

# AIR FORCE

JOURNAL OF THE AIR FORCE ASSOCIATION

# MAGAZINE

The War Nobody Expected  
Hits and Misses in Tricare for Life  
The 2003 Air Force Budget

## Redhawk CAP

Noble Eagle in the Northwest



What to expect from a team that is focused on performance.



Joint Strike Fighter. The new multi-role combat aircraft for the 21st century. Keyed on affordability, JSF will be the world's premier strike platform. Together with our allied partners, we're developing design and manufacturing processes as innovative as the aircraft itself. JSF will take joint and coalition operations to new levels of performance and interoperability. The Lockheed Martin team. Committed to performance and best-value solutions for the warfighter.

**NORTHROP GRUMMAN**

**LOCKHEED MARTIN**



**BAE SYSTEMS**

# AIR FORCE

JOURNAL OF THE AIR FORCE ASSOCIATION MAGAZINE

April 2002, Vol. 85, No. 4

[www.afa.org](http://www.afa.org)

- 4 Letters
- 8 Aerospace World
- 20 Senior Staff Changes
- 21 Index to Advertisers
- 41 Verbatim
- 72 State Contacts
- 73 This Is AFA
- 74 AFA/AEF National Report
- 78 Reunions
- 79 Books
- 80 Pieces of History

2 **Editorial: Rethinking the Unthinkable**  
By Robert S. Dudley  
*A "minimum deterrent" nuclear arsenal won't do it.*

22 **The Strength of the Force**  
By Peter Grier  
*Air Force leaders check their progress on the road toward transformation.*

30 **The Combination That Worked**  
By Peter Grier  
*CENTCOM's Franks says air and space power have been pivotal in Afghanistan.*

34 **The War Nobody Expected**  
By Rebecca Grant  
*The US suddenly had to fight halfway around the world, in primitive conditions and without preparation.*

42 **Redhawk CAP**  
By Guy Aceto and Erik Hildebrandt, photographers  
*For this Air National Guard fighter wing, the front line in the war on terror is in its own backyard.*



22

50 **Transformation Gets a Boost**  
By Robert S. Dudley  
*The new USAF budget targets high-payoff technologies and concepts.*

55 **Defense Budget Chart Pages**  
By Tamar A. Mehuron  
*The defense budget at a glance.*

58 **Terrorists Seek the Big Bang**  
By Bill Gertz  
*The CIA says that terrorists are pushing to acquire "ultimate weapons"—nuclear, chemical, biological—with a fair prospect for success.*

62 **Tricare for Life Hits and Misses**  
By Tom Philpott  
*The program began smoothly for most people, but some had a different experience.*

66 **The Genius of George Kenney**  
By Herman S. Wolk  
*He was a superb leader and organizer. He also knew how to get along with MacArthur.*



**About the cover:** An Oregon Air National Guard F-15 pilot, Maj. James Meckoll, flies Combat Air Patrol over the Northwest. See "Redhawk CAP," p. 42. Staff photo by Guy Aceto.



66

AIR FORCE Magazine (ISSN 0730-6784) April 2002 (Vol. 85, No. 4) 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 22209-1193. Publisher assumes no responsibility for unsolicited material. Trademark registered by Air Force Association. Copyright 2002 by Air Force Association.

By Robert S. Dudley, Executive Editor

## Rethinking the Unthinkable

**R**EMEMBER the "Doomsday Clock," that cartoon symbol of Cold War nuclear danger? It's back. On Feb. 27 the *Bulletin of the Atomic Scientists* moved the hand of their clock two minutes closer to midnight. "The clock is ticking," it warned.

The *Bulletin* was having the jitters about "negative developments"—lax nuclear security, terrorist nuclear ambitions, India-Pakistan tensions, and so forth. Predictably, though, the most prominent "negatives" on the list concerned US nuclear weapons.

Critics of US nuclear policies are thick on the ground. President Bush's new Nuclear Posture Review (NPR), unveiled Jan. 9, alarmed many because it set a course based on at least four distinctive principles—adequately large offensive forces, reversibility, responsiveness, and defense.

Today's arsenal contains 6,000 warheads. The NPR stated a target number of 3,800 operationally deployed weapons by 2007 and 1,700–2,200 by 2012, deployed on ICBMs, bombers, and submarines. The 2012 force—a third the size of today's—represents a rock-bottom minimum in military terms. Even so, 2,000 or so warheads far exceeds levels sought by hard-core arms controllers.

That's not all. The NPR is not a ratchet; it permits the US to raise as well as lower warhead levels by providing an operational force and a backup force. Most weapons removed from operational service will be stored, not dismantled, meaning that the US could reverse course and use them to reconstitute a larger arsenal.

The Bush plan seeks a more-responsive nuclear weapons complex able to design and test weapons faster than is possible today. The NPR does not disturb the moratorium on nuclear tests. However, today's weapons infrastructure would need 24 to 36 months to prepare and conduct a test. Bush is thinking more like 18 months.

When the NPR emerged, arms control sophisticates were distressed. Too many weapons, they charged. They weren't happy about reversibility,

either; it would leave the door ajar for a future buildup. Enhancing the readiness of the nuclear infrastructure would make possible a resumption of nuclear testing, they claimed, and Bush's call for missile defense was rejected out of hand.

The arms control lobby felt stiffed, with reason. The President rejected the notion, widespread in the arms

### A "minimum deterrent" nuclear arsenal won't do it.

control community, that the US does not really need much of a nuclear arsenal anymore. True, Bush himself wants to cut US reliance on nukes, but "the nuclear arsenal is central to our ongoing security needs," said a top US official.

The reasons are many. As US officials know, the nuclear threat has not disappeared. Russia, while no longer openly hostile, is still unstable and deploys thousands of weapons. China now is or soon will be able to construct a large and threatening arsenal. The danger is growing. Several Third World states now possess ballistic missiles, and others are acquiring them. Nuclear technology is spreading, too, with unpredictable consequences.

This goes a long way toward explaining Bush's rejection of "minimum deterrence"—keeping a few hundred warheads—in favor of a larger, more-complete arsenal. And the strategic force already has taken major cuts. The US in the late 1980s deployed more than 10,000 strategic warheads, but the force has been steadily declining.

Administration critics can't fathom why the US would need 2,000 weapons. Speaking to *Arms Control Today*, Undersecretary of State John R. Bolton gave an answer of sorts. He said, "There are a lot of contingencies that are inherent in the [classified] planning that underlies the Nuclear Pos-

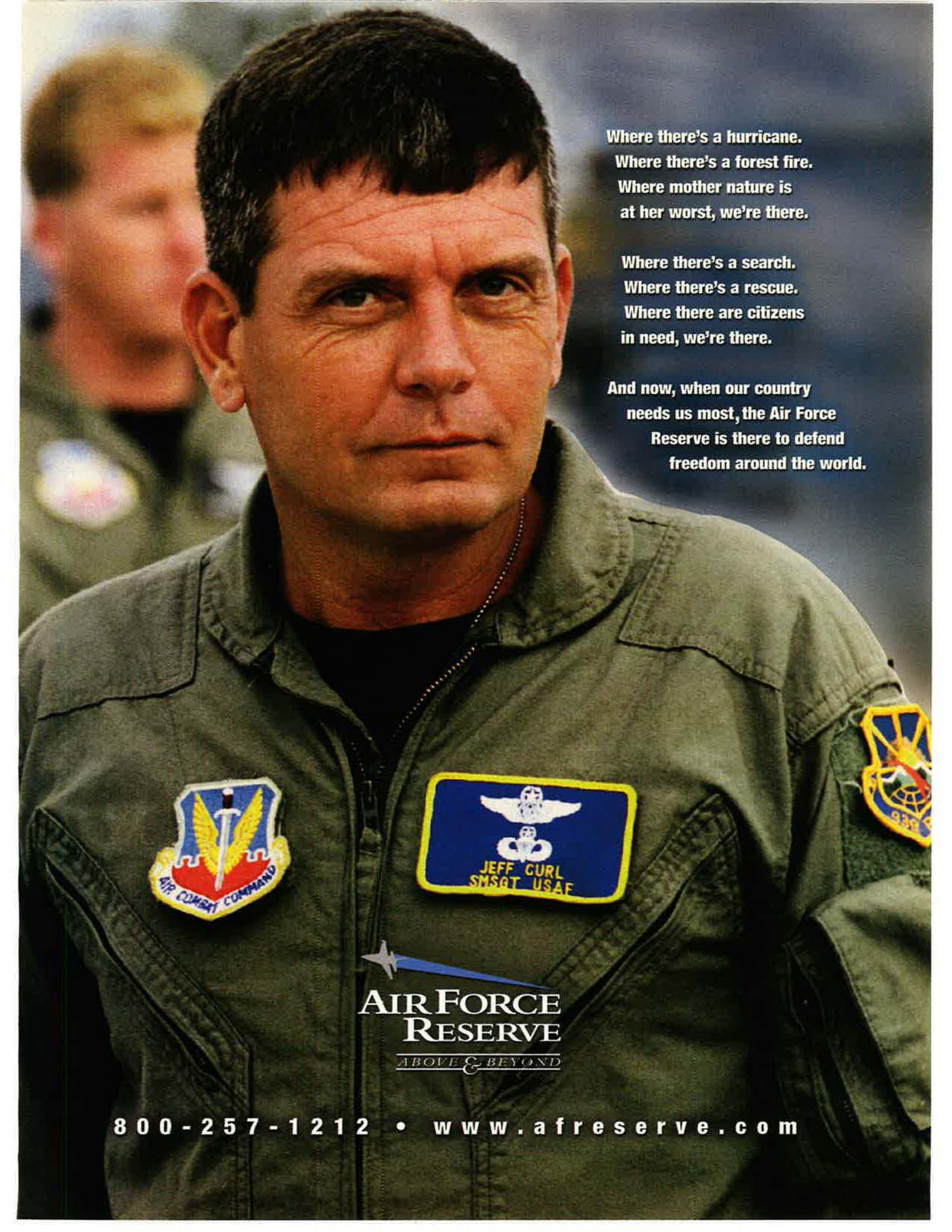
ture Review." These "contingencies" were not specified, but they are said to include potential wars with China, North Korea, Iraq, and Iran. Nor does DOD rule out a resurgent threat from Russia. Bolton added: "The overall question is whether we think we've got a deterrent capability that's robust enough to prevent a first use against us and also that we've got an adequately sized force in the event there's a need to use it."

Keeping a complete force offers more than military benefits. It permits the US to preserve the nuclear "triad" with its inherent security and stability. It makes possible "extended deterrence," or inclusion of allies under a US "umbrella," without which Japan and Germany might seek their own nuclear arms. Finally, the existence of a large force may discourage potential adversaries from trying to match Washington's might.

Bush's critics charge that saving decommissioned warheads is a shell game, and they should be destroyed. Maybe so, but treaties have never required actual destruction of weapons, and the US and Russia maintain thousands in standby stockpiles. Preserving warheads as a "hedge" against unpleasant surprises makes sense for the United States. Unlike Russia and other nations, the US no longer produces nuclear arms.

No one thinks the nuclear argument is over. Sen. Carl Levin (D-Mich.), chairman of the Senate Armed Services Committee, is contesting parts of nuclear policy. In a Feb. 14 letter, 76 House Democrats warned Bush not to tamper with today's unofficial testing moratorium. Bush officials had been forced to qualify statements ruling out new arms control treaties.

One thing, however, is clear. If we want to maintain adequate nuclear deterrence and security, we had better maintain more than a small, inflexible, and vulnerable remnant of today's force. Belittling nuclear arms may be fashionable in the better salons of Washington, but let us hope that the actual decisions on US policy remain in responsible hands. ■



Where there's a hurricane.  
Where there's a forest fire.  
Where mother nature is  
at her worst, we're there.

Where there's a search.  
Where there's a rescue.  
Where there are citizens  
in need, we're there.

And now, when our country  
needs us most, the Air Force  
Reserve is there to defend  
freedom around the world.



  
**AIR FORCE  
RESERVE**  
*ABOVE & BEYOND*

800-257-1212 • [www.afreserve.com](http://www.afreserve.com)

## How About a KC-17?

The KC-135 is certainly not going to last much longer and will need to be replaced.

Sen. [Patty] Murray (D-Wash.) wants to lease 100 767s from Boeing to be used in the tanker role. [See "Aerospace World: Tanker Lease Up for Negotiation," February, p. 19.]

Is leasing a good idea? Is the 767 a good idea or just more political [pork]? The idea of an aircraft, in tanker use, that has only two engines gives me a high "pucker factor."

Why not just buy even more C-17s configured for a KC role as the KC-10 has been? Wouldn't commonality of airframe (C-17/KC-17) lower the per unit price and reduce maintenance and operating costs? Is there some reason why the C-17 couldn't be fitted to this role? Is there some long-term advantage to leasing the 767 vs. a KC-17? What about "bang for a buck"—what would be more cost effective?

Please enlighten the peasantry out here in the provinces.

Calvin H. Cain  
Tucson, Ariz.

■ *Secretary of the Air Force James G. Roche characterized the situation this way at the Air Force Association Air Warfare Symposium in February: "I sure wish I had the cash to buy tankers and not have to put up with this grief."*—THE EDITORS

## More Acts of Terror

There was another act of terrorism at a military installation you did not reference. [See "4 Decades of Worldwide Terrorism," February, p. 70.]

I do not recall all the exact specifics [but I] am sure of most of this; it was part of the inbrief and why security always [required] ID, registration, and insurance paperwork.

In 1985 (I was there 1989–93) two women lured an Army troop out of a nightclub. One or two men were waiting, and they killed him. They took his ID and car and drove it onto Rhein-Main [AB, Germany] the next morning, parking it in the parking lot to the rear of the headquarters building (on the other side of the lot was a dorm).

At about 7:40 a.m., the car—now a car bomb—exploded. It killed a civilian and a young airman.

Good fortune did exist. First, [the terrorists] had the timer set to set [the bomb] off after everyone was inside for the 7:30 a.m. duty day start, and then, by fluke, they parked over a large sewer pipe. Most of the explosion went downward, absorbing the power of the explosion. Had it been solid ground, they calculated personnel indoors would've been injured/killed. The dorm at the other side of the parking lot was pretty much empty due to the duty time.

A wall made of brick and dirt was built to shield the headquarters building from the parking lot. Seems now it was an early on "force protection" measure.

MSgt. Mark Cipriano  
Sheppard AFB, Tex.

You omitted the kidnapping of Adolph Dubs in Kabul by Muslim extremists and the killing of him (Feb. 14, 1979). My daughter was a roommate of his daughter in college while he was chargé d'affaires in Moscow, before [becoming] ambassador to Afghanistan.

Capt. Henry N. Ehrenman,  
AFRC (Ret.)  
Boca Raton, Fla.

The listing of terrorist acts has a glaring omission. It neglects to include the October 1976 bombing of a Cubana de Aviación DC-8 carrying 73 persons on board, off the shores of Barbados. There were no survivors.

Of the alleged perpetrators, Luis

Posada Carriles escaped from a Venezuelan prison while serving sentence for the deaths. He is presently imprisoned in Panama accused of plotting another terrorist act [to take place] while Cuban President Fidel Castro was attending a conference in that country's capital, and extradition proceedings have been initiated by Venezuela. The other, Orlando Bosch, freely roams the streets of Miami.

Lt. Col. Gabriel I. Peñagaricano,  
USAF (Ret.)  
Guaynabo, P.R.

■ *We noted on the story's first page: "This excerpt is not held out as a complete or comprehensive account of all terrorist incidents during these years."*—THE EDITORS

## Keep the EF-111s

It is inconceivable that the Air Force is considering spending more money on jammers when there is a fleet of the best jammers ever built, abandoned and dying in the desert. [See "Aerospace World: USAF Considers New Jammer," February, p. 13.]

When the Air Force agreed to retire its EF-111 Raven aircraft in favor of an older, slower, and less capable EA-6B, it sounded like folly to me at the time. This is certainly not a hindsight comment—I have always thought it was a ridiculous move with no real thought for the future.

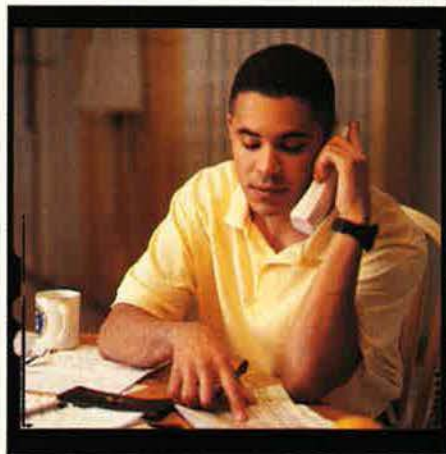
The Air Force spent millions, if not billions, on EF-111 modifications and upgrades—and then summarily retired them! I am not surprised to hear that the EA-6Bs are having problems. They were old and tired when the change occurred. The EF-111s could fly farther without air-to-air refueling than the EA-6Bs, and most other aircraft.

With its great range, mainly because of the sweep wings, the EF-111 did not require as many air-to-air refuelings and therefore did not tie up as many refuelers. It proved that when the fighter versions raided Libya. The sweep wings and afterburners gave it tremendous speed and performance when needed.

Carrier operations should not be the determining factor. The B-2s fly

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

**“When it**  
**comes to my investments, I call the shots.”**



**Brokerage Services.** If you do the research and decision making when it comes to your investments, use USAA Brokerage Services as your discount broker. We have a variety of accounts to meet your needs. And USAA Brokerage Services offers access to stock, bond and options trading at commissions as low as \$14.95. Plus, you can select from over 6,000 mutual funds from many of America's most prominent fund families through the USAA Fund Marketplace.<sup>®</sup> There are three

flexible ways to invest: you can invest online at [usaa.com](http://usaa.com); call one of our registered investment representatives; or use USAA TouchLine Trader,<sup>®</sup> our automated telephone service. If you're a take-charge kind of investor, use USAA Brokerage Services to help you meet the goals in your investment strategy.

**Call us at 1-800-645-6816**  
or visit us at [usaa.com](http://usaa.com)



*We know what it means to serve.<sup>®</sup>*

INSURANCE • BANKING • INVESTMENTS • MEMBER SERVICES

Up to 1,000 shares. \$14.95 for active, online traders only. Standard online fee is \$24 per trade. Commissions subject to change. • USAA Brokerage Services is a discount brokerage service of USAA Investment Management Company. • Transaction fees for nonproprietary funds can be avoided by purchasing directly from the fund family.

©2002 USAA. All rights reserved.



## 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 ..... [fldsvecs@afa.org](mailto:fldsvecs@afa.org)

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

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

Information ..... [information@afa.org](mailto:information@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/AEF Report ..... [afa-aeef@afa.org](mailto:afa-aeef@afa.org)

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

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

### Aerospace Education

Foundation ..... [aefstaff@aef.org](mailto:aefstaff@aef.org)

Eaker Institute ..... [eaker@aef.org](mailto:eaker@aef.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

**Advocates aerospace power and a strong national defense.**

**Supports the United States Air Force and the Air Force family.**

**Educates the American people about the importance of aerospace power to a strong national defense.**

### Letters

from the States to Afghanistan and back. The EF-111s had comparable range capability and could do the same if necessary.

Now, Air Force planners have one more chance—it is not too late to reactivate the EF-111s instead of spending billions on another jammer. I get the very strong feeling that the Air Force is never happy unless it has brand-new equipment under any circumstances.

Right now, I assume, the Air Force wants a bundle of F-22s, still newer joint-service fighters, and Unmanned Aerial Vehicles. This suggestion would provide an opportunity to do a little compromising and save some money for use on other programs. The more recent move to also retire B-1s is just one more example of USAF's sometimes twisted thinking.

In my opinion, the whole fleet of EF/F-111 aircraft and their aircrews were always underrated and unappreciated as to their accomplishments and value. During the Vietnam War, I personally saw the negativism of a majority of the Air Force leaders at Military Assistance Command Vietnam Headquarters concerning F-111s and their crews.

The deadly night time, low-level missions over Hanoi and Haiphong were the most demanding aerial operations ever conceived and flown, but the aircraft, and particularly the aircrews, were never given proper credit or recognition. They were always given second billing to both B-52s and other fighters.

Again, during Desert Storm, there was a similar situation. Most of the precision bombing was done by the F-111s and not the F-117s—however, the F-117s got most of the glory. The F-111s may not have had stealth technology, but there was a reason that the fighter versions were called "Whispering Death."

If the 50-year-old B-52 airframes can be upgraded with newer equipment, certainly the much newer EF-111 airframes can also! The EF-111s could again be a real benefit to the Air Force and the country.

Lt. Col. William G. Meyer,  
USAF (Ret.)  
Las Vegas

### On Alert

In the December 2001 issue, as part of the article "Fifty Years of the B-52," is a picture on p. 55.

It took me about two seconds to identify where the picture was taken—K.I. Sawyer Air Force Base (since closed) in Michigan's Upper Penin-

# AIR FORCE

JOURNAL OF THE AIR FORCE ASSOCIATION

MAGAZINE

### Publisher

John A. Shaud

### Editorial

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

### Editor in Chief

John T. Correll

### Executive Editor

Robert S. Dudney

### Senior Editor

John A. Tirpak

### Associate Editor

Tamar A. Mehuron

### Managing Editor

Suzann Chapman

### Assistant Managing Editors

Juliette Kelsey Chagnon  
Frances McKenney

### Director of Production

Robert T. Shaughness

### Art Director

Guy Aceto

### Assistant Art Director

Cathy C. Haskell

### Research Librarian

Pearlie M. Draughn

### Editorial Associate

Chequita Wood

### Advertising

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

### Advertising Director

Patricia Teevan  
1501 Lee Highway  
Arlington, Va. 22209-1198  
Tel: 703/247-5800  
Telefax: 703/247-5855

### Industry Relations Manager

Jennifer R. Anderson • 703/247-5800

### US and European Sales Manager

William Farrell • 847/295-2305  
Lake Forest, Ill.  
e-mail: [BFarr80708@aol.com](mailto:BFarr80708@aol.com)



Circulation audited by  
Business Publication Audit



sula. The base was the home of the 410th Bombardment Wing, 644th Bomb Squadron, and the 46th and 307th Air Refueling Squadrons.

As a former KC-135A boom operator stationed at K.I. Sawyer, the camera's perspective was one which I experienced many times during my flying career.

Steven Langner  
Bedford Heights, OH

### The Daisy Cutter

Just to keep the record straight concerning the 15,000-pound "Daisy Cutter" bomb: The system was developed in the early 1960s by the Air Force 6511th Test Group (Parachute) at El Centro, Calif. [See "Aerospace World," January, p. 13 photo caption.]

I was a member of that unit as enlisted and then civil service from 1955 to 1978. We first worked with Sandia Corp. with a 10,000-pound bomb dropped from the flying crane helicopter which was designed to clear the jungle for chopper landing pads.

We then designed the system for use by the C-130 aircraft utilizing the 15,000-pound bomb. We made several drops using duds and then made a live drop on the Tonapah Test Range [Nev.]. We then sent the system to Vietnam along with a warrant officer, Chuck Laine, to qualify rigging crews there to prepare and drop the weapon.

The 6511th Test Group made countless unsung contributions to the war effort and to parachute systems in general and continues to this day at Edwards AFB [Calif.], where it is currently testing the C-130J and [C-130J]-30.

Kenneth F. Cunningham  
Lancaster, Calif.

### Let's Roll

Accolades to SrA. Duane White for the outstanding nose art to be displayed by the Thunderbirds and some additional USAF aircraft. [See "Aerospace World," February, p. 26 photo caption.] Why not get an AAFES vendor to copy it in a smaller size with magnetic backing so we can display it on our personal vehicles? I am sure thousands would be purchased from base/post exchanges.

Lt. Col. Charles Friant,  
USAF (Ret.)  
Hobe Sound, Fla.

### Too Late

Your February issue contains advice from DOD regarding the recording of separation/retirement documents at local courthouses. [See "Aerospace World: News Notes," p. 27.]

Handcrafted Ready-Made Museum Quality Mahogany Aircraft/Ship Models  
**LET US CUSTOM MAKE YOUR AIRCRAFT/SHIP**  
**www.motionmodels.com 1-800-866-3172**

The largest catalog selection & website of custom & ready-made ships & aircraft anywhere. Catalog has over 1200 models in COLOR. Specializing in CUSTOM MADE & cataloged models. Vets & active, let us make you what you served on or flew. GIANT 120-page, full-color catalog \$8.00 (refundable). Layaway plans available. Flyers, Sailors, Collectors, we talk your language. Email: Joel@motionmodels.com

**Motion Models 1-800-866-3172**  
**Box #875, Baldwin, New York 11510**

Good advice, but years too late for me. My courthouse-recorded documents were apparently used to steal my identity. The thief borrowed \$12,301.56 from First Bank of Boston, which subsequently sold the bad loan to NCO Financial Services, Inc., a collection agency. I never was able to clean up the mess.

No separation/retirement documents should be in the possession of any courthouse. Even if the documents are supposedly protected from public examination, courthouses oc-

asionally hire corrupt clerks. Information not available to public examination could be purchased from corrupt clerks.

The sole appropriate place to record such documents is with Veterans Affairs. The VA should offer this service and, by Congressional mandate, seize all such documents that are presently held in the nation's courthouses.

Maj. Dave Broyles,  
AFRC (Ret.)  
Hilo, Hawaii

## More privileges on road. Online.



**F**ast and Simple! You can enjoy low web rates, special offers and Member Savings discounts when visiting hertz.com. Choose from a wide variety of cars — from economy class to standard SUV's and luxury vehicles. Find a convenient location anywhere in the world (including more than 700 suburban locations in the U.S.). And enroll free online the Hertz #1 Club® and #1 Awards®.

**A**lways enter your CDP# 83080 in your reservation and then present your Hertz Member Savings card at the time of rental.

**I**f you prefer to make your reservation by phone, call Hertz at 1-800-654-6511 or call your travel agent.

Hertz rents Fords and other fine cars.  
©REG U.S. PAT. OFF. ©HERTZ SYSTEM, INC. 2002/665-02.



# Aerospace World

By Suzann Chapman, Managing Editor

## Two Airmen Among Eight Killed

Two Air Force members were among eight Americans killed in the early action of Operation Anaconda in Afghanistan.

They were: TSgt. John A. Chapman, 36, of Waco, Tex., a combat controller assigned to the 24th Special Tactics Squadron at Pope AFB, N.C.; and SrA. Jason D. Cunningham, 26, of Camarillo, Calif., a pararescue jumper with the 38th Rescue Squadron, Moody AFB, Ga.

The airmen were working with US Army Special Forces that were being inserted into the fight March 4 by MH-47 helicopters on two separate missions. A Navy petty officer was killed as the first MH-47 was hit by ground fire. He fell off the helicopter.

Four Special Forces troops were killed, in addition to Chapman and Cunningham, on the second MH-47. Officials said it was hit by ground fire and either crashed or made a hard landing. The personnel on board were killed during a firefight with the enemy. Another Special Forces member was killed by enemy fire March 2.

Coalition forces launched Anaconda, which is part of the ongoing Enduring Freedom action in Afghanistan, on March 1 against several pockets of Taliban and al Qaeda forces in the mountains south of Gardez.

The coalition ground forces included about 200 special operations troops from Australia, Canada, Denmark, Germany, France, and Norway.

## USAF Engaged in Philippines

Air Force personnel, both ground and air, are participating in a new front in the war against terrorism as the US military aids the Philippine armed forces against Abu Sayyaf, a group with ties to al Qaeda.

USAF special tactics personnel accompanied US Army Special Forces sent to the Philippines to help train the Philippine military. Additionally, airmen were sent to establish expanded communications hookups.

A Pentagon official also acknowledged to the *Washington Post* in late February that USAF and Navy air-



A B-1B bomber assigned to the 405th Air Expeditionary Wing was the first aircraft flown in combat featuring the nose art "Let's Roll," commemorating the victims and heroes of the Sept. 11 terrorist attacks.

craft had begun surveillance flights to support ground forces.

## Philippine Op Claims Two Airmen

The crash of a US Army MH-47 helicopter in the Philippines Feb. 22 claimed 10 US military troops, including two USAF personnel.

The helicopter crashed into the sea as it flew from Basilan Island to Mactan air base. Pentagon officials said there was no sign of hostile fire.

The airmen were MSgt. William L. McDaniel II and SSgt. Juan M. Ridout, both pararescuemen from the 320th Special Tactics Squadron, Kadena AB, Japan. Eight Army personnel were killed.

McDaniel and Ridout were working with US Army Special Forces members as part of Joint Task Force 510 to train and advise Philippine armed forces.

The cause of the accident is under investigation.

## Rumsfeld Leans Toward More Strip Alerts

Should the Air Force continue to fly Combat Air Patrols over selected

US cities or switch to more strip alert locations? That question is under review said Defense Secretary Donald Rumsfeld.

Air Force leaders in the past few months have made it clear that Operation Noble Eagle is exacting a high cost in dollars but more importantly in stress on personnel and equipment.

The Air Force, principally the Air National Guard, has been flying CAPs over several US cities since the Sept. 11 terrorist attacks. In addition, the service has maintained strip alert—personnel and aircraft standing ready at a few minute's notice—at more than two dozen locations around the country. In all, some 265 aircraft—fighters, tankers, airlift, and radar aircraft—and about 12,000 airmen are involved.

Rumsfeld, speaking on NBC's "Meet the Press" on Feb. 24, said there is no question "the stress and the cost is substantial." However, he added the US "has to balance the use of those assets for that purpose against the threat."

He indicated that the number of

USAF photo by TSgt. Martin G. Zimmerman

aircraft actually airborne might be reduced if, as he hoped, the threat level was sufficiently lower. "What we need to do is what we have always done historically," said Rumsfeld, "and that's to have different threat levels."

### Services To Cut Jammer Options

The Air Force and Navy must pare down the 27 options proposed in an electronic warfare study. The goal is to put new jamming capabilities in the air within two years and a new joint aircraft to replace the aging EA-6B Prowler by 2009.

Pentagon acquisition chief Edward C. Aldridge directed the two services to develop a three-phase plan. He wants the new proposals by June 3.

For Phase 1, which would run from 2004 to 2009, Aldridge suggested replacement equipment such as a jammer-equipped Mini Air-Launched Decoy.

Phase 2 would begin in 2009, when the Pentagon is slated to phase out the Prowler. Aldridge told the services, in a memo obtained by *Defense News*, to consider a "joint core component aircraft" that would be comparable to a new electronic attack A-6 or F/A-18.

In Phase 3, with no dates attached, Aldridge said the services should look to a joint program for a jamming version of the new Joint Strike Fighter or a new high-altitude Unmanned Aerial Vehicle.

### Rumsfeld: Stop Using NCA

Defense Secretary Donald Rumsfeld directed DOD to stop using the term National Command Authority. Instead, he wants Pentagon instructions and documents to specifically identify either the President or the Secretary of Defense or both, as necessary.

The directive, established in a Joint Staff memo obtained by *Inside the Navy*, was sent to Joint Staff, unified commanders, and the military services.

One Pentagon official told *ITN* the change was purely administrative. Another said the NCA term was a Cold War relic that needed to be replaced.

### Northrop Grumman Files Offer for TRW

Northrop Grumman said March 3 it had formally filed its offer to buy TRW. If successful, the buyout could lead fourth-ranked Northrop to the top of the defense contractor ladder.

TRW had not responded, according to Northrop officials, to an unso-

## CSAF's Task Forces Take Shape

Gen. John P. Jumper, Air Force Chief of Staff, plans to develop key task forces that mirror USAF capabilities, with each led by a champion.

The idea, he said, is to base "what we do on Concepts of Operations." Jumper added that he included planning and programming in the equation.

The Air Force must be "able to describe how we go to war and how we interface with the other services before we start talking about what we are going to buy," Jumper said at the annual Air Force Association Air Warfare Symposium in February.

Task force champions would prioritize programs based on how many of the task forces a particular program would support, said Jumper.

Jumper mentioned six task forces:

**Global Response**—centered on those capabilities that provide quick reaction forces, especially for the war against terrorism.

**Global Strike**—focused on the capabilities used to gain initial access into a theater of operation.

**Space/Intelligence, Surveillance, and Reconnaissance**—focused on space and ISR capabilities and what they bring to the mission.

**Mobility/Humanitarian**—focused on capabilities needed to provide humanitarian aid, whether food, medical, or other relief, including evacuation.

**Expeditionary**—directed at the process used to rotate units for day-to-day contingency operations.

**Strategic**—focused on capabilities that handle USAF nuclear obligations.

There could be additional task forces, as the service more fully develops the concept.

Jumper sees the task force approach as key to USAF's continuing transformation. He asked the symposium audience, if the Air Force describes itself by these capabilities—the task forces—and they capture what the service does, "then why don't we plan and program that way, too?"

"We are going to transform ourselves in this way [in the] planning and programming business and see if we can make this work—a capabilities orientation to the way we do our business," said Jumper.

licited proposal Northrop submitted to TRW in a Feb. 21 letter. Northrop asked TRW officials to enter negotiations to combine the two companies in hopes of boosting its defense space and electronics business.

In the past seven years, Northrop has acquired 14 companies. During 2001 alone, the Los Angeles-based company bought Litton Industries, Newport News Shipbuilding, and the electronics systems group of Aerojet General.

Those major acquisitions have raised concerns among defense officials and Wall Street analysts as to whether the company could absorb another large purchase.

However, Northrop Chairman and

Chief Executive Officer Kent Kresa said Feb. 27, "We view this as quite an easy integration job, compared with ones that we've already demonstrated we can do."

TRW had until March 29 to reply to Northrop's offer.

However, Northrop may not be the only bidder. Other defense companies, including Lockheed Martin and General Dynamics, are reportedly considering making offers.

### Bill Would Place New Command Outside DC Area

The Administration's tentative plans to locate the Pentagon's new homeland security command in the Washington, D.C., area may not fly, ac-

ording to legislation drafted by Sen. Christopher S. Bond (R-Mo.).

Bond and Sen. Mary Landrieu (D-La.), the bill's co-sponsor, favor establishing the headquarters for the new unified command in the central US and away from any major population center. Bond has publicly cited Ft. Leonard Wood in his home state as an ideal location.

The legislation also calls for the deputy commander to be drawn from either the Army National Guard or Air National Guard.

Additionally, it would ensure that the Pentagon establishes the new command from existing resources.

The bill was referred to the Senate Armed Services Committee.

### **Two Die in Trainer Jet Crash**

An instructor and student pilot from Laughlin AFB, Tex., were killed when their T-37 jet training aircraft crashed near Spofford, Tex., Jan. 31.

1st Lt. Chad B. Carlson, an instructor pilot from Lewiston, Tex., and student pilot 2nd Lt. Nicholas J. Jabara of Colbert, Wash., were flying a training mission near an auxiliary airfield about 25 miles east of Laughlin when their jet crashed.

Jabara, who graduated from the US Air Force Academy last year, was the grandson of the late Col. James Jabara, the first ace of the Korean War.

Air Force officials said they were

pronounced dead at the scene. A board of officers will investigate the accident.

### **Strategic Influence Office Closed**

Defense Secretary Donald Rumsfeld announced that the Pentagon planned to close the Office of Strategic Influence, created last November, following severe media criticism that its mission was to plant false press releases with foreign media to manipulate public opinion.

Defense officials denied the allegations that the office's mission was disinformation. They said that although its charter had not been completed, its purpose was to coordinate the release of information overseas.

DOD released a statement Feb. 20 saying, "Under no circumstances will the office or its contractors knowingly or deliberately disseminate false information to the American or foreign media or publics."

In announcing the shutdown, Rumsfeld told reporters Feb. 26 that the disinformation claims were "off the mark," but despite that he said the office has "clearly been so damaged that ... it's pretty clear to me that it could not function effectively, so it's being closed down."

