cont.)

### Outstanding State Organization

Virginia  
*President Scott P. Van Cleef*

### Outstanding Chapters by Size

**Extra Large Chapter** (901+ members)  
 Tucson, Ariz.  
*President Rudy W. Cardona*

**Large Chapter** (401-900 members)  
 Hurlburt, Fla.  
*President Dann D. Mattiza*

**Medium Chapter** (201-400 members)  
 Col. H. M. "Bud" West, Fla.  
*President John E. Schmidt Jr.*

**Small Chapter** (20-200 members)  
 Northern Shenandoah Valley, Va.  
*President Norman M. Haller*

### Unit Exceptional Service Awards

**Best Single Program**  
 Paul Revere, Mass.  
*President Angela M. Dupont*

**Communications**  
 Central Okla. (Gerrity), Okla.  
*President James F. Diehl*

**Community Partners**  
 Swamp Fox, S.C.  
*President David A. Cotton*

**Community Relations**  
 Langley, Va.  
*President James R. Hobbs*

**Overall Programming**  
 Central Florida, Fla.  
*President James E. Callahan*

**Veterans' Affairs**  
 Wright Memorial, Ohio  
*President Kent D. Owsley*

### Special Recognition— Sustained New Member Recruitment

*These chapters have attained the quarterly new member recruitment goal for three consecutive quarters, extending from October 2007 to June 2008.*

Ark-La-Tex, La.  
 Altus, Okla.  
 C. Farinha Gold Rush, Calif.  
 Central Florida, Fla.  
 Charlemagne, Germany  
 Charles Hudson, Calif.  
 Cochise, Ariz.  
 Col. H. M. "Bud" West, Fla.  
 Fairbanks Midnight Sun, Alaska  
 Falcon, Fla.  
 Fort Dodge, Iowa  
 Fort Wayne, Ind.  
 Frank Luke, Ariz.  
 Gen. Charles L. Donnelly Jr., Tex.  
 Gen. David C. Jones, N.D.  
 Gen. H. H. Arnold Memorial, Tenn.  
 Gold Coast, Fla.  
 Golden Triangle, Miss.  
 Hurlburt, Fla.  
 Iron Gate, N.Y.  
 Lance P. Sijan, Colo.  
 Leigh Wade, Va.  
 Mel Harmon, Colo.  
 Mercer County, N.J.  
 Meridian, Miss.  
 Miami, Fla.  
 Montgomery, Ala.  
 Red River Valley, N.D.  
 San Gabriel Valley, Calif.  
 Shooting Star, N.J.  
 Red Tail Memorial, Fla.  
 Ute-Rocky Mountain, Utah  
 Worcester, Mass.

### Special Recognition— Chapter Growth

*These chapters have realized a growth in total membership from June 2007 to June 2008.*

Alamo, Tex.  
 Altoona, Pa.  
 Bob Hope, Calif.  
 C. Farinha Gold Rush, Calif.  
 Charles Hudson, Calif.  
 Chuck Yeager, W.Va.  
 Danville, Va.  
 Denton, Tex.  
 Frank Luke, Ariz.  
 H. H. Arnold Memorial, Tenn.  
 Brig. Gen. James R. McCarthy, Fla.  
 Gen. Nathan F. Twining, Fla.  
 Gen. Robert E. Huyser, Colo.  
 Grissom Memorial, Ind.  
 Iron Gate, N.Y.  
 Lake Superior Northland, Mich.  
 Llano Estacado, N.M.  
 Mercer County, N.J.  
 Meridian, Miss.  
 Northeast Texas, Tex.  
 Northeast Iowa, Iowa  
 Otis, Mass.  
 Paul Revere, Mass.  
 Pensacola, Fla.  
 Prescott/Goldwater, Ariz.  
 Red Tail Memorial, Fla.  
 Richard D. Kisling, Iowa  
 Richmond, Va.  
 Savannah, Ga.  
 Snake River Valley, Idaho  
 Southern Indiana, Ind.  
 Steel Valley, Ohio  
 Tarheel, N.C.  
 Tennessee Valley, Ala.  
 Worcester, Mass.



## EDUCATION AWARDS

### Aerospace Education Excellence Award

Presented to one chapter in each of the AFA size categories annually for excellence in aerospace education programming. To qualify, a chapter must have received the Aerospace Education Achievement Award this year.

<b>Small Chapter</b>	Fort Dodge, Iowa
<b>Large Chapter</b>	Hurlburt, Fla.
<b>Extra Large Chapter</b>	Eglin, Fla.

### Aerospace Education Achievement Award

Presented to chapters for outstanding achievement in aerospace education programming.

Blue Ridge, N.C.  
 Central Florida, Fla.  
 Central Oklahoma (Gerrity), Okla.  
 Cheyenne Cowboy, Wyo.  
 C. Farinha Gold Rush, Calif.  
 Cochise, Ariz.  
 Eglin, Fla.  
 Enid, Okla.  
 Everett R. Cook, Tenn.  
 Falcon, Fla.  
 Fort Dodge, Iowa  
 Gen. David C. Jones, N.D.  
 Gen. E. W. Rawlings, Minn.  
 Harry S. Truman, Mo.  
 Hurlburt, Fla.  
 Lance P. Sijan, Colo.  
 Lincoln, Neb.  
 McChord, Wash.  
 Montgomery, Ala.  
 Northern Shenandoah Valley, Va.  
 Paul Revere, Mass.  
 San Jacinto, Tex.  
 Swamp Fox, S.C.  
 Thomas W. Anthony, Md.  
 Tidewater, Va.  
 Tucson, Ariz.  
 Wright Memorial, Ohio

## MEMBERSHIP AWARDS

The following chapters have qualified for these awards based on their recruitment of new members during the 12-month period ending June 30, 2008.

