


April 2000/\$3

# AIR FORCE

JOURNAL OF THE AIR FORCE ASSOCIATION

MAGAZINE



**Expeditionary Force**  
The New Way of Deployments

The 2001 Defense Budget

The Fall of Saigon

Showdown Time on Tricare

**MISSION:** Lockheed Martin has built every C-130 ever made. The C-130X Avionics Modernization Program (AMP) will upgrade various models to make them ready for the 21st century, and it's no job for beginners. It will require total knowledge of the originals—their design, construction and operational history. Only Lockheed Martin has this knowledge.



# Our credentials for C-130X? C-130A,B,D,E,F,G,H,J,K,N,P,Q,R,S,T,V.

**LOCKHEED MARTIN**



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

**SUCCESS:** Passion for the C-130 family runs in Lockheed Martin's veins. So we've assembled a dedicated C-130X AMP team whose focus, like the guarantee they'll live up to, is 100%. Your existing C-130s can operate at a level close to the latest state-of-the-art Hercules. We're the people who created that level. We're by far your best choice to do it again.

# AIR FORCE

JOURNAL OF THE AIR FORCE ASSOCIATION

# MAGAZINE

April 2000, Vol. 83, No. 4

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

- 4 Letters
- 9 The Chart Page
- 12 Aerospace World
- 21 Senior Staff Changes
- 22 Index to Advertisers
- 80 AFA/AEF National Report
- 85 Reunions
- 85 Bulletin Board
- 87 This Is AFA
- 88 Pieces of History



**About the cover:** F-16CGs from the 150th FW, New Mexico ANG, pop decoys over Kuwait on a deployment. See "An Expeditionary Force," p. 34. USAF photo by SrA. Greg L. Davis.

## 2 Editorial: Nuclear Rumbles

By John T. Correll  
*The Cold War is not quite as over as we thought it was.*

## 24 Washington Watch: Still in the Hole

By Robert S. Dudley  
*The 2001 defense budget does not cover today's most urgent needs or begin to address long-term requirements of the force.*

## 28 Kosovo Retrospective

By John A. Tirpak  
*USAF leaders and others tell more of the story behind the Allied Force campaign.*

## 34 An Expeditionary Force

Photography by USAF combat camera photographers  
*They're saying that the force is going back to its roots as a deployable force to be reckoned with.*

## 42 Toward a "Concert for Freedom"

By Keith J. Costa  
*The Hart-Rudman Commission ponders the ways in which the US can reconcile national security ends and means.*

## 48 It's Showdown Time on Tricare

By Tom Philpott  
*Health care for military retirees isn't a big priority for the Administration, but Congress may decide otherwise.*

## 52 The Changing World of Air Force Medicine

By Peter Grier  
*The new surgeon general says the system will center on two "platforms"—expeditionary deployments and the health care clinic.*



## 56 The Congressional Defense Establishment

Compiled by Chequita Wood  
*A photochart of Capitol Hill defense committee members.*

## 62 Trends in Defense Spending

By Robert S. Dudley  
*Defense spending has fluctuated greatly over four decades, but the current budget is lower than all but eight of the preceding 40.*

## 68 The Fall of Saigon

By Walter J. Boyne  
*Twenty-five years ago this month, the Vietnam War came to an end with bewildering speed.*

## 75 The Surge in Junior ROTC

By Bruce D. Callander  
*Critics complain that it teaches militarism, but a great many schools and communities like it, and so does Congress.*

AIR FORCE Magazine (ISSN 0730-6784) April 2000 (Vol. 83, 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:** \$30 per year; \$90 for three-year membership. **Life Membership (nonrefundable):** \$500 single payment, \$525 extended payments. **Subscription Rate:** \$30 per year; \$25 per year additional for postage to foreign addresses (except Canada and Mexico, which are \$9 per year additional). Regular issues \$3 each. Special issues (USAF Almanac issue and Anniversary issue) \$5 each. **Change of address** requires four weeks' notice. Please include mailing label. **POSTMASTER:** Send changes of address to Air Force Association, 1501 Lee Highway, Arlington, VA 22209-1198. Publisher assumes no responsibility for unsolicited material. Trademark registered by Air Force Association. Copyright 2000 by Air Force Association.

By John T. Correll, Editor in Chief

## Nuclear Rumbles

**T**HE Russians announced Dec. 17 that they were lowering the nuclear threshold. From here on, they warned, they are ready to use nuclear weapons in smaller-scale conflicts.

This more aggressive nuclear doctrine is part of a broad—and very popular—program in which Russia is remilitarizing itself.

The Russians have just fielded another increment of their new ICBM, the SS-27 Topol-M. It is said to be more accurate than Russia's older missiles, and more effective against ballistic missile defenses. A new generation of nuclear submarines is under construction at the shipyards at Severodvinsk.

Despite dire economic circumstances, the Russians have found money to prosecute their campaign in Chechnya, and military spending is on the rise.

The Cold War is not quite as over as we thought it was.

On Feb. 21, China threatened to invade Taiwan unless it negotiates for a return to Chinese control. A week later, the official Chinese army newspaper said China might attack the United States with nuclear missiles if we stand in the way of a military takeover of Taiwan.

China has about 20 CSS-4 ICBMs that can reach any part of the United States. Several newer missiles, including the long-range Dong Feng-41, are in development. These programs will make good use of warhead and guidance system technology stolen from the United States.

China's military spending has increased by a double-digit percentage in each of the past eight years. The theme that permeates Chinese military and strategic writing is war with the United States.

Lately, Russia and China have been patching up the quarrels that drove them apart in the 1960s. They are re-establishing a partnership of sorts, based on their common concern about the dominant position of the United States in world affairs.

North Korea, a second-string member of the Communist club at mid-century, is also on the move. A sci-

entist who defected in February says North Korea has developed a missile that can reach California.

His report is unconfirmed and subject to doubt. However, the North Koreans surprised us in 1998 when they launched a three-stage missile across Japan, a capability that US intelligence said they would not have for another 15 years.

Russia, China, and North Korea are enthusiastically selling weapons to nations on the international fringe.

### **The Cold War is not quite as over as we thought it was.**

US leaders downplay the importance of these developments. President Clinton dismissed what he called "fairly inflammatory language" from China on the grounds that "it is political season over there." He continued to push for China's admission to the World Trade Organization.

The Administration takes a conciliatory stance toward Russia as well. The nuclear rumbles from Moscow have not slowed the flow of economic aid to Russia from the West, which allows the Russians to divert additional money to their military buildup.

The problem is more serious than our national security establishment appears to believe.

The circumstances under which the Russians would actually use nuclear weapons are ambiguous by design, but as a Stratfor.com Web site analysis said, "The mere threat of a nuclear reaction makes it impossible to treat Russia with the contemptuous indifference shown during the Iraq and Kosovo affairs."

Russia, a world power by no standard except its possession of nuclear weapons, is back in the game, and with improved arms. Fortunately, Russia is still deterred, as it was during the Cold War, by countervailing US nuclear weapons. ■

The Chinese and Korean missiles are less reliable and fewer in number than the Russian missiles. However, as the national intelligence estimate given to Congress in February said, the capability to generally target a large urban area will be sufficient to deter and constrain the United States.

It also said that "the probability that a missile with a weapon of mass destruction will be used against US forces or interests is higher today than during most of the Cold War, and will continue to grow."

Aside from worldwide nuclear disarmament—which isn't going to happen—there are three possible responses to a nuclear threat. You can surrender to it, deter it, or defend against it. The United States may cut its nuclear-armed adversaries some extra slack, but we are not about to surrender to them.

Both of our other options, traditional nuclear deterrence and national missile defense, are under simultaneous ideological attack.

The Administration itself is leading the effort to revive the Comprehensive Test Ban Treaty. Doing so would scarcely bother the proliferators and arms control cheaters, but it would prevent the United States from conducting tests to keep its aging nuclear weapons reliable and credible.

We should not wait until a rogue nation lobbs a crude weapon at San Francisco to discover that we need at least some ballistic missile defense. If we stay at it, we will solve the technical problems. The main political objection to a missile defense is that it supposedly would push rival nations to develop new missiles. But they seem to be doing that anyway.

Our best choice, among the imperfect choices available, is to pursue a combination of missile defenses and strategic deterrence. The best model for threading our way through the dangers ahead will be our own experience from the Cold War, the end of which we declared somewhat prematurely. ■

OUR CUSTOMERS  
HAVE LEARNED TO EXPECT  
UNCOMPROMISING QUALITY

#### THE PRINCIPLES OF AVIATION

In the demanding world of aeronautics, every single component must be officially approved and certified. We apply the same principle to the manufacturing of our wrist instruments.

Our movements meet all the precision and reliability criteria required to obtain chronometer certification. Moreover, every last detail of our watches is designed for intensive use.

One simply does not become an aviation supplier by chance.

BREITLING USA INC.

P.O. Box 110215

USA-STAMFORD, CT 06911-0215

Tel.: 203/327 1411 · Fax: 203/327 2537

FOR AN AUTHORIZED JEWELER  
OR CATALOG PLEASE CALL 800/641 7343

INSTRUMENTS FOR PROFESSIONALS™

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

#### THE ESSENCE OF BREITLING

AEROSPACE. Quartz electronic chronograph with combined analog and digital time display. This multi-function wrist instrument is crafted in titanium, a material widely used in modern aviation applications.



**BREITLING**  
1884

## About Intervention

In your February editorial, "The Doctrine of Intervention" [p. 2], you express your disapproval of the new lowered threshold for engaging in foreign adventures that involve putting our troops on the line around the world. I would like to offer a counterpoint. The United States has for pretty much most of its history been an intervening nation—only punctuated by occasional isolationist flare-ups.

The motivations for our past policeman-like worldwide behavior have been a mixture of altruism, nationalism, colonialism, and mercantilism. None of these are particularly admirable except perhaps for the altruistic component. Today our interventions are motivated as much or more by altruism than at any time in our history. [This] means that anywhere in the world where truly egregious violations of human rights or of international law or norms are taking place, if the US can help, it will. It is almost that simple.

Sometimes this means only threats, tough diplomacy, and hard bargaining (North Korea). Sometimes it involves invasion (Panama), insertion of a peacekeeping force (Haiti, Bosnia), or outright war (Iraq, Kosovo), you name it.