He added that DOD would continue to target information operations as it did with the Afghan people. "We told people where they could get hu-

manitarian assistance, we told people the difference between cluster bomb packages and food packages," he said, adding that the Pentagon also had to counter the lies that the food packages were poison.

"We did a whole series of things that are characterized as influence or strategic influence or information operations," said Rumsfeld.

"So there are lots of things that we have to do, and we will do those things," he added. "We'll just do them in a different office."

### **Foundation Competes New Air Force Memorial Design**

The Air Force Memorial Foundation announced March 12 that five architectural teams would compete to design a new Air Force Memorial.

The new design must fit the memorial's new planned location, which is near a promontory point of land overlooking the Pentagon.

AFMF officials decided late last year to relocate the memorial, ending a long-running controversy about the previous site on Arlington Ridge. Although two attempts to block the use of that site were overturned in federal court, the repeated challenges and delays slowed the project down. Several members of Congress moved to make an attractive alternative location available.

The location overlooking the Pentagon had been considered earlier, said Ross Perot Jr., foundation chairman. It was discounted because, at the time, "it was not going to be available for a number of years," he said.

Legislation passed last year, and signed by President Bush Dec. 28, made the new location available sooner. The foundation plans to build on the new site unless faced with a major environmental issue that could not be mitigated in a reasonable amount of time.

Preliminary design concepts from the five architectural teams were due to the foundation's board of trustees early this month.

### **Lease To Feature Smart Tanker?**

Air Force leaders have spoken recently about transforming aerial refuelers into more than flying gas stations. They want to endow tankers with the capability to conduct Intelligence, Surveillance, and Reconnaissance missions in addition to their refueling duties.

According to the *Seattle Times*, Boeing officials are considering offering that capability as part of a controversial tanker lease proposal.

## **Lord Confirmed for New AFSPC Four-Star Post**

The Senate confirmed Lt. Gen. Lance W. Lord to fill the new Air Force general officer position at Air Force Space Command. The position was made possible by a change included in the Fiscal 2002 defense authorization.

Lord was serving as the Air Force assistant vice chief of staff. He had previously been vice commander at AFSPC, which is headquartered at Peterson AFB, Colo.

Defense Secretary Donald Rumsfeld decided last year to follow a recommendation of the Space Commission to split the job of AFSPC commander from that of commander in chief for US Space Command.

Gen. Ralph E. Eberhart is currently serving as commander in chief of SPACECOM, as well as NORAD, and commander of AFSPC.

Congress late last year repealed the law that limited the number of four-star general officer positions available to DOD to make room for the new position.

The Space Commission, which was chaired by Rumsfeld before he was nominated to become Defense Secretary, suggested both the split and that the Pentagon name the Air Force as DOD executive agent for space.

Rumsfeld named the Air Force executive agent in May 2001. He also instructed the Air Force to nominate an officer to head AFSPC. However, the service had to wait for Congress to complete the Fiscal 2002 legislation.

The move creating a four-star commander for AFSPC also opens the commander in chief position at SPACECOM to other services. It had been limited to Air Force four stars.

Congress authorized the Air Force to lease commercial aircraft as tankers to offset its aging fleet of KC-135s, which are seeing even greater use as a result of Operations Enduring Freedom and Noble Eagle. USAF doesn't think the tankers will last until the end of this decade, as previously expected.

House and Senate appropriators approved a provision in the Fiscal 2002 defense bill that authorizes USAF to lease 100 Boeing 767s for 90 percent of their market purchase price, modify them for tanker use, fly them for 10 years, remove the modifications, and return them to Boeing.

Critics have called the plan a corporate bailout.

However, Air Force Secretary James G. Roche has stated the service is considering all reasonable options. That includes a projected proposal from Boeing's European competitor, Airbus.

To go with another contractor, the Air Force would have to ask for a change to last year's legislation. Roche told a Congressional committee that would be done "if somebody like Airbus came along and made a deal that was so good, an offer that was so good, that we felt that we would prefer it."

Roche told reporters after testifying at a March 6 House Armed Services Committee that the service plans to analyze, over the next few months, technical information provided by both companies. He said the goal was to come up with an answer sometime this summer.

#### Roche Cites Plan A for Tankers

In his testimony March 6 before the HASC, Air Force Secretary Roche said that Plan A for replacing the service's old KC-135s is to move procurement up.

Plan B is the tanker lease. Roche said that leasing some aircraft to use as replacement refuelers was "a way of doing something quickly."

Of course, he added, "the only way it works is if the cost of the lease was less than the cost we were avoiding."

Roche said that after the Sept. 11 terrorist attacks, the Air Force recognized that it was now going to be using these aging aircraft "far more than we ever had before. ... We became very concerned."

Plan A is to try to procure new aircraft earlier than the service originally planned, which would have been around 2008. "We're going to work on it in the '04 budget," he said.

#### USAF Raises Risk Bar

Air Force leaders decided to ac-

## Rumsfeld Outlines Coalition Contributions

Defense Secretary Donald Rumsfeld veered from his earlier stance that he would not reveal specifics about contributions by other nations to the war against terrorism. He told reporters Feb. 26 that many dozens of countries have joined the US—"not just its traditional allies."

He emphasized that he was revealing only a partial list of countries and activities but that all "deserve credit for their substantial and valuable contributions." Some have helped openly, while others have been less open, the Secretary said.

Rumsfeld noted, "In the Afghanistan effort alone, coalition partners are contributing something in the neighborhood of 6,000 troops to Operation Enduring Freedom and the International Security Assistance Force." He added, "By comparison, US forces in Afghanistan now total under 5,000."

He went on, "For example, 12 countries have contributed more than 2,800 personnel to ground operations in the campaign. Eight countries contributed more than 1,500 people to air operations. Eight countries contributed more than 13,000 people to naval operations, and some eight countries contributed 350-plus to civil operations in Afghanistan."

Rumsfeld then listed some specific assistance:

**Australia:** Special operations forces in Afghanistan.

**Bahrain:** A frigate and associated personnel supporting Enduring Freedom.

**Canada:** More than 2,200 personnel—land, air, and naval—in the region and a light infantry battle group with 700 personnel and 12 armored reconnaissance vehicles in Kandahar for security and combat operations.

**Czech Republic:** More than 250 personnel in Kuwait performing local training and management support in the region.

**Great Britain:** A naval task force, aircraft, and leadership of the 16-nation ISAF.

**Italy:** A carrier battle group—more than 13 percent of their naval force—to support Enduring Freedom combat operations.

**Jordan:** A hospital in Mazar-e Sharif.

**Spain:** A hospital in Bagram.

**South Korea:** Airlift for humanitarian relief supplies and a \$45 million pledge for reconstruction aid in Afghanistan.

**United Arab Emirates:** Airlift of humanitarian supplies.

"This is simply an illustrative example of the broad effort from dozens and dozens of countries," Rumsfeld concluded. "I did, however, think it would be helpful to pass out this detailed information, so that more people can become aware that this is not simply a US operation, but it is truly a broadly based multinational effort."

A fact sheet released Feb. 28 listed contributions by 27 nations. Those not listed above were: Belgium, Denmark, Egypt, Finland, France, Germany, Greece, Japan, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Turkey, and Uzbekistan.

The Sept. 11 series of terrorist attacks in the US "was an attack on the world," said Rumsfeld. "Citizens from more than 80 countries died that day, innocent men, women, and children of every race, religion, and region."

"Many countries were attacked by terrorists before September 11th," he added. "Some have been attacked or endangered since September 11th. And any could be attacked tomorrow. In short, the war on terrorism is truly a global struggle, and it affects all nations."

cept greater operational risk, as hundreds of F-16 aircraft retire, rather than buy new aircraft.

"If you don't have a continuous stream of investment, you'll pay the piper at some point," said Air Force Secretary Roche at a House Armed

Services Committee hearing March 6 on the Fiscal 2003 budget.

Roche explained that the service is hurting because older systems, like fighters, were not replaced and "they're just going to wear out."

"We're going to face what's called

a bathtub in our fighters," he said. "We're willing to take that risk if we can introduce some new systems."

To compensate for the fighter deficit—the bathtub—in coming years, Lt. Gen. Joseph H. Wehrle Jr., USAF's deputy chief of staff for plans and programs, told *Inside the Pentagon* that the service plans to rely on the greater capabilities of the F-22 as it comes into service. The service faces a 100-aircraft shortfall around 2010.

Plans call for the F-22 to reach Initial Operational Capability in 2006. The F-35 strike fighter, the replacement aircraft for the F-16, is not slated for IOC for the Air Force until 2010 or, possibly, 2011.

Wehrle said he presented three major options to USAF leadership to handle the F-16 shortfalls: buying old-model aircraft; accelerating new aircraft; or essentially riding out the shortage, thereby accepting greater risk.

He said the service does not want to buy more older, nonstealthy aircraft just to cover a four-year period. "It just didn't make sense to us."

**Pentagon Plans To Speed Test Tempo**

DOD's top tester told Congress that increasing test tempo will enable the Pentagon to field weapon systems faster. He also said that test and evaluation needs more money.

**"This Dichotomy Is Unacceptable"**

Air Force Gen. Joseph W. Ralston told Congress that permanent working conditions at some bases in Europe are far less suitable than temporary facilities in the Balkans. Housing, he said, has fared only somewhat better.

Ralston, who is commander in chief of European Command and Supreme Allied Commander Europe, testified that improving the command's "failing and antiquated infrastructure" is the No. 1 investment priority for the European theater.

He told members of the House appropriations military construction subcommittee Feb. 14 that EUCOM's infrastructure funding following the fall of the Berlin Wall was virtually nonexistent for nearly a decade. "We simply did not know in 1989 what the size of our commitment to Europe would be, nor did we know where those forces would be assigned."

Over the last decade, he said, EUCOM has closed 563 installations. Ralston also assured the Congressmen that the command had used every available funding source to improve the conditions in which service members live and work.

He said that, since 1990, alternative funding sources, such as the NATO Security Investment Program, Residual Value, Payment-in-Kind, and Quid Pro Quo initiatives, have generated more than \$2 billion for construction projects. The service components (US Air Forces in Europe, US Army Europe, and US Naval Forces Europe) have also consolidated, privatized, and outsourced to reduce the infrastructure requirements backlog.

Nonetheless, Ralston said, "We have reached the limits of our ability to do more for less." These alternative sources alone are simply inadequate to significantly impact current funding shortfalls, he stated.

He did note that increased funding over the past two years, to include \$251 million in Fiscal 2002, has helped. "However, a great deal of our infrastructure remains inadequate, and our service members continue to live and work in dilapidated facilities."

**Family Housing**

Ralston said family housing had received more emphasis than work facilities in recent years, so EUCOM service components were on schedule to meet last year's DOD requirement to eliminate substandard family housing by 2010. Now, Ralston said, they are currently working on plans to complete the task for new DOD guidelines that mandate completion by 2007.

He said that although the command has made progress as a whole, family housing throughout Europe remains old and in need of extensive repair and modernization. For example, Ralston said that 73 percent of USAREUR family housing is not up to DOD standards.

"Similarly, 57 percent of US Air Forces in Europe family housing is not to standard, and more than 80 percent of family housing units were constructed before 1960," he added. "Sustaining this aging inventory is costly."

Those standards, he said, are not overstated by American standards. "We've said, if a family qualifies for a three-bedroom apartment, we think they ought to have two bathrooms," said Ralston. "We think they ought to have a stove, a

refrigerator, a washer, and a dryer. I don't believe that's gold plated in any way."

He showed the Congressmen a photo of brown water flowing from rusted water pipes at Ramstein AB, Germany. Ralston said this has been one of those things that people have put off. The attitude has been that the problem could wait till next year. "Well, next year comes and it's put off and it's put off and it's put off, and ultimately that is what results," he said.

DOD has programmed full funding for family housing through Fiscal 2009 at \$2.3 billion.

**Single Housing**

Housing for single members has fared about the same—improvements have not come fast enough.

Ralston said one of the worst situations exists on the island of San Stephano, part of the La Maddalena Naval Support Activity in Italy. He said there were 50 sailors on shore duty who live there on one of the last berthing barges in the Navy, instead of in permanent quarters.

"It's small with only a locker for clothes and valuables," said Ralston, showing pictures of the facility.

"We're working hard to address conditions like that, but as you can see, that's pretty sad," he added, noting that it will be 2009 before the command gets its barracks upgrade program in shape.

**The Work Place**

Worse yet are the working conditions in EUCOM, according to Ralston. The average age of facilities is now 32 years old, with the oldest facilities 90 years old.

This situation now impacts readiness.

"Over 87 percent of the installations in USEUCOM are assessed as C-3, meaning that there are significant facility deficiencies that prevent performing some missions," he said.

Yet, Ralston noted that efforts to revitalize and modernize USAREUR and USNAVEUR installations are currently underfunded by \$1.3 billion over the Fiscal 2004–09 Future Years Defense Program. He added that the Air Force recently committed to fully fund sustainment for USAFE through 2007 and to start funding restoration and modernization to meet the DOD goal by 2010.

"From runways and repair docks to billeting and housing areas, the infrastructure that supports our operations and people has been underfunded for many years," said Ralston.

"It is not uncommon for a unit to deploy from its permanent installation in the heart of Europe for a tour of duty in the Balkans and have better working conditions in the temporary facilities," explained the EUCOM chief. "This dichotomy is unacceptable."

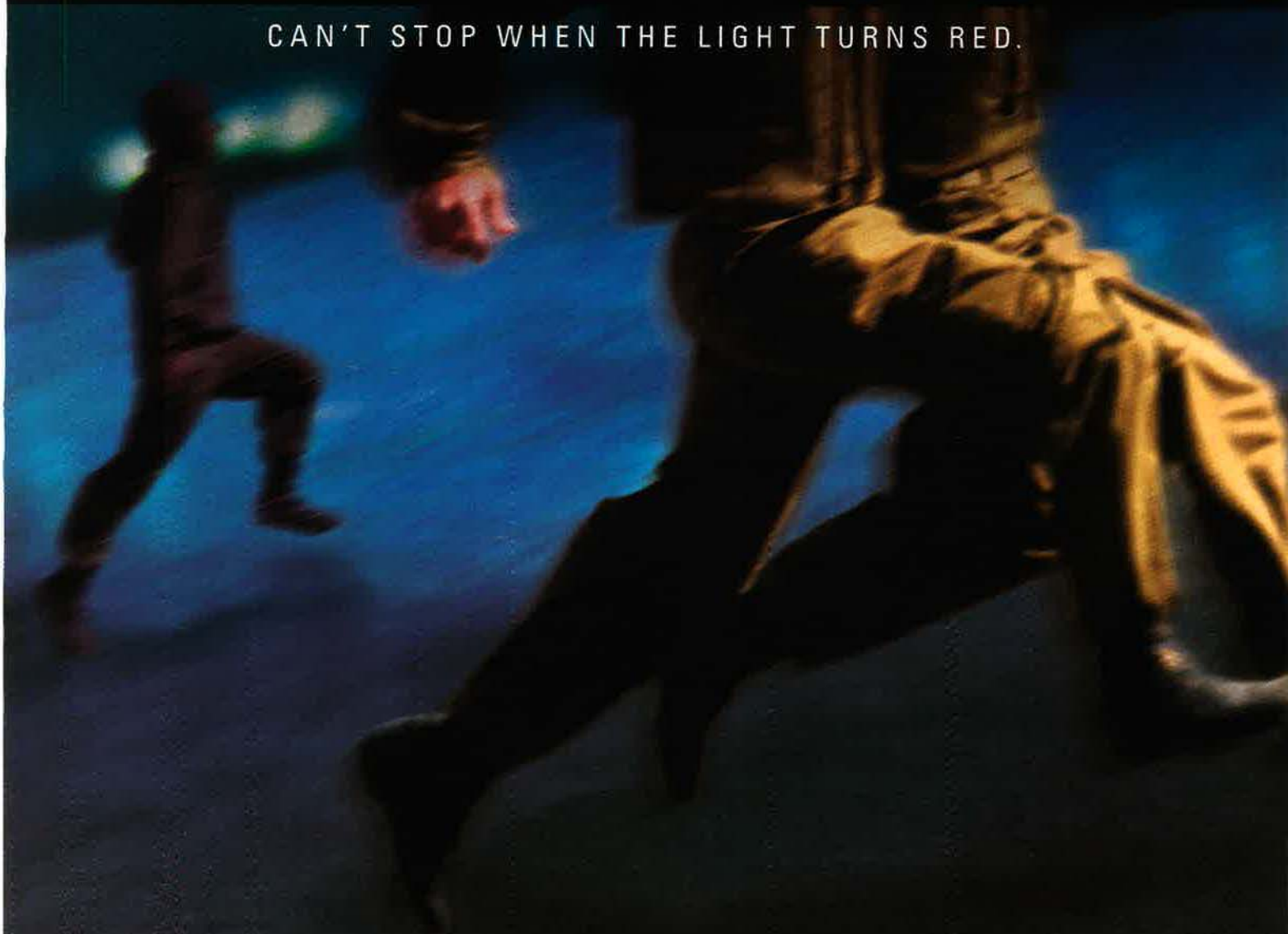
In closing, Ralston said that the Fiscal 2003 budget includes approximately \$575 million for the total military construction in the European Theater.

"That's a 60 percent increase over what was appropriated last year," he stated. "I ask for your favorable considerations of this increase."



# BECAUSE YOU

CAN'T STOP WHEN THE LIGHT TURNS RED.



When you get up and running, you need to trust that all systems are go.

You can, with the proven reliability of GE military power.



**GE Aircraft Engines**

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



**A French pilot climbs down from his Mirage 2000 after landing at Manas airfield in Kyrgyzstan.**

## The French Have Landed

Six French Mirage 2000 multirole fighter aircraft landed at Manas airfield in Kyrgyzstan on Feb. 27. They are the first aircraft assigned to the new coalition military facility recently set up there and will be flying fighter and reconnaissance missions for Enduring Freedom.

"Our jobs to participate in air military operations in Afghanistan and help in the international fight against terrorism," said French air force Lt. Col. Bertrand Bon. "We are proud and honored to be a participant in this mission."

Earlier, the French air force had sent in a team of engineers and technicians to set up communications, buildings, hangars, and warehouses and to restore parts of the flight line surface.

"The logistics here are difficult because we must get our equipment from Europe," said French Maj. Loick Renard, one of the officers overseeing the buildup. "However, with the cooperation between all the forces, we have been able to overcome [problems] and get the Mirage here."

For example, French forces worked alongside 13 USAF personnel from the 823rd RED HORSE out of Hurlburt Field, Fla., to construct the foundation for a new aircraft maintenance pad. The 420,000-square-foot facility is slated to handle aircraft from the US, France, and Spain.

Air Force officials said the arrival of the Mirages is the first step for the Manas facility.

"Having the French here is vitally important," said Brig. Gen. Christopher A. Kelly, 376th Air Expeditionary Wing commander. "From the first day, they have been key members of this coalition. It is a grand day today watching these planes come in and prepare to fly missions."

Thomas P. Christie, Director of Operational Test and Evaluation, said his office is reviewing several programs "where testing could be accelerated."

Writing in the annual DOT&E report to Congress released in late February, Christie said that DOT&E was working with Pentagon acquisition "to accelerate the testing and fielding of systems that might be especially relevant to the campaign against global terrorism."

The report also noted that the DOD testing process needs funding increases to play catch-up with a \$12 billion backlog in infrastructure mod-

ernization requirements and "to adequately test future weapon systems incorporating emerging technologies."

### It Was All Over in 15 Minutes

According to the first air battle for Operation Enduring Freedom, US airpower devastated Taliban air defenses in Afghanistan in just 15 minutes.

Lt. Gen. Charles F. Wald, now USAF deputy chief of staff for air and space operations, said March 7 at a defense symposium in Washington, D.C., that it was true the Taliban anti-aircraft force was not highly sophisticated. However, he said they did

possess an integrated air defense system, including radars, surface-to-air missiles, and fighter aircraft.

It was not the fact that Taliban air defenses were "rudimentary" that enabled US forces to dominate the skies quickly, said Wald. It was the high confidence of US weapon systems.

Looking at the first day of Enduring Freedom and the 1991 Desert Storm campaign, Wald said US airpower struck the same number of targets. What changed, he said, was the number of sorties. For the Afghanistan operation, the number was 200; for the Iraq operation, it was 2,500.

The difference was in the use of precision guided munitions by USAF and USN strike aircraft and in the large loads that could be carried by USAF B-1 and B-2 bombers, said Wald.

### TFL Seeks "Expired" Eligibles

Tricare officials announced in February that claims will automatically be paid for Tricare for Life beneficiaries with "expired" eligibility until Aug. 1, 2002.

Tricare for Life is the new health care program for military retirees and their dependents who are 65 or older and Medicare eligible. Officials said that claims submitted since the start up of the program Oct. 1, 2001, but denied for expired eligibility, will be automatically reprocessed.

Those whose claims were denied must reverify their eligibility with the Defense Enrollment Eligibility Records System by Aug. 1. For more information see "Tricare for Life Hits and Misses," p. 62.

### US, UK Conduct Subcritical Nuclear Experiment

The US and United Kingdom conducted their first joint nuclear experiment Feb. 14, some 960 feet below the Nevada desert, without a nuclear blast.

The experiment, performed under provisions of the global Comprehensive Test Ban Treaty, was designed to help maintain the safety and reliability of US and UK atomic weapons. Officials said the subcritical nuclear experiment enables them to analyze materials, such as plutonium, without actually exploding a nuclear warhead.

The event took place at the Nevada Test Site, about 85 miles northwest of Las Vegas.

### Military, Industry Share Blame

Peter B. Teets, the undersecretary of the Air Force and director of the National Reconnaissance Office, said that some space acquisition programs have "serious problems."



Teets, who is, in effect, the new Pentagon space czar, told a National Defense Industrial Association symposium Feb. 26 that he is intent on getting to the bottom of the deficiencies and that "it's absolutely true that there's plenty of blame to spread around."

He indicated that the problems stemmed from unclear requirements and inadequate funding, as well as poor program management.

A major change at the Pentagon, giving him milestone decision authority for all military space programs, is imminent, said Teets.

Other changes Teets has announced include creation of a Defense Space Acquisition Board and creation of two new positions for space: Deputy for Military Space and Directorate of National Security Space Integration. (See "Aerospace World: Teets Announces Two New Positions for Space," March, p. 13.)

The space czar said these moves will help the Air Force, which was named DOD executive agent for space in May 2001, to streamline oversight of space acquisition programs.

Another thing Teets said he wants to do is attempt to apply NRO program management practices—a cradle-to-grave approach—to Air Force acquisition. A step in that direction came last October when the Air Force transferred the Space and Missile Systems Center from Air Force Materiel Command to Air Force Space Command.

### **USAF Is Short of Scientists and Engineers**

Air Force officials sounded a new alarm about the growing shortage of military and civilian scientists and engineers. The problem has been looming for several years.

Air Force Materiel Command head Gen. Lester L. Lyles said the service faces a dire crisis by 2005 when 30 percent of its scientists and engineers are eligible to retire.

Air Force Secretary James G. Roche told Congress that recruitment fell far short in this area last year. He said the service has begun an "all-out effort to plus-up recruitment and target retention of these critical specialties."

Congress has authorized bonuses, funding adjustments to create retention allowances, and the possibility of special salary rates for the most difficult to fill specialties.

However, Roche said that funding levels were cut during the appropriations process.

Lyles said the "dire situation" in the civilian ranks stems from downsizing and hiring freezes, "so we did not bring anyone in through the front door

## **US Reaffirms Long-Standing Nuclear Pledge**

The 24-year-old US pledge not to use nuclear weapons against non-nuclear states was reaffirmed Feb. 22 by State Department spokesman Richard A. Boucher.

Reporters asked Boucher to explain statements made by Undersecretary of State for Arms Control and International Security John R. Bolton in an interview with the *Washington Times* that appeared to indicate a change in policy.

Among other comments, Bolton said, "We would do whatever is necessary to defend America's innocent civilian population." However, Boucher said, "Those kinds of statements have been made repeatedly since the 1970s."

Boucher repeated a 1995 "formulation" of the 1978 commitment: "The United States reaffirms that it will not use nuclear weapons against non-nuclear weapon state parties to the Treaty on the Nonproliferation of Nuclear Weapons, except in the case of an invasion or any other attack on the United States, its territories, its armed forces or other troops, its allies, or on a state toward which it has a security commitment, carried out or sustained by such a non-nuclear weapon state in association or alliance with a nuclear weapon state."

He then qualified the pledge in the same way that Bolton had. "The policy says that we will do whatever is necessary to deter the use of weapons of mass destruction against the United States, its allies, and its interests," he said. "If a weapon of mass destruction is used against the United States or its allies, we will not rule out any specific type of military response."

Boucher said this has been the policy for 20 or 30 years. "That is what Secretary Bolton was talking about, and there is no change," he added.

In Bolton's words: "The idea that fine theories of deterrence work against everybody, which is implicit in the negative security assurances, has just been disproven by September 11," he said. "What we are attempting to do is create a situation where nobody uses weapons of mass destruction of any kind."

## **Nurses: USAF Wants You**

The Air Force, like the nation, is facing a shortage of registered nurses. Officials said the service was short 215 nurses in Fiscal 2001. They project the shortage to grow to 400 by the end of this fiscal year.

The nation as a whole has 126,000 vacant full-time nursing positions. The shortage is driven by several factors, among them an increasing need as baby boomers age, while at the same time, nursing school enrollments and graduation rates have dropped.

For the Air Force, the most critical shortages currently occur in six specialties: clinical (medical and surgical), mental health, neonatal, and obstetrical nursing, certified registered nurse anesthetists, and women's health nurse practitioners.

"Nursing is fighting its own war on the home front, a war to provide enough nursing support to care for all the patients in our country," said Brig. Gen. Barbara C. Brannon, USAF's assistant surgeon general for nursing services.

Last year, the service failed to meet its nurse recruiting goal for the third consecutive year. Brannon said USAF was developing new strategies and changing policies to enable more nurses to qualify for a commission.

For instance, new nurses do not need a bachelor of science degree in nursing. Now candidates may have an associate's degree in nursing with a bachelor's in a health-related specialty, plus one year of nursing experience.

The Air Force is also accepting nurses for critical wartime specialties—nurse anesthetists and medical-surgical, mental health, and critical care nurses—up to age 47, rather than age 40.

Other initiatives include bonuses and more ROTC scholarships.

At least one early bonus program, though, provided only short-lived relief, said officials. The \$5,000 bonus came with a four-year service commitment. They said most new nurses opt for no bonus and only a three-year commitment.

Brannon said the Air Force is also concerned about its nurse retention rate. At the four-year point, the rate is 70 percent; at eight, it's 40 percent; at 10, it's just 31 percent.

Last year, Brannon said interviews of nurses who left voluntarily revealed a Catch-22. The nurses were leaving because there were too few nurses.

To improve retention of nurses in at least one critically short field—registered nurse anesthetists—the service plans to offer what started as a recruiting tool in Fiscal 2001. They will offer those already serving grants that reimburse education costs up to \$24,000.

It may not be enough. "The nationwide nursing shortage shows no signs of abating," said Brannon.

to prime the pump." That left the Air Force with an aging workforce, he added.

One thing Lyles said he wants to do is clear up some misconceptions. For instance, he said that while the service has focused on bringing in new engineers fresh from school, "there are opportunities for experienced engineers from industry."

**Pentagon Needs Another Funds Boost for War on Terrorism**

Deputy Defense Secretary Paul Wolfowitz told a Congressional subcommittee that the military will require an additional \$12.6 billion supplemental in Fiscal 2002 to cover the cost of the war against terrorism.

He said that, by the end of January, Operations Enduring Freedom, the war

in Afghanistan, and Noble Eagle, the homeland security effort, cost \$10.3 billion, more than DOD had estimated. Included in that total is about \$2.9 billion in nonrecurring expenses involving, Wolfowitz said, "immediate security improvements" set up after the Sept. 11 terrorist attacks.

The Pentagon expects the cost of the war to exceed \$30 billion by the end of this fiscal year.

**DOD To Transfer Peacekeeper Warhead to Minuteman III**

With the Nuclear Posture Review behind it, the Administration will start deactivating Peacekeeper ICBMs this year and placing its relatively new re-entry vehicles into the older Minuteman IIIs.

The nuclear review set the stage

for reducing the number of strategic warheads to between 1,700 and 2,200 by 2012. (See "Bush's Nuclear Blueprint," March, p. 26.)

DOD had already planned to transfer the Peacekeeper Mark 21 re-entry vehicle to the Minuteman, according to *Aerospace Daily*. The timing was uncertain since the START II treaty, which called for the decommissioning of Peacekeepers, was never ratified.

Now, a TRW official told the *Daily*, the company that has managed the ICBM upgrade and modernization program can move forward. The Minutemen will be converted from three-to single-warhead capability, featuring the "newest and safest" re-entry vehicle, said TRW.

**DACOWITS Gets New Role**

The Pentagon announced March 6 that the Defense Advisory Committee on Women in the Service would continue but under a revised charter.

The group's original charter—some 53 years old—focused largely on attracting women to military service. The group was the center of the effort for women to gain entry to combat specialties.

There had been a drive by some conservative groups to abolish the group.

Instead, the Pentagon said in its announcement that DACOWITS was to be "revitalized" to make it more relevant to today's force.

The revised charter calls for the group to provide advice and recommendations on "recruitment and retention, treatment, employment, integration, and well-being of highly qualified professional women." It will also now focus on improving conditions for military families.

**AFRC Tests the Snow and Ice**

An Air Force Reserve Command C-141 crew took a new approach to landing in Antarctica for the command's first Operation Deep Freeze mission of 2002.

While transport aircraft have landed on the hard ice runway near McMurdo Station for years, this time the runway had a new topping. "They put about six inches of dry snow and supercompacted it so it becomes bonded with the ice," said Lt. Col. Kelly Curtis, overall mission commander from the 452nd Airlift Mobility Wing, March ARB, Calif.

"This provides a two- to three-inch insulation cover for the ice when the sun angle gets significant so they don't have any melting that will degrade the continuity of the ice surface," he added.

**Aviation Hall of Fame Enshrines Four**

The National Aviation Hall of Fame will induct four "outstanding pioneers of aviation" to its roll of 174 men and women previously honored. The new members, who will be honored at a ceremony in Dayton, Ohio, on July 20, are:

**Col. Hubert "Hub" Zemke.** Known as one of the pre-eminent World War II European Theater fighter commanders, Zemke led his 56th Fighter Group to 665 air-to-air victories. The "Wolfpack" led all fighter groups in the theater. Zemke had 17.75 confirmed victories in 154 combat missions, putting him among the top 25 of all Army Air Forces World War II fighter pilots. He originated the Zemke Fan, which drastically changed Eighth Air Force policy, and other tactical innovations. The Fan allowed some fighters escorting bombers to fan out well ahead to take on enemy fighters as they formed up to attack—US bomber losses significantly declined. On his last mission in late 1944, he was forced to bail out of his P-51 when it lost a wing from turbulence. He was taken prisoner and served as senior officer in command of more than 7,000 Allied prisoners at Stalag Luft 1. He retired from the Air Force in 1966 and died in 1994.

Retired Air Force fighter pilot **Lt. Col. Dick Rutan.** He flew 325 combat missions during the Vietnam War. Following retirement from the Air Force, Rutan flight-tested development aircraft, setting several speed and distance records. In 1986, he and copilot Jeana L. Yeager set an absolute aviation world record for speed around the world, nonstop, nonrefueled. They flew an average of 115.65 mph in the *Voyager* experimental aircraft over Edwards AFB, Calif.

Retired **Vice Adm. James Stockdale.** Perhaps best remembered for his heroism as a prisoner of war, Stockdale was a highly decorated US Navy aviator, who served two combat tours flying fighters during the Vietnam War. He was shot down during his second tour in 1965 and held in the "Hanoi Hilton" until February 1973. He set a standard of courage and provided hope to other prisoners during his nearly eight years of captivity. He retired from the Navy in 1979.

**Frank Piasecki.** Founder and head of the PV-Engineering Forum, Piasecki built the world's first tandem rotor helicopter, known as the "flying banana," for the Navy. By 1946, the Piasecki Helicopter Corp. was producing and designing helicopters for the Navy, Army, and Air Force, as well as the Canadian and French navies. He continues to work on improving the Apache and Super Cobra helicopters.

Curtis explained that C-141s and other large aircraft have restrictions on how much loose snow and ice can be on a runway. The flying snow can cause structural damage.

He said they were concerned about potential damage, but the compacted snow held. "The first crew that went in had nothing but good things to say about the runway," said Curtis. "They said it was actually a smoother, better surface to operate on, and the braking was good, so everyone was thrilled with the test."

### Wilford Hall Team Rescues Baby

A highly specialized medical team from Wilford Hall Medical Center in Texas flew to Okinawa to bring back a three-day-old baby boy. The boy would have died without their expertise.

The baby, the son of a Marine stationed on Okinawa, was born without part of his diaphragm. As a result, some of his intestines were putting pressure on his lungs and other organs. His lungs were failing. He had only a few days to live. He needed to be put on a special heart-lung bypass machine that would stabilize his condition, allowing his lungs to heal. Surgeons could then correct the defect.

The problem: The only long-range-transport heart-lung bypass capability in the world is at Wilford Hall. Once alerted, a 16-member team and the equipment were in the air within 12 hours and, traveling on a series of aircraft, reached Okinawa 25 hours later. They had the infant on the portable equipment within three hours and headed back to Texas, where he was to undergo surgery.

### OPM Offers Long-Term Care Insurance

The Office of Personnel Management began a new program last month that offers long-term health care insurance to military and civilian federal employees and their families.

OPM contracted with John Hancock and MetLife insurance companies for the new benefit. It's designed to cover expenses associated with long-term medical care in a nursing home or in the patient's home.

Federal employees may purchase the insurance for themselves or their families, including parents. Federal retirees may enroll only themselves and their spouses.

Early enrollment continues through May 15, followed by an open-enrollment season beginning July 1.

More information is available on the OPM Web site ([www.opm.gov](http://www.opm.gov)). Officials said they would also post a rate calculator on the Web site.

## Americans View Muslim Countries With Distrust, Muslims Have Similar View of US

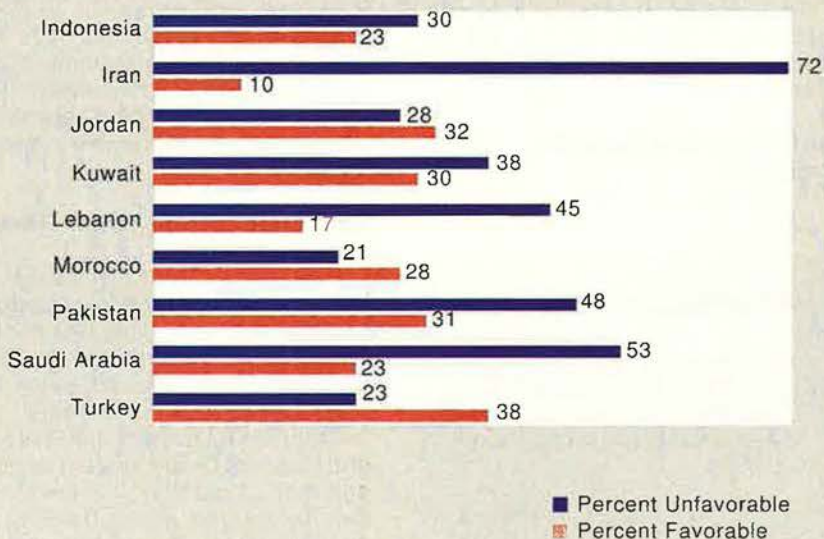
Gallup polls conducted in nine Muslim countries and Gallup/USA Today/CNN polls taken in the US reveal strong negative feelings between Muslims abroad and Americans.

There were some exceptions. Americans indicated favorable views of three countries—Jordan, Morocco, and Turkey—while individuals in Lebanon and Turkey expressed favorable views of the US. The US polls were conducted March 1–3. The foreign polls were taken in December and January.