### Community Partner Membership Awards

#### Gold Award

Presented in the field to chapters whose Community Partners represent at least six percent of overall chapter membership, with a minimum number of Community Partners. The minimum number is determined by chapter size.

Altus, Okla.	McChord, Wash.
Central Oklahoma (Gerrity), Okla.	Mercer County, N.J.
Cheyenne Cowboy, Wyo.	Meridian, Miss.
Cochise, Ariz.	Montgomery, Ala.
Col H. M. "Bud" West, Fla.	Northeast Texas, Tex.
Contrails, Kan.	Richard D. Kisling, Iowa
Enid, Okla.	Steel Valley, Ohio
Fairbanks Midnight Sun, Alaska	Swamp Fox, S.C.
Fort Wayne, Ind.	Ute-Rocky Mountain, Utah
Gen. Charles L. Donnelly, Tex.	W. J. "Pete" Knight, Calif.
Gen. David C. Jones, N.D.	
Happy Hooligan, N.D.	
Hurlburt, Fla.	
Lance P. Sijan, Colo.	
Leigh Wade, Va.	
Lloyd R. Leavitt Jr., Mich.	

#### Achievement Award

Presented in the field to chapters whose Community Partners represent at least three percent of overall chapter membership, with a minimum number of Community Partners. The minimum number is determined by chapter size.

Alamo, Tex.	Red Tail Memorial, Fla.
Brig. Gen. Bill Spruance, Del.	Richard I. Bong, Minn.
Cape Canaveral, Fla.	Robert H. Goddard, Calif.
Chautauqua, N.Y.	Strom Thurmond, S.C.
Fort Dodge, Iowa	Tidewater, Va.
Frank Luke, Ariz.	Total Force, Pa.
Gen. B. A. Schriever Los Angeles	William A. Jones III, Va.
H. H. Arnold Memorial, Tenn.	Wright Memorial, Ohio
Joe Walker-Mon Valley, Pa.	
Maj. Gen. C. I. Bennett Jr., Calif.	
Mel Harmon, Colo.	
Miami, Fla.	

## Individual Awards

Presented for outstanding service.

### Chairman's Citation

Debbie Estrem, Colo.  
Emil M. Friedauer, Fla.  
Thomas W. Gwaltney, Ala.  
James Hall, Colo.  
Karen L. Halstead, Ariz.  
O. Thomas Hansen, Wash.  
David T. Hanson, S.C.  
William L. Kirk, Fla.  
Scott P. Van Cleef, Va.  
Shiela Wallace, Ohio

### Central East Region

#### Medal of Merit

Stephanie Davis, Va.  
Donald Ellis, Va.  
Scott Frazier, Va.  
Kevin Jackson, D.C.  
Frederick Knowles, Va.  
John Murphy, Va.  
Kenneth Spencer, Va.  
Charles Thompson, Md.  
Elaine Van Dervort, Va.

#### Exceptional Service Award

James Hobbs, Va.  
Ira Latimer, W.Va.  
Jerry Levesque, Va.  
Gordon Strong, Va.

### Far West Region

#### Medal of Merit

Bob Clauson, Calif.  
Nancy Driscoll, Calif.  
Elony Eldredge, Hawaii  
John (Stan) Getz, Calif.  
John Pickleseimer, Hawaii  
Tim Saffold, Hawaii  
Frank Walterscheid, Calif.  
Ken Wilce, Calif.

#### Exceptional Service Award

Lee Greer, Calif.

### Florida Region

#### Medal of Merit

Francis Dailey, Fla.  
Mike Emig, Fla.  
Frederick Gross, Fla.  
Rik Harvin, Fla.

Dann Mattiza, Fla.  
Jerry Nabors, Fla.  
William Palmby, Fla.

#### Exceptional Service Award

Richard Schaller, Fla.  
William A. Yucuis, Fla.

### Great Lakes Region

#### Medal of Merit

Vita Eonta, Ohio  
William Gommel, Ind.  
Harlan Leimenstoll, Ind.  
Ray Lesniok, Ohio  
Jeff Liffick, Ohio  
Jonathan Rosa, Ky.  
David Shearer, Ind.

#### Exceptional Service Award

Dennis Drayer, Ohio

### Midwest Region

#### Medal of Merit

Deone Bachellor, Iowa  
Richard Betterton, Iowa  
James Lannigan, Mo.  
William Mavity, Neb.  
Nancy Needham, Neb.  
Jesse Wayland, Ill.

#### Exceptional Service Award

Von L. Blunt, Iowa  
Robert Seibolt, Mo.

### New England Region

#### Medal of Merit

Barbara Burnett, Mass.  
Joe Magnone, Mass.  
Michael Payne, Mass.  
Lisa Sirois, Mass.

#### Exceptional Service Award

Angela Dupont, Mass.  
Donald Warmuth, Mass.