You intimate that our interventionist policy is somehow dangerous for us. Do you fear that we might upset the Russian or Chinese leadership and have them poke us in the eye? Just because these two gangs of thugs may occasionally spout off with in-temperate invective against us, this doesn't mean that the US should necessarily back off from its humanitarian and objectively nonprovocative interventions. It would be another story if we were meddling in the affairs of these powers, but our interventions are usually careful not to do that.

You could even say that our interventionist policy is the best expression of what America is all about, not just a beacon of liberty for its own people but one of hope for all peoples—especially ones who may be oppressed by despots or slaughtered by their ethnic rivals—and

therefore worth it. The rub comes when the instrument of an interventionist policy, our military, is stretched thin with constant strains on people and resources. No one can deny that the sacrifices undergone by military members in the past 10 years since the drawdown of the Cold War have been horrific.

And no one should be surprised by the exodus of many good ones seeking a semblance of a "normal" life—hopefully with a family and all that that means. Congress and DoD have to address the fact that service members are not now being fairly compensated for their sacrifices, and I think the first steps are starting to be taken.

The fact is that during the Cold War, with two great powers shackled to each other by a short chain of unspoken threats of near-total destruction, there was no room, no time, and no reason for any other concerns to distract us.

Now we have the room, the time, and, arguably, the resources to give some effect to our oft-espoused vision of a world safe for all peoples to live without deprivation and fear. We cannot cure all the world's problems, but if being an American means anything, it should mean that where we have the opportunity and the means to relieve some suffering, we will try to lend a hand.

You ask, "Well, how do we make the distinction between a Rwanda and a Kosovo?" The answer is simple, I think. You do what you can. There was a clear, though not riskless, way to do something in Kosovo. That was

not the case in Rwanda, where it would have been impossible to mount a peacekeeping effort without running unacceptable risks to our people. It would have been Somalia times a thousand. The bottom line is this: For the foreseeable future, people entering the military, or choosing it for a career, will have to be made aware of the fact that they are going to be placed on the point of a spear that could be tossed anytime, anywhere, into a hot spot, with some attendant level of risk. They should also be made aware that they will have an opportunity, maybe several of them, to participate in something really worthwhile—bringing a taste of American freedom and values to others who are in need.

R.D. Truitt  
Summit, N.J.

Your editorial was one of the best in quite some time, properly concluding that we need to "pick our interventions on the basis of where our national interests lie." However, I do think you mistakenly came to the conclusion that the doctrine "reached its present position mainly on the wings of moral justice." That certainly is what all the propagandists at the White House would like the American people to believe.

But when one looks closely at the facts, there is no conclusion that can be reached other than our intervention in Yugoslavia and its territory of Kosovo was based on the political survivability of President Clinton, the need to have a big world crisis to deflect the laser-guided impeachment proceedings.

There was no need to intervene exactly at that time, the people of Kosovo are far worse off now than before, and Milosevic is still in power. Our intervention against Iraq had a justifiable scenario—Country A invades Country B and threatens the world's oil supplies. Definitely a national interest decision. The situation in Kosovo was no different, and probably less severe, than the ones you mentioned in East Timor and Sri Lanka, or the even more atrocious

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

attacks on the Christian population in southern Sudan.

And, if we are really using "moral justice" as our deciding factor, should we not be intervening on behalf of the people in Chechnya? No, it is clear that propaganda is the guiding principle in our interventions around the world. It just saddens me to watch our military leadership go along with this improper use of force. But then again, this is the same military leadership that has caved in on the anthrax vaccination issue and numerous other politically correct changes to our armed forces that have reduced combat readiness. Where are the Billy Mitchells when we need them?

Lt. Col. James V. Kelso III,  
USAF (Ret.)  
Peachtree City, Ga.

[The] editorial was, to me, a masterpiece in wisdom. It is hard to imagine at this time a model for an international psyche, and struggle seems to be a facet of the human makeup. Give the world a long period of peace, and one can sense a kind of fretfulness all over, as if struggle were part of self-identification. Yet in our century, war has settled very few things. Thanks for a perceptive editorial.

René C. Lévêque  
Wetumpka, Ala.

#### Northern Watch

I thoroughly enjoyed the article "Operation Northern Watch" [February, p. 32]. I had the good fortune to serve under Brig. Gen. [David A.] Deptula as his public affairs officer during his last three months as commanding general. A true warrior, he is the finest person I have had the pleasure of working for during a 33-year career in the Air National Guard. Photo credit should be given to SrA. Gary Guese for the picture showing all the ONW aircraft. Note also, in the photo on p. 35, SSgt. Mary Blyer is pictured with an AGM-130, which was first used in combat in Operation Northern Watch.

Lt. Col. Mike Waters  
174th Fighter Wing (ANG)  
Syracuse, N.Y.

#### Warbirds of Heritage Flight

The F-86F in the top photo on p. 43 [See, "Heritage Flight," February issue] is not wearing a patriotic paint scheme, but the markings for the 48th Fighter-Bomber Wing's Skyblazer aerobatic team in 1955 and 1956. This team was out of Chaumont AB, France, and some of its pilots are still alive. Their flying was superb!

MSGt. David W. Menard,  
USAF (Ret.)  
Huber Heights, Ohio

The P-51 on the February cover is dear to my heart. The airplane is painted in the colors of my World War II outfit, the 343rd Fighter Squadron, 55th Fighter Group, Eighth Air Force, UK. It was the only unit to have such colors.

In November 1944, we had several successive days of non-flying weather. As squadron commander, I found a number of restless pilots on my hands. We decided to have a contest on a paint scheme for our airplanes, and the one shown on the cover was chosen by the pilots. Without further consultation with higher authorities, I ordered all of our 36 airplanes to be so painted. The group [commanding officer] thought it was fine.

However, about three weeks later, our wing commander came to visit. After some grumbling, he decided we didn't have to remove the paint, but we could not paint anymore. Therefore, each time we got a new replacement it remained as delivered.

Maj. Gen. Edward B. Giller,  
USAF (Ret.)  
Albuquerque, N.M.

#### About Jerry Lewis

I am a supporter of our military—land, sea, and air. I am also supportive of our present Congress. However, I get very suspicious when (behind closed doors) there "was very quickly a unanimous decision" by the House Appropriations Committee's subcommittee on defense to cut funds for production of the F-22. [See "Jerry Lewis on the F-22," February, p. 62.]

[Lewis] correctly indicates that no one wants [the F-22] to be so expensive that the Air Force can only afford a handful. Yet, that's exactly what he is accomplishing by this action.

Lewis claims that the Air Force leadership is disappointingly not forthcoming and responsive. In the same magazine issue, in "Aerospace World," Maj. Gen. [Claude M.] Bolton Jr. and Darleen A. Druyun (top USAF acquisition official) briefly are quoted, explaining some of the F-22's testing accomplishments. Druyun even appeared before a House subcommittee on Dec. 7, 1999. [See "Twenty Questions and the F-22" and "Yes, Yes, But What Else Have You Done?" February, p. 14.]

He bemoans his projected cost of the projected 339 F-22s as [being as] high as \$70 billion. That does not seem to me [to be] bankrupt[ing] our defense budget. I'm assuming that our government pays over the life of a contract—not all up front. Besides, we all want our son and daughter pilots to have the best, the safest, and the most effective

# 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 Editor**  
Frances McKenney

**Director of Production**  
Robert T. Shaughness

**Art Director**  
Guy Aceto

**Assistant Art Director**  
Cathy Cavanaugh

**Research Librarian**  
Pearlie M. Draughn

**Editorial Associates**  
Chanel Sartor  
Chequita Wood


**Administrative Assistant & Staff Editor**  
Juliette Kelsey

**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**  
Nicola C. Whitlock • 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



## 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 customer service.

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

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

**Fax:** (703) 247-5853

To select documents and receive them by fax: (800) 232-3563

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

### E-Mail Addresses

Customer Service ..... [custserv@afa.org](mailto:custserv@afa.org)

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)

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

### Magazine

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

AFA/AEF Report ..... [afa-aef@afa.org](mailto:afa-aef@afa.org)

Bulletin Board ..... [bulletin@afa.org](mailto:bulletin@afa.org)

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

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

Reunion Notices ..... [reunions@afa.org](mailto:reunions@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

To promote aerospace power and a strong national defense.

To support the needs of the Air Force and Air Force people.

To explain these needs to the American people.

## Letters

platforms to utilize in the performance of perilous, but heroic, missions. I know that our troops on the ground that benefit from air support/superiority do not lose sleep condemning the cost—even if it were high—of US military hardware in battle.

I'm convinced that the F-22 is the best air superiority fighter now and into the new century. Let's not waste too much time in [debating] its procurement. And may Jerry Lewis overcome his obvious anti-Air Force bias.

Joe Martinez  
Lee's Summit, Mo.

### Not All the Candidates

I am writing in response to the February article "The Candidates on Defense" [p. 66]. I was really disappointed that this article listed only four Presidential candidates: Bradley, Bush, Gore, and McCain. The article listed the candidates' positions on defense and foreign affairs.

What was missing were the comments and positions of the other Republican Presidential candidates, [Steve] Forbes and Alan Keyes. Once the dust settles on exactly who will be the Presidential candidate for each party, *Air Force Magazine* needs to solicit the comments and positions of every Presidential candidate.

That means every bonafide, ballot-qualified Presidential candidate [from a] major party as well as the other alternative parties—Constitution party, Reform party, Libertarian party, etc.

MSgt. Larry Breazeale,  
USAFR (Ret.)  
Blue Jay, Calif.

### Not the First Block D

I read with interest your piece on Dyess AFB [Texas] getting its first Block D modified B-1s. [See "Dyess Gets Upgraded B-1 Bombers," February, p. 18.] While many of the items listed in the article are factually correct, I believe you may have left readers with the mistaken impression that these aircraft are the first Block D B-1s to become operational.

In fact, the first Block D upgraded B-1s to become operational arrived at Ellsworth AFB, S.D., in late 1998. The Block D force development evaluation was conducted by crews from Det. 2, 53rd Test and Evaluation Group beginning Nov. 24, 1998. The first operational Block D sortie, combined with a live [Joint Direct Attack Munition] (GBU-31) drop, was a collaborative effort between Det. 2 and the 77th Bomb Squadron, flown on

Dec. 3, 1998. Det. 2 began providing initial training to crews of the 77th BS in January 1999.

Four members of Det. 2 deployed with other operational B-1 crews from the 28th Bomb Wing in support of Operation Allied Force on March 31, 1999. The 77th Expeditionary Bomb Squadron operated four Block D B-1s, modified with the ALE-50 towed decoy system, and flew over 100 combat sorties, dropping over 2.5 million pounds of bombs.