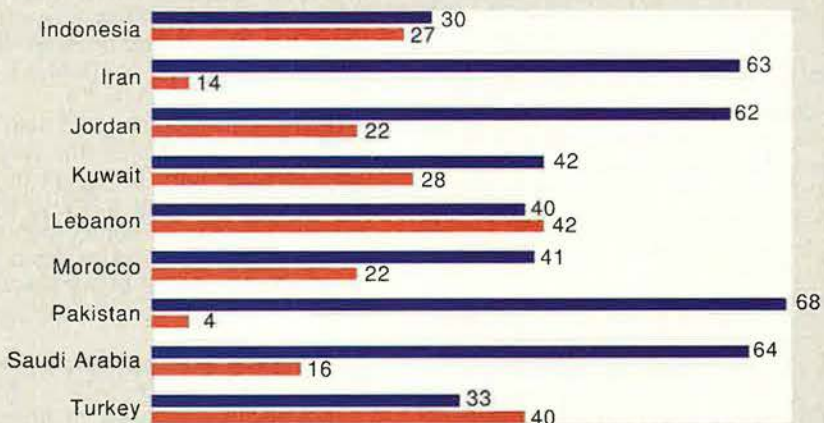
Despite the negative feelings held in general by Muslim countries, USA Today reported that 67 percent of the individuals polled said the Sept. 11 terror attacks were morally unjustifiable. However, only 18 percent of those polled in six of the countries said they believed that Arabs conducted the attacks, in direct contradiction of US evidence that indicates all 19 hijackers were Arab.

When questioned about the Gallup poll of Muslim countries, President Bush said, "There is no question that we must do a better job of telling the compassionate side of the American story." He added, "We've got work to do."

### American Opinion of Specific Muslim Countries



### Muslim Countries' Opinion of America



They noted that the Federal Employees Health Benefits Program, Medicare, and Tricare are not designed to cover long-term care. They also said the government does not plan to pay any part of the long-term care premiums.

### **USAF Starts Executive Job Swaps**

It probably went largely unnoticed, but the Air Force recently merged two offices—one that managed assignments for general officers and one that handled assignments for senior executive service civilians.

The new single office is called the Air Force Senior Leader Management Office.

Its primary mission is to fill executive posts, period. It doesn't matter if the position once was held only by a military member or only by a civilian. The office will equally consider generals and senior civilians for most executive vacancies.

There are some exceptions. For instance, a civilian will not be selected to fill an aircraft wing commander billet.

### **GAO Cites Peacekeeping Expenses**

According to a General Account-

ing Office report released in mid-February, the US directly contributed about \$3.45 billion to support UN peacekeeping from Fiscal 1996 to Fiscal 2001.

GAO estimated that the indirect contribution to UN peacekeeping was \$24.2 billion for the same period.

GAO defined indirect contributions as US programs and activities that:

- are located in the same area as an ongoing UN peacekeeping operation;
- have objectives that help the peacekeeping operation achieve its mandated objectives; and
- are not an official part of the UN operation.

"The largest indirect contribution (about \$21.8 billion) stemmed from US military operations and services that helped provide a secure environment for UN operations," said the report.

Both the State Department and the Pentagon took exception to GAO's inclusion of indirect contributions. They said US operations are undertaken in the US interest and thus there should be no implied connection between US operations and UN peacekeeping efforts.

### **Saxton Bill Would Lower Reserve Retirement Age**

New Jersey Rep. Jim Saxton announced Feb. 28 that he was submitting legislation to allow reservists to receive military retirement pay at age 55 rather than age 60, after they have served at least 20 years.

"With the reliance on the Reserves and National Guard system since the end of the Cold War, it is proper that they be treated appropriately," said the Republican Congressman.

Original co-sponsors on the bill are House Veterans' Affairs Committee Chairman Christopher H. Smith (R-N.J.) and Reps. Robert E. Andrews (D-N.J.), Frank A. LoBiondo (R-N.J.), William J. Pascrell Jr. (D-N.J.), and Frank Pallone Jr. (D-N.J.).

Saxton said the bill would help with retention of Guardsmen and Reservists. "It puts them on equal footing with the active duty military, which can already draw retirement pay after 20 years of service," Saxton said. "We as a nation ask a lot of our reserves. They are not asking a lot from us."

### **DOD Works On New Personnel, Pay System**

DOD is in the midst of dumping hundreds of 20- to 30-year-old personnel and pay systems and fashioning a new all-service system—

Defense Integrated Military Human Resources System. The Army will be the first to start testing the new system, beginning in 2003.

The Navy, which is executive agent for the program, will follow in 2004; the Marine Corps in 2005; then the Air Force.

A key piece of DIMHRS, said officials, is commercial computer software called PeopleSoft 8. It will allow personnel to access personnel information via the Internet at any time from anywhere.

The new system is also expected to improve the Pentagon's ability to keep track of active duty and reserve personnel during deployments and mobilizations.

### **USAF Expands Junior ROTC**

The Air Force is expanding its Junior Reserve Officer Training Corps program this year by 57 new units and needs additional USAF retirees to fill instructor slots in those units.

Service officials said potential instructors must be either retired active duty officers or enlisted personnel who served a minimum of 20 years or who retired under the temporary early retirement authority with at least 15 years.

Individuals from any career field are eligible, and they do not need an instructor background.

"It doesn't matter what profession the person had in the Air Force," said Col. Brian King, JROTC director. "The leadership skills, customs and courtesies, academic background, and professional military education are all excellent preparation for taking a role as a leader in the JROTC classroom."

Instructors will wear uniforms and must meet weight requirements. They will receive a salary equal to the difference between their retired pay and their active duty pay and allowances, excluding incentive pay.

For more information, call the Air Force JROTC Division at 800-522-0033, ext. 5275 or 5300; or write to HQ AFOATS/JRI, 551 E. Maxwell Blvd., Maxwell AFB, Ala., 36112-6106; or visit the Air Force JROTC Web site.

### **News Notes**

- The Air Force announced the consolidation of several organizations—public affairs, integrated marketing, issues team, and executive staff group—into a new Communications Directorate at the service's Pentagon headquarters. The move took effect March 15. William C. Bodie,

## **Ace MacDonald Dies**

Col. Charles H. "Mac" MacDonald, one of the highest ranking aces in World War II, died March 4 at his home in DeFuniak Springs, Fla. He was 87.

MacDonald initially flew P-36s out of Hawaii, then P-47s out of New Guinea on transport escort duty. He was recruited for the new P-38 group in Fifth Air Force, the 475th Fighter Group. In an October 1943 air battle, during which MacDonald got his first two aerial victories, the group shot down 36 enemy aircraft without a single loss. MacDonald soon became group commander and scored two more victories in October, then a fifth in November to become an ace. By war's end, MacDonald had racked up 27 aerial victories.

He returned to the States in July 1945 and served in a variety of command and staff assignments, including commander of the 33rd Fighter Group and 23rd Fighter Wing. He retired from the Air Force in 1961.

# OUR SFW IS SO SMART IT CAN MULTIPLY.

PRECISION  
LANDING

LONG RANGE  
SURVEILLANCE

AIR-TO-GROUND  
WEAPONS

INTELLIGENCE  
GATHERING

Textron Systems' SFW (Sensor Fuzed Weapon) is a force multiplier that can dramatically increase your firepower on any battlefield. Each SFW houses 40 heat-sensing, armor-penetrating Skeets, so just a few aircraft can stop an armored column. Dead in its tracks.

And with accurate delivery from altitudes up to 40,000 feet, aircraft and crew can operate at safer distances.

Call us in Wilmington, MA, USA at 1-978-657-2100 or visit our web site, [www.systems.textron.com](http://www.systems.textron.com) to find out what Textron Systems can do for you.

From seamlessly integrated intelligence gathering to innovative air-to-ground weapons, we're working to help you fight smarter on any battlefield.



MMLS



Rivet Joint/TAWS



Terrain Commander



SFW



BLU-108

**EXTRON** Systems  
Get Smart.



[www.systems.textron.com](http://www.systems.textron.com)

who serves as special assistant to the Secretary of the Air Force for policy and planning, assumed the additional duties of director of Air Force Communications.

■ USAF activated the 17th Reconnaissance Squadron, a new RQ-1 Predator Unmanned Aerial Vehicle squadron, March 8 at Indian Springs AFAF, Nev. The service established the new unit, which joins the 11th RS and 15th RS RQ-1 at Indian Springs, as a result of increased mission requirements following the success of the UAV in Enduring Freedom.

■ An Air Force MC-130P Combat Shadow aircraft crashed Feb. 12 in a remote region of Afghanistan injuring the eight crew members aboard. Officials said the crash did not appear to be caused by hostile fire and was under investigation.

■ An air base in Kyrgyzstan being used by US and allied forces for operations in Afghanistan was named after New York City Fire Chief Peter J. Ganci Jr., who died as a result of the Sept. 11 terrorist attacks on the World Trade Center.

■ Defense Undersecretary Paul Wolfowitz told Congress in late February that the US will likely have, in place at Ft. Greely, Alaska, by September 2004, four prototype rockets capable of destroying a long-range missile.

■ Brig. Gen. Teresa M. Peterson, former director of Air Force Transportation, became the first active duty woman to command an operational flying wing when she took command of the 305th Air Mobility Wing at McGuire AFB, N.J., March 1.

■ A Pratt & Whitney-led team, including Rolls Royce, Lockheed Martin, Northrop Grumman, and BAE Systems, received the National Aeronautic Association's Collier Trophy for designing, developing, testing, and demonstrating the Integrated Lift Fan Propulsion System that will be used on the new F-35 strike fighter's short takeoff and vertical landing version.

■ John M. Poindexter, the retired Navy admiral who served as President Reagan's national security advisor, now heads a new office—the Information Awareness Office—recently created by the Defense Advanced Research Projects Agency.

■ Kevin Montoya, the project manager for test and evaluation of the airborne laser program at the Air Force Flight Test Center, Edwards AFB, Calif., was named the National Defense Industrial Association Civilian Tester of the Year.

■ GE Aircraft Engines received a

## Sovietologist Erickson Dies

John Erickson, who was considered for most of the Cold War to be the West's leading authority on the Soviet military, died Feb. 10. He was 72.

During World War II, Erickson served as a sergeant in the British army. Afterward he attended Cambridge and Oxford, where he worked on his book *The Soviet High Command: A Military-Political History, 1918-1941*, a standard on the formation of the Red army. He was a scholar respected by the Soviet Academy of Sciences and gained unusual access to Soviet archives and high-ranking officers.

In 1967, Erickson founded the Center for Defense Studies at the University of Edinburgh where he was a professor of politics (defense studies). Through the center, he developed what became known as the Edinburgh conversations, a forum for US and Soviet admirals and generals. The conversations grew from informal exchanges to in-depth discussions on arms control and other security issues.

Erickson also was a visiting professor at the University of Indiana, Texas A&M University, and Yale. His other publications include *Barbarossa: the Axis and the Allies*; *Soviet Ground Forces: an Operational Assessment*; *The Road to Stalingrad* and *The Road to Berlin* on Stalin's war with Germany; and *The Expansion of Soviet Air Power*.

\$126 million contract from Lockheed Martin to provide CF5-80C2 propulsion systems for USAF's C-5 reliability, enhancement, and re-engining program. Deliveries begin in 2004.

■ Maj. Gen. Thomas J. Fiscus was named the Air Force judge advocate general Feb. 25.

■ USAF announced the 2001 safety award winners. Air Combat Command received the Secretary of the Air Force

Safety Award for Category 1 organizations, reflecting the "safest two-year period in the flying history of ACC." The Air Force Academy received the Category 2 SECAF award for "dramatically reducing its off-duty military injuries ... and its on-duty civilian injuries."

■ The Air Force also announced several 2001 safety achievement award winners, including MSgt. No-

## Senior Staff Changes

**RETIREMENTS:** Lt. Gen. Roger G. Dekok, Maj. Gen. Dennis G. Haines, Lt. Gen. Ronald C. Marcotte, Maj. Gen. Todd I. Stewart.

**NOMINATIONS:** To be **Major General:** Robert Damon Bishop Jr., Robert W. Chedister, Trudy H. Clark, Richard L. Comer, Craig R. Cooning, Scott S. Custer, Felix Dupré, Edward R. Ellis, Leonard D. Fox, Terry L. Gabreski, Michael C. Gould, Jonathan S. Gratton, William W. Hodges, Donald J. Hoffman, John L. Hudson, Claude R. Kehler, Christopher A. Kelly, Paul J. Lebras, John W. Rosa Jr., Ronald F. Sams, Joseph P. Stein, Kevin J. Sullivan, George P. Taylor Jr., Mark A. Welsh III, Stephen G. Wood.

**PROMOTIONS:** To **General:** Lance W. Lord. To **Lieutenant General:** John R. Baker.

**CHANGES:** Maj. Gen. Walter E.L. Buchanan III, from Dir., Ops. & Tng., DCS, Air & Space Ops., USAF, Pentagon, to Cmdr., JTF Southwest Asia, CENTCOM, Riyadh, Saudi Arabia ... Gen. Lance W. Lord, from Asst. Vice C/S, USAF, Pentagon, to Cmdr., AFSPC, Peterson AFB, Colo. ... Maj. Gen. Richard A. Mentemeyer, from Cmdr., 305th AMW, AMC, McGuire AFB, N.J., to Dir., Ops. & Tng., DCS, Air & Space Ops., USAF, Pentagon ... Brig. Gen. Teresa M. Peterson, from Dir., Trnsp., DCS, Instl. & Log., USAF, Pentagon, to Cmdr., 305th AMW, AMC, McGuire AFB, N.J. ... Maj. Gen. Craig P. Weston, from Dir., Advanced Sys. & Tech., NRO, Chantilly, Va., to Vice Cmdr., ESC, AFMC, Hanscom AFB, Mass.

**SENIOR EXECUTIVE SERVICE RETIREMENTS:** Alfred A. Buckles, Donald C. Daniel, Benedict A. Kausal, Terry L. Neighbor, Dennis J. Volpe.

**SES CHANGES:** Frances A. Duntz, to Dep. Dir., P&P, AFMC, Wright-Patterson AFB, Ohio ... Susan A. O'Neal, to Asst. DCS, Instl. & Log., USAF, Pentagon ... Ronald L. Orr, to Principal Dep. Asst. Secy., Instl., Env., & Log., Pentagon ... James Pennino, to Dep. Command Civil Engineer, AFMC Civil Engineer, Wright-Patterson AFB, Ohio ... Bonnie Taylor, to Dir., Contracting, ESC, Hanscom AFB, Mass.

Ian A. Rayne, McConnell AFB, Kan., 2001 Safety Career Professional.

■ The Pentagon presented awards to the top seven reserve component family readiness and mission support programs, including the 184th Bomb Wing of the Kansas ANG and the 913th Airlift Wing, AFRC, Willow Grove, Pa.

■ DOD and the VA began the first of a series of quarterly meetings for the new DOD-VA Health Executive and Benefits Executive Councils in mid-February. Officials said the new councils are designed to build a more collaborative relationship.

■ USAF selected 1,712 out of 8,965 line and nonline majors considered for promotion to lieutenant colonel. The selection rate for line officers in the promotion zone was 65.6 percent.

■ An F-16 crash at Hill AFB, Utah, on Oct. 17 during its takeoff roll was the result of a blown nose-gear tire, according to Air Force officials investigating the accident. The blown tire caused a debris spray that severed critical steering system wires.

■ The Air Force selected 579 line and nonline officers out of 4,717 lieutenant colonels considered for promotion to colonel. The selection rate for line officers was 46.6 percent.

■ Jim Bagg, 87, retired from Air Force civil service in a special Pentagon ceremony Feb. 27, after serving his country for more than 63 years. Officials said he had more years of federal service than any other USAF employee. Bagg spent the first half of his career as an Army officer and the second half as an Air Force civilian.

■ DOD notified Congress Feb. 26 that the 52nd Civil Support Team from the Ohio National Guard was certified to perform its mission. Congress authorized 32 teams, with 25 now certified.

■ USAF will be installing a new digital flight instrumentation system in the C-12 turboprop as one of several modifications needed to keep the small transport aircraft flying for another 20 years. USAF's 27 C-12s, managed by Tinker AFB, Okla., are scattered around the world and used primarily for embassy support.

■ Orbital Sciences received a \$425 million contract from Boeing to develop a booster rocket for the Pentagon's missile defense program. Orbital is to develop an alternative booster to the one Boeing has been developing.

■ A female powerlifter, 2nd Lt. Kimberly Walford from the 321st Missile Squadron, F.E. Warren AFB, Wyo., won the 2002 Women's Junior National Championship in the 148-pound

## CRS: Concurrent Receipt Is Top Retirement Issue

Many would argue that the most controversial military retirement issue that is currently the object of intense Congressional interest involves concurrent receipt of military retired pay and Veterans Affairs disability compensation, stated a Congressional Research Service issue brief, released Feb 15.

Military associations and retirees have raised the issue with Congress for the past 10 years, at least. They have tried to get Congress to change the law that prevents military retirees from receiving the two benefits simultaneously.

It is a complex issue with heated arguments on both sides. Opponents, of course, want to know how it would be financed if approved. Proponents, who say it is owed regardless, have recently said there's a surplus in the Military Retirement Fund that could cover it.

The CRS said that is not the case. "Recent assertions that there is a 'windfall' or 'surplus' in the Military Retirement Fund ... are incorrect. They are based on an invalid assumption about how the amount of money in the fund is determined." The brief explained that the government uses "complicated calculations" to compute the amount of money that must be transferred from DOD to the MRF to pay for future retirement costs. "The idea of the 'windfall' assumed that the calculations did not take the VA compensation offset into account," said the CRS.

According to the CRS, the Bush Administration, like the Clinton Administration, has been consistently opposed to granting concurrent receipt. The Administration sent a letter to Congress last October in which it stated that both military retired pay and VA compensation were intended to adequately compensate for the recipient's military service and that both were not required to do so.

However, CRS noted there might be a softening. A senior Pentagon official said earlier this year that DOD intended to study the issue to see if disabled military retirees were receiving adequate levels of support. The Pentagon commissioned an independent study that was due last month; it was then scheduled for an in-depth review before being forwarded to Congress.

That may be too late, as Congress was poised to consider the issue again last month for the Fiscal 2003 budget.

Whether or not Congress includes a reprieve from the concurrent receipt rule for the new budget, the Air Force Association and the Military Coalition pledge to continue the fight.

"For the last 10 years, AFA has been working to repeal restrictions on concurrent receipt believing that monies earned for a service-connected disability and retirement are separate entitlements and should not be linked," said Ken Goss, AFA government relations director. "We will continue to work this issue until full concurrent receipt is achieved."

weight class for ages 20 to 23. She lifted two and three times her weight of 144 pounds.

■ Raytheon delivered three fully integrated Multispectral Targeting Systems for the Predator UAV in three months. Officials said a typical development and delivery cycle on a first system of this type normally would take 12 to 16 months.

■ In February, a KC-10 refueling

aircraft from McGuire AFB, N.J., marked 875 KC-10 combat sorties over Afghanistan for Enduring Freedom. Personnel from the 32nd Expeditionary Air Refueling Squadron had provided more than 85 million pounds of jet fuel since KC-10s started Enduring Freedom operations Sept. 22. Along with the 60th EARS from Travis AFB, Calif., the 32nd refueled more than 7,000 aircraft. ■

## Index to Advertisers

Air Force Reserve Command .....	3
Boeing .....	Cover IV
GE Aircraft Engines .....	13
Hertz .....	7
Lockheed Martin .....	Cover II
Lockheed Martin Systems Integration .....	29
Motion Models .....	7
Northrop Grumman .....	Cover III
Textron .....	19
USAA .....	5
AEF Fellows .....	33
AFA Banking .....	77
New at AFA .....	76

Air Force leaders check their progress on the road toward transformation.

# The Strength of



By Peter Grier

*The F-22 program, which is currently fully funded and in production, continues to be the centerpiece of USAF and DOD modernization. In testing over Edwards AFB, Calif., this F-22 fires an AIM-9 Sidewinder missile.*



# the Force

**F**LEXIBILITY. Adaptability. Transformation. The power to continually change and improve has become a core strength of the US Air Force, senior service officials told a recent Air Force Association national symposium.

It is a virtue that was much in evidence during operations over Afghanistan, they noted.

From the technicians who fitted

Hellfire missiles onto Predator Unmanned Aerial Vehicles to the forward air controllers who learned how to operate laptop computers on horseback, Air Force troops excelled at taking the tools at hand and combining them in new ways to complete unanticipated missions.

"What we are [now] able to do is to leverage the technology of this nation to create asymmetrical ad-

vantage for our military forces and to overcome what [Defense] Secretary [Donald] Rumsfeld has called our asymmetrical vulnerabilities," Air Force Chief of Staff Gen. John P. Jumper told attendees.

In years to come, the Air Force speakers agreed, service transformation will accelerate, as a blend of stealth, precision guidance, space systems, and information technol-



F-22 Team photo by Jackson Bronner



**B-1B bomber crews like this one routinely make 2,500-mile runs into Afghanistan, hitting their targets with high precision. The fixed-point target problem is solved, Secretary Roche said.**

ogy enables the Air Force to actually do certain things warfighters have only talked about for years.

The AFA Air Warfare Symposium was held Feb. 14–15 in Orlando, Fla.

### Secretary James Roche

The ancient Chinese philosopher Lao-tzu predicted that “whoever adapts shall be preserved to the end,” said Secretary of the Air Force James G. Roche. A few hundred years later, a Greek, Heraclitus, said that nothing endures but change.

“About 1970, a similar figure in history, Yogi Berra, noted, ‘When you come to a fork in the road, take it,’” said Roche. The Air Force was born of a technology that is still less than 100 years old, noted the service’s civilian leader. In fact, he said, the technology—airpower—is newer than vacuum cleaners, newer than radios. “Yet, we seem to have come such a long way ... to the present era,” Roche said.

Major systems are headed down somewhat different paths, though most are proceeding well. “In our long-range strike aircraft area, we have done particularly well,” said Roche.

Ten B-52s and eight B-1Bs accounted for most of the 850 sorties by such warplanes in the Afghanistan area of operations, as of mid-February. The B-1s typically flew to Afghan airspace and stayed on station for some 2.5 hours. To get to the target area, the B-52s flew 2,500 miles—about the distance from Tam-

pa, Fla., to Seattle—with 20 Joint Direct Attack Munitions on board.

Bombers will be modernized where it makes sense to do so. The Air Force will make sure the B-2 can continue to penetrate air defenses into the future and that the B-1 has the standoff weapons it needs.

“We will be able to attack any fixed-point target anywhere in the world very, very quickly with great precision,” said Roche.

For the first time, the F-22 is fully funded in the budget, and after a development program of some 20 years, “the time is right” for the new air superiority fighter to enter production, Roche said, quoting Rumsfeld.

Noting the service’s need for the air superiority fighter, Roche said, “Those of you who are subcontractors, please know how critically important you are to the future of our fighter–bomber force. You must deliver ... on schedule and on cost ... for the sake of your country.”

The Joint Strike Fighter is getting off the ground, said Roche, and that is welcome. However, he added, older USAF systems performed beautifully in the Afghan war. Air National Guard F-16s with Litening pods were “demi-heroes,” in Roche’s phrase. The Link 16 system was quickly added to some F-15s to help them become part of the fused mosaic of target information and command and control.

“I feel good about the systems ... in our fighter–bomber–attack [forces] if we can only have steady budgets,”

said Roche. The outlook for mobility aircraft is similarly good. The C-17 has performed superbly. In fact, it is being worked to death because of its capabilities.

“We will probably want more than the number we have talked about because we are seeing how useful this aircraft can be,” said Roche.

The Air Force will probably look for a multiyear buy of the C-130J and upgrade the other C-130s. The best of the C-5s will be kept. “On mobility, I see a good path forward,” said Roche.

In the area of Intelligence, Surveillance, and Reconnaissance, the Air Force has developed wonderful systems, the Secretary said, but it is too dependent on the old Boeing 707 airframe. It’s not that the airplanes themselves are coming apart—it is that limits in electrical power and cooling have been reached, among other problems.

Fixing this problem may well require a mix of “unattended vehicles,” new aircraft, and space. “We are going to move to a portfolio of systems,” said Roche.

Command and control will see new systems coming on line, including advanced EHF and laser communications. The idea of the Combined Air Operations Center as a weapon system has proved itself, the Air Force civilian chief added.

Building on that, the service is looking at the notion of a new multi-mission airplane. “We will have multi-mission aircraft as part of our concept of operations—kicking down the door and controlling the battle afterwards,” said Roche.

Tankers, on the other hand, are something of a problem area. The Air Force has only 60–odd KC-10s but more than 550 ancient KC-135s.

Yet the Afghan conflict has pointed out how dependent the whole US military is on its tankers. With a landlocked area of operations, everything had to move by air. This ranged from the food and water US troops consumed to the equipment they used.

It is time for the Air Force to move forward in this area, warned the Secretary. “My fear is that our tanker fleet could be the [lost] horseshoe nail that could cause the horse to tumble, the king to fall, and the kingdom to come apart,” said Roche.

A big doctrinal change is the expansion of the close air support role, noted Roche. He contended that the

new F-22 will, in effect, work for soldiers on the ground, in something of a return to the days when Gen. Henry H. "Hap" Arnold's Ninth Air Force supported Gen. George S. Patton's 3rd Army in its race toward Nazi Germany.

Modern close air support capability will complement the Army's development of new, lighter forces. It will fit hand in glove with another Air Force goal—the ability to watch an area of interest 24 hours a day, seven days a week, 365 days a year, in all weather, and to identify anything that moves.

"Then we intend to have the capability to have almost instantaneous attack," said Roche. "That is part of our future."

Developing such capabilities will require transformation. That is a subject Roche knows something about, as in the 1970s, as a Navy commander, he worked in a then little-known Pentagon organization called the Office of Net Assessment.

Under the leadership of the strategist Andrew W. Marshall, the group came up with three criteria necessary for successful transformation, or as they called it then, adaptation. They were: a well-defined mission; technology to enable integration across stovepipes; and leaders and people willing to embrace change.

All are present in the Air Force today.

"The United States Air Force is led by, supported by, and filled with innovators who embrace change and aggressively pursue transformation and continuous process improvement," said Roche.

### Gen. John Jumper

Transformation has been a theme of the Air Force since the fall of the Berlin Wall in 1989, Gen. John P. Jumper, the Air Force Chief of Staff, said in his remarks to AFA.

Among the highlights of change was the transition to an expeditionary air force, which began in 1994. The Expeditionary Aerospace Force concept matured and was institutionalized by then-Chief Gen. Michael E. Ryan in 1997.

"It continues to mature today as we study the dynamics of maintaining a predictable rotation in an unpredictable world," said Jumper.

A second major aspect of transformation is the increasing ability of

the Air Force to do many of the things officials have only talked about for years. As the war in Afghanistan showed, the service is now able to leverage technology to create an asymmetrical military advantage for the nation.

"A combination of stealth, stand-off precision, space, and information technology [has] blended together in ways that offer us unimaginable change," said Jumper.

Key to this continued adaptation is the horizontal integration of manned and unmanned and space platforms.

Consider the notion of smart tankers. Tankers are already up on the edge of the battle zone, at high altitude and on station. They are in a perfect position to create a sort of Internet in the sky. Why not load them with a pallet of equipment that translates one data link message to another in a seamless way?

Why not take a tanker cargo door and outfit it with electronic scanning arrays and use it as a remote antenna for Rivet Joint aircraft? The tanker remains passive while the Rivet Joint benefits from signals sent from many locations.

Such multisensor constellations could be constructed in many different ways.

"You integrate the Joint STARS, the Rivet Joint, the AWACS, the ABCCC in a seamless way so that the airplanes talk to each other at the digital level without going through tribal representatives to interpret

tribal hieroglyphics to the rest of us poor unwashed, the way we do it today," said Jumper.

Another transformation might involve predictive battlespace awareness. Intelligence units might take their work to the next level, by exploiting predictive analysis and the mass of information available from multisensor constellations to in essence pinpoint where targets will be, before they are there.

Something of this sort occurred in Kosovo, where intelligence officers studied SA-6 anti-aircraft batteries so intently that they could guess what commanders would do, based on regular patterns.

The Air Force took some heat in Kosovo for not destroying more of Slobodan Milosevic's armored vehicles. But US targeteers had a pretty good idea where the tanks were hiding. "We couldn't hit them because [command authorities] said you had to see them first, and we didn't have that total analysis where we could be convinced beyond a shadow of a doubt that they were really in those trees," said Jumper. "We've got to take away the doubt."

The armed UAV is another transformation of technology. The success of the marriage of Hellfire and Predator has been such that Predator B will be dedicated to the hunter-killer role, with four or six weapon stations.

This doesn't mean Predator's basic mission will fall by the wayside—another experiment of the Af-



USAF photo

*The F-35 is getting off the ground and none too soon: USAF fighter inventories will decline steadily until it starts entering service. The joint program will also yield fighters for the Navy and Marines and many allied countries.*



**Special Operations Forces have taken center stage in Afghanistan. USAF leadership promises that SOF aircraft will get the proper level of support as they play an increasingly important role in the war on terror.**

ghan war placed streaming video in the back of AC-130s, allowing the gunships to pick up targeting information from on-station UAVs.

“When the AC-130 arrived on station, it was able to go right to work,” said Jumper.

On a larger scale, such integration will result in the Global Strike Task Force, in which horizontally linked ISR will be combined with the ground attack capabilities of the F-22 and the B-2 to provide kick-in-the-door capability.

“As I talk about these capabilities, what enables it all? It is the environment of space,” said Jumper.

Readiness was another of the Chief’s themes at the AFA symposium.

In February 2001, readiness bot-tomed out, with 65 percent of forces at C-1 or C-2. Today, 71 percent of forces are at that level, and the number continues to rise.

But there is a psychological aspect to readiness that can be as important as the numbers, said Jumper. If maintainers think higher command is taking them for granted, and counting on their extra effort to keep airplanes flying while budgets are squeezed, retention will suffer.

“Let’s not do that again and betray our people,” said Jumper.

Recruiting is only part of the answer to the personnel problem, after all. If the service does not retain the people it recruits, the system is only cycling in place.

The service needs to reiterate that

there has seldom been a better time to wear the nation’s uniform than today. As the war on terrorism goes forward, the citizens of the nation are looking to their military people as symbols of pride and strength.

“Whatever you think you’d like to be doing in your life or with your life, you ought to look in the mirror and be proud of what you are doing with it today if you are wearing the uniform, because there is no more noble cause or calling,” concluded the Chief.

### **Gen. Hal Hornburg**

The Chief’s emphasis on reten-

tion was seconded by Gen. Hal M. Hornburg, commander of Air Combat Command. Freshly minted air-men are simply not adequate replacements for eight- or 15-year people who walk out the door, he said.

“We have to scrape, fight, and make it very hard for those folks to leave us,” said Hornburg.

Over the last 10 years or so, the Air Force has closed 93 major military installations and shrunk structure by 40 percent. Yet optempo and perstempo are up 300 to 400 percent.

Furthermore, the Air Force personnel network may no longer be operating as a team.

“What we are not doing is at the four-star level down to the one-star level down to the lieutenant colonel, down to the chief master sergeant level down to the staff sergeant; we are not coaching, leading, and mentoring our airmen as we were coached, mentored, and led,” said Hornburg. “That has to stop.”

As to transformation—“the dreaded ‘T’ word,” said Hornburg in an aside—it may well have been a feature of the Air Force from its beginnings. There was, first of all, the transformation to a nuclear-capable force. There was the transformation from Vietnam to Desert Storm. Then there was the precision guided munitions revolution.

In World War II, it took 9,070 weapons to drop a bridge. In Korea, it took 1,100. By the Vietnam era the number was down to 176. And today?



USAF photo by MSgt. Keith Reed

**Holding onto midlevel enlisted troops is a high priority. While recruiting is important, no airman first class can replace a seasoned professional. Commanders are urged to let senior troops know just how crucial they are.**

"Now we drop two bridges per airplane, if we are using F-117s," said Hornburg.

Today's combat forces are co-dependent on mobility and space forces, the ACC chief cautioned. Without tanker support, the now-famous 15-hour F-15E mission over Afghanistan would have been impossible. Without space capabilities, weather prediction, navigation, and guidance would disappear.

"We need to ... harden space to make it totally 100 percent dependable," said Hornburg.

Then there is C<sup>4</sup>ISR—an amorphous term, Hornburg noted. It has so much lumped in together it needs focus, or it is an area that will continue to drift.

Some of the Cs in C<sup>4</sup>ISR may be more important than some of the other Cs, according to the Air Combat Command chief. He would order things like this: command and control, with the enablers of computers, communications, and ISR.

And the one C he values above all others is not command, but control.

"The science of control enables the art of command," he said.

### Gen. Gregory Martin

The need to fight terrorism on a global basis should not really have come as a surprise, said Gen. Gregory S. Martin, commander of US Air Forces in Europe.

That is because the end of the Cold War did not usher in a period of international harmony, sweetness, and light. In just the last decade, the men and women of USAFE alone have participated in more than 67 events, from full combat to humanitarian missions.

After the fall of the Berlin Wall, "we really went into a period that I think of as a simmering peace," said Martin.

Terrorist connections were evident in a number of strikes against US forces and cultural symbols. In 1993 there was the first World Trade Center bombing and attacks on US peace-keeping forces in Somalia. Later in the decade, the bombings of US embassies in Kenya and Tanzania killed more than 200 people. Then the bombing of USS *Cole* in Yemen increased national awareness of the al Qaeda threat.

"Over the last 10 years, just about the time you sort of think the world



USAF photo by TSgt. David J. Ahlshwede

*USAFE chief Martin said the Air Force has a number of imperatives, among them coordination from allies. Here, a pilot from Aviano AB, Italy, gets ready for a training mission flown from Zaragoza, Spain, with Spanish forces.*

is safe for democracy, another event occurs," said Martin.

Terrorists declared war on America some time ago, according to the USAFE chief. It just took some time for the US to connect all the dots of various events, figure that out, and respond in kind.

"They've been at it. They are serious, and we are awake," said Martin.

For the Air Force, fighting this new war will involve a number of imperatives. One of them is access—access to as many facilities in the area of operations as possible. Another is coordination from allies and acquaintances. Since Sept. 11, such help has been freely offered, said Martin, with more than 136 nations offering some sort of assistance. Eighty-nine countries have granted overflight rights and 76 have offered landing rights. Twenty-three have offered to host US forces.

Finally, the US needs to be able to conduct rapid operations of all kinds, from military to diplomatic and financial.

"We need to be able to make some very quick circle turns," said Martin.

Current operations have exposed some things the US Air Force needs to do better, according to the USAFE commander.

Force protection could be improved. Today it is manpower-intensive and not particularly technological.

"The most sophisticated sensor we

have is a dog and the standoff distance is a leash," said Martin.

The Air Force needs to know more about more places in the world. It needs to institutionalize the ability to supply small teams of high-tech triggers, such as forward deployed spotters, in remote locations.

There is much still to learn about the use of Predator, Global Hawk, and other long-range reachback air and space operations. And even though the Air Force has devoted much attention to humanitarian airlifts over the past 50 years, more could be done in such areas as air-drop technology.

"There are things that can be done to give us a much better and much more accurate delivery of the things that are important and necessary from all weather and all altitudes," said Martin.

### Gen. William Begert

Gen. William J. Begert, commander, Pacific Air Forces, took AFA on a quick country-by-country tour of his area of responsibility and the contributions PACAF has made to Afghan operations.

He started in northeast Asia, with Japan. The US has three air bases there, all well-cared for and funded largely by the host. The Japanese military itself is becoming more and more interoperable with the US, as it buys AWACS aircraft and other equipment and considers buying tankers.