### North Central Region

#### Medal of Merit

Larry Barnett, N.D.  
Joyce Goodvin, N.D.  
Durbin Keeney, Minn.  
Jim Simons, N.D.  
Vladimir Tkach, Minn.

### Exceptional Service Award

Ron Garcia, N.D.  
Julie (Eszlinger) Jensen, Minn.  
George Masters, N.D.

### Northeast Region

#### Medal of Merit

Oresta DiCerbo, Pa.  
Jaclyn Lacy B. Gyger, Pa.  
Susanna Gyger, Pa.  
Frank Hayes, N.Y.  
Gladys Jefferies, Pa.  
Kenneth Kibler, Pa.  
Frank Schaffer, Pa.  
Gerald Still, Pa.

#### Exceptional Service Award

James M. Cain, Pa.  
Lee Niehaus, Pa.

### Northwest Region

#### Medal of Merit

Roger Fogleman, Idaho  
Jerry Moore, Ore.

#### Exceptional Service Award

Mary J. Mayer, Ore.

### Rocky Mountain Region

#### Medal of Merit

Dan Beatty, Colo.  
Mary Carroll, Wyo.  
Dan Clark, Wyo.  
Kevin Estrem, Colo.  
Pete Illoway, Wyo.  
Jay Mosley, Utah  
Don Nate, Colo.  
Charlie Parker, Utah  
Sharon White, Colo.

#### Exceptional Service Award

Jeri Andrews, Colo.  
Jack Powell, Colo.  
Don Wardle, Utah

### South Central Region

#### Medal of Merit

Stephen Carey, Ala.  
Sam Forbert, Miss.  
James Harris, Ala.  
Susan Mallett, Ala.  
Winston J. Daws, Tenn.

### Exceptional Service Award

John S. Heffernan, Ark.

### Southeast Region

#### Medal of Merit

Don Adee, S.C.  
Gerald Murray, Ga.

#### Exceptional Service Award

Lance S. Young, S.C.

### Southwest Region

#### Medal of Merit

Gerald Ashley, Ariz.  
Robert Hale, Nev.  
Joseph Martin, Ariz.  
Mike Starkey, Ariz.  
Annette Trebesch, Ariz.

#### Exceptional Service Award

Luisa Bailey, Ariz.  
Ken Huey, N.M.  
Ross Lampert, Ariz.  
Ed Tooley, N.M.

### Texoma Region

#### Medal of Merit

Eric Bailey, Tex.  
Linda Campbell, Tex.  
Jennifer Condon-Pracht, Okla.  
James Jacobs, Okla.  
Mary King, Tex.  
Michelle Lollar, Tex.  
Michael Rollman, Okla.  
Bruce Shelton, Okla.

#### Exceptional Service Award

Richard Baldwin, Okla.  
Annie Howell, Tex.  
Rich Knapp, Okla.  
William Lawson, Tex.

## Named in Memorial Tribute

Deaths during the past year that were formally recognized at the convention.

Col. Jack H. Alston, USAF (Ret.)  
MSGT. Bruce R. Bachellor, USAF (Ret.)  
Brig. Gen. Walter J. Bacon, USAF (Ret.)  
Maj. Gen. William J. Breckner Jr., USAF (Ret.)  
Lt. Col. John G. Brennan, USAF (Ret.)  
Rose Brosky  
Capt. Norfleet Callicott, USAFR (Ret.)  
Col. Robert E. Darlington, USAF (Ret.)  
Lt. Col. James V. Drew, USAF (Ret.)  
SSgt. Jacob DeShazer, USAF (Ret.)  
Angelo DiGiovanni  
Lt. Col. Charles W. Dryden, USAF (Ret.)  
Winfield Du Barr  
Edward C. Greene  
Irwin Hansen

Edward J. Hayes Jr.  
Maj. Gen. John P. Henebry, USAF (Ret.)  
Gen. Robert T. Herres, USAF (Ret.)  
Brig. Gen. David Lee "Tex" Hill, USAF (Ret.)  
Lt. Col. Walter A. Hogan, USAF (Ret.)  
Edward Hudson  
Brig. Gen. Harold F. Knowles, USAF (Ret.)  
Frank R. Leary  
Col. Edwin W. Lewis, Jr., USAF (Ret.)  
Col. Donald S. Lopez, USAF (Ret.)  
Maj. Gen. Lewis Lyle, USAF (Ret.)  
Lt. Col. Kemp F. Martin, USAF (Ret.)  
Gordon E. Meinert  
Maj. Gen. Otis C. Moore, USAF (Ret.)  
Maj. Gen. David C. Morehouse, USAF (Ret.)