Det. 2 crews provided Block D training throughout that operation and continue to do so today. Although the 28th BS is the B-1 community's only formal aircrew training unit, the impression should not be left that no Block D training has been provided to operational crews while Dyess awaited its allotment of Block D modified aircraft.

Col. [Douglas] Raaberg's and Maj. [Matt] Bartlett's comments were right on the mark. Block D gives the B-1 its biggest leap forward in conventional capability to date. With the formal training unit having its own Block D airplanes, the operational units will now begin to receive initial qualification course graduates with Block D training. These new crew members will be valuable additions to the initial cadre who have been trained by Det. 2 over the past year.

Lt. Col. T. Richard Olsen Jr.,  
Commander, Det. 2, 53rd TEG  
Ellsworth AFB, S.D.

### Is it Really 7.5 Miles?

"USAF Looks at Fixes for C-17 Air-drop" [*Aerospace World*, February, p. 20] stated that the current space between aircraft in a C-17 formation is 40,000 feet. Surely an interval of over 7.5 miles cannot be correct. This could hardly be called a formation. I have many hours of formation flying with airdrops in the C-141, and though we did fly an in-trail formation, using station-keeping radar, we could usually see the aircraft in front of us.

Col. William J. Schwehm,  
USAF (Ret.)  
Lakewood, Wash.

■ That is the current distance for C-17s when dropping paratroopers. It is 10 times the 4,000-foot spacing for C-141s. The C-17 distance for equipment is 12,000 feet. The Air Force and Army expect to close the gap.—THE EDITORS

### Not So Fast on Those C-5 Engines

[Retired Air Force] Maj. Gen. Ralph Saunders's view is shortsighted, and many comments are obsolete or just





# Ready to deploy.

The trusted address for everything military on the Internet.  
Personnel locator, news, resources, unit homepages, free email and more.  
Connect. Reflect. Engage!

**Military.com**  
engage!

## A treasured symbol of your service



Over twenty different Air Force rings are available.

The magnificent "Classic" Air Force Rings are in a different league from typical school-style service rings.

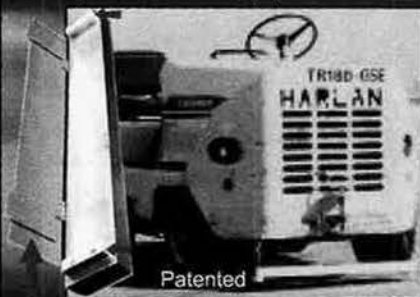
Each ring is crafted to be an enduring symbol of your service and achievements. Men's ring prices start at \$127; easy payment plans are available.

To get a **FREE** color brochure call **1-800-872-2853** (free 24 hr. recorded message - leave your name & address and the information will be rushed to you). Or, to speak directly with a sales representative, call 1-800-872-2856. Or write: Mitchell Lang Designs Inc., 435 S.E. 85th Ave. Dept. AR-400, Portland OR 97216. **Code AR-400**

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

## Get the "FOD" out.

**Shields Company Magnets**  
Type A.R.™ Self-Cleaning Magnetic Sweeper.  
Impact-resistant, replaceable polyethylene wear bars.



By applying pressure to any of the attached top plates, this unique design allows easy and safe debris removal.

**Ideal for preventative  
maintenance of GSE**

**Easy Operation,  
Maintenance Free,  
Great Performance**

Available in 24"-60" widths

Please call for pricing or check out our website at [www.shieldscompany.com](http://www.shieldscompany.com)

**SHIELDS COMPANY**

1891 Goodyear Ave #604 • Ventura, CA 93003

PH: 800.799.4408 or 805.642.4408 FAX: 805.642.4417

## Letters

plain inaccurate. [See "Letters: About Those C-5 Engines," February, p. 4.] If we review history we find that during many contingencies (Nickel Grass, Desert Shield/Storm, Somalia, and many more) the C-5 frequently operated at less than designed gross weight because of thrust limitations. High temperatures and pressure altitudes exacerbate the problem.

Takeoff planning is so complicated these days no one really understands it, and the net result is significantly lower takeoff weights. Takeoff planning now includes: 2.5 percent climb gradient, up to a 35-foot departure-end-of-runway altitude, and self-imposed climb-out factors. All of these potential limiting factors are improved with higher thrust engines.

The wings have been beefed up twice. This is false. The A models did receive a new wing, and the same wing was initially fitted to the B models. An engine cut loose from the pylon at Travis [AFB, Calif.]. This is wrong. The only separation occurred at Altus [AFB], Okla., in 1971. A C-5 had the entire pylon and engine assembly come off the wing. After this, the pylon went through several modifications.

The plan is to install 60,000-pound engines. This is a misleading statement. Yes, it is a 60,000-pound engine, but it will be derated to 50,000 pounds. This reduction of thrust means the engine will operate at significantly reduced temperatures. Net result: very long engine life.

His association with the C-5 goes back to the days when the maximum gross weight was 712,500 [pounds]. The aircraft now has a peacetime maximum takeoff gross weight of 769,000 and a contingency weight of 840,000. More thrust is imperative at these weights.

He and many others note the poor reliability of the aircraft. Spare parts and maintenance manning have both been cut or neglected. The sorry state of readiness is a direct result of management decisions. An Air Mobility Command staff member tells me that Dover AFB, Del., averages three cannibalization aircraft and Travis AFB four. In essence, 10 percent of the active duty fleet has parts taken off to keep the other 90 percent flying. That's a sorry state of affairs.

It seems Saunders is touting the Rolls-Royce RB211-535E4B engine, which produces 43,000-pound maximum thrust. I'm sure it's a good engine; however, it will not allow the aircraft to achieve its potential.

In short, the C-5 needs some overdue attention. The higher-thrust en-

gines will allow the C-5 to accomplish its wartime objective—heavy strategic airlift. The C-5 has no peer. There is nothing on the design boards to replace it. The C-17, for all its hype, has no legs and requires air-to-air refueling to achieve strategic range, even then with a substantially lower payload. Within AMC there is talk of a hub-and-spoke operation, C-5 long haul and C-17 short haul.

Lt. Col. David D. Wilson,  
USAF (Ret.)  
Dover, Del.

As a C-5 pilot for the last 7.5 years, I read Saunders's letter about the C-5 engine program with great interest. However, his theories have several flaws in them. First, we fly many missions to austere places today. Second, hot weather and heavy loads occur year round at many of our locations—not a rare event as the general suggests.

Currently, our payloads are being reduced by poor engine-out climb capability. Additionally, we waste thousands, perhaps millions, of dollars in fuel since we are unable to climb into the crowded oceanic airspace. The 60,000-pound-thrust engines would allow us to climb into this airspace and fly at a higher altitude [and] realiz[e] a fuel savings. It also would eliminate the engine-out climb problem.

Let's face it: The TF39 was the only show in town when the airplane was built and has been a workhorse for the C-5, but its elderly state requires us to modernize. Let's buy the 60,000-pound-thrust engines, derate them to 53,000 pounds, and move the missions.

Kris D. Oliver  
Dover AFB, Del.

### Correction

In the February issue, the news item in the "Aerospace World" column titled "The Charter Chiefs Remember" is misleading. The charter chiefs were promoted on Dec. 1, 1959, not Dec. 1, 1958. Congress passed the relevant law in 1958. In the fourth paragraph, the 1958 date should be 1959, the year the Air Force selected the personnel for promotion. Thanks to charter chief CMSgt. William T. Whitney, USAF (Ret.), Bellevue, Neb., for spotting this.

# The Chart Page

By Tamar A. Mehuron, Associate Editor

## The Defense Budget at a Glance

In February, President Clinton presented his proposed defense budget for Fiscal 2001. The document requests \$291.1 billion in budget authority and \$277.5 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 \$305.4 billion in budget authority and \$291.2 billion in outlays.

Funding levels can be expressed in several ways. Totals are most frequently

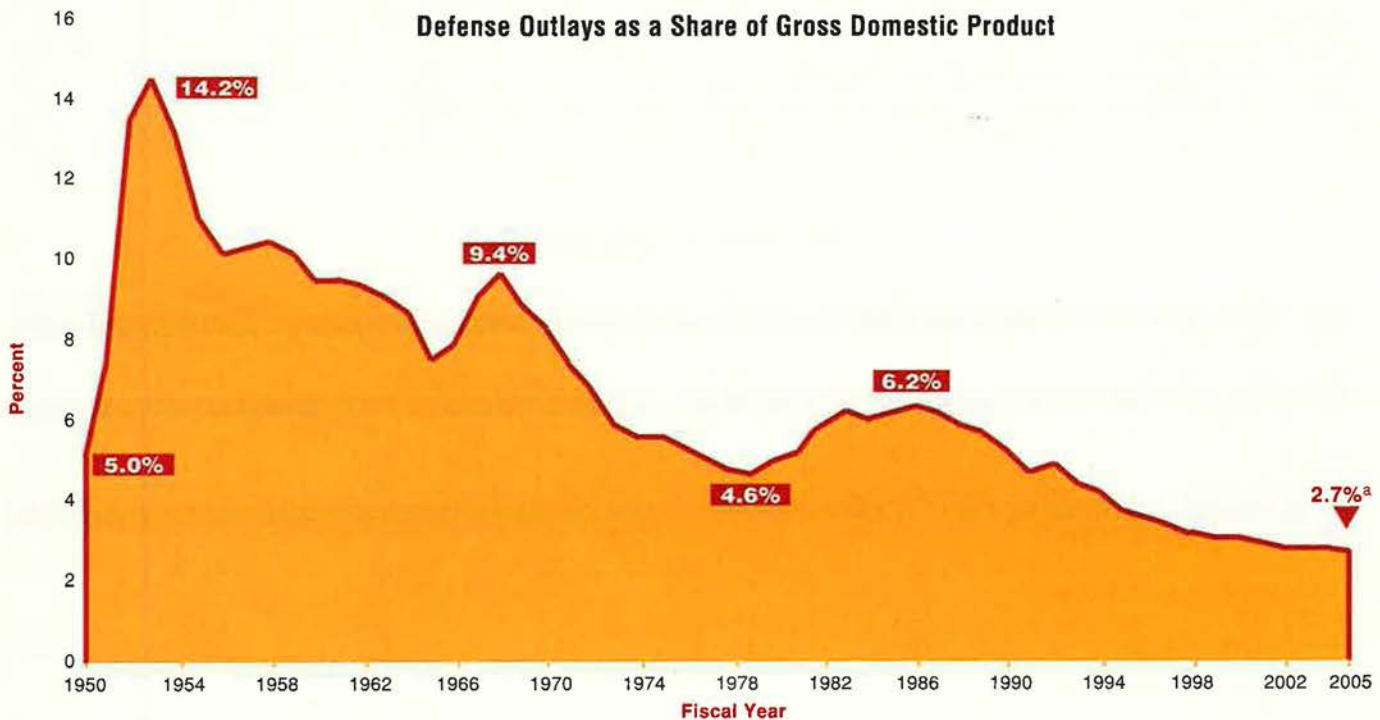
stated in **budget authority**, which is the value of new obligations that the government is authorized to incur. These include some obligations to be met in later years. Figures can also be expressed in **outlays** (actual expenditures, some of which are covered by amounts that were authorized in previous 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.