"The Japanese are great hosts and



**Pacific partnerships are proving critical in Enduring Freedom. The service is looking for more "lily pads" to help its aircraft hop the Pacific. Here, a USAF F-16 flies over a mountain range in South Korea.**

important strategic partners in that part of the world," said Begert.

Nearby, South Korea is a nation that has never really known peace. Two PACAF bases there are important demonstrations of resolve to counter North Korea, a nation famously named as part of President Bush's "axis of evil."

The standoff in Korea remains so sensitive that when the Navy withdrew USS *Kitty Hawk* from the region and sent it to the Indian Ocean, PACAF forces took up some of its deterrent role.

"The [commander in chief of Pacific Command] and the South Koreans felt it was important that we send our F-15Es from Alaska down to the Korean peninsula as a deterrent force to let the North Koreans know that we were still paying attention," said Begert.

US-China relations are returning to a more normal state following the collision between a Chinese fighter and a Navy P-3 last spring. China's air force—large, with many older aircraft, but rapidly developing—reflects its overall development of military strength.

China would be a tough opponent, if it ever came to that.

"We are all hoping for a soft landing on this, that the opening of markets and their economic growth will similarly at some point down the road also blossom into a political environment that is similarly open and peaceful," said Begert.

Malaysia and Singapore have cracked down on al Qaeda networks within their borders. Efforts in the Philippines are ongoing.

India, since Sept. 11, has similarly wanted to help, said Begert. Long-strained US-India relations may have turned a corner. The PACAF chief recently returned from a five-day visit to the country, where he traveled to three bases, including one near the tense border with Pakistan.

"They showed me ... everything. I got in the cockpit of the Su-30 and had a great chance to talk to the pilots and maintainers and talk to senior officers," said Begert.

Guam, with its modern complex of runways and weapons storage, has been a key player in shuttling forces to the Afghan theater of operations. Early on in Enduring Freedom, as many as 70 airplanes were on the ground at Guam, preparing to move west, at any time.

Diego Garcia, if anything, has been even more important. This British-owned archipelago of Indian Ocean islands was temporary home to many of the tankers and bombers that dropped the majority of the tonnage in Afghanistan.

"It has been a very quiet, success-

ful operation with very little in the way of press coverage, by design," said Begert.

Overall, PACAF is a relatively small command, with 40,000 personnel and some 400 airplanes. And those airplanes are old, by Air Force standards. The average age of PACAF tankers is 42 years. The C-130s based in Alaska are, on average, 28. The F-15s at Kadena AB, Japan, are the oldest in the inventory.

"One of the ways ... I describe PACAF is that it is somewhat geriatric," said Begert.

#### **Lt. Gen. Russell Davis**

Lt. Gen. Russell C. Davis, chief, National Guard Bureau, returned to Jumper's main theme of transformation.

The nation's Guard and Reserve are true transformational organizations, he said.

"We are continually getting new equipment and integrating it in. And that is very key," said Davis.

The Guard and Reserve are also transforming into organizations with more emphasis on homeland security. The definition of this job is still being drawn up, as the new Northern Command/Homeland Security Command structure develops.

But the readiness of US reservists to adapt to this task is beyond question. Just look at what happened on Sept. 11. Across America, Guardsmen stopped what they were doing, put on their uniforms, and reported for duty—any duty, anything to help.

"On 11 September, ... we had Army Guardsmen guarding the Pentagon and other key sites in Washington," said Davis. "People just show up."

Since then Guard and Reserve aircraft have protected the skies over the US, and Guardsmen have stood watch at many of the nation's transportation nodes. For the first time, uniforms have become a feature of daily life in many big US cities. And Davis noted that the response from ordinary citizens has been tremendous.

"People walk up to our young people, shake their hands, and thank them for being there," he said. ■

---

*Peter Grier, a Washington editor for the Christian Science Monitor, is a longtime defense correspondent and regular contributor to Air Force Magazine. His most recent article, "Bush's Nuclear Blueprint," co-authored with Executive Editor Robert S. Dudley, appeared in the March 2002 issue.*

# US101

Ready to fulfill tomorrow's mission requirements today.



Today's J.S. military faces the demands of an uncertain world, where flexibility, capability, and reliability are critical to mission success. To support those demands, Lockheed Martin and AgustaWestland have joined forces to produce a version of the proven AgustaWestland EH101 helicopter. This joint effort will deliver a dependable, reliable, and mission-ready helicopter with a proven performance record. It is available today, ready for tomorrow. **US101. Reporting for duty.**

LOCKHEED MARTIN 

**US101**

AGUSTAWESTLAND 

**CENTCOM's Franks says air and space power have been pivotal in Afghanistan.**

# The Combination That Worked

By Peter Grier

**O**NE of the “right lessons” to draw from the military operation in Afghanistan is that US airpower is accurate and highly reliable, said Army Gen. Tommy R. Franks, Commander in Chief of Central Command. And space communications was the lifeblood of that operation, said USAF Gen. Ralph E. Eberhart, Franks’s counterpart at US Space Command.

The two operational Commanders in Chief were directly involved in carrying out the innovative operation.

In the past, ground forces commanders have talked among themselves about whether they can depend on precision engagement of the enemy from the air. “What I’ve told all my friends and neighbors is, ‘By God, you can count on it,’” said Franks.

Franks, the officer who ramrods Operation Enduring Freedom in Southwest Asia, told an Air Force Association audience in Orlando, Fla., that he has learned to trust the capabilities of airpower in the effort to defeat the Taliban and al Qaeda forces.

He added that Enduring Freedom has been “the most precise war in America’s history, to be sure, beyond question.”

Operations over Afghanistan began Oct. 7. Thirteen days later, virtually all the air defenses and early warning systems in the country had been destroyed by air strikes, said the CENTCOM chief.



USAF Photo by SSgt. Wayne Clark

*Enduring Freedom has seen the longest-ever combat fighter mission—more than 15 hours. Meanwhile, B-52s have flown close air support. The distinctions between strategic and tactical platforms are gone—what matters are effects.*

About that time, special operations forces linked up with the Northern Alliance and other opposition combatants to sharpen “the incredible operational fires provided by you and yours,” said Franks.

Within weeks, the Taliban force had been destroyed as a coherent military entity. A new government was introduced in Kabul on Dec. 22. Precision engagement was the linchpin of the whole effort, Franks observed.

“I suspect we have seen the first glimpse of precision engagement as





**More than 2.5 million humanitarian rations have been delivered to Afghanistan by C-17s, even as the C-17 almost exclusively sustained the ground effort there.**

it was described in Joint Vision 2020," he said, referring to the JCS Chairman's operational template for US military operations in years to come.

The technology supported hunter-killer operations, strikes and re-strikes, and the employment of sensor-shooter grids unlike any seen in the past. The ability to plan and count on ISR—Intelligence, Surveillance, and Reconnaissance—was "incredible," Franks asserted.

In "the largest and most complex use ever of Unmanned Aerial Vehicles of multiple varieties," operators achieved an availability rate that approached 100 percent, Franks noted.

"If you are a CINC, you count on everything to be where you need to have it at the time that you need to have it there—incredible work when you can ... receive about 100 percent of what you count on, thanks to great young people on the ground and ... in the air."

Technology since the 1991 Gulf War has come a long way, too, he noted, making operations more swift and efficient. During the early part of Enduring Freedom, the US conducted about 200 attack sorties a day, but "the hell of it is that the 200 sorties today have hit roughly the same number of targets we hit with 3,000 a day during Desert Storm."

Franks added that in Desert Storm "we used about 10 airframes per target. In Enduring Freedom, we struck two targets per aircraft."

Among Enduring Freedom's firsts

were the longest combat fighter mission in history; an F-15E mission covered more than 15 hours. One surveillance mission lasted for more than 26 hours.

"With all due respect to those who accomplished something incredible during the Berlin Airlift, it seems to me that the duration, size, intensity, and the result of those aviation efforts into and out of Afghanistan are beyond what we may have ever planned for," said Franks.

Enduring Freedom involved the first opening of US Air Force bases in Central Asia and the largest RED

HORSE construction effort since Vietnam War days.

USAF aircraft delivered more than 100 Joint Direct Attack Munitions during a single 20-minute period, and they also dropped more than 50 million leaflets (one of which sold on eBay for \$147.80, Franks noted) and more than 2.5 million humanitarian daily rations, all by air.

End-to-end linkages of sensor platforms, such as E-8 Joint STARS surveillance and battle management aircraft and Predators with shooters and command and control, provided revolutionary fusion of information and functional commands, said Franks. And all this was to back ground forces that sometimes used less-technological transport.

"Unbelievable—close air support and interdiction fires in support of people riding around on horses," said Franks.

Among the lessons learned from the conflict is the incredible flexibility of bombers, which enables them to do even close air support, said Franks.

Not that other types of strike aircraft are now outdated.

"We are going to have to continue to wrap our arms around this business of the flexibility we gain by having a balance of multiple types of platforms, because what served well in Afghanistan may not be the precise trick we need in the next fight," said Franks.

Afghan operations also had a lot



**The Predator UAV has proved its worth in providing detailed views of the battlefield, in cuing other weapons platforms, and as a shooter in its own right.**



**Without much fanfare, space has become integral to everything USAF does in war and peace. Space has become so critical that it is time to seriously address protecting US satellites. To do less would be "naive," Eberhart said.**

to teach about the necessity of the C-17, the kinds and numbers of tanker refueling platforms needed, and the benefits of mixing and matching sensors and shooters to the needs of the mission.

"General Billy Mitchell, once upon a time, said airpower has the power of offense always with it. We choose the time, the place, and the method of attack," said Franks. "If we carry anything forward with us out of Enduring Freedom, that probably ought to be it."

Franks concluded that, in the future, "sometimes we will find ground power supported by airpower [and] in some cases, we will have airpower leveraged by ground forces."

In the decade since Desert Storm, the Air Force has been working hard on learning how to leverage space systems for operational use, said Eberhart, Commander in Chief not only of US Space Command but also of North American Aerospace Defense Command and commander of Air Force Space Command.

That means taking systems designed for national, strategic purposes and figuring out how they can help solve smaller, tactical problems, Eberhart told AFA.

"The analogy I use is a two-engine airplane," he said. "We had both throttles back toward idle, in terms of space control and force enhancement. We've moved that force enhancement throttle right on up to [full power]."

Space communications, for instance,

has been a lifeline of Operation Enduring Freedom. Space Command doubled the bandwidth available to Central Command—in part by going out and buying additional commercial capabilities and in part by picking the pocket of the other CINCs.

"They are not happy about that, but they understand because they know we would do the same thing for them if they were sending people in harm's way," said Eberhart.

In fact the military may have even reached the point where it takes many of the advantages of space for granted. Think of GPS. Only a small handful of GPS-guided munitions were used in Desert Storm. In Enduring Freedom, upward of 50 percent of the bombs dropped were JDAMs.

"And in terms of the accuracy that we have provided—it is all fuzzed up for security reasons—but we are providing accuracy half again as good as the operational requirements document stipulates," said Eberhart.

The JDAM was originally specified to be accurate to within a few meters of its intended aim point.

If the force enhancement throttle is on full power, to repeat Eberhart's analogy, the space control throttle is not—at least, not yet.

Mention "space control," and many people's thoughts turn immediately

to weapons in space and space battle. "But I would offer to you that the pillars of space control start with surveillance," said Eberhart. "We've got to know what is up there. [A] space 'order of battle,' if you will."

Even when moving into the area of denial of space capabilities to adversaries, there are ways of completing the mission without destroying orbital equipment—attacking ground equipment, for one thing, or jamming transmissions.

"There are lots of things you can do. You can use nonkinetic means," said Eberhart.

Even in Enduring Freedom, the US has practiced negation of a sort by buying up as much imagery of the area of operations as possible. It's an expensive technique—but an effective one, for now.

At least the Air Force can say the phrase "space control" again. In the 1990s, there was a period when broaching the subject was unpopular.

"We couldn't talk about it," says Eberhart. "I think that is terribly naive."

Today, force application through space means what the CINCSPACE called the "big guys"—ICBMs. If there is one nuclear weapon on the face of the Earth, it should belong to the US, he added.

But in decades to come, with the Global Strike Task Force, the situation may change.

"You are going to kick down the door, in my view, with weapons through space and possibly from space," said Eberhart.

Considering the length of system development times, the Air Force needs to dedicate itself now to thinking what that capability might be.

"Whether it is a conventional ICBM, which causes some people to shudder, or whether it is a [Combat Aerial Vehicle] or Pegasus off a B-52, whatever it might be, we've got to develop those capabilities in the coming decades," said Eberhart.

Doing missile defense right will also probably involve doing some of it from space, according to Eberhart.

"You are going to do it with space based lasers or things like that," he said. ■

*Peter Grier, a Washington editor for the Christian Science Monitor, is a longtime defense correspondent and regular contributor to Air Force Magazine. His most recent article, "Bush's Nuclear Blueprint," co-authored with Robert S. Dudley, appeared in the March 2002 issue.*



# FELLOWS FOR 2001

## BARRY GOLDWATER FELLOWS

(represents a \$5,000 contribution)

### Fellow

Gen. John P. Jumper  
Robert E. Patterson

### Sponsor

Langley Chapter  
Eglin Chapter

## GEN. BERNARD A. SCHRIEVER FELLOWS

(represents a \$2,500 contribution)

### Fellow

Lt. Gen. Eugene L. Tattini

Edward C. Aldridge Jr.

Ronald M. Sega

H.T. Johnson

Lt. Gen. Roger G. DeKok

Jim Albaugh

Albert E. Smith

Charlene Nicholson

### Sponsor

Gen. B.A. Schriever Los Angeles Chapter

The Aerospace Corporation

AEF Trustees and Friends

AEF Trustees and Friends

Gen. B.A. Schriever Los Angeles Chapter

The Boeing Company

Lockheed Martin Corporation

Iron Gate Chapter

## IRA C. EAKER HISTORICAL FELLOWS

(represents a \$1,000 contribution)

### Fellow

Maj. Gen. Fredrick C. Blesse, USAF (Ret.)

Col. Harold E. Fischer, USAF (Ret.)

Col. Dean Hess, USAF (Ret.)

Col. Russell L. Blaisdell, USAF (Ret.)

MSgt. Gilbert R. Switzer, USAF (Ret.)

Lt. Gen. Leslie F. Kenne Edmond Gormel

Lawrence A. Shellhammer

Terry D. Miller

Marguerite H. Cummock

### Sponsor

Central Florida Chapter

Central Florida Chapter

Central Florida Chapter

Central Florida Chapter

Central Florida Chapter

Gen. E.W. Rawlings Chapter

Cape Canaveral Chapter

Langley Chapter

Colorado AFA

David R. Cummock

## JIMMY DOOLITTLE EDUCATIONAL FELLOWS

(represents a \$1,000 contribution)

### Fellow

Carl Peterschmidt

Alice Peterschmidt

Robert W. Goss

Michael J. Daugherty

Jancy A. Bell

Gen. John W. Handy

Gen. Robert H. Foglesong

### Sponsor

Dale O. Smith Chapter

Dale O. Smith Chapter

John O. Gray

The Aerospace Corporation

John A. Shaud

Gen. E.W. Rawlings Chapter

Iron Gate Chapter

## FELLOWS OF THE FOUNDATION

(represents a \$500 contribution)

### Fellow

Scitor Corporation

Gen. John P. Jumper

Gen. Richard B. Myers

### Sponsor

Lance P. Sijan Chapter

Nation's Capital Chapter

Nation's Capital Chapter

## ASSOCIATE FELLOWS OF THE FOUNDATION

(represents a \$250 contribution)

### Fellow

Eleane M. Beadle

Katherine M. Ogburn

Melissa Treveño

The Boeing Company

Lt. Gen. George Macdonald, Lance P. Sijan Chapter

Canadian Forces

### Sponsor

Aerospace Education Foundation

Aerospace Education Foundation

Utah State AFA

Lance P. Sijan Chapter

Lance P. Sijan Chapter

## SCOTT ASSOCIATE FELLOWS

(represents a \$50 contribution)

### Fellow

Peter B. Lane

Julie Kimsal

Mike and Irene Richardson

Leah G. Spencer

Connie Chavez

William D. Croom Jr.

### Sponsor

Fort Worth Chapter

Lance P. Sijan Chapter

John W. DeMilly Jr. Chapter

Utah State AFA

Lance P. Sijan Chapter

Colorado State AFA

**The US suddenly had to fight halfway around the world,  
in primitive conditions and without preparation.**

**By Rebecca Grant**



# The War Nobody Expected

**T**HE nation's air component passed a major test in Afghanistan. With a relatively small but steady flow of sorties, aerospace forces struck emerging targets fast enough to enable the Northern Alliance to unseat numerically superior Taliban forces. "The very simple purpose was to build and maintain pressure inside Afghanistan with the objective of the destruction of the al Qaeda terrorist network and the government of the Taliban," Army Gen. Tommy R. Franks, Commander in Chief of Central Command, later testified.

To do that, Operation Enduring Freedom employed aerospace power in ways very different from canonical phased operations. US military planners recognized that from the start. USAF Gen. Richard B. Myers, the Chairman of the Joint Chiefs of Staff, drew a contrast with the 1991 Gulf War. "We tried to set conditions with the air war, and then we had a ground component that went in and finished the job," Myers said of Desert Storm. "You shouldn't



*A B-1B bomber takes off for a strike mission over Afghanistan for Operation Enduring Freedom.*

think of this in those terms.” Testifying to Congress in February, Franks described the campaign as “lines of operation conducted simultaneously, rather than sequentially.”

Those “lines of operation” ultimately included everything from supplying fodder for horses to delivering precision strikes from the air. To orchestrate this asymmetric campaign, commanders tapped aerospace power in all its forms. Humanitarian aid started on Night 1 as C-17s air-dropped relief supplies. Air Force bombers and Navy fighters stripped the country of its modest air defenses and opened the door for aircraft to range across the battlespace and find and kill targets. Dominance in the air soon translated into dominance on the ground, as special forces worked with Northern Alliance troops to pinpoint and destroy Taliban areas of resistance.

### New Operational Style

It was a new operational style, one that was revealed in Desert Storm and Allied Force in 1999 but brought to a higher level in the skies over Afghanistan.

The strategy of using aerospace power to degrade Taliban military effectiveness required that the air component step up to a new level of performance in handling time-critical targets and employing precision weapons. Planners working in the Combined Air Operations Center blended long-range bombers, land-

based fighters, and carrier-based aircraft into a force capable of overcoming the access hurdle while handling emerging targets on demand and 24 hours a day.

The first success came with the smooth functioning of the joint air component itself. The concept of the Joint Force Air Component Commander passed its first major combat test in Desert Storm in 1991. Centralized control worked: The 43-day air campaign brought about a victory for integrated planning and execution of the campaign. Ten years later, it was an altogether different air component available to the commanders of Enduring Freedom.

Tighter organization of the CAOC was one big change. The CAOC integrated mobility, space, and information operations along with strike operations into the actual master attack planning cell. The JFACC—the first was Lt. Gen. Charles F. Wald, who was succeeded by Lt. Gen. T. Michael Moseley—had mechanisms for plans, operations, and intelligence reporting directly to him, without stovepipes. In Enduring Freedom, said one officer at the CAOC, “you had a coherent and cooperative group of planners from all the services, working together with a common goal and perspective,” because they were all operating together inside the joint and combined air operations center. The officer added, “It just jelled in terms of personalities.”

The ability to concentrate both data and the command authority at a CAOC had grown dramatically in the 1990s, a result of US experiences in two air wars in the Balkans. The CAOC for Operation Enduring Freedom was wired with as many as 100 T-1 lines, carrying floods of data into and out of the facility. That meant complete connectivity with all strike platforms, be they carriers in the Arabian Sea or bombers at Diego Garcia. “We’ve come a long way from 10 years ago, when we had to fly ATO [Air Tasking Order] out to the aircraft carriers,” USAF Chief of Staff Gen. John P. Jumper told the *Washington Post* in a joint interview with Adm. Vern Clark, Chief of Naval Operations.

The data flow delivered a huge new advantage in ground situation awareness. In Desert Storm, the JFACC had a complete air picture but only a limited real-time view of ground operations. For Afghanistan, high volumes of human intelligence were combined with the take from multiple intelligence, surveillance, and reconnaissance sensors to deliver unprecedented situation awareness. Predator video feeds, Global Hawk surveillance information, and direct input from US Special Operations Forces on the ground improved the CAOC’s ability to track the immediate tactical requirements of the liaison officers operating with the Northern Alliance forces.

### Exploitation Phase

The key was to exploit this information, and the air component, for the first time, had the ordnance and platforms to respond immediately to emerging targets. Joint Direct Attack Munitions—first used by the B-2 in Operation Allied Force—could now be dropped by Navy and Air Force fighters and all three types of bombers, making 24-hour precision available in all types of weather. Combining JDAMs with a long-loiter capability was unprecedented. As soon as targets were identified, aircraft could be called to strike them.

Situation awareness at the CAOC did not always cover the entire battlespace at all times. However, the improved links between sensors and shooters outclassed anything seen before in modern warfare, translating aerospace power’s asymmetric advantages into gains on the ground.

USAF photo by SSgt. Shane Cuomo



USAF munitions specialists work on a JDAM on a B-52. The venerable bomber surprised everyone by taking on a close air support role in addition to traditional bombing.

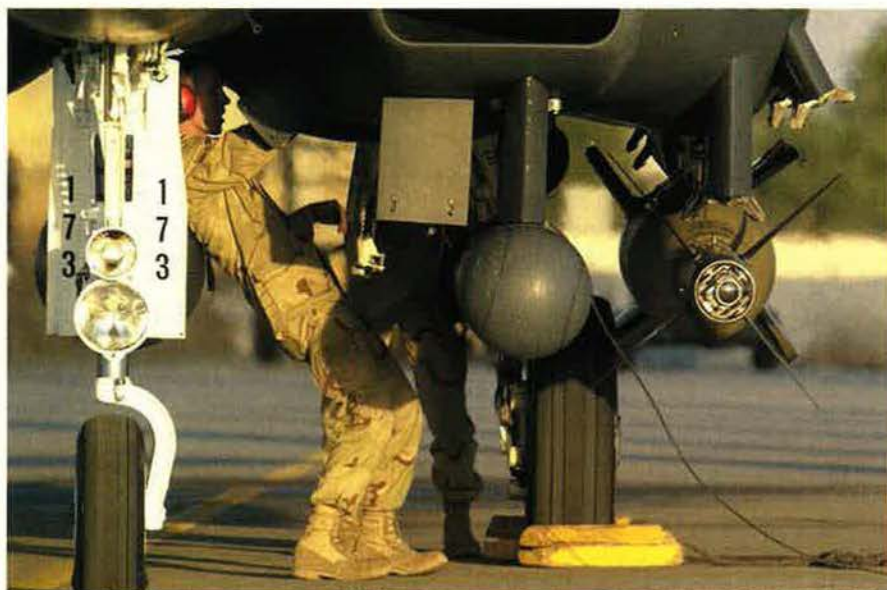
The changes came not a moment too soon. When American strikes began Oct. 7, Defense Secretary Donald Rumsfeld acknowledged that he saw “not a lot of high-value targets.” Coercion by bombing was not an option. Many did not believe that an air campaign would work at all, and some analysts were extreme in their pessimism. For example, MacKubin T. Owens of the Naval War College speculated that it would take 40,000 ground troops to wrest control of Afghanistan from the Taliban. Indeed, the success of Operation Enduring Freedom depended on the ability to find and kill emerging targets that would enable the Northern Alliance to move and take territory.

The war began with strikes on preplanned targets. These were designed to take down the Afghan air defenses. Then US war planners



USAF photos by MSgt. Dave Nolan

*F-15Es, here and below, were part of the mix of coalition aircraft dropping precision guided munitions on demand to strike emerging targets around the clock in Afghanistan.*



shifted to a combination of preplanned and flexible strikes on various targets. Within days, as many as 90 percent of the sorties were striking emerging targets. “After the first week, the pilots didn’t know what targets they’d be striking when they launched,” said Vice Adm. John B. Nathman, commander, Naval Air Force.

The CAOC needed 24-hour coverage of the battlespace to handle emerging targets, but long distances posed a problem.

For the fighters—consisting largely of Navy and Marine F/A-18s operating from aircraft carriers—a standard mission was to take off and fly

to an assigned engagement zone. Once on station, the fighters might orbit, waiting on the most recent information synthesized from a variety of sources to be passed on to the strike aircraft

Navy pilots had to traverse more than 500 miles, strike a target, and then recover within the intricate deck cycle time of the carrier’s operations. This created a major challenge. The Navy’s aircraft carriers worked under a different operational concept in the Afghan air war. Previously, exercises focused on a single carrier generating combat power—a reflection of the Cold War emphasis on each carrier being able to survive

and operate alone. In Operation Enduring Freedom, the Navy used five carriers (including USS *Kitty Hawk* with its stripped-down air wing) to keep up the coverage required by the CINC. Navy fighters delivered ordnance around the clock during the campaign.

### New Bomber Tactics

Bombers suffered less from range limitations and soon took up a major share of the job. However, bomber planners, too, found that new tactics were in order. Eighteen B-52s and B-1Bs deployed forward to Diego Garcia in the Indian Ocean. Typically, the CAOC could count on four sorties per day from the B-1B group and five from the B-52 group.

For the first time in combat, these bombers followed the lead of the B-2 in Operation Allied Force and linked into the net of updated information to take new target coordinates in real time. Bombers generally did not have their entire load of weapons designated for fixed targets. Instead, bomber crews headed for their first preplanned targets and then were on call any time during the sortie to be redirected to other targets. Jumper called the use of the B-52 against emerging targets in a close air support role transformational. Those sorties, he said, would previously only have been flown by attack aircraft such as the A-10. Who would have thought it possible? Jumper asked at a February symposium.

Strikes on preplanned targets and



**Early destruction of the Taliban's air defenses and aircraft gave the coalition immediate air dominance. Here, the remains of Soviet-built airplanes rest near a runway at Kandahar airport.**

flexed targets and reliance on fighters and bombers became commonplace in Enduring Freedom. In early December, the DOD spokesman, Rear Adm. John D. Stufflebeem, described a typical day: "Air strikes in 10 planned target areas, generally around the Jalalabad and Kandahar areas," carried out by a typical force mix of "about 110 strike aircraft, including about 90 tactical aircraft launched from sea-based platforms, 12 to 14 land-based tactical aircraft, and between eight and 10 long-range bombers."

To bring this striking power to bear, planners scheduled aircraft to be available 24 hours a day for operations within the engagement zones, although distance and constrained resources put some limitations on the coverage.

From the CAOC, the staff could change the flow of aircraft into an engagement zone in the time it took to transmit a call to the aircraft. Afghanistan was divided up into fixed engagement zones to control strikes on emerging targets such as Taliban troop concentrations, vehicles, and strong points. CAOC planners could also lay special zones over lines of communication, for example, and activate them at different times. Special forces personnel on the ground identified aim points and then double-checked the target coordinates.

As it turned out, time-sensitive targets were the key to the operation, and their prominence changed

the nature of the air war in several ways.

First, the need to strike such targets put a premium on battlespace coverage rather than relative percentage of missions flown or ordnance dropped. Pundits in and out of uniform quickly took sides, some lauding USAF bombers for dropping 70 percent of the ordnance during only 10 percent of the sorties, some praising the Navy's fighters for flying half the sorties and averaging two or more DMPIs (Designated Mean Points of Impact) per sortie.

Yet the comparisons were artificial. From the CAOC's point of view, the high number of emerging targets meant that the real value of strike aircraft was in having them constantly available to blow up resistance points on the ground. All of the forces contended with long, fatiguing sorties, be they 10-hour missions followed by a dawn carrier recovery, the 15-hour bomber missions from Diego Garcia, the record-setting 15-hour F-15E sorties, or 44-hour B-2 sorties.

### Harmonic Convergence

As one CAOC officer put it, "We were all working together as an air component, not individual services, so it didn't matter whether the platform you were working with was an F/A-18 off a boat or a B-1 or B-52 or an F-15E."

The emphasis on time-sensitive targets also affected execution of the air war—sometimes in negative ways.

Doctrine for air warfare all hangs on the tenet of centralized control and decentralized execution. The battle for centralized control was won with reliance on the JFACC concept, but Enduring Freedom witnessed a new clash over the continuing need for decentralized execution.

The CAOC itself handled the bulk of the sorties from a supermodern facility established at a secure site in the region. However, other command centers existed, and they used their pictures of the battlespace to control portions of the air war. The CIA controlled Predator Unmanned Aerial Vehicles armed with Hellfire missiles. Franks kept his headquarters at MacDill AFB, Fla., near Tampa, and took a direct hand in some targeting decisions.

Adding to the problem, the physical arrangements split the JFACC from the CINC more than in recent air campaigns. Franks told *Washington Post* reporter Thomas E. Ricks that he was comfortable with keeping his command in Tampa "because of technology assists, which provide 24/7 situational awareness," and that this enabled CENTCOM staff "to provide intent and guidance without doing the tactical work of subordinate commanders."

In Congressional testimony, Franks cited as reasons for staying in Florida the time and difficulty of moving a unified headquarters. "I think what we want is the ability to either be remote or offset or to be present in theater," Franks said, stressing again that, in this case, the mission was "best served" by using the technologies in hand and remaining in Tampa.

However, the perspective from Tampa sometimes differed from that of the CAOC, eight time zones away. For example, although Franks described Enduring Freedom as "far and away the greatest application of precision munitions in the history of our country," the different perspectives on how to reduce collateral damage ended up having a direct tactical impact on the execution of the air war.

### Horner's View

Retired Air Force Gen. Charles A. Horner, who commanded the air campaign in the Gulf War, talked to the *Washington Post* about the matter. He said simply: "I would have been forward."



Target approval constraints have become a bigger and bigger part of the air war over the last decade, but only recently has command approval threatened to become an obstacle in time-critical targeting. For example, commanders in Desert Storm used real-time communications with airborne aircraft almost exclusively to surge sorties or redirect strikes to more urgent targets, as during the Khafji engagement. Hundreds of sorties were sent to attack Iraqi forces, but all were under forward air controller control or followed kill box rules of engagement once they reached the battle zone.

During Operation Allied Force, fighters on missions frequently called the one-star CAOC shift directors for approval to strike mobile targets such as Serb vehicles. Some of these emerging targets were struck in time and some got away, but the control of the air war remained largely in the hands of CAOC staff. One B-2 assigned to strike a preplanned target got a call en route and was told not to strike that target for political reasons. Yet, for the most part, as with Desert Storm, execution remained decentralized to the appropriate tactical level.

In Operation Enduring Freedom, the improved picture of ground operations made it possible for concerns about collateral damage and political guidance to intrude into the execution of the air war, not just the planning process. The rapid ability to

handle emerging targets hit a bottleneck when CENTCOM's strategic perspectives clashed with the CAOC's tactical execution authority. According to an article in the *Washington Post*, CENTCOM on several occasions overrode the CAOC's calls for strikes on newly identified targets.

As one officer told the *Post*, "It's kind of ridiculous when you get a live feed [of a target] from a Predator and the intel guys say, 'We need independent verification.'"

A similar notorious incident of hesitation was reported in late October by Seymour M. Hersh in *The New Yorker*. According to Hersh, the CIA was controlling a Predator

with Hellfires when the UAV spotted a car and truck convoy believed to be transporting Mullah Mohammad Omar, leader of the Taliban and the second most-wanted man after Osama bin Laden himself. The Predator operators watched the convoy halt and Omar and his guards enter a building. But the CIA needed approval from CENTCOM to fire missiles.

Hersh reported that CENTCOM legal advisors balked and told the CIA to "bounce it [a missile] off the front door." In the end, the Predator fired at the parked cars. Soon, Omar's convoy left. F/A-18s carrying weapons heavier than the Hellfire struck



USAF photo



US Marine Corps photo by William D. Crow

Predators, such as this one, fed streaming video to aircraft to provide targeting information. In other areas USAF combat controllers, like the one above on horseback, called in strike coordinates from the ground.

the building itself but the opportunity to nail Omar had passed. Hersh wrote that "the failure to attack" left Rumsfeld "kicking a lot of glass and breaking doors."

### Problem of Reach Forward

Even rudimentary details of these cases showed how the ability to put ordnance on target in minutes could be squandered if execution authority became an obstacle. The CAOC's networked communications and reach-back intelligence environment accelerated air war execution, but it also left enough time for doubts to creep in. The desire for visibility elevated the tactical picture to a much higher level. Now, those who had the tactical picture had operational and even strategic responsibilities—a change from the days when the tactical picture was limited only to those actually engaged



**Mobility aircraft kept the operation moving. Airlifters, like this C-17, delivered millions of humanitarian aid packages for Afghans and relief supplies for coalition troops. Tankers refueled both strike aircraft and airlifters.**

in the operation and decentralizing execution authority was the only practical option.

The controversy over reachback generated heat because striking the time-sensitive ground force targets was the heart of the campaign. Yet for all the difficulties, it was airpower's ability to kill emerging targets that created the payoff on the ground.

It did not happen all at once. During October, it took time to get supplies to the Northern Alliance and build working relations with US liaisons on the ground. "You had a First World air force and a Fourth World army, and it took a while to connect the two," Secretary of State Colin Powell later explained in a *Washington Post* interview.

By November, the pieces were in place for rapid success. The ability of the CAOC to keep bombs on target raised the confidence of the Northern Alliance forces in their airpower ally. "Every day, the targeting and effectiveness has improved, and that has clearly played a critical role in killing Taliban and al Qaeda troops," Rumsfeld said Nov. 13.

On-call aerospace power linked to the immediate needs of ground forces provided a winning combination. A near-perfect example of decentralized execution at its best came with the now-famous event in which a B-52 put ordnance on target within minutes of the request. Northern

Alliance forces on horseback came across a Taliban military outpost with artillery, barracks, and a command post. The outpost was not engaged with ground forces at the time, but the Northern Alliance identified it as a stronghold. The commander requested an air strike on the target within the next few days. However, the target lay in a location with engagement zones already established. A B-52 dropped its ordnance within 19 minutes of the request.

With precise firepower available continuously, air strikes broke the Taliban resistance. The Northern Alliance began to roll up territory in defiance of conventional wisdom that attacking forces needed three to five times the strength in numbers to defeat their opponents. Mazar-e Sharif, Taloqan, Herat, Jalalabad, and Kabul fell in quick succession. By Nov. 27, US Marines were on the ground at Kandahar air base. When their helicopter gunships spotted Taliban vehicles nearby, a pair of Navy F-14s attacked the convoy.

The quick results depended on ground forces to exploit the openings. "Imagine the air campaign *without* the Northern Alliance ground forces," said one American officer.

"The Taliban troops could just have dispersed to avoid air attack." The Army vice chief of staff, Gen. John M. Keane, said in an interview with *Jane's Defense Weekly*, "Those population centers toppled as the result of a combined arms team: US airpower and a combination of special forces and Afghan troops."

### Disproving the Critics

In the first phase of Enduring Freedom, the joint air forces pulled off what critics had long said could not be done: They fought and won a sustained campaign with limited access to the region.

"In modern combat, there is nothing quite so leveraging as air dominance," summed up retired Air Force Gen. Richard E. Hawley, the former commander of Air Combat Command. Enduring Freedom also offered a taste of the difficulties of the wider war on terrorism. In late November, Franks mentioned that teams were systematically "visiting" more than 40 sites suspected of housing weapons of mass destruction.

Rumsfeld cautioned, "It would be a mistake for one to look at Afghanistan and think about it as a model that will be replicated." Afghanistan had "some distinctive things about it—hundreds and hundreds of tunnels and caves, for example," he added. The war on terrorism involves action beyond the air campaign. Rumsfeld described some of the broader strategy: "We've put a lot of pressure on the bank accounts, a lot of law enforcement action where people have been arrested and interrogated, a lot of intelligence has been pulled together, a lot of people have been killed. And some have been captured. It's all for the good. It's made their lives very difficult. But when or how or in what way it will all sort through, I don't know."