Lt. Col. Robert E. Olson, USA (Ret.)  
Col. G. Barney Rawlings, USAF (Ret.)  
Lt. Col. William J. Redmond, USAF (Ret.)  
Robert T. Shaughness  
Brig. Gen. Edward D. Slasienski, USAF (Ret.)  
Col. Ray E. Stratton, USAF (Ret.)  
Col. Theodore Stumm, USAF (Ret.)  
Capt. George A. Taylor, USAF (Ret.)  
Lt. Col. Lee Terrell, USAF (Ret.)  
Brig. Gen. Paul W. Tibbets Jr., USAF (Ret.)  
Brig. Gen. Thomas L. Tinsley  
Anthony Vallone  
Maj. John T. Willis, USAF (Ret.)  
Ralph Yates  
Walter Zywan



# Air Force Councils

## Air National Guard Council



**Maj. Gen. Fred R. Sloan, ANG (Ret.)** (Chair)

CMSgt. Lori Ashness  
 Maj. Robert T. Botkin  
 Br g. Gen. Hugh T. Broomall  
 TSgt. Daniel Dierickx  
 Maj. Gen. Michael J. Haugen, ANG (Ret.)  
 Maj. Gen. William B. Lynch, ANG (Ret.)  
 CMSgt. Michael Meyer  
 CMSgt. Jon Rosa  
 Col. J. Kurt Vogel Jr.  
 Maj. Gen. Mason C. Whitney, ANG (Ret.)  
 Capt. Stacy Williamson  
 Lt. Gen. Craig R. McKinley (Advisor)  
 SMSgt. Jennifer C. McKinney (Liaison)

## Civilian Advisory Council



**Jeffrey C. Allen** (Chair)

Sheila Barboza  
 James Hamilton  
 Raymond Pabilonia  
 Cynthia Manchester (Liaison)

## Company Grade Officers Council



**Capt. Jason Parker** (Chair)

Capt. Douglas M. Bauer  
 Capt. Jill A. Durbin  
 Capt. Shay Edwards  
 Capt. Paul Hendrickson  
 Capt. Jason Kalman  
 Capt. Jason J. Miller  
 Capt. Christopher A. Tooman  
 Capt. Gregory Duffy (Liaison)

## Enlisted Council



**CMSgt. James E. Davis** (Chair-Liaison)

SrA. Mary C. Bullock  
 TSgt. James B. Caughron  
 TSgt. Earl I. Covei  
 MSgt. Carla L. Curry  
 SSgt. Eric M. Eberhard  
 SrA. Alicia A. Goetschel  
 SMSgt. Dorra J. Goodno  
 TSgt. Jason D. Hughes  
 MSgt. Sachiko D. Jones  
 MSgt. George Price Jr.  
 SSgt. Shawn A. Ryan  
 TSgt. Tammy K. Shaw  
 SSgt. James M. Weltin

## Reserve Advisory Council



**Brig. Gen. Eric W. Crabtree** (Chair)

Maj. Brandon Bailey  
 Maj. Ericka Brewington  
 Capt. Shari E. Crenshaw  
 SMSgt. Jonathan Demboski  
 SSgt. Armando Galarza  
 SMSgt. Lucinda Hines  
 Lt. Col. Mark Loeben  
 SSgt. Sean O'Connor  
 SMSgt. Ramon Roldan  
 Col. Michael F. LoGrande (Advisor)  
 CMSgt. David Conaway (Liaison)



# AFA

## Veterans/Retiree Council



**Walter S. Hogle Jr.** (Chair)

Rod Ellison  
 Richard E. Fitzhugh  
 David A. Guzman  
 Maynard N. Heth  
 Charles E. Lucas  
 Russell Mank  
 Jimmy L. Miller  
 Donald Taylor  
 Elia T. Vasilopoulos

## New Mission Statement

"The enduring responsibility of the United States Air Force is to provide strategic deterrence for the nation and [to] fly, fight, and win as an integral part of the joint team."—**Gen. Norton A. Schwartz, Air Force Chief of Staff, Sept. 3.**

## The Real Aggressors

"The suspicion would arise that someone in the United States created this conflict on purpose to stir up the situation and to create an advantage for one of the candidates in the competitive race for the presidency in the United States."—**Russian Prime Minister Vladimir V. Putin, explaining the events leading up to the Russian invasion of Georgia, CNN, Aug. 28.**

## The Post Spots a Trend

"Mr. Putin is turning Russia into something very like a fascist state, and its natural inclination will be to replicate itself abroad."—**Washington Post editorial, Sept. 2.**

## Now's Your Chance

"If you are an Air Force critic, the world is your oyster."—**Richard Aboulafia, Teal Group aerospace research firm, Government Executive, Aug. 15.**

## Remember To Talk Big

"My preference is to go carefully on concrete actions but to be sufficiently tough on the language. Whether we like it or not, Russia and Europe are mutually interdependent."—**Foreign Minister Alexander Stubb of Finland, Wall Street Journal, Aug. 29.**

## Indication for Raptors

"Given Russia's invasion of Georgia on behalf of the breakaway region of South Ossetia on 8 Aug., some of the lost emphasis on preparing to fight potential future conventional war is likely to have been rediscovered. *Jane's* believes the case for extending the procurement of the F-22 has seemingly been strengthened by events in the Caucasus. While the conflict in Georgia will not establish a firm requirement for additional Raptors, it will give more credence to those voices that advocate

the potential for future conflict with advanced states."—**Jane's Defence Business News, Sept. 5.**

## Déjà Baloney

"Washington officials probably will use the same excuses they did after Vietnam to justify renegeing on their obligation to 'provide for the common defense.' They will argue that they can spend less on defense because they're so smart. They know exactly what the future holds, what the threats will be, how to handle them—and miraculously, the cost of this defense will be exactly the paltry amount of money they're willing to spend."—**James J. Carafano, Heritage Foundation, Tampa Tribune, Sept. 8.**