	1999	2000	2001	2002	2003	2004	2005
<b>DoD Budget Topline</b> (\$ billions)	<b>Budget authority</b>						
	(current \$)						
	278.4	279.9	291.1	294.8	300.9	308.3	316.4
	<b>Budget authority</b>						
(constant FY 2001 \$)							
292.6	287.8	291.1	288.6	288.2	288.3	288.8	
<b>Outlays</b>							
(current \$)							
261.4	277.5	277.5	284.3	293.0	301.9	315.8	
<b>Outlays</b>							
(constant FY 2001 \$)							
274.6	285.3	277.5	278.4	281.2	282.9	289.0	



<sup>a</sup> Estimate.

Source: US Department of Defense.

**Service Shares**

(Budget authority in constant \$ billions)

FY 2001 \$ billions	1999	2000	2001	2002	2003	2004	2005
Air Force	86.1	83.5	85.3	86.4	85.5	85.0	85.2
Army	71.9	71.5	70.6	72.8	72.9	72.9	72.9
Navy	88.1	89.7	91.7	88.9	90.1	90.1	90.1
Defense agencies	46.6	43.1	43.5	40.5	39.7	40.3	40.6
<b>Total</b>	<b>292.6</b>	<b>287.8</b>	<b>291.1</b>	<b>288.6</b>	<b>288.2</b>	<b>288.3</b>	<b>288.8</b>
<b>Percentages</b>							
Air Force	29.4%	29.0%	29.3%	29.9%	29.7%	29.5%	29.5%
Army	24.6%	24.8%	24.3%	25.2%	25.3%	25.3%	25.2%
Navy	30.1%	31.2%	31.5%	30.8%	31.3%	31.3%	31.2%
Defense agencies	15.9%	15.0%	14.9%	14.0%	13.8%	14.0%	14.1%

Fiscal 1999–2005 figures are from the Clinton Administration's Fiscal 2001 budget request.

**Force Structure Changes**

	Cold War Base 1990	Base Force	BUR Plan	QDR Goal	2001
<b>Air Force</b>					
Active fighter wings	24	15.3	13	12+	12+
AFRC/ANG fighter wings	12	11.3	7	8	7+
<b>Army</b>					
Active divisions	18	12	10	10	10 <sup>b</sup>
Army National Guard/Reserve	10	34 <sup>a</sup>	5+	8	8 <sup>c</sup>
<b>Navy</b>					
<b>Aircraft carriers</b>					
Active	15	13	11	11	12 <sup>d</sup>
Reserve	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 MEFs	3	3	3	3	3
Reserve MEF	1	1	1	1	1

<sup>a</sup> Brigades.

<sup>b</sup> Plus two armored cavalry regiments.

<sup>c</sup> Plus 18 separate brigades (15 of which are at enhanced readiness levels).

<sup>d</sup> USS *John F. Kennedy* was redesignated as an active duty carrier to meet forward presence commitments.

**Operational Training Rates**

	1990	1997	1998	1999	2000	2001
<b>Air Force</b>						
Flying hours per crew per month, fighter/attack aircraft	19.5	19.3	17.0	17.7	17.2	17.1
<b>Army</b>						
Flying hours per tactical crew per month	14.2	14.5	11.4	11.8	14.5	14.5
Annual tank miles <sup>a</sup>	800	654	600	601	800	800
<b>Navy</b>						
Flying hours per tactical crew per month	23.9	21.1	20.2	21.5	22.3	23.5
Ship steaming days per quarter						
Deployed fleet	54.2	50.5	50.5	50.5	50.5	50.5
Nondeployed fleet	28.1	28.0	26.8	26.1	28.0	28.0

<sup>a</sup> Excludes National Training Center miles.

### Total Funding of Major Programs

(Current \$ millions, RDT&E and procurement funding)

	2001
<b>Air Force</b>	
B-2 bomber	132.5
C-17 transport	3,067.3
E-8 Joint STARS aircraft	427.3
F-16 fighter	149.2
F-22 fighter	3,957.9
JDAM	221.0
JPATS	135.5
JSF (RDT&E only)	429.1
Milstar satellite (RDT&E only)	236.8
<b>Army</b>	
AH-64D helicopter	775.0
RAH-66 helicopter (RDT&E only)	614.0
<b>Navy</b>	
CVN-77 aircraft carrier	4,377.3
DDG-51 destroyer	3,385.8
E-2C early warning aircraft	352.7
F/A-18E/F fighter	3,080.6
JDAM	50.6
JPATS	74.7
JSF (RDT&E only)	427.6
New attack submarine	2,031.6
Trident II ballistic missile	496.0

### Procurement of Major Air Force Systems

(Current \$ millions)

	2000	2001
<b>Aircraft Procurement</b>		
B-2 bomber	172.8	84.2
C-17 transport	3,354.9	2,890.9
C-130J transport	133.4	208.1
CV-22	41.7	380.0
E-8 Joint STARS	359.8	283.2
F-22 fighter	280.5	2,546.1
JPATS	111.4	113.8
<b>Missile Procurement</b>		
AMRAAM	89.7	98.7
<b>Other Procurement</b>		
AWACS	104.3	88.7
DSP satellites	108.4	106.4
GPS satellites	125.4	210.3
JDAM	189.7	219.8
Titan IV (Titan II refurbishment)	429.2	469.7
<b>RDT&amp;E</b>		
Airborne Laser	304.2	148.6
EELV	318.0	332.9
F-16 fighter	114.2	124.9
F-22 fighter	1,945.1	1,411.8
JASSM	164.4	120.3
JSF	249.1	429.1
Milstar satellite	357.2	236.8
SBIRS satellites	646.1	810.2
UAV	77.9	109.2

### Cutting the Pie: Who Gets What

(Budget authority in constant \$ billions)

	1999	2000	2001	2000-01	2002	2003	2004	2005
Military personnel	75.9	76.1	75.8	-0.3	76.0	75.7	76.0	76.0
O&M	110.7	108.8	109.3	0.5	105.6	105.0	105.4	105.3
Procurement	52.5	55.1	60.3	5.2	61.9	64.4	64.0	65.8
RDT&E	39.6	39.1	37.9	-1.2	37.8	36.3	35.4	33.7
Military construction	5.6	4.9	4.5	-0.4	4.2	3.6	4.3	5.0
Family housing	3.7	3.7	3.5	-0.2	3.6	3.8	3.8	3.8
Other	4.7	0.4	-0.2	-0.6	-0.5	-0.5	-0.7	-0.7
<b>Total</b>	<b>292.6</b>	<b>287.8</b>	<b>291.1</b>	<b>3.3</b>	<b>288.6</b>	<b>288.2</b>	<b>288.3</b>	<b>288.8</b>

### Manpower

(End strength in thousands)

	Change 1990-98	1999	2000	2001	Change 1999-01	2005	QDR Goal
Total active duty	-650	1,390	1,382	1,382	-8	1,373	1,360
Air Force	-167	366	358	357	-9	352	339
Army	-263	480	480	480	0	480	480
Navy	-196	372	372	372	0	369	369
Marine Corps	-24	172	173	173	+1	173	172
Selected reserves	-242	877	864	866	-11	836	835
Civilians (FTE)	-227	724	699	683	-41	638	640

### Acronyms

<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>MEF</b>	Marine Expeditionary Force
<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>UAV</b>	Unmanned Aerial Vehicle

# Aerospace World

By Peter Grier

## House Panel Calls for Halt in Anthrax Shots

A sharply critical House of Representatives report has called for a suspension in the Pentagon's anthrax immunization program. The effectiveness of the anti-anthrax shots is uncertain, and the safety of troops who have been inoculated is not being properly monitored, said the report.

The immunization program is based on a "dangerously narrow scientific and medical foundation," said the House Government Reform Committee national security subcommittee report.

Furthermore, the regimen was expanded arbitrarily. Livestock workers used to receive three shots to protect against anthrax. After three inoculated people became infected after exposure to anthrax, doctors arbitrarily added three more shots, according to the report.

The report calls for the anthrax vaccine to be returned to the status of an experimental drug pending further study.

Defense Department officials insist in reply that the vaccine is "safe and effective." The number of adverse reactions to the vaccinations remains low, according to figures DoD released in February.

Some 400,000 members of the military have received a total of nearly 1.4 million anthrax vaccine dosages. Through the beginning of February, only 620 individuals have submitted reports to the US Food and Drug Administration about adverse reactions from the shots.

Adverse reaction reports are reviewed by the Anthrax Vaccine Expert Committee, an independent panel of civilians sponsored by the Department of Health and Human Services. The committee's review in January revealed that 76 of the reports of adverse reactions were, in fact, likely to have been caused by the anthrax shots.

"We are fortunate to have a vaccine that is both safe and effective," said Lt. Gen. Paul K. Carlton Jr., Air Force surgeon general. "It would be morally irresponsible for Air Force



USAF photo by TSgt. Cary Humphries

*A crew chief from the 17th Airlift Squadron, Charleston AFB, S.C., refuels a C-17 at Hoedspruit, South Africa. As part of Operation Atlas Response, the transport delivered supplies and personnel for victims of flooding in Mozambique.*

leaders and the entire Department of Defense not to protect our troops against this lethal threat."

## "Don't Ask, Don't Tell" Training Expands

The Department of Defense approved service plans for the expansion of training about the "don't ask, don't tell, don't harass" policy regarding homosexuals in the armed forces.

Education about the program will continue to be included in the recruit training and officer entry training curriculums. It will also be added to all levels of noncommissioned officer and officer professional military education.

Air Force officers, for example, will now receive additional don't ask, don't tell, don't harass instruction at Squadron Officer School, Air Command and Staff College, and the Air War College.