Yet one point is certain. On Sept. 11, 2001, Afghanistan was an oppressed state and a safe harbor for a lethal terrorist network. After the first phase of Enduring Freedom, as Franks said, "The harbor is gone." ■

---

*Rebecca Grant is president of IRIS Independent Research in Washington, D.C., and has worked for RAND, the Secretary of the Air Force, and the Chief of Staff of the Air Force. Grant is a fellow of the Eaker Institute for Aerospace Concepts, the public policy and research arm of the Air Force Association's Aerospace Education Foundation. Her most recent article, "Flying Tiger, Hidden Dragon," appeared in the March 2002 issue.*

By John T. Correll, Editor in Chief

## Pigs and Pork

"But Washington is a capital overrun by vested interests whose livelihoods depend on extracting ever-increasing quantities of taxpayer dollars for their narrow causes. It is not clear that they will subordinate their interests even to the needs of wartime."—**Mitchell E. Daniels Jr., director, Office of Management and Budget, in Feb. 3 *Washington Post* op-ed column.**

## XV Minutes Is Plenty

"I remember when I was nine years old. I was in fourth grade, and I was reading a rather remarkable book, and the book was about Julius Caesar. It said, 'Julius Caesar was a general. Julius Caesar made long speeches. They killed him.'"—**Army Gen. Tommy R. Franks, commander in chief, Central Command, on Feb. 15 at the Air Force Association Air Warfare Symposium in Orlando, Fla.**

## Gore Backs Bush on Iraq

"I also support the President's stated goals in the next phases of the war against terrorism as he laid them out in the State of the Union. ... Even if we give first priority to the destruction of terrorist networks, and even if we succeed, there are still governments that could bring us great harm. And there is a clear case that one of these governments in particular represents a virulent threat in a class by itself: Iraq. As far as I am concerned, a final reckoning with that government should be on the table."—**Al Gore, in Feb. 12 speech to Council on Foreign Relations.**

## Great To Be an American

"What happened on September 11 was horrific, but this patriotic fever can go too far. America has an almost obscene infatuation with itself. Has there ever been a big, powerful country that is as patriotic as America? And patriotic in the tinniest way, with so much flag waving? ... The right wing benefitted so much from September 11 that, if I were still a

conspiratorialist, I would believe they'd done it."—**Novelist Norman Mailer, in Feb. 6 *London Daily Telegraph*.**

## Not Deep, Just Low

"I had not the slightest emotional reaction [to watching one of the World Trade Center Towers collapse]. I thought: 'This is really a strange art project.' ... It was a most amazing sight in terms of sheer elegance. It fell like water. It just slid, like a turtle-neck going over someone's head. ... It was just beautiful. You can't tell people this. I'm talking to you because you're Canadian. ... I just felt, like, everyone was overreacting. People were going on about it. That part really annoyed me."—**Elizabeth Wurtzel, author of *Prozac Nation* and *Bitch*, in a Feb. 16 interview in Toronto's *The Globe and Mail*, as cited in *The New Republic's* "Idiocy Watch."**

## Don't Generalize

"The CNO [Chief of Naval Operations], Admiral Vern Clark, puts it best. This war is like this war. It ain't like the last one, and it ain't like the next one. It is like this one."—**Gen. John P. Jumper, US Air Force Chief of Staff, Feb. 14 at the AFA Air Warfare Symposium in Orlando.**

## Continental Living

"It is not uncommon for a unit to deploy from its permanent installation in the heart of Europe for a tour of duty in the Balkans and have better working conditions in the temporary facilities. ... This dichotomy is unacceptable."—**Gen. Joseph W. Ralston, commander in chief, European Command, to House Appropriations military construction subcommittee, Feb. 14.**

## Selling the Sea Services

"When America is threatened, the response must be quick and decisive. That can be a real challenge, especially when the danger is halfway around the world. Just being there can be half the battle. That is when the nation looks to the team—

the Navy/Marine Corps Team. Sailors and Marines are on watch, 24/7, ready to respond. And when a crisis erupts, this team strikes from the sea, with precise Naval power and tough, well-trained Marines. From the sea to the fight—whether that fight's along the coast or 600 miles inland—that's the 'Power of Teamwork.'"—**Full page advertisement in Feb. 11 *Washington Post*, placed by US Navy and US Marine Corps.**

## We Shoot Back

"The one mistake that I know was made was when people shot at American forces doing their job on the ground in Afghanistan."—**Franks, shortly after being asked, at Feb. 25 news conference, if US forces were "trigger happy" in killing 16 Afghans at Hazar Qadam.**

## Ripe Target

"Ten billion dollars just sitting there is a pretty ripe target."—**Rep. Jerry Lewis (R-Calif.), chairman of the House appropriations defense subcommittee, in Feb. 11 *Defense Week*, referring to the \$10 billion contingency fund proposed for the war on terror in the 2003 defense budget.**

## Al Qaeda Still Here

"The estimate is that there are 100 or more al Qaeda operatives inside the United States, some who have been here for a considerable period of time, all of whom went through a training program to prepare them to carry out terrorist plots when they are called upon to do so."—**Sen. Bob Graham (D-Fla.), on CNN's Feb. 23 "Evans, Novak, Hunt & Shields."**

## How Many Should We Leave?

"If we expect to kill every terrorist in the world, that's going to keep us going beyond doomsday. How long can we afford this?"—**Sen. Robert C. Byrd (D-W.Va.), chairman of the Senate Appropriations Committee, at Feb. 27 hearing on the defense budget and the war on terrorism.**

For this Air National Guard fighter wing, the front line in the war on terror is in its own backyard.

# REDHAWK CAP



Photography by Guy Aceto, Art Director, and Erik Hildebrandt

*Cruising at nearly 35,000 feet, F-15s from the Oregon ANG's 142nd Fighter Wing patrol the sky over Seattle.*



**H**igh above the cloud deck, an F-15 from the 123rd Fighter Squadron Redhawks, from the Oregon Air National Guard's 142nd Fighter Wing, begins a Combat Air Patrol, part of Operation Noble Eagle.

Ever since two F-15s at Otis ANGB, Mass., received their scramble order at 8:46 a.m. on Sept. 11, Combat Air Patrols have been a constant presence in the skies over New York and Washington, D.C. Guard, Reserve, and active fighter, air refueling, and airlift aircraft have carried out those CAPs, as well as random patrols over many other urban areas.



Redhawk F-15As—their fin flashes showing a hawk carrying a banner in its talon—are armed as they fly a typical CAP sortie. The unit has been averaging more than 40 such missions a month.

Ready in their alert shelters, these armed F-15s can get airborne within a few minutes.

The Redhawks, operating under Air Combat Command and NORAD, guard the Pacific Northwest from the Canadian border into northern California.

The squadron and the wing trace their beginnings to April 1941 to the 123rd Observation Squadron.





Redhawks fly in formation past the Oregon coast, on the way to mock aerial combat over the Pacific. Plenty of power and an excellent radar make the F-15s ideal for the air defense-air sovereignty role.



Above, pilots suit up. For them, Combat Air Patrols mean up to five hours of straight and level flying. In the Cold War, the pilots knew what to look for; today, the threat is not well-defined or predictable.

Photo by Erik Hildebrandt



Staff photos by Guy Aceto



Above, ground crews go through their paces to launch the next sortie. At left, an F-15 takes off, while in the background, a commercial airliner—just above the Eagle's tail—lifts off from a parallel runway. The ANG unit is located on 245 acres of leased land on the south side of Portland Airport in Oregon.

The 123rd comprises 18 F-15s, all of which have more than the normal amount of flying time on their airframes. The unit's F-15s are all more than 20 years old, but the multistage improvement program and skilled maintenance keep them in shape—whether for alert duty or for daily missions. Preventive maintenance is the order of the day. Wing personnel carry out near-depot-level maintenance to keep the F-15As flying.



Staff photos by Guy Aceto



At left, back from a sortie, this fighter is met by SrA. Jessica Reilly, who checks the weapons and (below) changes out a flare box.



Fuel trucks work their way down the line, getting the fighters ready for the next set of sorties. With the squadron on a full-time schedule, sorties take place even at night. This gives the crews practice with night vision equipment that they'll need in case of an evening intercept.

Combat Air Patrols in the Pacific Northwest gained urgency after photos of Seattle's Space Needle landmark were discovered in an al Qaeda computer during military operations in Afghanistan. They were described as "tourist type" photos and not evidence of a direct threat against the state, but they highlighted the need for vigilance.







The F-15 Eagles mix it up to keep their skills sharp. Combat Air Patrol aircraft across the US responded to 270 airborne incidents from Sept. 11 through February.



The 123rd responded to one such incident in mid-February. Police received a call from an unidentified person claiming there was a bomb aboard a commercial airplane. Two F-15s from the 123rd escorted the airliner to Sea-Tac Airport, Wash. No bomb was found.

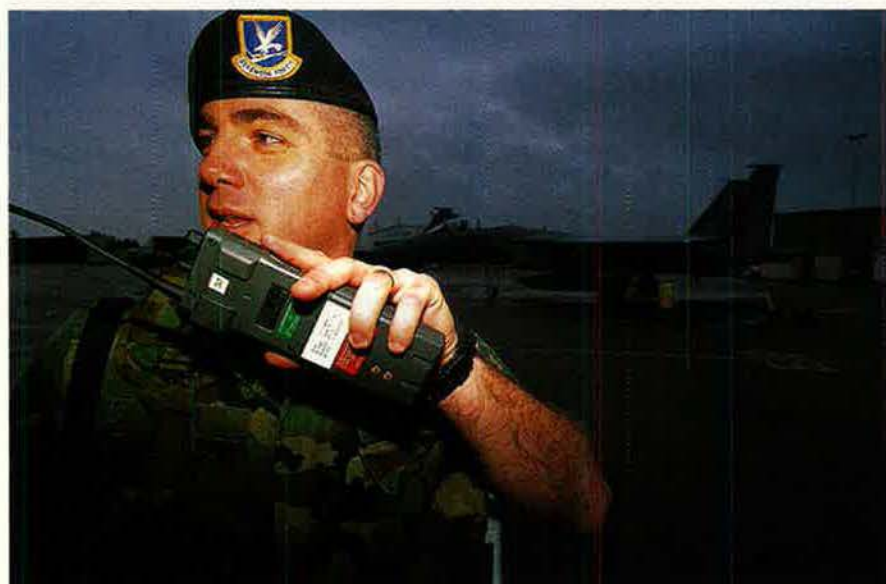
Staff photo by Guy Aceto



In addition to CAPs, crews still regularly train with nearby Canadian units as well as attend exercises such as Red Flag during the year.



The need for more aircraft on alert to cover their area of responsibility moved up planned construction of four new alert hangars on the 142nd Fighter Wing's flight line.



At left, TSgt. Timothy Lear checks in while patrolling the flight line. New barriers at various points around the facility are just one sign of the increased security. Note the warning on the ramp, above: "Use of deadly force authorized." Trucks heading for the construction sites get searched, too. Wing security forces are busy, not just at the unit but also with deployments to other locations.

Over the years, the wing has taken part in drug interdiction efforts around the world, US Air Forces in Europe air defense, and Operations Northern Watch and Southern Watch in the Middle East.

Gen. Richard B. Myers, Chairman of the Joint Chiefs of Staff, said Noble Eagle sorties numbered more than 13,000 between Sept. 11 and February. They featured ANG, Reserve, active duty, and NATO aircrews. Myers added that USAF had 260 airplanes committed to the effort, with 1,200 airmen flying nearly 57,000 hours from 29 bases. In all, some 11,000 airmen take part in the operation.

Rain or shine, the CAP missions go on. At right, in a drizzle typical of the Pacific Northwest, an alert fighter stops near the end of the runway.





Photo by Erik Hildebrandt

Combat Air Patrols have called for enormous effort from all elements of the Total Force. The strain has been showing. In January, a DOD spokesman said that CAPs will continue to be a very important part of protecting the American people but, later, indicated the operation could be scaled back if conditions warrant.



Staff photos by Guy Acasio

Although CAPs are often flown high above the cloud cover—almost out of sight to those on the ground—they are not out of mind. Oregonians across the state have written to the Redhawks to thank unit members.



For more than 60 years, the 142nd has performed its mission of air defense for the northwest sector of the "lower 48." Today, wing personnel are more than ever aware of what this responsibility means to their neighbors—and to the country. ■

# Transformation Gets a Boost

By Robert S. Dudley, Executive Editor

All figures refer to new budget authority, and all amounts are given in constant 2003 dollars. The term "this year" refers to 2002 and "next year" to 2003.

**I**F THE latest Air Force budget is any guide, the pace of service "transformation" is about to pick up considerably.

USAF's \$107 billion proposal essentially forgoes troop increases, buys of existing aircraft, infrastructure repairs, and other stopgap measures, despite pressures caused by today's high optempo. Instead, the budget emphasizes longer-range projects promising revolutionary leaps in combat capability.

It sustains or increases funding for numerous high-technology programs and concepts ranging from stealthy air combat and strike vehicles to precision munitions, from unmanned combat air systems to space based radars, high-capacity

# The new USAF budget targets high-payoff technologies and concepts.

space communications, and advanced information systems.

The purpose is clear. "We have been on a journey ... for transformation for several years," said a top Air Force officer, "but this budget will help us accelerate the journey."

In Air Force parlance, transformation means a fundamental change that yields "order-of-magnitude" leaps in power rather than incremental gains. It is based on interactions of advanced technologies, innovative operational concepts, and imaginative organizational structures.

No one believes USAF is ignoring today's readiness in pursuit of tomorrow's capabilities. It allocated many billions of dollars for pay, bonuses, training, maintenance, and the like. Even so, a detailed examination of Fiscal 2003 budget plans makes the push for transformation only too apparent.

Transformation was a major theme of the overall Pentagon program. The plan unveiled Feb. 4 by Secretary of Defense Donald Rumsfeld seeks \$379.3 billion in Fiscal 2003, which starts Oct. 1. This marks a real, after-inflation increase of \$41.4 billion, the largest one-year boost in defense spending in two decades. (For more on the DOD budget, see charts on p. 55-57.)

## By the Numbers

The Air Force's \$107 billion budget amounts to a real increase of 10 percent over this year's budget. USAF's share of the overall DOD expenditure is unchanged at about 28 percent.

Air Force planners anticipate modest budget growth in the out-years, the last four years of the 2002-07 program. USAF plans on spending \$110.6 billion in 2004, \$112.5 billion in 2005, \$115.7 billion in 2006, and \$118.7 billion in 2007.

Next year's Air Force budget can be broken down into five principal categories. They are: procurement, \$27.3 billion; Research and Development, \$17.6 billion; Operations



Photo courtesy General Atomics Aeronautical Systems

**War Stars.** The success in Afghanistan of UAVs—such as this armed Predator—has boosted interest in unmanned combat air vehicles.

and Maintenance, \$34.0 billion; military personnel, \$25.5 billion; and other accounts, \$2.6 billion.

It is the Air Force procurement and R&D accounts, totaling \$45 billion, that are the focus of transformation. That process, as explained by Secretary of the Air Force James G. Roche, "involves harnessing the attributes of stealth, precision, standoff, space, and information technology."

## Unmanned Combat Aircraft

Nowhere is the effort more apparent than in the field of Unmanned Aerial Vehicles.

The smashing success of UAVs in Operation Enduring Freedom generated new interest in using these unpowered craft for a wide variety of missions, including combat operations. A USAF officer who briefed reporters in February said Bush Administration officials viewed UAVs as being among the leading transformational technologies anywhere.

At present, keenest attention is focused on the X-45 Unmanned Combat Air Vehicle, a system now in development. Many believe it will be cast in a starring role in future

attacks on heavily defended targets such as radars and air defenses.

The aircraft has the potential "to provide revolutionary suppression of enemy air defenses and strike capabilities to future joint force commanders," said Roche.

Air Force funding for this stealthy, unpowered strike aircraft almost tripled in one year, to \$58 million, and will soon go higher. The Air Force also wants to speed its completion, seeking operational assessment in 2008—two years earlier than planned.

"We are pushing the envelope," said one Air Force officer.

Elsewhere, the budget boosts production of the Predator UAV, a system used heavily and to great effect in the Afghan war.

In one form, Predator was an Intelligence, Surveillance, and Reconnaissance system, providing persistent visual coverage of target areas. However, another variant of Predator—this one armed with Hellfire missiles tucked under its wings—conducted remote-control attacks on selected Taliban and al Qaeda targets.

Liking what it saw in the war, USAF allocated \$154 million to purchase



**The Can Opener.** Stealth, supercruise, and maneuverability make the F-22 the key to prying open dense, "anti-access" defenses of the future and countering third-generation fighters.

22 new Predator systems next year. Each will be equipped with advanced radars and laser designators.

The Air Force believes Predator will bring about a major improvement in the "sensor-to-shooter" cycle. "The successful weaponization of Predator," said Roche, "holds the promise of significantly shortening the time-critical targeting time line."

The additional funding will more than double the size of the Predator fleet and bring into the force six faster, higher-flying Predator B aircraft.

Plans call for using advanced communications systems to link Predators with other aircraft and ground stations so that it can deliver its visual and electronic goods and receive orders in return. Undersecretary of Defense Dov S. Zakheim noted that, if the Pentagon has its way, the new Predators will be able to "talk to just about everything" in a combat zone.

### Manned Combat Aircraft

USAF leaders see great transformational value in the F-22 air superiority fighter and F-35 strike fighter—manned aircraft long in the works but destined to enter the force in large numbers only in the next decade or so.

Both fighters are stealthy. And, declared Roche, "Stealth will be absolutely essential to establish air superiority in the decades ahead

against rapidly improving air defense systems and fighters."

The Air Force argues that the F-22's combination of low observable technology, supercruise, high maneuverability, and supersophisticated avionics make it a transformational system *par excellence*. Senior officers say that, in the future, it will be the key to penetrating anti-access defenses and countering third-generation fighters.

When equipped with advanced, miniaturized ordnance, the F-22 will also be a formidable strike aircraft in its own right.

The new spending plan proposes to take the F-22 up to a brisker production rate. It provides \$5.2 billion for next year—enough to continue development, procure 23 production aircraft (vs. only 13 this year), and buy long-lead equipment for more fighters in 2004.

Officials envision a steady increase in F-22 procurement, rising to 36 per year.

The budget strongly supports the F-35 strike fighter (aka Joint Strike Fighter) soon to be the source of aircraft not only for the Air Force but also for the Navy, Marine Corps, Royal Air Force, and Royal Navy.

USAF plans next year to spend more than \$1.7 billion of a Pentagon-wide total of \$3.5 billion to continue F-35 development. The Navy provides the rest. No procurement money has yet been requested.

The JSF program this year entered the engineering and manufacturing development phase. USAF procurement is set to begin in 2005, with initial operational capability in 2010.

As Roche tells it, the F-35 will act in concert with the F-22 over future battlefields. Its transformational credentials, he said, center on "persistent battlefield stealth," resulting from its "combination of stealth, large internal payloads, and multispectral avionics."

### Precision Weapons

USAF's procurement budget contained nothing for long-range airpower aircraft platforms. However, the Air Force views the B-2 stealth bomber as a transformational system. The budget allotted \$297 million to continue work on B-2 modifications, but once again, the service failed to request more than the 21 bombers it already has in hand.

With no new platforms on the way, Air Force bomber priorities center on obtaining a variety of conventional weapons upgrades for use in theater war.

Of these, the most prominent is the Joint Direct Attack Munition, or JDAM, another star of the Afghan war. It is a low-cost tail kit, which when linked to the magic of Global Positioning System navigation signals, transforms a standard 1,000-pound or 2,000-pound iron bomb into an all-weather, day-or-night, near-precision weapon.

All three USAF bomber types—B-1B, B-2, and B-52H—now can carry the 2,000-pound JDAM.

And the B-2, which currently carries up to 16 2,000-pounders, could be able to carry 80 of the new 500-pound JDAMs, currently in development. "This will provide the first step in the Air Force's transition to miniature munitions," Roche said.

These weapons now are used by fighter aircraft as well. Eventually, the F-22 will employ 1,000-pound JDAMs against anti-access and air defense systems, for example.

The Air Force wants to dedicate \$534 million next year to production of 22,700 JDAM tail kits. The Navy plans to spend \$297 million for 12,300 kits.

Wartime usage of JDAM approached 3,000 per month, and the services were running dangerously low. According to Gen. Richard B. Myers, Chairman of the Joint Chiefs of Staff, the budget

provides enough money to build a sufficient stockpile of JDAMs.

Other "high-priority" munition systems, according to Roche:

- Joint Air-to-Surface Standoff Missile is a precise, stealthy cruise missile built to hit hardened, heavily defended, fixed, and relocatable targets from outside of area defenses. The budget allotted \$111 million for 100 JASSMs.

- Joint Standoff Weapon is an accurate, all-weather, unpowered glide munition, capable of destroying armored targets at ranges exceeding 40 nautical miles. USAF wants to buy 113 of them for \$55 million

- Wind-Corrected Munitions Dispenser is an inertial-guided tail kit that gives greater accuracy to the Combined Effects Munition, Sensor Fuzed Weapon, and the Gator Mine Dispenser from medium to high altitude in adverse weather. USAF plans to spend \$71 million for about 5,000 kits,

- Small Diameter Munition, under development for the F-22, will offer standoff capabilities against the most difficult surface-to-air threats. The F-22 will carry up to eight SDMs internally.

Precision itself is revolutionary, said Rumsfeld. "Bombs are no longer regarded as solely area weapons," he noted. "Instead, they can be used like bullets from a rifle, aimed precisely and individually."

### Persistent ISR

The Air Force places great new emphasis on developing and linking together air- and spacecraft that provide timely data on air and land battles, around the clock and in any weather.

"We are focusing on the horizontal integration of our manned, unmanned, and space assets in order to provide real-time actionable, exploitable intelligence to commanders," declared Roche.

A big part of this effort involves UAVs. They provide, in Roche's words, "unmatched access" for ISR missions and reduce the danger of sending pilots in harm's way.

- Global Hawk. The Air Force is committed to the production of this giant, high-altitude UAV, which saw its first action over Afghanistan, as the successor to the U-2 system. Development of advanced sensors will permit Global Hawk to support the time-critical targeting mission better than is now possible. Plans call

for committing \$629 million to develop and procure three more Global Hawks this year and accelerate improvements.

- Predator. Roche said demand for the older Predator UAV remains high, and so the Air Force will continue to deploy it in the ISR mode.

Other systems are viewed as equally significant. The E-8 Joint STARS is a case in point. The Air Force committed money to buy another E-8 aircraft—the 17th and last of the line—at a cost, with research spending, of \$334.8 million.

USAF has committed \$815 million for continued development of the Space Based Infrared System—High, successor to the Defense Support Program warning satellite constellation.

The Space Based Radar is the system viewed by many as having the most transformational potential of all. From high in space, the SBR would provide near-continuous overflight of enemy targets. In the view of Roche, such a sensor "will revolutionize battlespace awareness." He calls it an "absolute leap-ahead technology."

The Air Force is seeking \$91 million for the SBR next year.

### Getting There

In the view of the Air Force, even the C-17 transport has transformational value, given its power to make direct deliveries of troops and cargo over great distances.

The budget, in fact, allocates a major share of procurement funds to airlifters and refueling aircraft.

It allots \$4 billion to procure 12 new C-17 airlifters and to fund spare parts, R&D, and basing support construction. DOD has raised its official requirement from 120 to 180 C-17s, while some believe the actual requirement surpasses 220.

Aerial refuelers are getting lots of attention. The budget provides money to continue the modification of the aging KC-135 aircraft in the active force, Air National Guard, and Air Force Reserve Command.

The Air Force is giving strong consideration to another replacement option: lease or purchase of up to 100 Boeing 767 Global Tanker Transport Aircraft.

One way or the other, the Air Force will have to fix the tanker problem—and soon. "The average age of our KC-135 tankers is now over 41 years," said Roche, "and operations and support costs are escalating."

### No Growth Force

The new budget leaves the Air Force at its current small size. In the late stages of the Cold War, USAF end strength stood at 608,000. The force was down to 357,000 at the start of this year, and next year's request is roughly 359,000.

Within the Air National Guard and Air Force Reserve Command, one finds essentially no change in end



**Makeover.** A low-cost tail kit turns a standard 2,000-pound iron bomb into an all-weather, day-or-night Joint Direct Attack Munition.

USAF photo by SSgt. Larry A. Simmons



**Gas and Go.** The Air Force thinks it might ease pressure on its aging tanker fleet with a lease or purchase of up to 100 Boeing 767 aircraft, which would be modified for refueling.

strength. USAF has a combined reserve military force of 182,000—108,000 Guardsmen and 74,000 Reservists.

The end strength picture could change, however. Roche and others have been quoted as saying that the Air Force needs to get bigger if it is to continue its current operational pace at home and overseas.

Estimates of possible increases range from 7,000 to 10,000, with further growth in the Air National Guard under discussion.

As for force structure, the Total Air Force will maintain roughly 20 Fighter Wing Equivalents, 12-plus wings in the active force and seven-plus FWEs in the Guard and Reserve. Much of the fighter force structure will be forward deployed in Asia, Europe, and Southwest Asia.

### Combat Readiness

Air Force O&M funding contains about \$10.9 billion to pay for 2.1 million flying hours—1.3 million in the active force, the rest in the Guard and Reserve.

Flying time in the next year for active Air Force fighter and attack aircrews has been set at 17.1 hours per month, the same as planned this year.

Materiel readiness is a different story. The budget does nothing to reduce the high average age of the fighter fleet, the problem that some officers view as USAF's most worrisome.

USAF failed to include any money in next year's budget for new F-16 or F-15 fighters, which have been in service for two decades. The situation has been worsened by the wear and tear sustained by F-16s assigned to fly combat air patrol over US cities.

USAF bought four F-16s last year. Formerly, service officials said they planned to resume buys of the multi-role fighter aircraft with purchases of six in 2003 and seven in each of the two years after that, but that plan is now suspect. Roche has said he hopes to be able to avoid spending money on such "legacy" aircraft.

However, the Secretary noted that the F-16 line will be open for some time, filling foreign fighter orders. That means the Air Force could get back in the queue and place a new order at any time.

Waiting to do this poses a risk, given the fact that, as Roche said, "our fielded forces have aged to the point that they will not be able to compete with emerging and future threats."

He added that, until the F-22, F-35, and UCAV become operational, "we will continue to rely heavily on our legacy fighters—the F-15, F-16, F-117, and A-10."

USAF documents note that the mission capable rate for these and other major Air Force systems stood at 73 percent at the end of 2001. That is a slight improvement over 2000,

but it still marks a drop of a full 10 percentage points since 1991. Much of the decline can be attributed to aging aircraft.

"We now face a dangerous situation," said Roche. "Our aircraft fleet is getting older, less capable, and more expensive to maintain—all at the same time."

### Retention Still Worries

On the personnel front, Air Force leaders remain apprehensive about pilot retention. Last year, the retention rate was 49 percent, up a bit from 41 percent in 2000 but dramatically lower than the high of 87 percent in the mid-1990s.

USAF has been able to fully man its cockpits, but only by pulling pilots away from critical staff positions. Rated pilot staff manning has fallen to 51 percent of requirement.

Moreover, the airlines continue to hire military pilots, prompting Roche to say, "We can expect the USAF pilot shortage to continue for at least the next eight years."

The enlisted force continues to be a focus of concern. That is because 2001 was another year in which USAF failed to meet goals in two of three major re-enlistment categories.

First-term enlisted retention hit 56 percent, surpassing the goal of 55 percent. However, second-term airmen retention held steady at about 70 percent (goal: 75 percent), and career retention was stuck at 90 percent (goal: 95 percent).

The new budget attempts to address the personnel problem. It proposes a 4.1 percent raise in basic military pay to help bring it more in line with private sector compensation. (This is one-half of a percentage point above the forecasted rate of civilian wage growth—the Employment Cost Index). And the service is set to spend billions more on bonuses, special pays, housing, medical care, and other personnel-related benefits.

Roche acknowledged that air and space supremacy carry a high cost. However, he suggested, the US has no alternative but to pay the price.

Roche's words: "The demonstrated superiority of our air and space forces over Afghanistan ... must not be taken for granted. Success is not a birthright. We must continue to transform to stay ahead of our adversaries." ■



# The Chart Page

By Tamar A. Mehuron, Associate Editor

## The Defense Budget at a Glance

In February, President Bush presented his defense budget for Fiscal 2003. The document requests \$379.3 billion in budget authority and \$360.7 billion in outlays for the direct program (DOD activities only). The budget request for the total national defense program (DOD activities and defense activities in the Department of Energy and other federal agencies) is \$396.1 billion in budget authority and \$379.0 billion in outlays.

Funding levels can be expressed in several ways. Totals are most frequently stated in **budget authority**, which is the

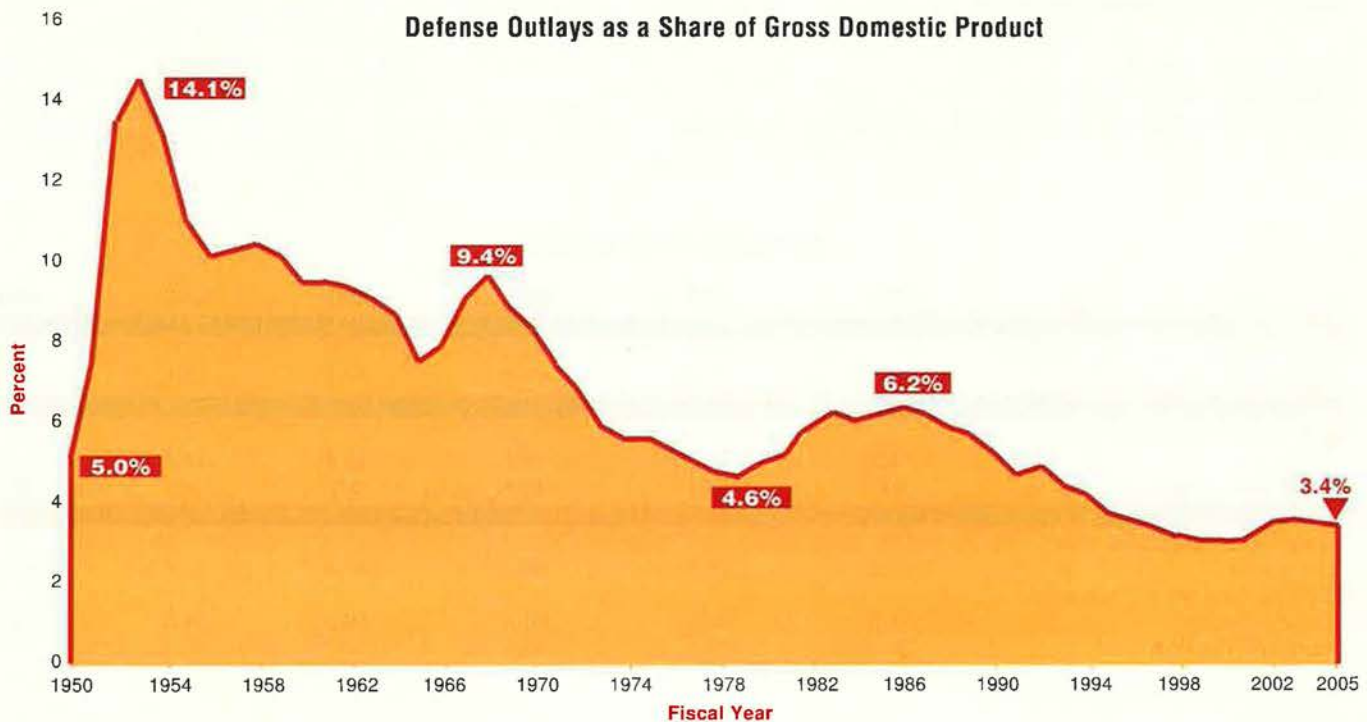
value of new obligations that the government is authorized to incur. These include some obligations to be met in later years. Figures can also be expressed in **outlays** (actual expenditures, some of which are covered by amounts that were authorized in previous years).

Another difference concerns the value of money. When funding is in **current or then-year dollars**, no adjustment for inflation has taken place. This is the actual amount of dollars that has been or is to be spent, budgeted, or forecast. When funding is expressed in **constant dollars**, or **real**

**dollars**, the effect of inflation has been factored out to make direct comparisons between budget years possible. A specific year, often the present one, is chosen as a baseline for constant dollars.

The following charts address only the Defense Department program. In some instances, numbers on the charts in this section may not sum to totals shown because of rounding. Years indicated are Fiscal Years. Civilian manpower figures are now measured in terms of Full Time Equivalents.

	2001	2002	2003	2004	2005	2006	2007	
<b>DOD Budget Topline</b> (\$ billions)	<b>Budget authority</b>							
	(current)	\$296.3	\$331.2	\$379.3	\$387.9	\$408.8	\$429.6	\$451.4
	(constant FY 2003)	\$304.8	\$338.6	\$379.3	\$378.7	\$389.5	\$399.3	\$409.4
	<b>Outlays</b>							
(current)	\$283.9	\$326.7	\$360.7	\$376.4	\$395.9	\$410.4	\$423.9	
(constant FY 2003)	\$299.0	\$333.5	\$360.7	\$367.5	\$377.4	\$381.5	\$384.2	



Source: US Department of Defense.

**Service Shares**

(Budget authority in constant \$ billions)

FY 2003 \$ billions	2001	2002	2003	2004	2005	2006	2007
Air Force	88.3	96.4	107.0	110.6	112.5	115.7	118.7
Army	75.3	82.7	90.9	94.3	96.0	99.9	103.7
Navy/Marine Corps	95.7	101.0	108.3	112.0	114.2	118.1	121.5
Defense agencies	45.7	61.8	73.0	61.8	66.7	65.6	65.4
<b>Total</b>	<b>304.8</b>	<b>341.8</b>	<b>379.2</b>	<b>378.7</b>	<b>389.5</b>	<b>399.3</b>	<b>409.4</b>
<b>Percentages</b>							
Air Force	29.0%	28.2%	28.2%	29.2%	28.9%	29.0%	29.0%
Army	24.7%	24.2%	24.0%	25.0%	24.6%	25.0%	25.3%
Navy	31.4%	29.6%	28.6%	29.6%	29.3%	29.6%	29.7%
Defense agencies	15.0%	17.1%	19.3%	16.3%	17.1%	16.4%	16.0%

**Force Structure Changes**

	Cold War Base 1990	1993 Base Force	1993 BUR Plan	1997 QDR Goal	Plan 2003
<b>Air Force</b>					
Active fighter wings	24	15	13	12+	12+
AFRC/ANG fighter wings	12	11	7	8	7+
<b>Army</b>					
Active divisions	18	12	10	10	10 <sup>b</sup>
Army National Guard/Reserve	10	8 <sup>a</sup>	8	8	8 <sup>c</sup>
<b>Navy</b>					
<b>Aircraft carriers</b>					
Active	15	12	11	11	12
Reserve	1	1	1	1	0
<b>Carrier air wings</b>					
Active	13	11	10	10	10
Reserve	2	2	1	1	1
<b>Marine Corps</b>					
Active Marine Expeditionary Forces	3	3	3	3	3
Reserve Marine Expeditionary Force	1	1	1	1	1

<sup>a</sup> Comprising 34 brigades.

<sup>b</sup> Plus two armored cavalry regiments.

<sup>c</sup> Plus 16 separate brigades (15 of which are at enhanced readiness levels).