## Wynne's Prescription

"We could have flown Global Hawks or U-2s on the Russian-Georgian border to signal our watchfulness to the Russians. We could have escorted these assets with the F-22s, which fly at high enough altitude to operate as a defense of unmanned assets, or can operate to defend key assets in Georgia. If the Russians determined to invade, we could have strengthened air defenses of key Georgian positions, provided fighter reinforcements, and placed Special Forces or marines on the ground in the national capital."—**Former Secretary of the Air Force Michael W. Wynne, commentary, Military.com, Sept. 8.**

## US Dominance Diminishing

"The US will remain the pre-eminent power, but that American dominance will be much diminished."—**Thomas Fingar, leading analyst of the US Intelligence Community, forecasting global trends for 2025, Washington Post, Sept. 10.**

## Where It Must End

"We do face committed enemies, which brings me to the challenge of the tribal areas of Pakistan. As in Iraq, until the insurgency is deprived of safe havens, insecurity and violence will persist. ... During this time of political turmoil in Pakistan, it is especially crucial that we maintain a strong and positive relationship with the govern-

ment—since any deterioration would be a setback for both Pakistan and Afghanistan. The War on Terror started in this region. It must end there."—**Secretary of Defense Robert M. Gates, House Armed Services Committee, Sept. 10.**

## Not a Suggestion

"In the past few years, we've witnessed reduced situational awareness and a lack of focus when it comes to complying with policies and procedures and the fundamental principles of accountability. Air Force instructions are not a suggestion. We should begin by critically examining our internal processes, identify weaknesses, restore discipline, and instill a willingness to enforce policies."—**Maj. Gen. Gary T. McCoy, Air Force director of logistics readiness, Air Force Print News, Sept. 5.**

## Nuclear Limbo

"Despite the continuing desire or the part of many to see a nuclear free world, I believe that such a vision is a dangerous pipe dream. We can no more disestablish the reality of nuclear weapons than we can plan for the end of history. The current strategy and posture places us in limbo. While there is virtual unanimity that the security environment has changed, the US strategic posture looks remarkably similar to what it was more than a decade ago. It is important to recognize that by not taking steps to modernize the existing elements of the posture, we are making a choice with respect to our future military strategy and deterrent policy."—**Daniel Goure, Lexington Institute, remarks to Strategic Posture Commission, Aug. 15.**

## Return on Success

"Here's the bottom line: While the enemy in Iraq is dangerous, we have seized the offensive. Iraqi forces are becoming increasingly capable of leading and winning the fight. As a result, we've been able to carry out a policy of 'return on success'—reducing American combat forces in Iraq as conditions on the ground continue to improve."—**President Bush, speech at National Defense University, Sept. 9.**

# AFA's GLOBAL WARFARE SYMPOSIUM



Thursday, November 20 - Friday, November 21, 2008  
The Beverly Hilton Hotel  
Beverly Hills, CA

**MARK YOUR CALENDAR FOR THESE OTHER GREAT AFA EVENTS COMING IN 2009!**

## AIR WARFARE SYMPOSIUM AND TECHNOLOGY EXPOSITION



ORLANDO, FL  
FEBRUARY 26-27, 2009

AIR & SPACE  
CONFERENCE  
AND TECHNOLOGY EXPOSITION  
2 · 0 · 0 · 9



SEPTEMBER 14-16, 2009  
GAYLORD NATIONAL HOTEL | WASHINGTON, DC

**FOR MORE INFORMATION OR TO REGISTER VISIT [WWW.AFA.ORG](http://WWW.AFA.ORG)**

# AFA National Report

natrep@afa.org

By Frances McKenney, Assistant Managing Editor

## AFA's Teacher of the Year

Florida teacher Leo F. Murphy was honored as the 2008 National Aerospace Teacher of the Year at the Air Force Association's Air & Space Conference and National Convention in September.

The **Hurlburt Chapter** and AFA Florida nominated Murphy, who received the award at a ceremony on the conference's opening day. The award recognizes a classroom teacher who encourages students in grades kindergarten through 12 to study science, technology, engineering, and math.

A retired Navy commander—and naval aviator—Murphy today directs an aviation program for Choctawhatchee High School in Fort Walton Beach and at nearby Crestview Vocational Technical Center. The program allows students to earn high school and college credits and industry certification. Murphy teaches flight physiology, management science, and information systems in the program.

In 2006, Murphy began to walk his students through every step of the col-



*AFA's National Aerospace Teacher of the Year is Leo Murphy, who directs—and teaches in—an aviation program for two Florida schools. He was nominated for the award by the Hurlburt Chapter.*



*Wearing a lei, in keeping with the luau theme, MSgt. Ramon Barajas, the Frank Luke Chapter president, prepares to serve food at a chapter-organized dinner. Helping him are (l-r) chapter members Ray Rodes and Bob Curry and an unidentified volunteer from the First-Term Airman Center at Luke AFB, Ariz.*

lege application process, to boost the numbers who would go on for further formal education. He developed programs to encourage them to attend local junior colleges and universities. He worked with Embry-Riddle Aeronautical University-Daytona Beach, where he is an associate professor, to offer his students a VIP campus visit and a flight in a small airplane. The Okaloosa County School District reported that Embry-Riddle accepted 24 of his seniors in 2008.

Murphy is the 23rd recipient of AFA's National Aerospace Teacher of the Year award.

## Luau at Luke

At Luke AFB, Ariz., in August, the **Frank Luke Chapter** invited families of airmen on deployment to a luau dinner.