"The idea here is to make the training more uniform ... and to first stress that this policy is part of a nondiscrimination policy in the military," said DoD spokesman Kenneth H. Bacon. "It's to make sure that everybody

understands exactly what the policy is and what it isn't, what it allows and doesn't allow, and to make sure that this is being communicated uniformly throughout every service."

In Fiscal 1999, 1,034 service members were discharged under the homosexual policy, said Bacon, down from 1,145 in Fiscal 1998.

About 83 percent of those discharged last year were the result of statement cases, in which members of the military went to their commanders and declared their homosexuality.

Don't ask, don't tell has been a matter of some political controversy in recent months, following the fatal beating of a soldier perceived to be a homosexual at Ft. Campbell, Ky.

President Clinton has said the program is "out of whack"—that the policy is not working as he intended when he announced it in 1993.

The Chairman of the Joint Chiefs of Staff is thus in the unusual position of defending Administration policy in the face of criticism from the Administration itself.

"It's a law that I think strikes the proper balance between the require-

Simple.

7¢

All day. Every day.

NO CHANGING RATES.  
NO EXTRA NUMBERS.  
NO GAMES.

INTRODUCING

**AT&T**  
 **one rate**  
**7¢ plan**

This is about as basic as it gets. The new AT&T One Rate 7 cent plan. All state-to-state calls for military personnel are just 7 cents a minute.\* All day. Every day. Not 25 cents a minute, which can happen with some nickel plans. So no matter how complicated your day gets, AT&T has made real savings simple again. 7 cents. Always. To enroll, call 1 800 551-3131, x76703.

CALL  
NOW

1 800 551-3131  
ext. 76703

TO  
ENROLL

[www.att.com/mil](http://www.att.com/mil)



ment for good law, order, and discipline in the military and individual rights," said Army Gen. Henry H. Shelton, Chairman of the Joint Chiefs of Staff, at a February session with Washington defense reporters.

"We've got it right. I would not argue that the implementation of it has left something to be desired," said the JCS chief.

**DoD Worries About ISR Shortages**

The Department of Defense is continuing to study a shortfall in the number of Intelligence, Surveillance, and Reconnaissance platforms in the military, says the Chairman of the Joint Chiefs of Staff.

Conflicts from the Persian Gulf War to Kosovo have continually proved

that spy satellites, radar aircraft, electronic warfare equipment, and other ISR assets are among the most valuable items in the military.

"We've only got a limited number of ISR assets, and the demand is high for those assets on a daily basis," said Shelton in a meeting with defense reporters Feb. 15.

Demand for ISR does not abate during peacetime, Shelton noted. Such low-intensity-conflict operations as counterdrug planning are heavy ISR users.

The proposed Fiscal 2001 budget aims at easing the ISR shortfall by including money for an additional EA-6B electronic warfare squadron and an RC-135 Rivet Joint surveillance aircraft through the five-year defense plan.

More adds may be in store in future years.

**Shalikhshvili Leads CTBT Revival Effort**

The Clinton Administration has turned to retired Army Gen. John M. Shalikhshvili, former Chairman of the Joint Chiefs of Staff, for help in reviving the Comprehensive Test Ban Treaty.

Shalikhshvili will lead a low-key task force that will explore ways of making the CTBT pact acceptable to the Senate, Secretary of State Madeleine K. Albright announced Jan. 28. Senators rejected the pact, 51-48, last October.

"We do not expect to seek consent in the Senate this year, given the shortness of the calendar," said State

**Kosovo After Action Report**

Successful as it was, Operation Allied Force highlighted shortfalls in American military capability that will now be addressed with budget dollars and policy changes, according to a lessons learned report submitted to Congress at the end of January.

Writing in "Kosovo/Operation Allied Force After-Action Report," Defense Secretary William S. Cohen and Joint Chiefs of Staff Chairman Army Gen. Henry H. Shelton said last year's air campaign "identified the need for specific enhancements in [the US military's] precision strike, electronic warfare, and Intelligence, Surveillance, and Reconnaissance (ISR) capabilities."

The Pentagon will apply \$3.5 billion in Fiscal 2001 toward buying more satellite-guided munitions, adding an additional squadron of EA-6B jamming airplanes to the fleet, adding another E-8 Joint STARS ground-surveillance airplane, acquiring more towed decoys, and upgrading satellites and surveillance drones. It will also spend money to improve and quicken the process by which intelligence is collected, analyzed, and sent in usable form to forward staffs and combat units.

The Defense Department is also taking steps "to ensure the lessons of this operation are not lost" and will be making changes to doctrine, military education, training, and the Joint Vision 2010 national security blueprint as a result of the experience in the Balkans.

Cohen and Shelton said the services did a good job of cooperating and coordinating their efforts and that the performance of the troops involved was "extraordinary." They also praised the cooperation and coordination of NATO, both in military and political matters, in obtaining Yugoslavia's compliance with NATO demands.

However, they noted that NATO allies on the whole are falling behind the US in military capabilities and that "improvements are necessary" in allied hardware and organization to get fully up-to-date in precision attack, secure communications, command and control, mobility, and other areas.

During the operation, the US bore a "disproportionate burden of responsibility for combat operations," Cohen and Shelton said. They said "on an encouraging note" that the NATO allies are "already concentrating" on upgrading their militaries, with an eye toward the lessons of the Balkans. They also said NATO needs to undertake a review of its coordination policies and develop a new joint doctrine.

Air attacks on the Serbs forced their fielded forces to hide



and limit their movements, according to the report. Strikes on infrastructure targets—such as bridges and power plants—hampered Serb command and control and their efforts to resupply their forces. "These effects created pressure on [Yugoslavian President Slobodan] Milosevic to yield to NATO demands."

One of the changes to be made to doctrine will be in the area of Army air and missile assets.

These will be brought under the air tasking order of future operations, "when appropriate," and a new Joint Deep Operations doctrine will be developed that includes such systems as Army attack helicopters and the Army Tactical Missile System.

The report singled out the C-17 as a platform crucial to the success of Allied Force; its "high reliability and basing versatility clearly enhanced our ability to deploy forces to, and within, the European theater." Also of great logistical benefit were new systems designed to track supplies and equipment on their way from home base to the front lines. Nevertheless, glitches and delays occurred and could be chalked up to plans and practices that will now be overhauled, Cohen and Shelton observed.

While the efforts of NATO to suppress enemy ground-based defenses were largely successful, the Pentagon acknowledged that it never fully deprived the Serbs of their ability to harass and threaten NATO airplanes. It said that aircrews had ground missiles shot at them at a rate "three times that encountered by the average coalition aircrew during Operation Desert Storm" in 1991.

"Our experience in Allied Force ... re-emphasized the importance of having a comprehensive air defense suppression strategy," according to the report, which said a new strategy for this critical element of future air campaigns is being developed, to be ready later this year.

The Balkans operation did not impede the US ability to fight and win two near-simultaneous Major Theater Wars, as national strategy calls for, though it did add "some risk" to that capability, Cohen and Shelton wrote. If more important wars had broken out, they asserted, the US would have withdrawn from Allied Force to deal with the greater threat.

The high professionalism of US troops was the chief reason there were no NATO troops killed in Allied Force, but "this achievement cannot be expected in every future conflict," Cohen and Shelton pointed out.



Department spokesman James P. Rubin. "But what we are hoping to do by bringing Shalikhvili aboard is to develop the basis and the groundwork so that a consensus can develop for CTBT ratification in the near future."

The concerns raised by treaty opponents include the difficulty of verification and the need to make sure the US nuclear arsenal remains modern and safe.

Partisan acrimony played a part in the Senate defeat, as well. In the vote's aftermath some internationalist Republicans expressed discomfiture with the outcome and called for further work toward possible compromise.

If nothing else, the choice of Shalikhvili should reassure allies who were upset when the long-sought treaty was derailed in the US.

### F-22 Base List Shaping Up

Langley AFB, Va., is first on the list of possible homes for the initial operational F-22 wing, according to Air Force officials. The Virginia base could see the first of the stealthy jets beginning in 2004, pending the outcome of an environmental impact study, according to Air Combat Command.

The study will examine such issues as air and water quality, noise, and safety. It will also research other reasonable F-22 base alternatives, said officials, including Eglin and Tyndall AFBs, Fla., Elmendorf AFB, Alaska, and Mountain Home AFB, Idaho.

The service plans to base a total of 72 operational aircraft, grouped into three squadrons, at the first wing location.

Two developmental Raptors are already flying out of Edwards AFB, Calif., where the F-22 test force is based. And Nellis AFB, Nev., was recently picked as the home for the F-22 Force Development Evaluation program and weapons school—a move that will add 17 aircraft and 367 personnel to the installation's infrastructure.

### Team Joint Strike Fighter?

The Pentagon is weighing whether to opt for a team approach in building the Joint Strike Fighter that would somehow give both Boeing and Lockheed Martin a big chunk of work.

The two aerospace giants are currently locked in a winner-take-all contest for the JSF contract, which could involve more than 3,000 aircraft and \$750 billion over the next 30 years. Defense officials are worried that the loser in this competition could exit



F-22 Team photo by John Rossino

*Raptor 4003, the newest in USAF's test fleet of F-22 air superiority fighters, takes off from Dobbins ARB, Ga., on its inaugural flight March 6. It flew to 30,000 feet at 500 mph in this 80-minute first flight. Boeing test pilot Chuck Killberg was at the controls. Once it arrives at Edwards AFB, Calif., the F-22 test force will use it to test the F-22's full flight load.*

the fighter business, leaving the US with a perilously thin industrial base in a highly important national security area.

"We believe special efforts are required to ensure that both competing firms remain competitive after the competition," said Jacques S. Gansler, undersecretary of defense for acquisition, technology, and logistics, at a Washington conference in late January. Pentagon officials and industry executives are currently advising Gansler about possible teaming strategies.

According to a Pentagon memo, obtained by the *Washington Post*, DoD is investigating two approaches. One would be for the Defense Department to pick one firm's design, then have both winner and loser build production aircraft. Another option would be for the companies to team up on development, then compete for subsequent production batches.

Top lawmakers warned that DoD should not make a hasty teaming decision. Congress is sure to look carefully at any attempt to restructure the JSF contract, they said.

"To see a major program have a significant shift like that so early on jeopardizes it," said Senate Armed Services Committee Chairman Sen. John W. Warner (R-Va.) on Feb. 10.

At a targeted price of \$30 million apiece, the JSF is meant to serve as the backbone of the tactical fighter force in the early decades of the 21st century. It could well replace the F-16 as the export fighter of choice for air forces around the world.