**Operational Training Rates**

	1990	1999	2000	2001	2002	2003
<b>Air Force</b>						
Flying hours per crew per month, fighter/attack aircraft	19.5	17.7	17.2	17.1	17.1	17.1
<b>Army</b>						
Flying hours per tactical crew per month	14.2	11.8	12.7	14.5	14.0	14.5
Annual tank miles <sup>a</sup>	800	601	669	849	831	849
<b>Navy</b>						
Flying hours per tactical crew per month	23.9	21.5	20.9	17.8	22.6	22.6
Ship steaming days per quarter						
Deployed fleet	54.2	50.5	50.5	56.2	54.0	54.0
Nondeployed fleet	28.1	26.1	28.0	*	*	*

<sup>a</sup> Excludes National Training Center miles.

\* Not given.

### Major USAF Programs RDT&E

(Current \$ millions)

Program	2001	2002	2003
B-1B bomber	148.1	150.8	160.7
B-2 bomber	126.1	217.0	225.3
C-5 transport	91.9	154.9	277.8
C-17 transport	168.0	109.5	157.2
C-130J transport	63.3	59.9	169.0
CV-22 transport	0.0	188.6	11.5
E-3 AWACS	33.2	39.0	174.0
E-8 Joint STARS	145.6	152.7	55.5
F-15E fighter	91.3	107.4	81.7
F-16 fighter	114.7	114.0	81.3
F-22 fighter	1,411.6	881.5	627.3
F-35 fighter (JSF)	341.2	761.9	1,743.7
T-6 JPATS	0.0	0.0	0.0
AIM-120 AMRAAM	50.4	57.1	37.0
JDAM	28.1	55.7	48.7
JASSM	110.6	79.2	42.1
AEHF satellite	229.8	479.7	825.8
DSP satellite	12.8	6.1	2.1
GPS satellite	241.2	255.6	424.3
Milstar satellite	224.6	228.7	148.9
SBIRS-High satellite	550.1	438.7	814.9
SBIRS-Low satellite	233.6	0.0	0.0
Airborne Laser	386.1	475.8	598.0
Space Based Laser	67.5	0.0	0.0
Space Based Radar	0.0	0.0	47.9
Titan boosters	21.5	21.1	0.0
EELV booster	377.6	315.3	57.6
Minuteman III ICBM	14.2	80.3	133.3
Unmanned Aerial Vehicles	142.9	308.5	309.7

### Major USAF Programs Procurement

(Current \$ millions)

Program	2001	2002	2003
B-1B bomber	48.3	36.8	98.0
B-2 bomber	23.6	23.5	72.1
C-5 transport	66.7	32.1	86.0
C-17 transport	2,995.0	3,762.3	3,826.7
C-130J transport	501.2	450.9	194.6
CV-22 transport	45.5	18.2	174.0
E-3 AWACS	117.6	90.7	29.5
E-8 Joint STARS	286.7	317.8	279.3
F-15E fighter	661.4	241.6	232.5
F-16 fighter	411.1	232.4	265.0
F-22 fighter	2,536.5	3,037.3	4,621.0
F-35 fighter (JSF)	0.0	0.0	0.0
T-6 JPATS	134.0	223.9	211.8
AIM-120 AMRAAM	95.7	104.0	89.6
JDAM	203.5	467.8	484.9
JASSM	0.2	44.7	54.2
AEHF satellite	0.0	0.0	94.5
DSP satellite	102.0	109.0	114.4
GPS satellite	159.6	171.2	209.5
Milstar satellite	0.0	0.0	0.0
SBIRS-High satellite	0.0	0.0	0.0
SBIRS-Low satellite	0.0	0.0	0.0
Airborne Laser	0.0	0.0	0.0
Space Based Laser	0.0	0.0	0.0
Space Based Radar	0.0	0.0	0.0
Titan boosters	393.0	350.2	335.3
EELV booster	286.3	98.0	158.9
Minuteman III ICBM	345.5	544.0	580.7
UAVs	51.0	360.1	324.9

### Cutting the Pie: Who Gets What

(Budget authority in constant FY 2003 \$ billions)

	2001	2002	2003	2004	2005	2006	2007
Military personnel	77.6	83.8	94.2	101.4	102.9	105.6	106.5
O&M	111.0	130.3	150.2	137.5	140.0	141.5	140.7
Procurement	63.9	62.5	68.7	72.9	75.4	80.8	89.7
RDT&E	42.0	49.5	53.9	55.7	57.8	54.7	52.6
Military construction	5.5	6.7	4.8	5.0	7.3	10.0	12.5
Family housing	3.7	4.2	4.2	4.2	4.9	4.6	4.4
Other	1.9	1.7	3.3	2.1	2.5	2.1	3.1
<b>Total</b>	<b>304.8</b>	<b>341.7</b>	<b>379.3</b>	<b>378.7</b>	<b>389.5</b>	<b>399.3</b>	<b>409.4</b>

### Manpower

(End strength in thousands)

	1990	2000	2001	2002	2003	Change 1990-2003	1997 QDR Goal
Total active duty	2,065	1,382	1,382	1,387	1,390	-675	1,360
Air Force	535	358	357	359	359	-176	339
Army	751	480	480	480	480	-271	480
Navy	582	372	372	376	376	-206	369
Marine Corps	197	173	173	173	175	-22	172
Selected reserves	1,128	864	866	864	865	-263	835
Civilians (FTE)	997	699	683	672	665	-332	640

### Acronyms

<b>AEHF</b>	Advanced Extremely High Frequency
<b>AFRC</b>	Air Force Reserve Command
<b>AMRAAM</b>	Advanced Medium-Range Air-to-Air Missile
<b>ANG</b>	Air National Guard
<b>AWACS</b>	Airborne Warning and Control System
<b>BUR</b>	Bottom-Up Review
<b>DSP</b>	Defense Support Program
<b>EELV</b>	Evolved Expendable Launch Vehicle
<b>FTE</b>	Full Time Equivalent
<b>GPS</b>	Global Positioning System
<b>JASSM</b>	Joint Air-to-Surface Standoff Missile
<b>JDAM</b>	Joint Direct Attack Munition
<b>JPATS</b>	Joint Primary Aircraft Training System
<b>JSF</b>	Joint Strike Fighter
<b>O&amp;M</b>	Operations and Maintenance
<b>QDR</b>	Quadrennial Defense Review
<b>RDT&amp;E</b>	Research, Development, Test, and Evaluation
<b>SBIRS</b>	Space Based Infrared System
<b>STARS</b>	Surveillance Target Attack Radar System
<b>UAV</b>	Unmanned Aerial Vehicle

The CIA says that terrorists are pushing to acquire “ultimate weapons”—nuclear, chemical, biological—with a fair prospect for success.

# Terrorists Seek the Big Bang

**T**HE danger that international terrorists would use deadly chemical, biological, or nuclear weapons for attacks increased after the Sept. 11 strikes in the United States, said intelligence experts who based their assessments on discoveries made during Operation Enduring Freedom military actions in Afghanistan.

The Central Intelligence Agency provided the clearest warning of this trend in its late January “721 Report” to Congress. For the first time, this semiannual report addressed terrorism carried out using weapons made from Chemical, Biological, Radiological, and Nuclear arms.

In the past, the CIA limited the 721 Report—so called after the section in the Fiscal 1997 intelligence authorization act that requires a current assessment on Weapons of Mass Destruction acquisition—to identification of key arms transfers among rogue nations by suppliers such as Russia, China, and North Korea.

Instead the most recent report carried an entire section on CBRN terrorism. “The threat of terrorists using Chemical, Biological, Radiological, and Nuclear (CBRN) materials appears to be rising—par-

By Bill Gertz

ticularly since the 11 September attacks," it stated.

The report also suggested, though, that terrorists probably would prefer conventional weapons over unconventional WMD. It said, "Several of the 30 designated foreign terrorist organizations and other nonstate actors worldwide have expressed interest in CBRN—although terrorists probably will continue to favor proven conventional tactics, such as bombings and shootings."

Despite that caveat, the 721 Report went on to describe evidence of the growing threat.

According to the report, the danger of an unconventional-weapons terror attack stems partly from the increasing amount of information and technology that is available to terrorist groups from sources such as the Internet. Moreover, Russia, which continues to face dire economic straits, looked to its defense, biotechnology, and nuclear industries to provide exports, thus offering an opportunity for terrorists to gain WMD materials and technology.

#### Modus Operandi

CIA director George J. Tenet told Congress during an annual hearing that the danger of new al Qaeda and other terrorist attacks is growing.

"We assess that al Qaeda and other terrorist groups will continue to plan to attack this country and its interests abroad," Tenet said. "Their modus operandi is to have multiple attack plans in the works simultaneously and to have al Qaeda cells in place to conduct them."

The targets, he said, include high-profile government or private facilities, famous landmarks, and US infrastructure elements, such as airports, bridges, harbors, and dams. They also might strike at high-profile sporting events that would, said Tenet, "fit the terrorists' interest in striking another blow within the United States that would command worldwide media attention."

Al Qaeda, Tenet emphasized, could launch attacks against US targets using its secret cells already in place in major cities in Europe and the Middle East. As for al Qaeda's WMD threat, he said, "One of our highest concerns is their stated readiness to attempt unconventional attacks against us."

"Terrorist groups worldwide have ready access to information on chemi-

cal, biological, and even nuclear weapons via the Internet, and we know that al Qaeda was working to acquire some of the most dangerous chemical agents and toxins," stated Tenet.

#### Long Time Coming

US intelligence agencies have known since the early 1990s that Osama bin Laden actively sought to develop chemical and biological arms in his al Qaeda organizations. Intelligence officials also said that he had a long-standing interest in acquiring nuclear materials.

"Osama bin Laden and groups aligned with him have shown interest in staging unconventional attacks, and bin Laden has sought CBRN materials and resources to further this goal," the 721 Report stated. Bin Laden and his organization have made "public statements about unconventional weapons, which could be an attempt to justify the use of such weapons."

According to the CIA, a senior bin Laden associate who was put on trial in Egypt in 1999 said his group already possessed chemical and biological arms.

Terrorists have shown the most interest in the rudimentary chemical weapons, such as cyanide salts that could be used to contaminate food and water supplies or to conduct assassinations of targeted people, the report noted. "Terrorist groups also have expressed interest in many other toxic industrial chemicals—most of which are relatively easy to acquire and handle—and traditional chemical agents, including chlorine and phosgene, and some groups have discussed nerve agents," it said.

According to the report, the agency believes the terrorists have less interest in biological agents that produce small-scale poisonings than in those that would affect the largest number of people.

One former CIA official said al Qaeda was working hard on biological arms. "There's a lot of evidence al Qaeda had a very sophisticated program to develop Weapons of Mass Destruction, particularly biological weapons," said Vincent Cannistraro, who headed CIA counterterrorism operations in the late 1990s. "We don't have a full measure of what level it's reached, but the program was very advanced."

The danger also was highlighted by Vice Adm. Thomas R. Wilson, director of the Defense Intelligence Agency. He said that, although terrorists are likely to favor continued "proven" conventional weapons over Weapons of Mass Destruction in the near term, "several groups, especially al Qaeda, have pursued CBRN capabilities, and the threat from terrorist use of these materials will continue."

"Many of the technologies associated with the development of CBRN weapons—especially chemical and biological agents—have legitimate civil applications and are classified as dual use," Wilson said in a prepared statement for the Senate Select Committee on Intelligence. "The increased availability of these technologies, coupled with the relative ease of producing some chemical or biological agents, makes them attractive to terrorist groups intent on causing panic or inflicting larger numbers of casualties."

Terrorists have noticed the intense psychological impact caused by the recent anthrax cases in the United States, Wilson said.

#### The Bigger Fear?

The big fear among intelligence officials focused on the danger of a devastating explosion from a nuclear weapon.

Specific information on terrorists' acquisition of nuclear arms has been limited. According to the CIA report, "We have no credible reporting on terrorists successfully acquiring nuclear weapons or sufficient material to make them."

The agency warned, however, that there are sizeable "gaps" in US intelligence on the subject.

Bin Laden, the supposed mastermind of the Sept. 11 attacks, stated in public speeches that he views the acquisition of Weapons of Mass Destruction as a "religious duty."

One government witness in the trial of four men who were convicted of supporting al Qaeda's bombing in 1998 of US embassies in Tanzania and Kenya testified that al Qaeda has tried to obtain fissile material—the fuel for a nuclear explosion—since the early 1990s.

Even more startling is a discovery made after Enduring Freedom kicked off on Oct. 7. In an abandoned al Qaeda safe house in Kabul, the CIA retrieved documents showing "rudi-

mentary diagrams of nuclear weapons," the 721 Report stated. "These diagrams, while crude, describe essential components—uranium and high explosives—common to nuclear weapons," it added.

An internal alert sent to US government agencies in January warned that Islamic terrorists were planning spectacular attacks meant to rival the devastation of Sept. 11.

The detailed warning said the numerous targets included US nuclear power plants and US Energy Department nuclear weapons facilities. The warning outlined several possible attack scenarios. Among them:

- A bombing or airline attack on a nuclear power plant or other US nuclear facility, such as a weapons storage depot, designed to cause mass casualties and spread deadly radiological debris.

- A bombing against a US warship in Bahrain, headquarters of the US Navy's 5th Fleet and where some 20 ships are based. The attack would be similar to the October 2000 suicide bombing attack on USS *Cole*.

- Another airliner attack on a building using a hijacked commercial jet.

- A vehicle bombing in Yemen. Authorities in Yemen, acting on intelligence gathered by the United States in Afghanistan, recently found an explosives-laden vehicle intended for use as a car bomb against the US Embassy in San'a.

The alert prompted the Nuclear Regulatory Commission to beef up security at nuclear plants. The tighter security included limiting access to nuclear power plants, increasing training for security guards at facilities, and increasing the coordination between state and federal officials. The NRC also ordered all vehicles, both cars and trucks, that approach the nation's 103 commercial operating nuclear power plants to be stopped and checked at greater distances from the facilities' gates.

"The commission has decided to issue orders to require prudent interim compensatory measures because the generalized high-level threat environment has persisted longer than expected," the NRC said in a statement.

The NRC said it is requiring plant employees to observe new restrictions on where they can go within a facility, and the commission planned

to increase screening and identification checks of employees and the numerous contractor personnel who work at and operate the facilities.

"What we're trying to do is ensure that all the plants have the highest level of protection, by ordering them to implement security measures that incorporate some of the findings of this ongoing security review," said NRC spokesman Victor Dricks.

NRC officials said privately that all the plants were put on a heightened state of alert after Sept. 11. But the commission gave no orders to tighten security until February.

Defense officials said intelligence obtained through Enduring Freedom helped thwart three terrorist attacks and led to the arrests of terrorists in Singapore and Yemen. A third operation is still "being rolled up," one official said.

Asked about the danger of a mass destruction terrorist attack, Gordon Johndroe, a spokesman for Homeland Security Director Tom Ridge said: "We remain on alert." The Homeland Security office has issued several warnings for nuclear power facilities, utilities, and water treatment plants to be alert for an attack.

#### Building a Nuke?

Some arms control analysts believe the odds that bin Laden and al Qaeda would obtain a nuclear weapon or a radiological weapon—a bomb that enhances its lethality by spreading nuclear material, such as stolen nuclear waste—are low but not zero.

Terrorists can get their hands on nuclear weapons by building one from scratch, by acquiring one on the black market, or by theft.

Although buying plutonium on the black market is difficult, some experts say it could be done, especially from Russia. But a plutonium bomb is difficult to construct and requires precision machine tools to fashion a conventional explosion to implode a ball of plutonium for the nuclear blast.

Bomb-grade uranium would be easier for terrorists to get. For instance, the South Africans built six uranium bombs. The bombs used a gun design that fired a slug of uranium down a barrel into another uranium slug. The problem for terrorists would be in acquiring enough—about 120 pounds—to make a gun-type nuclear bomb.

An al Qaeda operative named Ja-

mal Ahmed al-Fadl testified in an American court during the trial of four men who were convicted of supporting al Qaeda's terrorist bombing of US embassies in Tanzania and Kenya that he sought to purchase uranium for \$1.5 million in 1993. He made the attempt in Khartoum where he spotted a cylinder that was said to contain bomb-grade uranium from South Africa. Al-Fadl said he did not know if the deal was concluded.

Buying nuclear arms outright is not likely, say some experts. For instance, Libya's Col. Muammar Qaddafi for years tried to buy nuclear weapons and failed.

Yet, in 1997, Gen. Alexander Lebed, then-Russian President Boris Yeltsin's national security advisor, stated publicly that the Russians could not account for 100 suitcase-sized tactical nuclear weapons. Later, Russian officials said none of the arms appeared to be missing from stockpiles.

A radiological weapon is easier to produce. The problem is that transporting such a weapon is difficult because the protection needed to shield the users from radiation makes it impractical.

The danger is that terrorists will find a sanctuary that will allow them to set up the proper laboratories to build nuclear weapons.

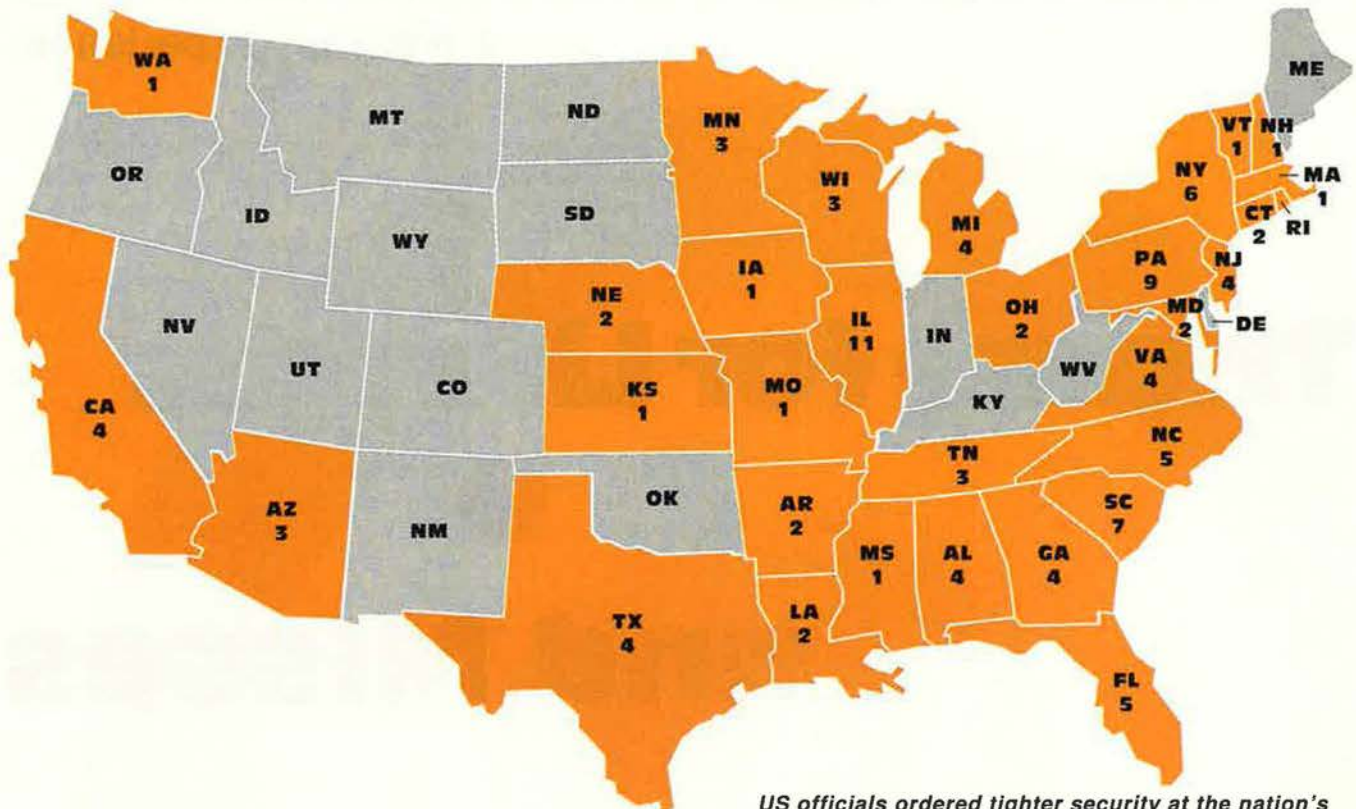
#### The More Insidious Threat

However, the American Medical Association believes the potentially greater disaster would spring from biological weapons in the hands of terrorists. In a warning about the dangers of germ weapon attacks, an AMA statement said that it "recognizes the growing threat that biological weapons might be used to cause devastating epidemics that could spread internationally."

"All countries are potentially at risk," the association said. "The release of organisms causing smallpox, plague, anthrax, or other diseases could prove catastrophic in terms of the resulting illnesses and deaths, compounded by the panic such outbreaks would generate. At the same time, there is a growing potential for production of new microbial agents, as expertise in biotechnology grows and methods for genetic manipulation of organisms become simpler."

The AMA called for stepping up

## Civilian Nuclear Power Plants, State by State



US officials ordered tighter security at the nation's 103 plants, located in 31 states.

efforts to prepare for a biological weapons attack. "Unlike the use of nuclear, chemical, and conventional weapons, the consequences of a biological attack are likely to be insidious," the group said.

"Their impact might continue with secondary and tertiary transmission of the agent, weeks or months after the initial epidemic," said the AMA. "The consequences of a successful biological attack, especially if the infection were readily communicable, could far exceed those of a chemical or even a nuclear event. Given the ease of travel and increasing globalization, an outbreak anywhere in the world could be a threat to all nations."

In fact, Health and Human Services Secretary Tommy G. Thompson told a Senate subcommittee last October that attacks with biological weapons could cause major epidemics. "Biological agents are easy to conceal," he said. "A small amount may be sufficient to harm large populations and cause epidemics over a broad geographic region."

He added that disease can also spread as a result of contagious attack and "in the most worrisome scenario of a surreptitious attack, the first responders are likely to be health professionals in emergency rooms, physician offices, outpatient clinics, public health settings, and other health care activities rather than the traditional first responders."

In November, Thompson announced that his department had awarded a \$428 million contract to produce 155 million doses of smallpox vaccine by the end of 2002.

"While the probability of an intentional release of the smallpox virus is low, the risk does exist and we must be prepared," Thompson said. "Expanding our stockpile so there is a smallpox vaccine for every American if needed prepares us to respond aggressively to minimize the spread of the disease should an outbreak occur. Additionally, we hope that increasing our smallpox vaccine stockpile would serve as a deterrent to those who might consider using smallpox as a weapon against us."

DIA director Wilson noted that the global security environment changed with the terrorist attacks of Sept. 11 and the US war against terrorism.

"On 11 September the asymmetric threat became real—and strategic," Wilson stated. "We are in a new struggle—for our way of life and our vision of the global future. Our adversaries see things the same way. They think the United States is the 'center of gravity' for an emerging world order that undermines their beliefs, values, interests, and culture. They need to eliminate our global power, leadership, and influence or—in their eyes—be overwhelmed by it." ■

*Bill Gertz is a defense and national security reporter for the Washington Times and author of the book The China Threat: How the People's Republic Targets America (Regnery). His most recent article for Air Force Magazine, "The Last Flight of Wang Wei," appeared in the July 2001 issue.*

The program began smoothly for most people, but some had a different experience.

# Tricare for Life Hits and Misses

By Tom Philpott

**F**OR thousands of expectant beneficiaries, issues of eligibility and other problems have marred the start of Tricare for Life, the health care program touted by its promoters as a “golden supplement” for senior military retirees.

The problems tended to overshadow what appeared to be a relatively smooth launch for most of the military’s 1.5 million-strong Medicare-eligible population. Take, for example, Laura Beck of Honolulu, a 69-year-old widow of a retired Air Force technical sergeant. Beck said she relied on TFL, which began Oct. 1, 2001, for follow-up care after hip replacement surgery and for routine medical exams. With her internist, orthopedic surgeon, and gynecologist, TFL was working fine, covering all costs Medicare wouldn’t pay. She no longer has to pay the \$100-a-month premium charged for her old Medicare supplement.



For Beck, who received a letter from an Air Force hospital four years ago denying her access to routine care, TFL is a promise restored. "I'm just really pleased," she said.

Even so, Tricare officials concede that Beck's experience hasn't been universal. They acknowledge that TFL in its first few months has caused many beneficiaries little but frustration, the result of confusion over other insurance and mistakes in shaping a so-called crossover list of TFL-eligible beneficiaries that was sent to Medicare and TFL claims processors.

Under TFL, a Medicare-eligible beneficiary can visit the doctor of his choice. The doctor files a claim with Medicare. Medicare pays its share, checks for Other Health Insurance held by the patient, and finding a crossover match with TFL, sends claims electronically to TFL for processing. TFL usually covers whatever costs remain. The beneficiary receives two Explanation-of-Benefits forms, one from Medicare and one from Tricare. Usually, nothing more is required.

### **Dropping the Ball**

Things didn't work that smoothly, however, for tens of thousands of TFL users who had contact with the program during the first months. In Pensacola, Fla., retired Navy Lt. Cmdr. Russell M. Saurey and his wife planned to keep their USAA Medicare supplement for a while after TFL began; they wanted to have time to assess the program's performance. But in September, he said, "we interviewed with the Tricare office and they were very confident everything would work out fine. So we submitted the paperwork to stop our insurance. We then hand carried the forms down to the Tricare office."

Subsequently, Mrs. Saurey was hospitalized for a week with a heart ailment. Medicare paid its share of the bill, but TFL in late November denied payment on the remaining \$2,900 owed. The reason, according to Tricare's EOB: The Saureys still had USAA health coverage. That was incorrect, Saurey explained to the claim processors in several phone calls. Saurey was optimistic about the outcome, but as of late January, TFL still hadn't paid up.

"I kind of get the feeling this is not

an isolated incident," said Saurey. "They have an appeals process all set up."

Retired Air Force CMSgt. Don Hawley, 69, said he doesn't know enough about TFL to feel comfortable dropping his supplement with its \$139-a-month premium. Like many older retirees, Hawley watched access to military care disappear over the past decade as bases closed and hospital space became rare. Now he wonders if Congress will renege on this program. He wants to see statistics showing claims being paid and both doctors and patients satisfied.

"I spent 27 years in the military," he said. "Sometimes programs don't run as advertised. That's the main reason I haven't signed up."

Tricare officials understand the caution. They are trying to counter with the message that TFL benefits are excellent, and despite early "hiccups," they aren't going away.

"It is, without question, the best supplement to Medicare that's out there," said Thomas F. Carrato, executive director of the Tricare Management Activity, headquartered in Falls Church, Va. While beneficiaries have to make their own decisions on health insurance, Carrato said, "If I were 65, as knowledgeable as I am about supplements and health care, Medicare, Tricare for Life, and Tricare Senior Pharmacy, I wouldn't need any additional supplemental coverage."

### **The 20 Percent Problem**

Even so, the kind of comforting performance statistics sought by Hawley and thousands like him are not yet available and may not be for a while. Indeed, Carrato in early February had stopped describing TFL's start-up effort as "flawless." Roughly five million claims had been filed during the program's first four months; more than 3.1 million, some 62 percent, had been paid. TFL officers say that 20 percent or more have been either denied or delayed over questions of eligibility.

Here is a rundown of major TFL claim processing problems, all of which, said officials, either have been or soon will be corrected:

■ **Names Glitch.** In transferring to Medicare an initial list of TFL beneficiaries, the Defense Manpower Data Center left off 195,000

names, or 13 percent of the eligible population. About 10,600 were widows and widowers of members who died while on active duty. Another 184,000 were those who, ironically, provided early proof of their enrollment in Medicare Part B, a requirement for TFL.

"If they were proactive and sent in their paperwork early, those were the ones who got caught up in the troubles," said Donna Banks, site manager for the Tricare Worldwide Call Center in Falls Church.

Medicare, because it lacked their names, did not know to send their claims to TFL for payment as second payer. So the Medicare EOB that beneficiaries received said they were liable to pay the provider for all charges Medicare didn't cover.

In a mid-November letter to the affected beneficiaries, Carrato explained the problem, said it was temporary, and claimed that benefits would be paid in full. But beneficiaries, most of them unfamiliar with Tricare, had to refile the claim themselves with Tricare, attaching a copy of the Medicare EOB.

Once TFL officials understood the problem, they began putting holds on claims with eligibility problems and stopped denying them. By early December, Medicare had corrected the crossover list, and new claims from the 195,000 were moving electronically between Medicare and TFL, as planned.

About 70 percent of these claims had been paid by mid-January. But many early claims, those that beneficiaries had to refile, weren't settling easy. They had become part of a rising claims backlog fed by two other major challenges: confusion over Other Health Insurance and claim denials caused by the expiration of military identification cards.

■ **Expired ID Cards.** Long before Oct. 1, Tricare urged TFL beneficiaries to update their information in DEERS, the Defense Enrollment Eligibility Reporting System. DEERS tracks military or dependency status, current address, and eligibility for benefits, including health care. Issuance or reissuance of a military ID card automatically updates DEERS information. IDs for dependents and survivors of retirees expire every four years. Military retiree cards have no expiration date themselves, but

## Helpful Numbers in Tricare for Life



**Call 1-888-DOD-LIFE  
(1-888-363-5433)  
for questions  
about TFL.**

**Call the DEERS  
support office at  
1-800-361-2620  
to learn how to  
update or reverify  
ID cards and TFL  
eligibility.**

**Call 1-877-DOD-MEDS  
(1-877-363-6337) for  
more information  
on the Tricare  
Senior Pharmacy  
program.**

**Call (TTY/TDD)  
1-877-535-6778  
for help for hearing-  
or speech-impaired  
beneficiaries.**

currently the cards note a date on the back that indicates medical coverage ends when a retiree turns 65.

Four months into TFL, more than 160,000 claims filed by some 65,000 beneficiaries had been denied because of the expiration of an ID. By late January, the number of denials had truly alarmed Tricare officials, who were then eyeing a rising claims processing backlog.

Part of the problem was that many of the beneficiaries had been inattentive about paperwork or were living away from bases or in nursing homes and were unable to renew their IDs. Another part of the problem, however, led back to that cross-over list; it hadn't been screened for expired IDs.

Thus, Medicare and TFL claims processors were bouncing claims off a list that showed every person in DEERS enrolled in Medicare Part B was eligible for TFL. This was not true. Widows or widowers who had remarried a civilian, for example, knew they were ineligible for TFL. However, Medicare soon began sending unpaid bills not to private Medicare supplemental insurers but to TFL. Through no fault of the beneficiary, TFL was getting claims and rejecting them for reason of expired IDs.

TFL had a mess on its hands.

Worried that the expired ID problem could shake confidence in TFL among beneficiaries and providers, defense officials in early February announced a patient-friendly solution. TFL would pay the claims even of beneficiaries with expired IDs, whether the claims had been denied previously, were on hold, or were still coming in. It would be done automatically, too. Neither the beneficiary nor the provider would have to resubmit claims.

Moreover, TFL would continue to pay such claims for a six-month grace period that would run through July 2002. TFL also launched an aggressive information campaign to educate elderly beneficiaries on the need to obtain new ID cards.

"We want to ensure that our beneficiaries, some of whom are re-entering the military health system and using Tricare for the first time, have the best possible experience and receive their rightful benefits," said William Winkenwerder Jr., assistant secretary of defense for health affairs. "We will do everything we can

to overcome initial difficulties that may arise."

Carrato added, "We will be paying for some people who aren't eligible. We're not supposed to do that, but we are also denying claims to people who, if they updated their eligibility information, we would be paying for. It's a benefit that is very rich, but this is an age group where you really have to do extraordinary outreach."

The government does have authority to later recoup erroneous payments, but officials aren't keen on using it or at least discussing it. Waivers also are possible, one noted, if repayment would be a hardship.

After Aug. 1, claims from beneficiaries with expired IDs will be denied until their eligibility information is updated.

■ **"Other" Insurance.** Through January, Tricare for Life had denied 750,000 claims, 15 percent of all claims filed, because Medicare and TFL records showed beneficiaries had Other Health Insurance, or OHI. It's a troubling problem for Tricare for Life because, by law, Other Health Insurance, not TFL, must serve as second payer to Medicare.

It's a problem TFL officials tried to avoid by means of a survey mailed to elderly beneficiaries last summer. The survey asked whether the recipient had private insurance and whether he would drop it when TFL began. The return rate on the survey was only 60 percent, and that was not the only problem. Critics say that some beneficiaries never received the survey, either because they were not on the mailing list or because it never reached their hands.

Moreover, half of those who indicated they had Other Health Insurance failed to declare whether or not they planned to drop it as a result of the phase in of TFL.

Thousands of beneficiaries who did drop their supplements, like the Saureys, later learned that their claims processors never got the word. In some instances, insurance companies had delayed notifying Medicare until outstanding or disputed claims were settled. Some Medicare carriers were slow to update their files. And some beneficiaries themselves made paperwork errors or just forgot to cancel Other Health Insurance and continued to think they had done so.

By mid-January, TFL was rejecting so many claims for OHI reasons that Carrato directed claims processors to begin accepting the word of beneficiaries over the phone if they said they had or did not have other insurance.

"We overrode our system," said Carrato. "It is a very user-friendly solution, something you don't often times see in government—that is, trust the beneficiary."

The OHI problem will go away over time, he said, as a majority of 1.5 million beneficiaries settle into using their new benefits and TFL builds an OHI file on them. Most TFL-eligible beneficiaries did have Other Health Insurance. While many ignored last summer's survey, the calls were streaming into the Tricare phone center by January from beneficiaries saying they had now dropped their coverage.

Finally, there is another problem with which TFL didn't reckon: Twenty percent of qualified beneficiaries don't want to have anything to do with TFL. Some of them are angry that the TFL master list that was sent to Medicare changed their OHI designation from a private insurance to TFL, without their approval or permission.

This is exactly what happened to Frank Maxted, 74, of Fouke, Ark. The retired Army sergeant uses Blue Cross/Blue Shield as a second payer to cover charges Medicare won't pay. Premiums are deducted from his wife's retired pay. In November, however, TFL suddenly began covering his claims. Maxted called the claims processor to complain.

Maxted described the conversation: "I said, 'What happens to my regular insurance?' They said, 'Oh, you can drop that.' I said, 'No, I don't want to.'" He was asked to explain why he wanted to stick with Blue Cross/Blue Shield, which charges a premium. Maxted replied that, throughout his 20-year military career, he had been given assurances that he would receive free medical care for life. "And what happened to that deal? I didn't get it. The government [stuck it to] me once. I'm not going to give them a second chance."

■ **Busy Signals.** January was a rough month for TFL executives. Claims denials were mounting. At the same time, many more beneficiaries entered the system for the

first time because their other supplemental health insurance policies lapsed on the last day of 2001. In addition, call volumes soared because of the OHI and expired ID problems. Moreover, Carrato said, "We underestimated how long these calls would take. They end up to be fairly lengthy calls, with sometimes a callback."

Suddenly, TLF users with questions about claims had difficulty contacting the primary claims processor, Palmetto Government Benefits Administrators of South Carolina. Though PGBA was responsible for handling 85 percent of all TFL claims, it had woefully insufficient numbers of telephone lines and operators. The "blockage rate" on TFL calls to PGBA reached 78 percent. Most callers got busy signals or faced long waits.

To ease beneficiary frustrations, PGBA and the regional Tricare contractors ordered more telephone trunk lines, hired more staff, and began rolling some calls into alternative call centers.

Other problems surfaced. About one percent of TFL beneficiaries use doctors who don't "participate" in Medicare. That usually means they charge more than 115 percent of the Medicare authorized rate, an extra cost Tricare won't cover. These claims were delayed because TFL needed time to calculate its share of reimbursement. "That problem is now fixed," said Carrato.

As each TFL problem arose, Tricare officials kept military associations and the press informed and often worked with association representatives to find solutions. That open approach has served the system well. Advocates for beneficiaries have been able to prod and encourage the bureaucracy toward patient-friendly solutions.

For example, service groups were concerned that persons "aging in" to the Tricare for Life benefit weren't getting clear or timely information on the changes ahead. So the letter that previously advised persons approaching age 65 that they soon would lose Tricare eligibility was rewritten to explain TFL and the impact of not dropping Other Health Insurance.