MSgt. Ramon E. Barajas, the chapter president, explained that the base chapel sponsors a family dinner once a month for those who have a spouse on deployment. Each month a different group takes on organizing it. He volunteered the chapter for the August gather-

ing because when his wife, Elena, had been deployed for six months to Qatar in August 2007, he had attended one of these dinners with his two daughters and had enjoyed the night out.

About 20 chapter members pitched in to carry out the luau—a theme chosen by Barajas simply because it sounded fun. Community Partner Vice President Beverly Gately took charge of decorating around this theme, using colorful tablecloths, pineapples and coconuts, and lei garlands.

Chapter members set up the tables (and cleaned up afterward). They served pulled pork, Hawaiian-style meatballs, fruit salad, and other dishes to some 80 guests. The chapter collected donations from the community and raffled off dozens of prizes, including two kids' bikes.

Barajas, a munitions production chief at the 56th Equipment Maintenance Squadron, arranged for entertainment by a Filipino-American group that performed folk dances from the Philippines, Hawaii, and Guam. The audience, he said, was "very surprised by the entertainment—how good it was."

Barajas added that word spread about this luau, and the next month, an even larger crowd showed up for the chapel dinner.

#### Welcome, AFJROTC

In September, **Red Tail Memorial Chapter** members in Ocala, Fla., helped support a new school that wants to start an AFJROTC program.

Francis Marion Military Academy—a charter school that had opened only



**Brig. Gen. Roy Uptegraff II (far left), commander of the 171st Air Refueling Wing, and Eric Taylor (far right), then Pennsylvania state president, present Eagle Chapter's Susanna Gyger and Jaclyn Lacy Gyger with AFA awards at the Pennsylvania State Convention.**

three weeks before—hosted a program on Sept. 5 to show its classrooms to area AFJROTC administrator Col. John Vick, USAF (Ret.).

Chapter President Michael H. Emig reported that among the guests joining him at this open house were county officials, parents of the students, and several Red Tail members: John E. Clark, aerospace education VP; Fern M. Rhodes, communications VP; Paul

A. Blystone; John R. Edsall, a teacher at the school; and Joe Lacey.

Emig spoke to the gathering, describing AFA's support for aerospace education.

The school opened with students in grades nine and 10, and, in the following years, intends to add grades 11 and 12. It is named after Brig. Gen. Francis Marion, a Revolutionary War soldier from South Carolina whose ability to slip away into the woods and river areas earned him the nickname "the Swamp Fox."

#### Eagles in Alabama

The **Montgomery Chapter's** annual Gathering of Eagles brunch in Montgomery, Ala., in June filled a local country club with more than 200 guests.

This was nothing new, reported chapter member Joe Panza. "The brunch is a first-class affair that is very popular," he said.

The Eagles are notables in aviation and aerospace who, since 1982, have visited with students at the Air Command and Staff College, Maxwell AFB, Ala., to describe their role in history.

The Montgomery Chapter traditionally hosts a brunch for these Eagles, giving members an opportunity to meet the legends.

This year, the 14 Eagles were: Retired Brig. Gen. Harry C. Aderholt, air commando; Roscoe C. Brown Jr., Tuskegee Airman; Iris Cummings Critchell, Women Airforce Service Pilot; Kenneth H. Dahlberg, World War II triple ace; retired Col. George E. Day, Medal of Honor recipi-



**At the Montgomery Chapter's Gathering of Eagles brunch, chapter member Charles Cleveland (l) meets a new "Eagle," Kenneth Rowe. A North Korean pilot in the Korean War, Rowe defected in September 1953, flying his MiG-15 to Kimpo Air Base.**

ent; retired Col. Charles B. DeBellevue, Vietnam War ace; retired Gen. Charles A. Horner, Gulf War air boss;

Retired MSgt. Edwin W. Horton Jr., Doolittle Raider; Eugene F. Kranz, NASA mission director; Chief Warrant Officer 5 Lance McElhiney, Army Cobra and Apache pilot; Alfred Paul Metz, F-22 test pilot; Dolph Overton III, Korean War ace; Kenneth H. Rowe (born No Kum-Sok), North Korean MiG-15 pilot; and

retired Col. Walter T. Stewart, Ploesti mission pilot.

At the brunch, the guests watched a video biography of the Eagles. Chapter officers, led by then-Chapter President Thomas W. Gwaltney, presented each Eagle with a commemorative medallion. Panza said the Eagles wore their medallions to the ACSC graduation that evening—even Day, who wore it along with his Medal of Honor.

**More Chapter News**

■ The Long Island Chapter in New York set up an AFA display at the American Airpower Museum's Labor Day air show. Led by Chapter Treasurer Fred DiFabio, chapter members manned the display and spoke to visitors about AFA's mission. The AFA volunteers were Lorraine A. Birnbach, William Birnbach, David E. Boone, Robert Braverman, Frank T. Logan II, and Alphonse A. Parise. Vintage B-17 and B-24 warbirds from the Collings Foundation, a living history-educational nonprofit based in Stow, Mass., brought crowds to the show. A World War II P-40 and P-51 and several North American Aviation SNJ trainers also performed.