### C-17 Buy Is Reduced

The Air Force Fiscal 2001 budget plan calls for the purchase of 12 C-17 airlifters, as opposed to the 15 established in earlier plans. Defense officials claim that contract fine print means they will not have to break their multiyear purchase agreement with Boeing to make the move.

The reason for the reduction is to allow room for a British purchase of three C-17s to meet short-range airlift needs, according to DoD. But Boeing officials dispute this—saying that their production line could easily handle an annual order for 18 Globemasters, reported the defense newsletter *Inside the Air Force*.

The change does free up procurement money for other uses, Air Force officials admit. Indeed, it was authorized in the same budget change document that allocated extra funds for the purchase of two C-130Js.

The current multiyear C-17 agreement, signed in 1996, called for the purchase of 80 total aircraft over seven years. After that, the production rate may begin to drop, and the Air Force is concerned that could produce an inefficient line and higher prices.

### Summit Takes Aim at Retention Problems

The Air Force held Retention Summit 2000 in Washington in February to help develop a game plan to halt the slide in the service's retention rate.

The three-day meeting included representatives from all major com-

mands, the Air Force Personnel Center, and the Air National Guard. Undersecretary of the Air Force Carol A. DiBattiste challenged all attendees to think creatively when developing retention initiatives.

"Retention is a serious problem in the Air Force today," DiBattiste said. "FY 99 showed that we missed our re-enlistment goals in all three categories—first term, second term, and career. We're also very concerned about our officer force."

The service ended Fiscal 1999 about 1,200 pilots short, the undersecretary noted. The pilot retention rate has fallen from 87 percent in Fiscal 1995 to 41 percent in Fiscal 1999.

Pay and benefit increases have the Air Force moving in the right direction. "Yet, in spite of that, we still have a number of our people not wanting to stay in. That is a problem," DiBattiste said.

Summit participants were told not to rely on unrealistic fixes, such as large budget increases, a sharp decline in operations tempo, or a less attractive civilian economy. They came up with a tentative list of ideas, which were to be tested at focus groups held in February and March at bases in the US and Europe.

The focus groups, comprised of enlisted troops, officers, and family members, were to determine if the summit initiatives are on the right track, according to Lt. Col. Jan Middleton, Air Force chief of retention policy. "Then, Air Force leadership will decide which ideas to pursue."

**Lawsuit Hits Low-Level Training**

A coalition of environmentalists, landowners, and outdoorsmen filed suit against the Air Force in Federal District Court in Washington on Jan. 27, seeking to stop low-level training flights. They claim the steady roar of fighters and bombers overhead is disrupting life and lowering property values across the American West—and anywhere else such training occurs.

The suit may be the most serious legal challenge yet to Air Force training, which has long been a subject of controversy for those who live near training areas. It claims that Air Force leaders have violated the National Environmental Policy Act by not studying the cumulative environmental effects of low-level training.

Instead, the Air Force has conducted limited individual environmental studies that deal only with discrete areas.

"The evidence has been mounting for years that these flights are not compatible with a lot of land uses. And the Air Force has never studied the cumulative impact," Peter J. Galvin, a biologist with the Center for Biological Diversity, an Arizona environmental group that is one of the lawsuit's plaintiffs, told *The New York Times*.

Whether the suit actually halts low-level flights or not, it could well launch a legal process that will allow critics of Air Force training to more forcefully make their case.

Air Force officials have maintained that they have analyzed the impact of

low-level flights over the years and that the training should continue.

**Depot Debate Rages**

The Air Force has issued a temporary waiver of a law that requires the military services to keep at least 50 percent of their depot maintenance work in-house—and some members of Congress are not too happy about it.

At a Senate subcommittee hearing on the waiver in early March, Sen. James M. Inhofe (R-Okla.)—a frequent critic of the Clinton Administration's actions regarding Air Force depots—expressed the opinion that the Administration and the Air Force, in particular, "envision the eventual collapse of the public depot system."

"Let's not forget why we have depots in the first place," he said. "The whole concept was the national security concept, that if something should happen that we didn't want to be hijacked by a sole source in times of war."

Secretary of the Air Force F. Whitten Peters, testifying before the subcommittee, said that the waiver was necessary because of the transition of workloads from depots that are closing.

When the waiver decision was made, he explained, the transition had created parts problems that led to declining aircraft readiness at a time when the Air Force has a very high operations tempo. "We could not stand to have this many aircraft on the ground, based on the transition."

Pressed by Inhofe, Peters stated that this is "a unique and one-time situation to respond to ... continuing high-level operations overseas and a broken depot process caused by the transfer of workload."

Meanwhile, the Pentagon—largely at the Air Force's behest—is asking Congress for wording changes in the law which would have the effect of giving the Air Force more flexibility in divvying up maintenance dollars.

**New Squadron Officer College Opens**

A Feb. 8 ceremony at Maxwell AFB, Ala., marked the official debut of the Squadron Officer College, a new first-level professional military education school for newly commissioned and mid-level Air Force officers.

The college includes the Squadron Officer School and the Aerospace Basic Course. Realignment of these institutions will reduce duplication of effort.

USAF photo by MSgt. Val Gempis



*With Mount Mayon in the background, military personnel unload an MC-130 from the 353rd Special Operations Group, Kadena AB, Japan. It brought supplies to Legazpi, Philippines, where thousands evacuated from an erupting volcano.*

# 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.



**TEXTRON** Systems  
Get Smart.



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

"A host of synergies will be achieved with centralized management of the support staff, to include the curriculum directorate," said Col. Ann M. Testa, the first Squadron Officer College commander.

The new college is the result of a USAF Chief of Staff initiative aimed at creating more streamlined professional military education for mid-level officers, similar to what already exists for Army, Navy, and Marine leaders.

A new curriculum that eliminates the duplication between ABC and SOS curriculums will debut in January 2001. It will focus on five fundamental areas: profession of arms, leadership and management, military studies, communication skills, and international studies.

Mid-level captains will continue to attend SOS between their fourth and seventh year of commissioned service. Lieutenants will attend ABC within one year of their commissioning.

### Warner Promotes Unmanned Air Systems

Republican Sen. John Warner of Virginia, chairman of the Senate Armed Services Committee, has a new priority: unmanned combat systems.

The US should "aggressively" develop and field robotic weapons that lower the number of personnel in harm's way, according to the powerful legislator.

A "reasonable" goal would be to make one-third of all deep-strike aircraft unmanned within 10 years, said Warner at a Feb. 8 hearing. One-third of all ground combat vehicles could be unmanned within 15 years, he added.

The American people want their military personnel to run as little risk as possible, said Warner. In addition, the development of unmanned weapons plays to the nation's technological strengths.

"We must make better use of the American capability and technology," emphasized Warner, who has said that he will push this issue.

### New Air Force Symbol Explained

Wondering what the Air Force's proposed new logo represents? On Feb. 16 service officials released an explanation of the symbols contained in the new, modernized design.

The logo retains "the core elements of our Air Corps heritage," according to the explanation—the Arnold wings and star with circle.

The stylized wings represent the

enlisted men and women of the force. Their new angularity is supposed to represent "our swiftness and power," according to officials.

The six sections of the wings represent core competencies— aerospace superiority, global attack, rapid global mobility, precision engagement, information superiority, and agile combat support.

The lower half of the new logo features a sphere, a star, and three diamonds.

The sphere, which is within the star, represents the globe, as a reminder of global responsibilities.

The star's points represent the Total Force family—active duty personnel, civilians, Guard, Reserve, and retirees.

The star itself has many meanings, including "space as the high ground of our nation's aerospace force" and "our officer corps, central to our combat leadership," according to the explanation.

The three diamonds framing the star represent the core values of integrity, service before self, and excellence.

"The elements come together to form one symbol that presents two powerful images—at once it is an eagle, the emblem of our nation, and a medal, representing valor in service to our nation," according to the official explanation.

### Super Hornet Wins Collier Trophy

The National Aeronautic Association announced Feb. 11 that the Boeing F/A-18E/F Super Hornet has been selected to receive the NAA Collier Trophy, recognizing the top aeronautical achievement in the US for 1999.

The Boeing Company, the Hornet industry team, and the US Navy were recognized for "designing, manufacturing, testing, and introducing into service the F/A-18E/F multimission strike fighter aircraft, the most capable and survivable carrier-based combat aircraft."

The Collier Trophy, first awarded in 1911, recognizes "the greatest achievement in aeronautics and astronautics in America, with respect to improving the performance, efficiency, and safety of air or space vehicles, the value of which has been thoroughly demonstrated by actual use during the preceding year."

The Super Hornet is a stretched version of the earlier F/A-18 Hornet, a multirole carrier aircraft.

### NMD Test Was Success, DoD Asserts

While the interceptor in a Jan. 18 National Missile Defense test missed its target, the system as a whole performed well, according to Pentagon officials.

## A Stunner From the Duke

Last year, Rep. Randy "Duke" Cunningham (R-Calif.) took dead aim at the Air Force's F-22 Raptor.

The retired-Navy fighter ace contended that the F-22 program was consuming the funds needed to improve the quality of life for military personnel and to meet less glamorous needs, such as upgrading the Pentagon's aging fleet of radar-jamming airplanes.

He became a leader among a group of House defense appropriators who tried to eliminate all F-22 procurement funding and put the program in a "research-only" mode.

Evidently, Cunningham's had a change of heart. Here is what he said in a Feb. 15 speech on the House floor:

"We are debating in Congress the additional cost of that particular airplane. If anything, we need to double the numbers [currently, 339 fighters], reduce the unit cost, and proceed with the test and evaluation so we can take a look at introducing that particular airplane capability against the future threat of Russian and Chinese airplanes. ...

"This year, in Congress, we debated the F-22. The F-22 will meet the threat of the [Russian-built] SU-35 and the SU-37, which are the future aircraft. Right now, in my opinion, it is one of the few airplanes that will meet that threat. Unfortunately, the airplane today is \$187 million a copy. The research and development is over \$20 billion, and the cost of the electronics, hopefully, will not go up.

"If we do anything, Mr. Speaker, we should double the buy of the F-22. Because what they did is, with Lockheed and the Air Force, they cut the buy of the F-22 in half. When you take all this research and development money and you put it on a lesser number of airplanes, each of those airplanes, when you pile those additional costs, it is more than if you had a whole bunch of them. So, in the future, I think we need to double the buy of the F-22."