A question many beneficiaries have is whether funding for TFL and the Tricare Senior Pharmacy Pro-

gram (TSRx) is guaranteed. Congress set \$3.9 billion aside to pay the benefits this year. Carrato said he thinks that will be enough.

If it is not, Congress will simply have to come up with more money, because both programs are now entitlements. Congress must fund them just like Medicare or federal retirement plans, and the programs don't require annual authorizations. The cost is still reflected in the defense budget's topline, but the only way Congress can stop the programs is to pass legislation rescinding the entitlement, an action virtually unprecedented in modern America.

### **Stunning Size**

Still, the \$8.1 billion cost of TFL and TSRx for 2003 stunned senior defense officials, according to one official. Half of that money will go into a new accrual account, called the Department of Defense Medicare-Eligible Retiree Health Care Fund. The money is to ensure these benefits will be there for future generations of Medicare-eligible retirees. In 2004, when general tax revenues begin covering current TFL and TSRx costs, actual payouts from DOD will drop to between \$4 billion and \$5 billion.

"I think folks truly recognize what this benefit means," Carrato said. While health benefits for service elderly have improved dramatically in the past year, they can read news stories of private sector employees seeing "premiums increasing, deductibles increasing, benefits being reduced."

In sum, the TFL start-up problems are only temporary obstacles to the smooth delivery of TFL benefits, Carrato claimed. They don't diminish the value of that benefit, and the benefit won't suddenly vanish someday. Many potential beneficiaries, however, continue to take a wait-and-see approach to TFL and will for some time to come. ●

---

*Tom Philpott writes the weekly syndicated news column "Military Update." His book, *Glory Denied: The Saga of Jim Thompson, America's Longest-Held Prisoner of War*, will be released in paperback in April 2002. His most recent article for *Air Force Magazine*, "The Tricare Budget Drain," appeared in the August 2001 issue.*

**He was a superb leader and organizer. He also knew how to get along with MacArthur.**

# The Genius of George Kenney

**I**T may truthfully be said that no air commander ever did so much with so little." Thus did Gen. Henry H. "Hap" Arnold, Commanding General, Army Air Forces, describe Gen. George C. Kenney, commander of Far East Air Forces, at the close of World War II.

George Churchill Kenney was a kind of renaissance airman. He was an engineer, flier, logistician, tactician, strategist, and exceptional leader. It can be said that, as an operational airman, he was first among equals during World War II.

Arnold inserted Kenney into trouble spots because he considered him to be a tinkerer and a doer who could resolve difficult problems.

Kenney probably faced his greatest challenge in the Pacific in the period 1942-43, and he had limited resources to meet it. As Kenney emphasized to Arnold, he was operating on a shoestring. He pulled it off brilliantly because he had long ago mastered the intricacies of airmanship.

Born on Aug. 6, 1889, Kenney grew up in Brookline, Mass. He spent three years at the Massachusetts Institute of Technology. While taking flying training under Bert Acosta, a crack flier, Kenney showed the flair and confidence that subsequently distinguished his career.

Kenney landed dead-stick on his first landing. He recalled that Acosta asked, "What is the idea, coming in there dead-stick?" Kenney replied, "Any damned fool can land it if the motor is running" and added, "I just wanted to see what would happen in case the motor quit."

During World War I, Kenney flew 75 missions, downed two German aircraft, was shot down himself, and was awarded the Distinguished Service Cross and Silver Star. Afterward, he decided to make Army aviation a career. He soon gained a reputation for technical and tactical innovation, as well as for candor and wit.

When Brig. Gen. Frank M. Andrews was appointed in March 1935 to command the General Headquarters Air Force, he tapped Kenney to be his assistant chief of staff for operations and training. In this key post on the GHQ Air Force staff, Kenney had responsibility for combat flying training.

And along with assumption of this position, Kenney was promoted to lieutenant colonel, his first promotion in 17 years.

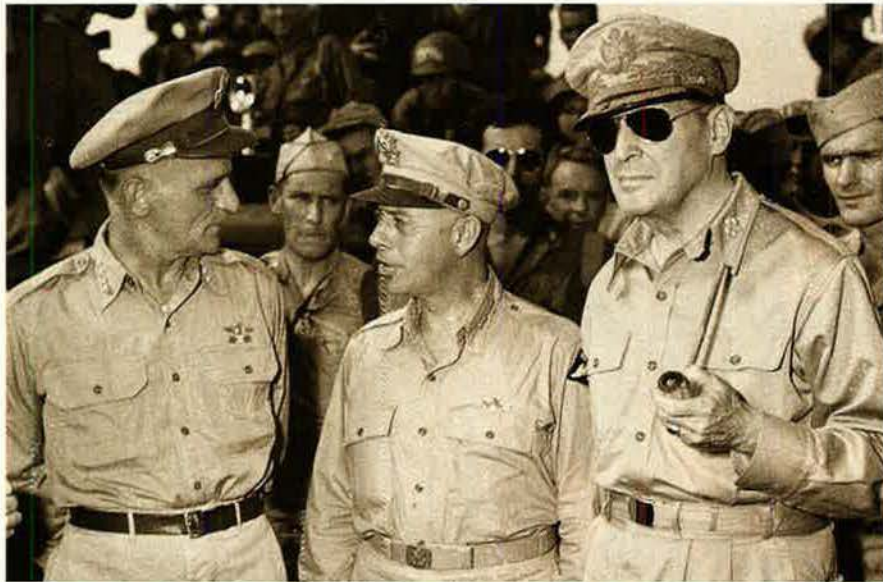
Andrews knew Kenney well from the Air Corps Tactical School, where from 1927 to 1928 Kenney was an instructor and Andrews a student. Andrews had been impressed with Kenney's ability to explain technical problems and to find solutions to them. At the tactical school, Kenney developed doctrine and revised the basic attack aviation textbook.

At GHQ Air Force, Kenney emphasized training in instrument and night flying. He also wrote tables of organization and planned maneuvers and traveled extensively. "During the first year," Kenney noted, "I was home at Langley Field [Va.] something like 39 days; the rest of the time I was all over the country."

His tenure at GHQ didn't last long, however. Kenney's outspoken and

**By Herman S. Wolk**





*Kenney (center) talks with Gen. Carl A. "Tooeey" Spaatz (left) and Gen. Douglas A. MacArthur at an airfield near Tokyo on Aug. 30, 1945.*

sometimes biting verbal manner caused him to run afoul of the War Department General Staff.

Like Andrews, Kenney championed the new B-17 long-range bomber, but the General Staff did not want to hear this. "They said there was no sense in having an airplane as big as that," recalled Kenney. "They didn't like some of the remarks I made because I was a temporary lieutenant colonel and a permanent captain, and these were all major generals." As a result, the War Department banished him to Ft. Benning, Ga., where, during the period 1936-38, he taught tactics at the Infantry School.

Maj. Gen. Oscar Westover, Chief of the Air Corps, undoubtedly had a hand in Kenney's treatment. Westover and Andrews were at loggerheads. Andrews advocated more B-17s and autonomy for the Air Corps, while Westover preferred not to rock the boat.

It was Arnold, then a brigadier general and assistant chief of the Air Corps, who rescued Kenney. He assigned him to various special projects in Washington, D.C.

### The Troubleshooter

When Westover was killed in an air crash in 1938 and Arnold became Chief of the Air Corps, one of his first actions was to send Kenney to a trouble spot at Wright Field, Ohio. Kenney went out to head the production engineering section of the Air Corps materiel division.

"Every time [Arnold] got some-

thing going wrong," Kenney recalled, "he would say, 'Send George Kenney out there; he is a lucky SOB. He will straighten it out.' I never was supposed to have any brains. I was just lucky."

Following the Nazi invasion of Poland in late 1939, Arnold ordered Kenney to France to study French aircraft and equipment and also to assess the Luftwaffe. Kenney returned home and reported that American military aviation was far behind what the German air force was flying.

After Japanese forces attacked Pearl Harbor in December 1941, the United States moved to organize its forces in the Pacific and to begin preliminary planning aimed at the defeat of Japan.

To organize for victory in the Pacific, however, Arnold first needed to assign an energetic and aggressive officer to replace the air commander under Gen. Douglas A. MacArthur, commanding general of the Southwest Pacific Theater.

According to Arnold and Gen. George C. Marshall, Army Chief of Staff, MacArthur's air commander, Lt. Gen. George H. Brett, was in wrong with MacArthur and his staff. Marshall said the situation was rife with clashes of personalities.

Brett had in fact been shut off from MacArthur and his staff.

Arnold wanted to send Lt. Gen. Frank Andrews, who was then commanding Caribbean Defense Command. However, Andrews turned him down. He was appalled that Arnold

thought he would work for MacArthur, with whom he had battled in the 1930s and whom he detested.

It was Brig. Gen. Laurence S. Kuter, deputy chief of the Air Staff, who suggested to Arnold that he send Kenney to MacArthur. Arnold thought the blunt talking Kenney probably wouldn't last long out there.

Kenney, however, had two things going for him. First, he knew how to organize air forces to gain maximum combat efficiency and effectiveness. Second, he was an experienced airman with the ability to lead.

Before he left Washington, though, Kenney realized that one of the major difficulties he would face related to Allied strategy. Marshall and Arnold had made it clear to him that the European conflict was the top military priority.

Kenney noted that he was supposed to help MacArthur hold the line in the Pacific "until the European show is cleared up."

### Removing Deadwood

The emphasis on the European theater was bound to affect the flow of equipment to the Southwest Pacific. Moreover, Kenney knew that he had to straighten out difficult personnel and logistical problems in his new assignment.

With Arnold and Marshall, Kenney raised the issue of removing some officers among his new staff. "I am going to get rid of a lot of the Air Corps deadwood," Kenney informed them.

Upon arriving in the theater, Kenney found logistics to be "a hell of a mess." Combat aircraft were not able to get into the air. Spare parts were nowhere to be found. "A lot of stuff has gone out there," Kenney said, "but no one knows what has happened to it."

There were even complaints from the field that requests for parts were turned down because of improperly filled out requisition forms. Kenney made clear that he was putting an end to this practice. "You don't win wars with file cabinets," he said.

Before he could tackle the logistics issue, he had to face MacArthur. According to Brett, neither MacArthur nor his staff possessed an understanding of air operations. Yet, he said, after conferring only with his immediate staff, MacArthur made all decisions himself.

Moreover, Brett emphasized that Maj. Gen. Richard K. Sutherland, MacArthur's chief of staff, was a bully and overly protective of the boss.

To reach MacArthur, Kenney had to get past Sutherland, who had shut Brett out and had taken it upon himself to write air operations orders.

### "What I Know"

Kenney decided to confront Sutherland. In a meeting, he jabbed a dot onto a piece of paper. As he thrust it before MacArthur's chief of staff, he said, "The dot represents what you know about air operations, the entire rest of the paper what I know."

When Sutherland reacted belligerently, Kenney suggested they see MacArthur. Sutherland backed down.

Brett had told Kenney that he rarely saw MacArthur and added, "Every endeavor I have made to explain what I was trying to do has been lost among lengthy dissertations which I would not take the time to deliver to a second lieutenant."

Now, it was Kenney's turn. He recalled, "I listened to a lecture for approximately an hour on the shortcomings of the Air Force in general and the Allied Air Forces in the Southwest Pacific in particular."

The air forces, MacArthur charged, had done nothing.

Kenney interrupted and told him that *he* would take care of air operations. He added, "If, for any reason, I found that I couldn't work for him, I would tell him so and do everything in my power to get relieved."

According to Kenney, MacArthur grinned, put his hand on his shoulder, and said, "I think we are going to get along together all right."

Meanwhile, the situation in the Southwest Pacific had turned critical. Japanese forces had stormed through the southern Philippines, most of New Guinea, and the islands northeast of Australia. An invasion of the Australian continent seemed possible.

Prior to Kenney's arrival in the theater in July 1942, Japan had taken heavy losses in the Coral Sea and Midway battles. Despite that, Japanese troops had established positions in the Solomon Islands and were advancing in New Guinea across the Owen Stanley mountain range toward Port Moresby.

Kenney immediately focused on building an organization that could

meet the demands of the theater. In early August 1942, he established Fifth Air Force in Brisbane, Australia, 1,000 miles from the New Guinea front. He appointed Brig. Gen. Ennis C. Whitehead, his deputy, as commander of the Fifth Air Force advanced echelon at Port Moresby.

MacArthur planned to move his forces northwest along the northern coast of New Guinea toward the Markham Valley and Finschhafen.

### Owning the Air

For that to succeed, Kenney emphasized to MacArthur, the Allied Air Forces had to gain air superiority over Japanese forces. Kenney said that the Allies had to "own the air over New Guinea." He added that there was no use talking about "playing across the street" until the Allies got the Japanese troops "off of our front lawn."

Once having gained control of the air, Fifth Air Force would support the ground forces and hammer enemy shipping troop concentrations. The Allies would advance northward up the New Guinea coast, and ultimately the island-hopping campaign would succeed.

Kenney knew that MacArthur's strategy depended upon aerial resupply.

He had to straighten out the chaotic maintenance and supply systems. He made certain that critical equipment found its way from Australia to New Guinea.

Kenney noted he was "inventing new ways to win a war on a shoestring." He explained, "We are doing things nearly every day that were never in the books" and added, "It really is remarkable what you can do with an airplane if you really try; anytime I can't think of something screwy enough, I have a flock of people out here to help me. ... We carry troops to war, feed them, supply them with ammunition, artillery, clothes, shoes, and evacuate their wounded."

By the end of 1942, MacArthur had gained confidence in Kenney. The feeling, apparently, was mutual. "It is a lot of fun to talk to General MacArthur," Kenney maintained. "He thinks clearly, does not have preconceived ideas, weighs every factor, and plays the winning game for all it's worth. As soon as airpower could show him anything, he bought it."

Kenney definitely showed him something. By early 1943, Fifth Air Force had gained air superiority, putting MacArthur's forces in a position to turn the tide of war.

In March 1943, Kenney's fliers, aided by Australian airmen, dealt Japan a crippling blow in the Battle of the Bismarck Sea. He employed skip-bombing, a concept he developed in 1928 while at the tactical school.

In this case, B-25s and some A-20s went in very low, skipping bombs over the water to strike an enemy convoy. Japan suffered heavy losses.



Kenney's airmen, flying A-20s and B-25s, like these, used "skip-bombing" and low-altitude bomb release to devastate a Japanese convoy during the Battle of the Bismarck Sea in March 1943.

Allied aircraft sank 12 of 16 ships in the convoy and killed approximately 2,900 troops.

### Tackling Washington

Kenney was continually frustrated by the Europe-first strategy and did not appreciate Arnold's description of the Southwest Pacific as a "defensive" theater. He badgered Arnold at every opportunity for airplanes to conduct offensive operations.

Arnold explained that he could not "maintain every theater at offensive strength" as this "dispersed effort would invite disaster." His objective, he informed Kenney, was to keep Kenney's forces at sufficient strength to enable Kenney to support himself defensively and to carry out a limited offensive against the Japanese.

Kenney made several trips to Washington, always keeping in mind the need to balance his loyalty to MacArthur, as theater commander, with his loyalty to Arnold, the AAF boss. On one trip, though, Kenney held discussions with Undersecretary of War Robert P. Patterson and Assistant Secretary of War for Air Robert A. Lovett and then met with President Franklin D. Roosevelt.

To Roosevelt and the Joint Chiefs of Staff, he emphasized the need to replace his losses to maintain air superiority. Roosevelt asked Kenney to "be reasonable about it," saying he would see what he could do even if he had "to argue with the whole British Empire about it."

Later, Arnold informed Kenney that the JCS would be sending him several bomb groups and several fighter groups.

In the summer of 1943, Kenney began to campaign for B-29s to be deployed to the Southwest Pacific. It is, he stated, "the plane with which we are to win the war."

Kenney's concept was to hurl the very-long-range bombers against the oil refineries at Palembang, Sumatra, and Balikpapan, Borneo. "If you want the B-29 used efficiently and effectively, where it will do the most good in the shortest time," he told Arnold, "the Southwest Pacific area is the place, and the Fifth Air Force can do the job. ... Japan may easily collapse back to her original empire by that time (1944), due to her oil shortage alone."

However, this was one battle that Kenney would not win. Arnold had long ago determined that the B-29 would be employed solely against the Japanese home islands. And the AAF Chief was not about to relinquish the B-29s to a theater commander—in this case, MacArthur.

Nonetheless, Fifth Air Force intensified its efforts to support MacArthur's drive up the north coast of New Guinea toward Lae and Salamaua. Kenney's forces had been striking Rabaul, but now their attention turned to Wewak, where Japan had a large concentration of aircraft.

In mid-August 1943, Fifth Air Force bombers and P-38 pursuit aircraft attacked the Wewak airdromes,

destroying about 175 enemy aircraft on the ground. As a result of this devastating strike, Japan had to base its forces farther to the rear, leaving Lae and Salamaua vulnerable.

### Airlift in Action

Both Lae and Salamaua fell in September 1943 to MacArthur's offensive. Kenney had made that possible by orchestrating the first large-scale airlift of the war. Kenney's C-47 transports air-dropped 1,700 troops and an Australian artillery battery into Nadzab, 19 miles northwest of Lae.

The scale of the airlift operation was daunting. In fact, MacArthur, when he was briefed, asked Kenney whether he had discussed the airlift with MacArthur's staff. Learning that he hadn't done so yet, MacArthur exclaimed, "Well, don't, you will scare them to death!"

Meanwhile, air operations by Fifth Air Force in 1943-44 against the Rabaul complex of harbor and airfields rendered the area practically useless to Japanese forces.

By mid-1944, MacArthur and Kenney picked up the pace. Ground forces occupied Hollandia as well as Wakde, Biak, Owi, Woendi, and Numfoor Islands. At the same time, Kenney joined Thirteenth Air Force with Fifth Air Force as part of Far East Air Forces. Whitehead took command of Fifth Air Force.

MacArthur's accelerated offensive moves and Kenney's shift of Thirteenth Air Force into FEAF set the stage for MacArthur's return to the Philippines.

The invasion of the Philippines had been moved up from December 1944 to October 1944. Sixth Army landed on the east coast of Leyte Gulf on Oct. 20. And when Allied forces landed on Luzon in January 1945, no enemy aircraft opposed them.

Kenney's FEAF, along with Navy aircraft, destroyed hundreds of Japanese airplanes on the ground. By March 1945, Manila had fallen. (Also in March, on a trip to Washington, Kenney was personally informed by President Roosevelt that he would receive his fourth star.)

Following the capture of Iwo Jima and with the invasion of Okinawa in April 1945, Fifth Air Force used Okinawa to launch strikes against Kyushu, one of the Japanese home islands. In July 1945, Brig. Gen.



Kenney's Fifth Air Force bombers and fighters destroyed some 175 enemy aircraft on the ground at Wewak, New Guinea. Here, B-29s make a minimum altitude bombing run on a Wewak airstrip.



Thomas D. White's Seventh Air Force joined FEAF and teamed up with Fifth to strike Kyushu and enemy shipping.

Meanwhile, Arnold's plan to use the B-29s for direct attacks against the Japanese home islands had taken shape. In April 1944, the Joint Chiefs had approved creation of Twentieth Air Force, based in Washington, D.C., with Arnold as executive agent of the JCS.

In March 1944, Kuter, Arnold's deputy, gave Kenney the bad news, at which time Kenney's pique got the better of his judgment. B-29 raids against Japan from the Marianas, he said, would accomplish little; they would be just "nuisance raids."

Nonetheless, Japan, by mid-1945, was being strangled by blockade and hammered by the B-29 campaign.

At the Potsdam Conference in July 1945, President Truman ordered use of the atomic bomb against Imperial Japan. In late July, Gen. Carl A. "Tooy" Spaatz arrived on Guam to head the newly established Strategic Air Forces in the Pacific.

After receiving authorization from Truman and Marshall, Spaatz ordered the use of the atomic bomb. On Aug. 6, 1945, the US struck Hiroshima, and on Aug. 9, it hit Nagasaki. The next day, Japan asked for peace.

### Toward an Independent Air Force

The war was over, but Kenney had more work to do. He became the point man for unification of the War and Navy Departments and a truly independent air arm.

In the immediate post-World War II period, when hopes were high for the success of the United Nations organization, Kenney was named the senior US member of the UN Military Staff committee. This committee had been organized to assist the Security Council on military issues and potentially to implement plans for creation of a UN military force.

Kenney's post at the UN did not last long, though. In early 1946, Spaatz and Gen. Dwight D. Eisenhower agreed on a postwar reorganization for the air forces, establishing Strategic Air Command, Tactical Air Command (upon which Eisenhower had insisted), and Air Defense Command. Spaatz appointed Kenney as SAC's first commanding general.

However, Kenney spent little time in the position. Instead, with the battle



After the war, Kenney testified before Congress for both a separate air arm and a unified department of armed services. He also lectured coast to coast on the importance of an independent Air Force.

over unification approaching a climax in 1947, Kenney was encouraged by W. Stuart Symington, assistant secretary of war for air, and Spaatz to go on the road to speak about the need for a separate air force. Knowledgeable and articulate, Kenney advocated an independent Air Force to audiences from coast to coast.

Kenney left the running of SAC's daily operations to his deputy—initially Maj. Gen. St. Clair Streett and then Maj. Gen. Clements McMullen. Although McMullen was an excellent supply and maintenance man, the training of SAC's combat crews suffered.

Meanwhile, the Cold War heated up, and in the summer of 1948, the Soviet Union began the Berlin Blockade. Gen. Hoyt S. Vandenberg, who succeeded Spaatz in April 1948 as Air Force Chief of Staff, asked Charles Lindbergh to assess SAC's combat readiness. Lindbergh reported in September that SAC's readiness left a great deal to be desired.

As a result, Vandenberg and Symington decided, in October, to replace Kenney with Gen. Curtis E. LeMay, commander of the US Air Forces in Europe and architect of the B-29 campaign against Japan.

Kenney was assigned as com-

mander of Air University at Maxwell AFB, Ala. While there, he wrote *General Kenney Reports: A Personal History of the Pacific War*, which is characteristically candid and one of the very best memoirs of the war. He retired in August 1951 and continued writing, including a book about MacArthur.

MacArthur had quickly recognized that Kenney was a man who had a plan and, what's more, got results. Over and above everything else, Kenney was a straight shooter and true to himself.

After the war, MacArthur had this to say about Kenney: "Of all the commanders of our major air forces engaged in World War II, none surpassed General Kenney in those three great essentials of successful combat leadership: aggressive vision, mastery over air strategy and tactics, and the ability to exact the maximum in fighting qualities from both men and equipment."

As Kenney's Fifth Air Force director of operations, Lt. Col. Francis C. Gideon, observed in retrospect, "He was unique; for the war to be fought in the Southwest Pacific under General MacArthur, he may have been the only one who could have succeeded." ■

*Herman S. Wolk is senior historian in the Air Force History Support Office. He is the author of The Struggle for Air Force Independence, 1943-1947 (1997) and a coauthor of Winged Shield, Winged Sword: A History of the United States Air Force (1997). His most recent article for Air Force Magazine, "When Arnold Bucked FDR," appeared in the November 2001 issue.*

# AFA State Contacts



Following each state name are the names of the communities in which AFA chapters are located. Information regarding chapters or any of AFA's activities within the state may be obtained from the appropriate contact.

**ALABAMA** (Birmingham, Huntsville, Montgomery): **Greg Schumann**, 4603 Colewood Cir., Huntsville, AL 35802 (phone 256-337-7185).

**ALASKA** (Anchorage, Fairbanks): **Bart LeBon**, P.O. Box 73880, Fairbanks, AK 99707 (phone 907-452-1751).

**ARIZONA** (Green Valley, Luke AFB, Phoenix, Prescott, Sedona, Sierra Vista, Tucson): **Arthur W. Gigax**, 3325 S. Elm St., Tempe, AZ 85282-5765 (phone 480-838-2278).

**ARKANSAS** (Fayetteville, Hot Springs, Little Rock): **Jerry Reichenbach**, 501 Brewer St., Jacksonville, AR 72076-4172 (phone 501-988-1115).

**CALIFORNIA** (Apple Valley, Bakersfield, Edwards AFB, Fairfield, Fresno, Los Angeles, Merced, Monterey, Orange County, Palm Springs, Pasadena, Riverside, Sacramento, San Diego, San Francisco, Sunnyvale, Vandenberg AFB, Yuba City): **John F. Wickman**, 1541 Martingale Ct., Carlsbad, CA 92009 (phone 760-476-9807).

**COLORADO** (Colorado Springs, Denver, Fort Collins, Grand Junction, Pueblo): **Chuck Zimkas**, 729 Drew Dr., Colorado Springs, CO 80911 (phone 719-576-8000).

**CONNECTICUT** (Brookfield, East Hartford, Storrs, Waterbury, Westport, Windsor Locks): **Wayne Ferris**, P.O. Box 523, East Granby, CT 06026 (phone 860-292-2560).

**DELAWARE** (Dover, New Castle County): **Ronald H. Love**, 8 Ringed Neck Ln., Camden Wyoming, DE 19934-9510 (phone 302-739-4696).

**DISTRICT OF COLUMBIA** (Washington): **Rosemary Pacenta**, 1501 Lee Hwy., Arlington, VA 22209-1198 (phone 703-247-5820).

**FLORIDA** (Avon Park, Broward County, Daytona Beach, Fort Walton Beach, Gainesville, Homestead, Hurlburt Field, Jacksonville, Miami, New Port Richey, Orlando, Palm Harbor, Panama City, Patrick AFB, Pensacola, Tallahassee, Tampa, Vero Beach, West Palm Beach): **Bruce E. Marshall**, 9 Bayshore Dr., Shalimar, FL 32579-2116 (phone 850-651-8155).

**GEORGIA** (Atlanta, Augusta, Savannah, Valdosta, Warner Robins): **Mike Bolton**, 1521 Whitfield Park Cir., Savannah, GA 31406 (phone 912-966-8295).

**HAWAII** (Honolulu, Maui): **Michael E. Solomon**, 98-1217 Lupea St., Aiea, HI 96701-3432 (phone 808-292-2089).

**IDAHO** (Mountain Home, Twin Falls): **Dale W. Smith**, R.R. 1, Box 123, King Hill, ID 83633 (phone 208-366-2710).

**ILLINOIS** (Belleville, Chicago, Galesburg, Moline, Springfield-Decatur): **Frank Gustine**, 988 Northwood Dr., Galesburg, IL 61401 (phone 309-343-7349).

**INDIANA** (Bloomington, Columbus, Fort Wayne, Grissom ARB, Indianapolis, Lafayette, Marion, Mentone, Terre Haute): **William Howard Jr.**, 1622 St. Louis Ave., Fort Wayne, IN 46819-2020 (phone 219-747-0740).

**IOWA** (Des Moines, Marion, Sioux City, Waterloo): **Norman J. Beu**, 903 Blackhawk St., Reinbeck, IA 50669-1413 (phone 319-345-6600).

**KANSAS** (Garden City, Topeka, Wichita): **Samuel M. Gardner**, 1708 Prairie Park Ln., Garden City, KS 67846-4732 (phone 620-275-4555).

**KENTUCKY** (Lexington, Louisville): **Edward W. Tonini**, 12 Eastover Ct., Louisville, KY 40206-2705 (phone 502-897-0596).

**LOUISIANA** (Baton Rouge, Shreveport): **Peyton Cole**, 2513 N. Waverly Dr., Bossier City, LA 71111-5933 (phone 318-742-8071).

**MARYLAND** (Andrews AFB, Baltimore, College Park, Rockville): **George Apostle**, 905 Bay Hill Ln., Silver Spring, MD 20905 (phone 301-421-0180).

**MASSACHUSETTS** (Bedford, Boston, East Longmeadow, Falmouth, Taunton, Westfield, Worcester): **Donald B. Warmuth**, 136 Rice Ave., Northborough, MA 01532 (phone 508-393-2193).

**MICHIGAN** (Alpena, Battle Creek, East Lansing, Kalamazoo, Marquette, Mount Clemens, Traverse City, Southfield): **James W. Rau**, 466 Marywood Dr., Alpena, MI 49707 (phone 517-354-2175).

**MINNESOTA** (Duluth, Minneapolis-St. Paul): **Richard Giesler**, Rt. 1, Box 111, Sturgeon Lake, MN 55783-9725 (phone 218-658-4507).

**MISSISSIPPI** (Biloxi, Columbus, Jackson): **Leonard R. Vernamonti**, 101 Easthaven Cir., Brandon, MS 39042-2805 (phone 601-824-0060).

**MISSOURI** (Kansas City, St. Louis, Springfield, Whiteman AFB): **John D. Miller**, HCR 77, Box 241-5, Sunrise Beach, MO 65079-9205 (phone 573-374-6977).

**MONTANA** (Bozeman, Great Falls): **Al Garver**, 203 Tam O'Shanter Rd., Billings, MT 59105 (phone 520-749-9864).

**NEBRASKA** (Lincoln, Omaha): **Richard Gaddie**, 7240 41st St., Lincoln, NE 68516-3063 (phone 402-472-3605).

**NEVADA** (Las Vegas, Reno): **Kathleen Clemence**, 35 Austrian Pine Cir., Reno, NV 89511-5707 (phone 775-849-3665).

**NEW HAMPSHIRE** (Manchester, Portsmouth): **Eric P. Taylor**, 17 Foxglove Ct., Nashua, NH 03062 (phone 603-883-6573).

**NEW JERSEY** (Andover, Atlantic City, Camden, Chatham, Forked River, Ft. Monmouth, Jersey City, McGuire AFB, Newark, Old Bridge, Trenton, West Orange): **Ethel Mattson**, 27 Maple Ave., New Egypt, NJ 08533-1005 (phone 609-758-2885).

**NEW MEXICO** (Alamogordo, Albuquerque, Clovis): **Peter D. Robinson**, 1804 Llano Ct. N.W., Albuquerque, NM 87107 (phone 505-343-0526).

**NEW YORK** (Albany, Binghamton, Buffalo, Jamestown, Nassau County, New York, Queens, Rochester, Staten Island, Syracuse, Westhampton Beach, White Plains): **Timothy G. Vaughan**, 7198 Woodmore Ct., Lockport, NY 14094 (phone 716-236-2429).

**NORTH CAROLINA** (Asheville, Charlotte, Fayetteville, Goldsboro, Kitty Hawk, Raleigh, Wilmington): **Gerald V. West**, 4002 E. Bishop Ct., Wilmington, NC 28412-7434 (phone 910-791-8204).

**NORTH DAKOTA** (Fargo, Grand Forks, Minot): **James M. Crawford**, 1720 9th St. S.W., Minot, ND 58701-6219 (phone 701-839-7268).

**OHIO** (Cincinnati, Cleveland, Columbus, Dayton, Mansfield, Youngstown): **Fred Kubli**, 823 Nancy St., Niles, OH 44446-2729 (phone 330-652-4440).

**OKLAHOMA** (Altus, Enid, Oklahoma City, Tulsa): **Don Johnson**, 309 Camino Norte, Altus OK 73521-1183 (phone 580-482-1387).

**OREGON** (Eugene, Klamath Falls, Portland): **John Lee**, P.O. Box 3759, Salem, OR 97302 (phone 503-581-3682).

**PENNSYLVANIA** (Allentown, Altoona, Coraopolis, Drexel Hill, Harrisburg, Johnstown, Lewistown, Monessen, Philadelphia, Pittsburgh, Scranton, Shiremanstown, York): **Bob Rutledge**, 295 Cinema Dr., Johnstown, PA 15905-1216 (phone 724-235-4609).

**RHODE ISLAND** (Newport, Warwick): **Wayne Mrozinski**, 90 Scenic Dr., West Warwick, RI 02893-2369 (phone 401-621-5438).

**SOUTH CAROLINA** (Charleston, Clemson, Columbia, Myrtle Beach, Sumter): **Roger Rucker**, 112 Mallard Pt., Lexington, SC 29072-9784 (phone 803-359-5565).

**SOUTH DAKOTA** (Rapid City, Sioux Falls): **Ronald W. Mielke**, 4833 Sunflower Trail, Sioux Falls, SD 57108 (phone 605-339-1023).

**TENNESSEE** (Chattanooga, Knoxville, Memphis, Nashville, Tullahoma): **Joseph E. Sutter**, 5413 Shenandoah Dr., Knoxville, TN 37909-1822 (phone 423-588-4013).

**TEXAS** (Abilene, Amarillo, Austin, Big Spring, College Station, Commerce, Dallas, Del Rio, Denton, Fort Worth, Harlingen, Houston, Kerrville, San Angelo, San Antonio, Wichita Falls): **Dennis Mathis**, P.O. Box 8244, Greenville, TX 75404-8244 (phone 903-455-8170).

**UTAH** (Clearfield, Ogden, Salt Lake City): **Brad Sutton**, 5221 West Rendezvous Rd., Mountain Green, UT 84050-9741 (phone 801-721-7225).

**VERMONT** (Burlington): **Dick Strifert**, 4099 McDowell Rd., Danville, VT 05828 (phone 802-338-3127).

**VIRGINIA** (Alexandria, Charlottesville, Danville, Langley AFB, McLean, Norfolk, Petersburg, Richmond, Roanoke, Winchester): **Bill Anderson**, 3500 Monacan Dr., Charlottesville, VA 22901-1030 (phone 804-295-9011).

**WASHINGTON** (Seattle, Spokane, Tacoma): **Tom Hansen**, 8117 75th St. S.W., Lakewood, WA 98498-4819 (phone 253-984-0437).

**WEST VIRGINIA** (Charleston, Fairmont): **Samuel Rich**, P.O. Box 444, White Sulphur Springs, WV 24986 (phone 304-536-4131).

**WISCONSIN** (Madison, Milwaukee, General Mitchell IAP/ARS): **Chuck Marotske**, 5406 Somerset Ln. S., Greenfield, WI 53221-3247 (phone 414-325-9272).

**WYOMING** (Cheyenne): **Stephan Pappas**, 2617 E. Lincolnway, Ste. A, Cheyenne, WY 82001 (phone 307-637-5227).

## NATIONAL OFFICERS



**BOARD CHAIRMAN**  
Thomas J. McKee  
Fairfax Station, Va.



**PRESIDENT**  
John J. Politi  
Sedalia, Mo.



**SECRETARY**  
Daniel C. Hendrickson  
Layton, Utah



**TREASURER**  
Charles A. Nelson  
Sioux Falls, S.D.



# This Is AFA

## REGION PRESIDENTS

Information regarding AFA activity within a particular state may be obtained from the president of the region in which the state is located.