## MEMBER GET A MEMBER CAMPAIGN



All AFA members are encouraged to participate in the Member Get A Member campaign between **October 1 and December 31.**

### PRIZES

1st Prize  
**Studio 15 Laptop Computer**  
*(donated by Dell)*

2nd Prize  
**\$1,000**  
*(donated by AFAVBA Banking Center)*

3rd Prize  
**16 GB iPod Touch**  
*(donated by Apple)*

### CONTEST RULES

1. Recruiters must ensure the membership application (either on-line or paper) includes the recruiter's name, phone number and member number if known.
  - a. There will be space for this information in the online application.
  - b. Go to AFA.org and click on "Join AFA" to access an application which you can print and use.
  - c. If you are using the regular application, please add your phone number and/or member number to the back of the app along with your name.
2. The member must be recruited between Oct 1 and Dec 31. Membership applications must be entered online/postmarked no later than December 31.
3. The application must include payment.
4. Enter code HGM in the lower right corner of the application if this code is not on the application you use.
5. Chapters will get new member rebates and recruitment credit for the new members recruited into the chapter by one of the chapter members – as long as the application has the chapter name or number along with the recruiter's information on it.
6. AFA National Officers and AFA Staff may not compete in this challenge.
7. Recruiters will get one chance to win for every new member they recruit.
  - a. This means the more members you recruit the more chances you have to win.
  - b. This also means that with just one person recruited you can win!

**Have AFA News?**

Contributions to "AFA National Report" should be sent to *Air Force Magazine*, 1501 Lee Highway, Arlington, VA 22209-1198. Phone: (703) 247-5828. Fax: (703) 247-5855. E-mail: natrep@afa.org. Digital images submitted for consideration should have a minimum pixel count of 900 by 1,500 pixels.

## SPOTLIGHT ON . . .



AFAVBA's MetLife Auto Insurance

[www.metlife.com/airforceassoc](http://www.metlife.com/airforceassoc)

- \* Would lower rates make you switch auto insurance?  
\* \$369 average cost savings per year
- \* Special AFA member discounts
- \* \$50 off your deductible for each claim free year, up to \$250
- \* Full Replacement Coverage for full new-car value
- \* Special parts replacement
- \* Multi-policy discounts
- \* Enhanced rental car damage coverage
- \* 24/7/365 access to superior customer service

Call 1-800-888-2308

for a free no-obligation quote






■ As it has since 2001, the **Chuck Yeager Chapter** in West Virginia co-sponsored the annual Mountaineer Cadet Officer Leadership School in June. AFJROTC cadets from five states spent a week at Concord University in Athens, W.Va., both in the classroom and on the drill field. Central East Region President Mason S. Botts attended the leadership school's final pass in review and the awards ceremony. The chapter provided trophies and plaques for the cadets, with the top award going to Alexander Hargrave from Dobyns-Bennett High School in Kingsport, Tenn. Retired Maj. Phillip Suydam, the senior aerospace science instructor from the same school, led the MCOLS as commandant, this year.

■ At the Pennsylvania State Convention's awards dinner held in State College in August, a mother-daughter team from the **Eagle Chapter** was among the recipients of AFA national-level awards. Susanna B. Gyger, chapter president (and state VP), and Jaclyn Lacy B. Gyger, who serves as VP for communications as well as government relations, each received a Medal of Merit. State President Eric P. Taylor and ANG Brig. Gen. Roy E. Uptegraff II made the presentations. Uptegraff is commander of the 171st Air Refueling Wing at Pittsburgh Arpt./ARS, Pa., and was guest speaker for the awards dinner. Robert Rutledge of the **Lt. Col. B. D. "Buzz" Wagner Chapter** was elected as the new state president.

■ The new president of the **San Jacinto Chapter** has the distinction of being voted into office in a ship-board election. The chapter elected ANG Col. Rodney L. Horn during its annual Harbor Lites dinner cruise in August, as M/V *Sam Houston* plied the port of Houston's ship channel. Horn is vice commander of the 147th Reconnaissance Wing at JRB Ellington Field, Tex. The chapter's other officers elected were Richard P. Campbell, William J. Rothschild, and William T. Humphries.

**Joseph A. Zaranka, 1925-2008**

Joseph A. Zaranka, an AFA National Director Emeritus, died in Connecticut on Sept. 21. He was 83 years old.

A native of Nanticoke, Pa., Zaranka was a corporal in the Marine Corps during World War II, serving in the Pacific Theater. He then earned a bachelor's degree from the Teachers College of Connecticut and a law degree from Western New England College in Springfield, Mass.

Zaranka enlisted in the Air Force for the Korean War, serving until 1953. In his civilian career, he was an insurance adjuster. ■

# THE HANGAR STORE



Order TOLL FREE!  
**1-800-727-3337**

Add \$5.00 per order for shipping and handling.