# Even at 12 g's Our Airborne Video Solid-State Recorder Scores a Perfect 10

Optimized performance without the  
high maintenance cost.

High acceleration and angular velocity? No problem. Rapid change in temperature, humidity or altitude? Not a concern. Our next generation Airborne Video Solid-State Recorder (AVSR) out performs standard video tape recorders in all situations. With no moving parts to break and no scheduled maintenance, cost of ownership goes way down too. The AVSR is based on the solid-state recorder we developed for the F-22, which won us the 1999 F-22 Most Valuable Player Award. Designed to be a drop in replacement for existing tape systems with no needed mods, AVSR draws less power and captures up to four channels of video and one channel of audio. The bottom line... better performance at a lower cost of ownership. Perfect.



For more information, contact:  
Orbital Sciences Corporation  
Fairchild Defense Division  
Tel: 301-428-6477 or 800-368-2812, ext. 6477  
Fax: 301-428-6433  
Email: [fdbusdev@oscsystems.com](mailto:fdbusdev@oscsystems.com)  
Or visit [www.orbital.com](http://www.orbital.com)



**Orbital**  
FAIRCHILD DEFENSE

## Did Deutch Mishandle US Defense Secrets...

The Department of Defense is investigating whether former CIA Director John M. Deutch—who also served as a top DoD official—mishandled Pentagon secrets by keeping them on an unsecured government computer in his home.

DoD is thus following the lead of the CIA, which has already begun a damage assessment to determine whether intelligence community information was compromised by Deutch.

At issue in both probes are several of Deutch's government-issued laptop and desktop computer systems, which he used to keep a personal diary and to access the Internet and receive e-mail—including at least one message from a Russian scientist now living in the West. Deutch left the CIA in December 1996.

The defense information at risk concerns "special access programs," said officials. Many of these highly classified black programs are kept secret even from the CIA and are known to only a handful of DoD officials.

Deutch, who headed the CIA in the period 1995–96, would have been briefed on these programs when he was undersecretary of defense for acquisition and technology, and then deputy secretary of defense, from 1993 to May of 1995. They involve plans for information warfare and other highly technical weapons, among other things.

CIA security officials first discovered evidence that Deutch may have violated laws concerning the use of classified material in mid-December 1996. The Justice Department was not notified of the possible infractions until over a year later.

The Senate Select Committee on Intelligence is itself investigating the investigations by studying whether high-level CIA officials covered up evidence of Deutch's misdeeds to prevent embarrassing the former senior official.

ment in 2003. If the cuts remain, that first shot would now be in 2005, according to the Pentagon.

## Minuteman/Pegasus Launch a Success

On Jan. 26, the Air Force successfully launched a new hybrid Minuteman/Pegasus rocket for the first time.

The Orbital Suborbital Program Space Launch Vehicle is the result of combining a Minuteman II first and second stage with the third and fourth stages of a Pegasus XL, built by contractor Orbital Sciences.

The creation of the hybrid rocket is part of an Air Force effort to use surplus Minuteman II components as a lower-cost means of reaching space. The service currently has more than 350 Minuteman II ICBMs in storage.

"We demonstrated that we can take retired Intercontinental Ballistic Mis-

A leak of coolant that was supposed to cool a pair of infrared sensor eyes likely caused the NMD interceptor to slip past its simulated warhead target by about 50 yards. But just to get it that close, the system's battle management and command-and-control components had to meet all their test objectives. (The *Washington Post* initially reported the coolant problem.)

The basic "science and technology" of hitting a target vehicle in space "is there," said Secretary of Defense William S. Cohen at a Feb. 8 budget hearing before Congress.

The next test will build upon this integration success. It is currently set for late April or May, though that date could yet slip.

NMD remains a high priority for both the Republican-controlled Congress and the Administration. The Pentagon's proposed 2001 budget includes an increase of \$400 million over the 2000 level and an overall increase of \$2.3 billion through 2005.

## Congress May Restore ABL Cuts

Key members of Congress are vowing to restore the \$900 million the Air Force marked for cuts in the Airborne Laser program over the next five years.

Initial reports cited the budget cuts as a DoD decision. However, in Feb. 8 testimony to the Senate Armed Services Committee, Defense Secretary Cohen stated it was solely an Air Force decision.

## ... And Was the Investigation Flawed?

Deutch's actions came to light on Dec. 17, 1996, when CIA technicians took a routine inventory of computers in his suburban Washington home. On them (and later, others), they found much sensitive and classified data. Officials, no matter how senior, are barred from putting such information on insecure, unclassified computers, especially when linked to the Internet.

The CIA launched an internal investigation, but it soon bogged down. A CIA inspector general report, recently released by the Senate Intelligence Committee, said Deutch resisted being interviewed by CIA security officers. Moreover, his interests supposedly were zealously guarded by CIA General Counsel Michael O'Neil and CIA Executive Director Nora Slatkin.

Even as the investigation was continuing, Deutch was given a security briefing as a member of the White House's Proliferation Commission. Moreover, he was permitted to keep his security clearances for such work.

On Aug. 3, 1997, the legal adviser to the operations division (unnamed in the document) sent an e-mail to a colleague. He expressed concern that no one had yet warned the Pentagon or the White House about Deutch's possible compromise of classified information. He also raised the issue of Deutch retaining his security clearance. His words:

"I remain unpersuaded ... that the CIA has done everything it can in this case to protect CIA and DoD equities. The investigation has been one in name only. ... I'm certainly not persuaded that giving this man a security clearance is in the best interest of the US Government or the President. ... I mean, geez, when was the last time a subject of an investigation was not interviewed because he objected to talking to security officers and the EXDIR [Slatkin], a personal friend, used her position to short-circuit an investigation? Let's be honest with each other; this so-called investigation has been handled in a manner that was more designed not to upset friendships than to protect the interests of the USG."

In subsequent budget testimony, Air Force Secretary Peters assured senators that the service is committed to the program. In fact, Air Force Chief of Staff Gen. Michael E. Ryan asked for restoration of the full five years' funding in his top priorities list of unfunded requirements presented to Congress in February.

The ABL has shone in major tests and was set for a shutdown experi-

ment and use them as a low-cost, reliable, space launch vehicle," said Col. Dan Dansro, launch mission director. "By inserting satellites into the desired orbit, we've now proven this new capability."

The Vandenberg AFB, Calif., launch went perfectly, said Air Force officials. The payload consisted of four satellites from universities across the country and scientific experiments.

The OSP is capable of launching several payloads of up to 750 pounds to a 400 nautical mile, sun-synchronous orbit.

"The fact that we launched a complex payload is important because it allows us to use the maximum capability of the launch vehicle for customers who perhaps couldn't afford paying for a space launch by themselves," said Maj. Steven Buckley, launch director.

#### News Notes

■ On Feb. 1, the Air Force stood up its Quadrennial Defense Review office at the Pentagon. The office is responsible for preparing the Air Force for the 2001 QDR and reports to the Air Force assistant vice chief of staff.

■ A strike by Boeing workers has

delayed some testing and production of the F-22, according to the Air Force. The walkout by more than 17,000 engineers and technical workers has also had a moderate impact on software development for the firm's entry in the competition to build the Joint Strike Fighter, said company officials.

■ Operations at two overseas installations will end as part of the 25th round of Pentagon base closures, Secretary of Defense William S. Cohen announced Feb. 15. Headquarters US Army Europe will cease operations in Bad Kreuznach, Germany, and return six facilities to host nation control. Headquarters US Air Forces in Europe will cease operations at the Soesterberg Collocated Operating Base in the Netherlands.

■ The USO has recently opened its

largest and most modern lounge ever at the Baltimore-Washington IAP. The 5,000-square-foot center has a technology center outfitted with computers and top-of-the-line software, as well as a complimentary snack bar and cafe tables wired for the Internet. Military personnel can sip a cup of coffee and plug in their laptops to check e-mail at the same time.

■ On Feb. 9 the Air Force awarded a second Distinguished Flying Cross to the special operations helicopter pilot who led the rescue of both American pilots shot down in Operation Allied Force. Lt. Col. Stephan J. Laushine, former commander of the 55th Special Operations Squadron, Hurlburt Field, Fla., retrieved the pilot of an F-117 shot down by Serbian artillery March 27, 1999, and the pilot

## Senior Staff Changes

**RETIREMENTS:** Maj. Gen. Jeffrey G. Cliver, Brig. Gen. Richard A. Coleman Jr., Brig. Gen. Paul R. Dordal.

**NOMINATIONS:** To be **Lieutenant General:** Ronald E. Keys. To be **Major General:** Gary A. Ambrose, Brian A. Arnold, Thomas L. Baptiste, Leroy Barnidge Jr., John L. Barry, Walter E.L. Buchanan III, Richard W. Davis, Robert R. Dierker, Michael N. Farage, Jack R. Holbein Jr., Charles L. Johnson II, Theodore W. Lay II, Teddie M. McFarland, Michael C. McMahan, Timothy J. McMahon, Duncan J. McNabb, Howard J. Mitchell, Bentley B. Rayburn, John F. Regni, Victor E. Renuart Jr., Lee P. Rodgers, Glen D. Shaffer, Charles N. Simpson, James N. Soligan, Michael P. Wiedemer, Michael W. Wooley, Bruce A. Wright. To be **Brigadier General:** Curtis M. Bedke, Scott S. Custer.

**CHANGES:** Maj. Gen. (sel.) Leroy Barnidge Jr., from Cmdr., 509th BW, ACC, Whiteman AFB, Mo., to Vice Cmdr., 9th AF, ACC, Shaw AFB, S.C. ... Brig. Gen. (sel.) Curtis M. Bedke, from Cmdr., 71st FTW, AETC, Vance AFB, Okla., to Vice Cmdr., 8th AF, ACC, Barksdale AFB, La. ... Maj. Gen. Robert P. Bongiovi, from Dir., Rqmts., AFMC, Wright-Patterson AFB, Ohio, to Dep. Dir., Defense Threat Reduction Agency, USD, Acq. & Tech., Sterling, Va. ... Brig. Gen. Kelvin R. Coppock, from Dep. Dir., Ops., AFSPC, Peterson AFB, Colo., to Dir., Intel., USSTRATCOM, Offutt AFB, Neb. ... Brig. Gen. (sel.) Scott S. Custer, from Asst. Dep. Dir., Politico-Military Affairs, Jt. Staff, Pentagon, to Dep. Dir., Ops., Natl. Mil. Cmd. Ctr., Jt. Staff, Pentagon ... Brig. Gen. David A. Deptula, from Dir., EAF Implementation, DCS, Air & Space Ops., USAF, Pentagon, to Dir., AF Quadrennial Defense Review, Pentagon ... Brig. Gen. (sel.) Felix Dupre, from Cmdr., 1st FW ACC, Langley AFB, Va., to Exec. to SACEUR, SHAPE, NATO, Mons, Belgium ... Brig. Gen. Robert J. Elder Jr., from Asst. Dir., Aerospace Ops., ACC, Langley AFB, Va., to Dep. Dir., Reaction Force Air Staff, Allied Command Europe, NATO, Kalkar, Germany.