**Central East Region**  
Delaware, District of Columbia, Maryland, Virginia, West Virginia  
**Thomas G. Shepherd**  
HCR 61, Box 167  
Timber Ridge Rd.  
Capon Bridge, WV 26711  
(304) 856-3868



**Far West Region**  
California, Guam, Hawaii  
**Michael J. Peters**  
5800 Lone Star Oaks Ct.  
Auburn, CA 95602-9280  
(916) 379-3842



**Florida Region**  
Florida, Puerto Rico  
**Bruce E. Marshall**  
9 Bayshore Dr.  
Shalimar, FL 32579-2116  
(850) 651-8155



**Great Lakes Region**  
Indiana, Kentucky, Michigan, Ohio  
**James E. Fultz**  
3915 Bay Tree Ln.  
Bloomington, IN 47401-9754  
(812) 333-8920



**Midwest Region**  
Illinois, Iowa, Kansas, Missouri, Nebraska  
**W. Graham Burnley Jr.**  
112 Elk Run Dr.  
Eureka, MO 63025  
(636) 938-6113



**New England Region**  
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont  
**David T. Buckwalter**  
30 Johnnycake Ln.  
Portsmouth, RI 02871  
(401) 841-6432



**North Central Region**  
Minnesota, Montana, North Dakota, South Dakota, Wisconsin  
**Gary H. Olson**  
3610 90th Ave. N.  
Moorhead, MN 56560-7238  
(218) 233-5130



**Northeast Region**  
New Jersey, New York, Pennsylvania  
**Karl Miller**  
412-21 N. Broadway  
Yonkers, NY 10701  
(914) 968-5499



**Northwest Region**  
Alaska, Idaho, Oregon, Washington  
**Steven R. Lundgren**  
4521 Drake St.  
Fairbanks, AK 99709  
(907) 451-4646



**Rocky Mountain Region**  
Colorado, Utah, Wyoming  
**Craig E. Allen**  
5708 West 4350 South  
Hooper, UT 84315  
(801) 731-6240



**South Central Region**  
Alabama, Arkansas, Louisiana, Mississippi, Tennessee  
**Frederick A. Zehrer III**  
6401 Thistlewood Ct.  
Montgomery, AL 36117-5223  
(334) 273-5577



**Southeast Region**  
Georgia, North Carolina, South Carolina  
**Rodgers K. Greenawalt**  
2420 Clematis Trail  
Sumter, SC 29150  
(803) 469-4945



**Southwest Region**  
Arizona, Nevada, New Mexico  
**William A. Lafferty Jr.**  
821 S. Camino Del Monte  
Green Valley, AZ 85614  
(520) 625-9449



**Texoma Region**  
Oklahoma, Texas  
**M.N. "Dan" Heth**  
3000 Steve Dr.  
Hurst, TX 76054-2118  
(817) 498-2880



**Special Assistant Pacific**  
**Gary L. McClain**  
Komazawa Garden House D-309  
1-2-33 Komazawa  
Setagaya-ku, Tokyo 154-0012  
Japan 81-3-3405-1512



**Special Assistant Europe**  
**Fred J. Ruggeri**  
PSC 1, Box 3451  
APO AE 09009  
011-49-0631-52071

## NATIONAL DIRECTORS

**Eric W. Benken**  
San Antonio  
**Roy A. Boudreaux**  
Venice, Fla.  
**Billy M. Boyd**  
Columbus, Miss.  
**John H. Breslin**  
Miami  
**Stephen P. "Pat" Condon**  
Ogden, Utah  
**John E. Craig II**  
Arlington, Va.  
**David R. Cumrock**  
Daytona Beach, Fla.  
**Eugene M. D'Andrea**  
Warwick, R.I.  
**Theron G. Davis**  
Fort Worth, Tex.  
**Dennis R. Davoren**  
Beale AFB, Calif.  
**Ted Eaton**  
Sun City West, Ariz.  
**Richard B. Goetze Jr.**  
Arlington, Va.  
**Richard E. Hawley**  
Newport News, Va.  
**Sam Johnson**  
Washington, D.C.

**Thomas J. Kemp**  
Fort Worth, Tex.  
**Doyle E. Larson**  
Burnsville, Minn.  
**Lloyd W. Newton**  
Avon, Conn.  
**Robert E. Patterson**  
Shalimar, Fla.  
**Jack C. Price**  
Pleasant View, Utah  
**Coleman Rader Jr.**  
Maple Grove, Minn.  
**I. Fred Rosenfelder**  
Renton, Wash.  
**Michael E. Ryan**  
Arlington, Va.  
**Thomas J. Stark**  
O'Fallon, Ill.  
**Jack H. Stead**  
Warner Robins, Ga.  
**William G. Stratemeier Jr.**  
Quogue, N.Y.  
**Charles G. Thomas**  
Albuquerque, N.M.  
**Ronald E. Thompson**  
Beavercreek, Ohio  
**Arthur F. Trost**  
Walnut Creek, Calif.

**Howard R. Vasina**  
Colorado Springs, Colo.  
**Edward I. Wexler**  
Savannah, Ga.  
**Robert M. Williams**  
Omaha, Neb.  
**Mark J. Worrick**  
Denver  
**directors emeritus**  
**John R. Alison**  
Washington, D.C.  
**Joseph E. Assaf**  
Sandwich, Mass.  
**Richard H. Becker**  
Oak Brook, Ill.  
**David L. Blankenship**  
Tulsa, Okla.  
**John G. Brosky**  
Pittsburgh  
**Dan Callahan**  
Centerville, Ga.  
**Robert L. Carr**  
Pittsburgh  
**George H. Chabbott**  
Dover, Del.

**Charles H. Church Jr.**  
Lenexa, Kan.  
**O.R. Crawford**  
Blanco, Tex.  
**R.L. Devoucoux**  
Portsmouth, N.H.  
**Jon R. Donnelly**  
Richmond, Va.  
**Russell E. Dougherty**  
Arlington, Va.  
**George M. Douglas**  
Colorado Springs, Colo.  
**Charles G. Durazo**  
McLean, Va.  
**Joseph R. Falcone**  
Ellington, Conn.  
**E.F. "Sandy" Faust**  
San Antonio  
**Joe Foss**  
Scottsdale, Ariz.  
**John O. Gray**  
Arlington, Va.  
**Jack B. Gross**  
Harrisburg, Pa.  
**Martin H. Harris**  
Montverde, Fla.  
**Gerald V. Hasler**  
Encinitas, Calif.

**Monroe W. Hatch Jr.**  
Clifton, Va.  
**H.B. Henderson**  
Santa Ana, Calif.  
**John P. Henebry**  
Winnetka, Ill.  
**David C. Jones**  
Arlington, Va.  
**Victor R. Kregel**  
Colorado Springs, Colo.  
**Jan M. Laitos**  
Rapid City, S.D.  
**Nathan H. Mazer**  
Roy, Utah  
**William V. McBride**  
San Antonio  
**James M. McCoy**  
Bellevue, Neb.  
**Bryan L. Murphy Jr.**  
Fort Worth, Tex.  
**Ellis T. Nottingham**  
Washington, D.C.  
**William C. Rapp**  
Williamsville, N.Y.  
**Julian B. Rosenthal**  
Durham, N.C.  
**Peter J. Schenk**  
Pinehurst, N.C.

**Walter E. Scott**  
Dixon, Calif.  
**Mary Ann Seibal-Porto**  
St. Louis  
**Joe L. Shosid**  
Fort Worth, Tex.  
**James E. "Red" Smith**  
Princeton, N.C.  
**R.E. "Gene" Smith**  
West Point, Miss.  
**William W. Spruance**  
Marathon, Fla.  
**Thos. F. Stack**  
Lafayette, Calif.  
**Harold C. Stuart**  
Jensen Beach, Fla.  
**Walter G. Vartan**  
Chicago  
**A.A. West**  
Hayes, Va.  
**Sherman W. Wilkins**  
Issaquah, Wash.  
**Joseph A. Zranka**  
Bloomfield, Conn.  
**Richard Carr**  
National Chaplain Emeritus  
Springfield, Va.

**ex officio**  
**John A. Shaud**  
Executive Director  
Air Force Association  
Arlington, Va.  
**Donald J. Harlin**  
National Chaplain  
Albuquerque, N.M.  
**John D. Ryan**  
National Commander  
Arnold Air Society  
Champaign, Ill.

For information  
on state and  
local AFA  
contacts, see  
[www.afa.org](http://www.afa.org)

By Frances McKenney, Assistant Managing Editor

## AFA's Mission, Vision, and Values

At its February meeting in Orlando, Fla., the Air Force Association's Board of Directors approved a recommendation made by the Long-Range Planning Committee and formalized a statement of the association's mission, vision, and values.

**Mission:** The Air Force Association

- Advocates aerospace power and a strong national defense
- Supports the United States Air Force and the Air Force Family
- Educates the American people about the importance of aerospace power to a strong national defense

**Vision:** The premier professional military association widely recognized as the principal advocate for aerospace power and military preparedness for the security and defense of the United States and its allies

**Values:**

- Integrity first
- Service before self
- Excellence in all we do

At the same board of directors meeting, AFA National Chairman of the Board Thomas J. McKee proposed that R.E. "Gene" Smith be named an AFA national director emeritus. The board unanimously approved. Smith was AFA National President from 1994 to 1996 and National Chairman of the Board from 1996 to 1998.

## AFA Improves Web Site

It's packed with more information, is easier to navigate, and gives direct access to your local media and to Congress.

AFA gave its Web site a major facelift and debuted the new look and several new features in February. A clean design and hover buttons are the most visible improvements to the site. Hovering over a button reveals its many subcategories, thus cutting down on the on-screen clutter and on the number of clicks it takes to reach a given subject.

AFA improved its Government Relations section by adding to the Contact Congress button. AFA members



*Rep. Joe Wilson (R-S.C.) receives an AFA coin from AFA National Chairman of the Board Thomas McKee (left). McKee and AFA Executive Director John Shaud (right) met with Wilson in January, a month after he was elected to fill the seat of the late Rep. Floyd Spence. Wilson is on the House Armed Services Committee and is a colonel in the South Carolina Army National Guard.*

can now learn how their Capitol Hill representatives voted, contact them directly, learn what political action committees contributed to their campaigns, and track actions on Capitol Hill.

A new Media Guide section—located under the Media Room hover button—provides e-mail connections to news media, so AFA members can send a letter to the editor or a press release about a chapter event without having to hunt up addresses or phone numbers for their local newspaper, TV, or radio station.

The number of *Air Force Magazine* articles archived on the Web site continues to grow. Editorials are now archived back to 1990 and "Verbatim" to 1994.

The Members Only section of AFA's Web site has become more accessible. Although some items require a password and log in, members no longer need to register to retrieve such general information as AFA's "Newslines" newsletter, AFA governing documents, and other resources.

AFA originally debuted its Web site at the 1995 National Convention.

## Fur Rendezvous

It started in the 1930s as a winter sports tournament in Anchorage, Alaska.

Back then, fur trading was the state's No. 2 industry, so trappers and buyers used the event to get together for business and fun, competing for prizes for the finest ermine or best fox pelt. Today, Anchorage calls the 10-day February festival Fur Rendezvous. Its activities run the gamut from dogsled races, snowshoe softball, and an Eskimo blanket toss to art shows, musicals, and formal balls.

Fur Rendezvous has for the last 25 years included a Salute to the Military banquet. This year, USAF Gen. Richard B. Myers, Chairman of the Joint Chiefs of Staff, was guest speaker, introduced to the audience of more than 700 by Sen. Ted Stevens (R-Alaska).

The Anchorage Chapter sponsored a table at the banquet, with

SrA. Brian M. Hamilton from the 611th Air Control Squadron at Elmendorf Air Force Base as their special guest. He was honored as the base's Airman of the Year at the gathering.

Among those joining Hamilton at the chapter table were Lt. Col. Rich Stephenson, commander of the 517th Airlift Squadron at Elmendorf; Gary A. Hoff, chapter president; Victor R. Davis, vice president for membership; Alfred H. Bennett, John H. Cloe, MSgt. Arleen K. Heath, and MSgt. Mark A. Heath. The chapter was recognized in the Salute to the Military program as a Red Table Sponsor.

The Armed Services YMCA of Alaska organizes the banquet, which honors all military branches, including the US Coast Guard and Alaska State Defense Force.

### Three in a Row

At the Maryland state annual awards program, the **Thomas W. Anthony (Md.) Chapter** was named the No. 1 chapter in the state for the third year in a row.

George Apostle, Maryland state president, made the presentation at the awards dinner, held at Ft. Meade, Md. Other award recipients included Frank M. Coorsen, a **College Park Airport Chapter** member and state treasurer, who was named state Member of the Year.

Brig. Gen. Glenn F. Spears, commander of the 89th Airlift Wing at Andrews AFB, Md., and a chapter member, later accepted a duplicate of the chapter's award plaque and in a show of support for the chapter had it mounted on the wall at the wing's headquarters conference room.



*Randolph McHone (left), Northeast Iowa Chapter president, and Carl Zimmerman (right), chapter member, chat with Elizabeth and Matthew Hosford about the US Air Force Academy. The two were among the students and parents who attended the chapter's annual Grassroots Seminar. The evening seminar allows prospective cadets and their parents to meet service academy and ROTC representatives and learn about admissions requirements, cadet life, and military service.*

### Action

When you want something done, assign it to an action officer. The **Donald W. Steele Sr. Memorial (Va.) Chapter** hosted a Salute to AF/XO, specifically to honor several action officers in the Office of the Deputy Chief of Staff for Air and Space Operations.

Lt. Gen. Charles F. Wald, the new DCS, air and space operations, thanked the individuals for their hard work—especially in the wake of the Sept. 11 terrorist attacks. He helped James T.

Hannam, chapter president, present awards to Lt. Cols. Michael Babcock, Steven Bills, and Randy Tymofichuk; Maj. Jim Eck, Dave Hambleton, Keith Jones, Michael Puffenbarger, Scott Webber, and Chris Wasdin; Capt. Laura Ryan; and TSgt. Tonya Hawkins.

AFA National President McKee and John E. Craig II, an AFA national director, were among the 200 guests who gathered at Ft. Myer, Va., for the reception.

Also in January, Peter B. Teets, the new undersecretary of the Air Force, addressed Steele Chapter members at a membership luncheon at the Army Navy Country Club in Arlington, Va. Teets outlined his new responsibilities—assigned to him on recommendation of the Space Commission—for acquisition and operation of all US space-based reconnaissance and intelligence systems.

A former Lockheed Martin executive, Teets spoke to an audience of more than 160 chapter members, foreign air attaches, and defense industry representatives, Hannam said.

### First Grant, First Step

Capt. Timothy W. Trimmell, president of the **Brig. Gen. Harrison R. Thyng (N.H.) Chapter**, presented the group's first Aerospace Education Foundation Educator Grant to Louise Stevens, a fifth-grade teacher at Main Dunstable Elementary School in Nashua, N.H.

The \$250 grant will allow the entire

## AFA Conventions

May 3-4	Tennessee State Convention, Chattanooga, Tenn.
May 3-5	New Jersey State Convention, Cape May, N.J.
May 10-11	South Carolina State Convention, Sumter, S.C.
May 17-19	Mississippi State Convention, Columbus, Miss.
June 8	North Carolina State Convention, Wilmington, N.C.
June 14-16	New York State Convention, Owego, N.Y.
June 14-16	Ohio State Convention, Youngstown, Ohio
June 25-26	Alaska State Convention, Fairbanks, Alaska
June 28-29	Oklahoma State Convention, Altus, Okla.
July 19-21	Florida State Convention, Cape Canaveral, Fla.
July 20	Kansas State Convention, McConnell AFB, Kan.
July 26-27	Texas State Convention, San Antonio
Aug. 2-3	California State Convention, Vandenberg AFB, Calif.
Aug. 2-3	Illinois State Convention, Galesburg, Ill.
Aug. 16-17	Utah State Convention, Ogden, Utah
Aug. 17	Georgia State Convention, Savannah, Ga.
Aug. 18	Massachusetts State Convention, Worcester, Mass.
Aug. 23-24	Colorado State Convention, Denver
Sept. 7	Delaware State Convention, Dover, Del.
Sept. 15-18	AFA National Convention, Washington, D.C.
Sept. 21	New Hampshire State Convention, Manchester, N.H.



**Maj. Dennis Davoren, an AFA national director, presents a chapter Outstanding Civilian Employee award to Robert Brandewie (center) of the Defense Manpower Data Center in Monterey, Calif. The David J. Price/Beale Chapter and C. Farinha Gold Rush Chapter joined forces for recent awards presentations. At left is Ken Schefflen of the DMDC, Arlington, Va.**

fifth grade—about 125 pupils—to take a field trip to the Christa McAuliffe Planetarium in Concord, N.H.

Trimmell reports that Stevens, who has 22 students in her homeroom,

teaches a segment on Mars and space exploration and had wanted to take this field trip for years. Funds for transportation were unavailable until Trimmell, whose son attends Main

Dunstable, told the school about the AEF grant.

The students plan to take in the planetarium's "Destination: Mars" program and learn about space colonization, said Trimmell, who is an acquisitions program manager at Electronic Systems Center, Hanscom AFB, Mass. He added that presentation of the educator grant was the first step in the chapter's plan for a greater level of community and aerospace education involvement.

**More AFA/AEF News**

■ The **Montgomery (Ala.) Chapter** hosted a reception at the city's visitors center in January to introduce business and community leaders to the F-22. Col. Albert A. Allenback Jr., chapter president, and Lt. Gen. Donald A. Lamontagne, commander of Air University, were among the guests at the reception. F-22 contractor Lockheed Martin gave a model of the Raptor to the city, which put it on display in the visitors center.

■ **Karen Rankin, Alamo (Tex.) Chapter** president, and Kaye H. Biggar, chapter secretary and vice president for leadership development, were guests on AM radio station KLUP on a Sunday morning in February. The hour-long "Healthy, Wealthy, and Wise" program, hosted by longtime local radio personality George McKenzie, gave them an opportunity to promote the chapter's programs and AEF. Rankin also spoke about concurrent receipt, which, if funded, would allow disabled military retirees to receive full retired pay as well as disability compensation. Right now, their pay is offset by the amount of disability pay received from the Department of Veterans Affairs.

■ The **Leigh Wade (Va.) Chapter** held its annual awards banquet in October, where its new president, Julie Bowles, was introduced. William Anderson, Virginia state president, attended the meeting in Colonial Heights, Va. He joined Bowles in presenting several AFA national-level awards (as listed in the November 2001 issue) as well as state and chapter awards. Among the awardees was George Aguirre, who received a citation recognizing three decades of service to the chapter.

**Have AFA/AEF News?**

Contributions to "AFA/AEF 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: afa-aef@afa.org.



# NEW at AFA!



#139. AFA Polo Shirt by Lands' End. Mesh with full color AFA logo, available in Chambray, Heather. Sizes: M, L, XL. \$31



#107. AFA Logo tie. 100% silk available in Yellow, Dk Blue, Burgundy. \$23



#118. AFA T-Shirt. 50/50 cotton/poly available in Ash Gray, White. AFA logo on front, eagle on back. Unisex sizes: M, L, XL, XXL. \$15



#138. AFA Polo Long Sleeve. Pima cotton by Lands' End with full color AFA logo, available in Black, Ivory. Unisex sizes: M, L, XL. \$38

**Order TOLL FREE! 1-800-727-3337**  
 Add \$3.95 per order for shipping and handling  
 OR shop online at [www.afa.org](http://www.afa.org)

Introducing

# AFA's NEW BANKING CENTER

For AFA Members Only



It's no ordinary bank.  
It's open 24/7.  
It offers great interest rates.  
It features FREE ATM\* and  
Online Bill Pay Service.  
It supports The Aerospace  
Education Foundation.  
It's fully FDIC insured.

- You can earn higher interest rates, among the best in the country on Money Market, Checking and Certificates of Deposit Accounts.\*\*
- You can receive a distinctive AFA ATM/Debit card with no fees for withdrawing cash at any MAC, CIRRUS, HONOR and STAR machine. PLUS you will be reimbursed for ATM fees other banks might charge.\*\*
- You can pay all your bills online FREE of charge.\*\*\*
- You can open an account and a donation will be made on your behalf to The Aerospace Education Foundation.



## Introductory Offer

For a limited time, when you open and fund any account in the AFA Banking Center, we'll send you a FREE AFA BASEBALL CAP with gold insignia.



The Aerospace Education Foundation benefits too! For every account opened and funded, a donation on your behalf will be made to The Aerospace Education Foundation. These funds will go toward Spouse Scholarships and the Pitsenbarger Award, both created to benefit the Air Force family.

Visit  
[www.afabankingcenter.com](http://www.afabankingcenter.com)  
to apply online today!

or Call 1-800-229-9505 and a member of the customer care team can answer your questions and take your application over the phone.

ABOUT THE BANK: All Checking, Savings, Money Market and Certificate of Deposit Accounts are provided by Union Federal Bank. These accounts are insured by the FDIC up to \$100,000 per customer.

\* You will also be reimbursed up to \$6.00 in total charges per statement period for fees other banks might charge for using their network.

\*\* For Checking and Money Market Accounts with a balance of \$200 or more.

\*\*\* Free for customers with direct deposit or a minimum balance of \$1,500.

**1st Tactical Depot Sq.**, including the 1st Tactical Spt. Sq and 9th Aviation Sq, UK. Sept. 12-15 in San Antonio. **Contacts:** Fred Kloeppel, 4453 Huntington Cir., Niceville, FL 32578-2385 (850-729-2884) or Fred Chanatry, 3709 Big Sky Dr., Albuquerque, NM 87111 (505-292-7475).

**9th BG.** May 19-23 at the Park Inn Regency Hotel in Omaha, NE. **Contact:** Carnevale & Assoc., PO Box 1230, Sonoita, AZ 85637 (phone: 800-659-8808 or fax: 520-455-5866) (carne@dakotacom.net).

**20th BS.** Oct. 11-13 at the Officers' Club, Barksdale AFB, LA. **Contacts:** Frank Rogers, 2426 Melrose Pl., Bossier City, LA 71111 (318-747-4985) or Ray Burgess, 221 Norcross St., Bossier City, LA 71111 (318-746-2444).

**28th ATS (WWII)** and LSS, MATS, MAS, Hill AFB, UT (1953-69). Aug. 30-Sept. 1 at the Marriott Courtyard Hotel in Layton, UT. **Contact:** Jim Thurell, 5460 S. 150 E., Washington Terrace, UT 84405 (801-475-9690).

**28th Wg Assn** and associated units, Ellsworth AFB, SD (1947-present). Sept. 5-9 in Rapid City, SD. **Contact:** Robert Heller, c/o 28th Wing Association, PO Box 3092, Rapid City, SD 57709 (605-721-3023) (skater@rushmore.com).

**33rd Troop Carrier Sq.**, 374th Troop Carrier Gp, Fifth AF (WWII). June 20-23 at the Radisson Hotel in Aurora, CO. **Contact:** Earl Kohler, 8060 E. Girard Ave., Apt. 211, Denver, CO 80231 (KOHLE8060@earthlink.net).

**34th FS.** June 28-29 at Hill AFB, UT. **Contact:** Linda Wampler (801-775-3283) (linda.wampler@hill.af.mil).

**47th BG, A-20s (WWII).** May 1-5 in Charlotte, NC. **Contact:** William Jones (phone: 803-548-0822 or fax: 803-548-0788) (HOJO2@Comporium.net).

**47th BW (1950-62)**, all assigned and attached to RAFs Sculthorpe and Alconbury, UK. June 9-16 at RAF Sculthorpe, UK. **Contact:** Glenn Ludlow, 1504 Mahon Ave., North Vancouver, BC, Canada V7M2S5 (604-988-5316) (afnktown@yahoo.com).

**48th TCS,** 313th TCG. July 9-11 in Mentor, OH. **Contact:** Dudley Rose, PO Box 123, Madison, OH 44057-0123 (440-428-3284).

**68th Air Service Gp,** China (WWII). Sept. 23-27 at the Flamingo Hotel in Las Vegas. **Contact:** Bob Pierce (303-985-1933) (bobpierce14@aol.com).

**92nd USAAF-USAF Memorial Assn**, including 92nd BW, ARW, and BG and 325th BS. Sept. 19-24 at the Marriott Riverfront Hotel in Savannah, GA. **Contact:** Irv Baum, 3935 Young Ave., Napa, CA 94558 (marirv92bg@aol.com).

**98th BG Veterans Assn.** Sept. 24-28 at the Crowne Plaza Hotel in Dayton, OH. **Contacts:** Ken Laninga (616-751-8231) or Dennis Posey (770-509-7734).

**301st BG/Wg Assn.** Oct. 31-Nov. 3 in San Antonio.

**Contact:** Erwin Eckert, 14215 Hunter Hill, San Antonio, TX 78217-1349 (210-653-2368).

**306th BW.** Sept. 12-17 in New Orleans. **Contact:** Joe Demes (312-452-4417) (joedimps@aol.com).

**365th FG.** May 3-7 at Valley Forge Military Academy in Wayne, PA. **Contact:** Jack Almond, 11000 Rock Ridge Rd., Oklahoma City, OK 73120 (405-751-9108) (julius.h.almond@worldnet.att.net).

**390th Strategic Missile Wg (1962-84).** Sept. 24-29 in Orlando, FL. **Contacts:** John or Sue Lasher, PO Box 17916, Tucson, AZ 85731 (520-886-7157) (<http://www.390smw.org>).

**397th BG,** Ninth AF (WWII). Oct. 9-13 in Tucson, AZ. **Contact:** Bill Spurrier, 1675 Los Osos Valley Rd., Sp. 220, Los Osos, CA 93402 (805-528-5437).

**410th BG, ETO (WWII).** May 5-8 at Harrah's Strip Hotel and Casino in Las Vegas. **Contact:** Milt Gussow, 130 Lestrade Pl., Biloxi, MS 39530 (hotel reservations: 800-427-7247, ask for code name 410BG).

**450th BG.** Oct. 9-14 at the Doubletree Hotel Crystal City in Arlington, VA. **Contact:** Al Goodman, 2 Portside Ct., Grayslake, IL 60030 (847-543-8381) (GOBARAL@AOL.COM).

**454th BS,** 323rd BG, Ninth AF (WWII). Oct. 2-6 at the Wyndham Myrtle Beach Resort Hotel in Myrtle Beach, SC. **Contact:** Joe Havrilla, 1208 Margaret St., Munhall, PA 15120-2048 (412-461-6373).

**459th BG Assn,** Fifteenth AF (WWII). Oct. 3-6 at the Hilton St. Louis Frontenac Hotel in St. Louis. **Contacts:** Delbert Wofford, 624 Suffolk Dr., Owensboro, KY 42303-7024 (270-683-4613) or John Devney, 90 Kimbark Rd., Rochester, NY 14610-2738 (585-381-6174).

**485th Tactical Missile Wg.** June 13-15 at the Radisson Hotel in Charleston, SC. **Contact:** John Rudzianski, 485th TMW Alumni Association, PO Box 339, South Montrose, PA 18843-0339 (570-278-2482) (jrudz@epix.net).

**793rd Military Police Battalion.** Sept. 18-21 at the Renaissance St. Louis Airport Hotel in St. Louis. **Contact:** Frank De Rosa, 640 S. Kaspar Ave., Arlington Heights, IL 60005-2320 (847-255-3977).

**6147th TCG (Korea).** Sept. 9-15 in Charleston, SC. **Contact:** Dick Souza, 79 Bradstreet Ave., Lowell, MA 01851-4120 (978-453-3887).

**Air Forces Escape & Evasion Society.** May 2-5 in Tampa, FL. **Contacts:** Clayton David, 19 Oak Ridge Pond, Hannibal, MO 63401 (573-221-0441) (davidafe@packetx.net) or Paul Kenney, 1041 N. Jamestown Rd., Apt. B, Decatur, GA 30033 (404-929-8808).

**Air Force Photo Mapping Assn.** Sept. 25-28 at the Hope Hotel and Conference Center, Wright-Patterson AFB, OH. **Contact:** AFPMA, 225 Southside Ave., Webster Groves, MO 63119 (phone: 314-961-0519 or fax: 314-961-3177) (photomapper@aol.com).

**Alaska Air National Guard.** May 30-June 2 in Anchorage, Alaska. **Contact:** Gene Ramsay, Kulis ANG Base, 5005 Raspberry Rd., Anchorage, AK 99502 (907-249-1239) (glramsay@yahoo.com).

**Arc Light/Young Tiger.** Aug. 30-Sept. 2 in San Antonio. **Contact:** Albert Litzler, 29308 No Le Haze Dr., Fair Oaks Ranch, TX 78015 (830-981-4520) (alitzler@aol.com).

**Aviation Cadet Class 42-B,** all nine graduating bases. May 14-19 in Denver. **Contact:** Len Horner, 4410 Marigold Ln., Littleton, CO 80123-2731 (303-794-7261) (lensterhorn@prodigy.net).

**Berlin Airlift Veterans Assn (1948-49).** Sept. 26-29 at Barksdale AFB, LA. **Contact:** J.W. Studak, 3204 Benbrook Dr., Austin, TX 78757-6804 (512-452-0903).

**Bolling AFB, DC,** B-25 Bunch (flight-line and crew chiefs). May 5-9 in Biloxi, MS. **Contact:** C.J. Smith, 5249 Old A&P Rd., Ripley, OH 45167-9747 (937-375-4671).

**Flying Tigers of the 14th AF Assn, CBI (1941-45).** Sept. 23-27 at the Flamingo Hotel in Las Vegas. **Contact:** McKay Nelson, 480 E. Rainbow Canyon Dr., Cedar City, UT 84720-2724 (435-586-1480).

**Nagoya/Komaki Air Base Reunion Assn,** Fifth AF, Japan. June 6-9 in Harrisburg/Camp Hill, PA. **Contact:** John Campo (816-407-0055) (JAYMCEE@aol.com).

**Pilot Class 44-D,** Luke Field, AZ. May 13-17 at the Red Lion Inn in Phoenix. **Contact:** Harry Gandrup (515-382-4365).

**USAF OCS Class 51-C,** Lackland AFB, TX. Sept. 12-15 in San Antonio. **Contact:** Joyce Bithell Eckenbrecht, 2665 Pierce Ave., Ogden, UT 84401 (877-860-4600, access 162304).

Seeking former members of the **345th Tactical Airlift Sq** for a reunion in 2003. **Contact:** J. Conlee, 12366 Timberlane Trace S., Granger, IN 46530 (REUNION345TAS@aol.com).

Seeking former members of the **465th FIS,** Griffiss AFB, NY (1956-59), for a reunion in the summer of 2003. **Contacts:** Kenneth McDaniel (405-374-2237) or Bob Rodzwell (480-821-8114) (bobrodz@hotmail.com).

Seeking members of **Aviation Cadet Class 42-X** for a reunion in September in San Antonio. **Contact:** Franklin Lane, PO 5348, El Dorado Hills, CA 95762 (phone: 916-933-6881 or fax: 916-933-9614) (effquell@aol.com).

Seeking former members of **Vance Class 68-G** for a reunion. **Contact:** Duane Cocking, 8322 N. Glenarvon Ln., Newman Lake, WA 99025 (509-226-2385) (ingJudy@msn.com).

Mail unit reunion notices four months ahead of the event to "Unit Reunions," *Air Force Magazine*, 1501 Lee Highway, Arlington, VA 22209-1198. Please designate the unit holding the reunion, time, location, and a contact for more information. We reserve the right to condense notices.



# Books

Compiled by Chequita Wood, Editorial Associate

## *The 11 Days of Christmas: America's Last Vietnam Battle.*

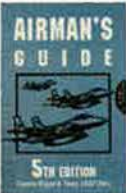
Marshall L. Michel III, Encounter Books, San Francisco (800-786-3839). 325 pages. \$16.95.



*An Eagle's Flight: A Biography of Brig. Gen. Ernest K. Warburton, US Air Force.* James P. Coyne, Dorrance Publishing Co., Pittsburgh (800-788-7654). 218 pages. \$15.00.



*Jane's Battles With the Luftwaffe: The Bomber Campaign Against Germany 1942-45.* Theo Boiten and Martin Bowman, HarperCollins Publishers, New York (212-207-7000). 236 pages. \$44.95.



*Airman's Guide.* 5th ed. Capt. Wayne A. Valey, USAF (Ret.), Stackpole Books, Mechanicsburg, PA (800-732-3669). 344 pages. \$16.95



*First to Fly: North Carolina and the Beginnings of Aviation.* Thomas C. Parramore, The University of North Carolina Press, Chapel Hill, NC (800-848-7424). 372 pages. \$29.95.



*Judge Advocates in Combat: Army Lawyers in Military Operations From Vietnam to Haiti.* Frederic L. Borch, Supt. of Documents, Pittsburgh (866-512-1800). 413 pages. \$44.00.

*America the Vulnerable: Our Military Problems and How To Fix Them.* John F. Lehman and Harvey Sicherman, eds. Foreign Policy Research Institute, Philadelphia (215-732-3774). 248 pages. \$20.00.



*Flight Deck: US Navy Carrier Operations 1940-1945.* Al Adcock, Squadron/Signal Publications, Carrollton, TX (800-527-7427). 64 pages. \$14.95.



*The Long Search for a Surgical Strike: Precision Munitions and the Revolution in Military Affairs.* David R. Mets, Air University Press, Maxwell AFB, AL (334-953-2773). 79 pages. \$8.00.



*Bone: B-1 Lancer in Action: Aircraft No. 179.* Lou Drendel, Squadron/Signal Publications, Carrollton, TX (800-527-7427). 49 pages. \$9.95.

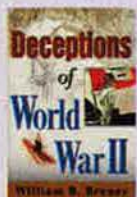


*History of the Office of the Secretary of Defense, Vol. III: Strategy, Money, and the New Look, 1953-1956.* Richard M. Leighton, Supt. of Documents, Pittsburgh (866-512-1800). 792 pages. \$74.00.



*Networks and Networks: The Future of Terror, Crime, and Militancy.* John Arquilla and David Ronfeldt, eds. RAND, Santa Monica, CA (877-584-8642). 371 pages. \$25.00.

*Deceptions of World War II.* William B. Breuer, John Wiley & Sons, New York (800-225-5945). 242 pages. \$24.95.



*Into the Rising Sun: In Their Own Words, World War II's Pacific Veterans Reveal the Heart of Combat.* Patrick K. O'Donnell, The Free Press, New York (800-323-7445). 314 pages. \$26.00.



*Reggiane Fighters in Action: Aircraft No. 177.* George Punka, Squadron/Signal Publications, Carrollton, TX (800-527-7427). 49 pages. \$9.95.



*A Dream of Wings: Americans and the Airplane 1875-1905.* Tom D. Crouch, W.W. Norton & Co., New York (800-233-4830). 349 pages. \$14.95.



*Iron Hand: Smashing the Enemy's Air Defences.* Anthony M. Thornborough and Frank B. Mormillo, Motorbooks International, Osceola, WI (800-458-0454). 310 pages. \$32.95.



*The War Within World War II: The United States and International Cartels.* Robert Franklin Maddox, Praeger Publishers, Westport, CT (800-225-5800). 232 pages. \$64.00.

# Pieces of History

Photography by Paul Kennedy


## Huskie



For a pilot downed in the Vietnam War, a Huskie helicopter with a parascue jumper being lowered on a jungle penetrator was a welcome sight. USAF began taking delivery of the Huskie—like this one on display at the USAF Museum—in the late 1950s to handle crash rescue and aircraft firefighting duties. Built by Kaman Aircraft Corp., the Huskie had twin intermeshing rotors

that provided great lift capacity per horsepower. The Huskie's powerful downwash, combined with foam from a fire-suppression kit, could open a path to the fire, helping rescuers reach the crash victim. USAF used Huskies in many roles, including support of missile sites and transport of troops and equipment.

Courtesy US Air Force Museum, Wright-Patterson AFB, Ohio

A silhouette of a Northrop Grumman aircraft, possibly an F-35, is shown in flight against a dark blue sky. Below the aircraft, a bright sun is setting or rising over a body of water, creating a golden glow and a horizon line. The overall scene is dramatic and evokes a sense of looking beyond the horizon.

It takes a whole new  
vision to see what's  
over the horizon.

Northrop Grumman is seeing the battlefield in a brand new light. We've assembled six unique sectors of talented individuals with a single shared vision. To deliver defense technologies that make our forces stronger in air and space, on land, and in the sea. And in cyberspace, information technologies that make us more mobile, more agile, more precise. It's a vision that is redefining the battlefield. In every dimension.

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

© 2002 Northrop Grumman Corporation

**NORTHROP GRUMMAN**  
*Integrated Systems*



WE'RE JUST AS FAMOUS FOR  
**GROUND SUPERIORITY.**

At Boeing, we've taken  
military aerospace support  
to a whole new level. From  
training and support systems  
to maintenance, modification  
and logistics services, we  
provide integrated, affordable  
life-cycle customer support  
solutions. From the ground up.

 **BOEING**<sup>®</sup>  
*Forever New Frontiers*

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