Shop online at

**www.afa.org/store/**

V-NECK GOLF SWEATER  
M, L, XL



**\$35**

100% cotton,  
rib knit trim

CLASSIC POLO  
M, L, XL, XXL, XXXL



**\$35**

100% cotton,  
embroidered

PRO STYLE CAP  
adjustable strap size



**\$20**

100% cotton, adjustable  
size, embroidered

JACQUARD COLLAR POLO  
M, L, XL, XXL, XXXL



**\$35**

short sleeved, 100%  
cotton, embroidered



**YOUR competitors are here selling to  
YOUR customers!**

**WHY AREN'T YOU?**

**Technology Exposition**  
at the **AIR & SPACE CONFERENCE**  
every September, Washington DC  
and at the **AIR WARFARE SYMPOSIUM**  
every February, Orlando FL

CONTACT  
**DENNIS SHARLAND**  
dsharland@afa.org  
(703) 247-5838

or for more details visit  
**WWW.AFA.ORG**

# Airpower Classics

Artwork by Zaur Eylanbekov

## F-86 Sabre



Called the “fighter pilot’s fighter,” USAF’s F-86 was a marriage of US manufacturing technique and German swept-wing research. The hot little North American jet aircraft took over from its P-51 Mustang predecessor to become the top air superiority fighter in the Air Force. Before it was done, it had served as an interceptor, fighter-bomber, nuclear strike fighter, reconnaissance aircraft, and trainer.

Original plans called for the Sabre to have straight wings like those of the Navy FJ-1 from which it was derived. However, the prototype XP-86 was enhanced with a 35-degree swept wing. It had automatic slats similar to those used on the Messerschmitt Me 262 fighter. The Sabre was capable of supersonic flight in a dive. In fact, the F-86 suffered a high accident rate until pilots

could routinely be given training of a caliber commensurate with the fighter’s performance.

Initial F-86s were assigned as air defense interceptors, a role in which they were deemed indispensable. Then, in November 1950, Soviet-built MiG-15s entered the Korean War. The US quickly sent three squadrons of Sabres as counters. Equal performance and superior piloting allowed the F-86 to establish dominance over Russian pilots flying the MiGs; Sabre pilots established a lopsided kill advantage over their communist opponents. The F-86 went on to serve in 38 air forces around the world.

—Walter J. Boyne

**This aircraft:** F-86E Sabre #51-2791—*My Hutch*—as it looked in 1953 when assigned to 25th FS, Suwon AB, South Korea.



### In Brief

Designed by North American Aviation ★ built by NAA, Canadair, Commonwealth, Fiat, Mitsubishi ★ first flight Oct. 1, 1947 ★ crew of one ★ number built 9,860 (USAF, USN, USMC) ★ **Specific to F-86F:** one General Electric J47-GE-27 engine ★ armament six .50 cal machine guns, two 1,000-lb bombs, eight 5-in rockets, napalm ★ max speed 687 mph ★ cruise speed 540 mph ★ max range 1,525 mi ★ weight (loaded) 18,152 lb ★ span 37 ft 1 in ★ length 37 ft 6 in ★ height 14 ft 8 in.

### Famous Fliers

**Medal of Honor:** George Davis (Korea). **Air Force Cross:** Robinson Risner (Vietnam). **Aces:** Joseph McConnell Jr., James Jabara, Manuel Fernandez Jr., George Davis, Royal Baker, Frederick Blesse, Vermont Garrison, Robinson Risner, Francis Gabreski, Harrison Thyng, Charles Cleveland. **Notables:** Edwin Aldrin, Bud Anderson, Bruce Carr, Edwin Chickering, Kenneth Chilstrom, Jacqueline Cochran, Gordon Fullerton, John Glenn, Robert Hoover, Sam Johnson, Iven Kincheloe Jr., Walker Mahurin, Robin Olds, Donald Rodewald, Russell Schlee, Raymond Tolliver, Chuck Yeager.

### Interesting Facts

Credited by some as first to break sound barrier ★ first to break 700-mph barrier ★ first to launch a Sidewinder in combat (Taiwan AF model, 1958) ★ led to North American F-100 ★ featured in films “The McConnell Story” (1955), “The Hunters” (1958) ★ flew in SAC, TAC, ADC ★ set world speed records of 670.981 mph (1948), 698.505 mph (1952), and 715.697 mph (1953).



*The Sabre was fast and maneuverable.*

# ONE FOR ALL



SKY WARRIOR



EAGLE EYE



HUNTER



AAI AEROSONDE



FIRE SCOUT



AAI SHADOW



PIONEER

## THE ONE SYSTEM<sup>®</sup>

The One System<sup>®</sup> is the U.S. Army's premier ground control station for operating multiple unmanned aircraft systems over the battlefield and operations areas and disseminating the valuable intelligence video collected.

Designed by AAI as the core of the Army's Shadow Tactical Unmanned Aircraft System, the One System ground control station is expanding to other unmanned systems, including the Army's Sky Warrior system.

Protected in a climate-controlled, standard-sized Army shelter, the One System receives and disseminates battlefield video through state-of-the-art aircraft operator and mission payload operator terminals and mission planning consoles.

In addition, the One System design complies with the emerging NATO STANAG 4586, supporting operations of a variety of allied and U.S. unmanned aircraft and greatly enhancing interoperability among international military forces.

For more information, e-mail us at [OneSystem@aaicorp.com](mailto:OneSystem@aaicorp.com) or phone 1-800-655-2616.



TEXTRON Systems

INNOVATION THAT WORKS<sup>®</sup>

[aaicorp.com](http://aaicorp.com)



**FACT: COMBAT PROVEN, PRODUCTION READY.**

The search and rescue mission of the U.S. Air Force is a high priority. And the HH-47 is most ready to respond. With a low-risk, hot production line and high commonality with combat-proven state-of-the-art H-47 platforms, the HH-47 best meets Air Force requirements. The warfighter needs the HH-47. When the mission is saving lives, there's not a minute to lose.

 **BOEING**