Brig. Gen. Paul W. Essex, from Dep. Dir., Reaction Force Air Staff, Allied Command Europe, NATO, Kalkar, Germany, to Mission Area Dir., Global Reach, Asst. SECAF for Acq., Arlington, Va. ... Gen. (sel.) John W. Handy, from DCS, Instl. & Log., USAF, Pentagon, to Vice C/S, USAF, Pentagon ... Brig. Gen. Paul M. Hankins, from Dep. Dir., LL, OSAF, Pentagon, to Dir., Recruiting & Retention Task Force, Office of Vice C/S, USAF, Pentagon ... Maj. Gen. (sel.) Charles L. Johnson II, from Dir., P&P, AMC, Scott AFB, Ill., to Cmdr., Oklahoma City ALC, AFMC, Tinker AFB, Okla. ... Lt. Gen. (sel.) Ronald E. Keys, from Dir., Ops., USEUCOM, Stuttgart-Vaihingen, Germany, to Cmdr., Al-

lied Air Forces Southern Europe, NATO, Naples, Italy ... Brig. Gen. Michael G. Lee, from Dep. Dir., Ops., NMCC, Pentagon, to Dep. Cmdr., 6th Allied Tactical Air Force, Allied Air Forces Southern Europe, NATO, Izmir AS, Turkey ... Brig. Gen. Richard B.H. Lewis, from Dep. Cmdr., 6th Allied Tactical Air Force, Allied Air Forces Southern Europe, NATO, Izmir AS, Turkey, to Dep. Dir., Developing Aerospace Leaders Prgm. Office, DCS, Personnel, USAF, Pentagon ... Maj. Gen. Arthur J. Lichte, from Mission Area Dir., Global Reach, Asst. SECAF for Acq., Arlington, Va., to Dir., P&P, AMC, Scott AFB, Ill. ... Gen. Lester L. Lyles, from Vice C/S, USAF, Pentagon, to Cmdr., AFMC, Wright-Patterson AFB, Ohio ... Brig. Gen. (sel.) Roosevelt Mercer Jr., from Vice Dir., Plans, USSPACECOM, Peterson AFB, Colo., to Dep. Dir., Ops., AFSPC, Peterson AFB, Colo. ... Brig. Gen. (sel.) Allen G. Peck, from Cmdr., 32nd Air Ops. Gp., USAF, Ramstein AB, Germany, to Asst. Dir., Aerospace Ops., ACC, Langley AFB, Va.

Brig. Gen. (sel.) Anthony F. Przybyslawski, from Cmdr., 28th BW, ACC, Ellsworth AFB, S.D., to Cmdr., 509th BW, ACC, Whiteman AFB, Mo. ... Maj. Gen. (sel.) Victor E. Renuart Jr., from Cmdr., 347th Wg., ACC, Moody AFB, Ga., to Cmdr., JTF Southwest Asia, USCENTCOM, Riyadh, Saudi Arabia ... Brig. Gen. John W. Rosa Jr., from Cmdt., ACSC, AETC, Maxwell AFB, Ala., to Cmdr., 347th Wg., ACC, Moody AFB, Ga. ... Maj. Gen. Randall M. Schmidt, from Cmdr., JTF Southwest Asia, USCENTCOM, Riyadh, Saudi Arabia, to Special Asst. to Cmdr., USAF, Ramstein AB, Germany ... Brig. Gen. (sel.) John T. Sheridan, from Gp. Cmdr., to Cmdt., ACSC, AETC, Maxwell AFB, Ala. ... Brig. Gen. (sel.) Loyd S. Utterback, from Cmdr., 27th FW, ACC, Cannon AFB, N.M., to Cmdr., 35th FW, PACAF, Misawa AB, Japan ... Brig. Gen. Stephen G. Wood, from Cmdr., 35th FW, PACAF, Misawa AB, Japan, to Dep. Dir., LL, OSAF, Pentagon ... Lt. Gen. (sel.) Michael E. Zettler, from Cmdr., Oklahoma City ALC, AFMC, Tinker AFB, Okla., to Dep. C/S, Instl. & Log., USAF, Pentagon.

**COMMAND CHIEF MASTER SERGEANT CHANGES:** CMSgt. Daniel M. Keane, to CCMS, ACC, Langley AFB, Va.

**SENIOR EXECUTIVE SERVICE CHANGES:** Gregory W. Den Herder, to Dep. Dir., Personnel Force Mgmt., DCS, Personnel, USAF, Pentagon ... Frances A. Duntz, to Prgm. Dir., Mobility, SPO, ASC, Wright-Patterson AFB, Ohio ... Edward C. Koenig, to Chief, Aircraft & Missile Spt. Div., DCS, Instl. & Log., USAF, Pentagon ... Robert J. May Jr., to Exec. Dir., AFRL, Wright-Patterson AFB, Ohio ... Shirley C. Williams, to Dir., Palace Compass Prgm. Mgmt. Office, USAF, Pentagon ... Margaret A. Zook, to Dep. Dir., Supply, DCS, Instl. & Log., USAF, Pentagon. ■

of an F-16 downed May 2, 1999, near Belgrade.

■ Army Gen. Henry H. Shelton, Chairman of the Joint Chiefs of Staff, will ask Congress to make tweaks in the 1986 Goldwater-Nichols Act, he told reporters Feb. 15. The changes will attempt to eliminate cumbersome administrative requirements, he said—most significantly as they relate to joint officer management and joint professional military education.

■ A relay of unit members carried the guidon of the 8th Special Operations Squadron 26 miles from their old home at Hurlburt Field, Fla., to their new home at Duke Field, Fla., on Feb. 5. The 8th SOS is now the Air Force's only active duty associate unit. The Reserve owns the field's six Combat Talon I aircraft, while the 8th SOS provides aircrews and maintainers who share flying time and upkeep on the airplanes.

■ A new Tanker Planner Course officially opened at Air Mobility Warfare Center Det. 1, Hurlburt Field, on Feb. 7. The five-day course will prepare tanker planners to operate in the fast-paced, time-critical atmosphere of any combined or joint air operations center.

■ Rogue states, such as North Korea or Iraq, may well be able to hit the United States with an ICBM within a few years—but they are unlikely to actually mount such an attack, according to government intelligence officials. A terrorist delivery of a weapon of mass destruction via a means other than a missile—a truck, car, boat, airplane, etc.—is a more likely threat to US territory, an official told a Senate governmental affairs subcommittee hearing in early February.



USAF photo by SSgt. Rob Jensen

**Capt. Ty Groh, 18th Fighter Squadron, Eielson AFB, Alaska, preflights his F-16 for the exercise Northern Edge 2000. Alaska's largest annual training exercise, the multiservice Northern Edge focuses on military peace enforcement operations.**

■ The Air Force was scheduled to receive its 100th Tunner loader during a Feb. 24 ceremony at the West Plains, Mo., factory of manufacturer Systems & Electronics, Inc. Plans call for the Air Force to eventually take delivery of 318 of the loaders, named for Lt. Gen. William H. Tunner, commander of the Berlin Airlift.

■ All Air Force Space Command air stations in the United States were redesignated as "Air Force Stations" effective Feb. 4. The change will provide the sites with a "clearer identity," said officials. For example, at Cape Canaveral, Fla., where commercial, civil, and military space programs all exist side by side, the name Cape Canaveral AFS will

clearly delineate Air Force roles and missions.

■ *Memphis Belle* flies again. Aviation artist Dru Blair has completed a faithful rendition of the pinup nose art that graced the B-17 during World War II on a B-1 bomber of the 116th Bomb Wing, Robins AFB, Ga.

■ C-130s will now routinely fly actual—as opposed to training—aero-medical evacuations, Air Mobility Command officials announced in late January. The vast majority of aero-medical evacuation missions are currently flown by C-141s, but as their numbers dwindle AMC is looking at new ways to perform the vital function.

■ The maximum allowable selective re-enlistment bonus authorized has increased from \$45,000 to \$60,000, effective Feb. 4. Eligibility for the higher bonus cap requires re-enlistment on or after that date.

■ Air Force runners took their second consecutive team crown in the Armed Forces Cross Country Championships at Patrick AFB, Fla., on Feb. 11. The Air Force combined time of 3:21.20 provided a 28-second margin of victory after second-place Army.

■ The Extension Course Institute and the Air Force Distance Learning Office merged Feb. 1. During the height of the Vietnam War, ECI was the largest educator in the country—and with the merger, the new entity will probably reclaim that crown, said officials. Home for the new Air Force Institute of Advanced Distributed Learning will be at Maxwell AFB, Gunter Annex, Ala. ■

## Index to Advertisers

AT&T .....	13
Boeing .....	44-45, Cover IV
Breitling .....	3
Lockheed Martin .....	Cover II
Military.Com .....	7
Mitchell Lang .....	8
Northrop Grumman .....	79
Orbital Fairchild .....	19
Rockwell Collins .....	23
Shields Co. ....	8
TEAC America .....	67
Teledyne Brown .....	Cover III
Textron Systems .....	17
USAA .....	51
AFA Affordable Wearables .....	27
AFA Online Community .....	83
AFA Resume .....	26



Master airspace and time.



**GANS/GATM FOR ONE COMMON AIRSPACE.** Autonomous altitude selection. Current weather routing. Flight path optimization. With assured separation from other aircraft. Today, the global air traffic environment is taking shape. Our advanced, open-architecture avionics are currently being installed on military aircraft throughout the world.

Providing unrestricted access to commercial airspace and the military functionality to ensure mission success. So you can fly anywhere the future takes you. Call 319.295.5100 or fax 319.295.4777.

[www.collins.rockwell.com/government-systems](http://www.collins.rockwell.com/government-systems)

**Rockwell  
Collins**

# Washington Watch

By Robert S. Dudley, Executive Editor

## Still in the Hole

The 2001 defense budget does not cover today's most urgent needs or begin to address long-term requirements of the force.



WASHINGTON'S reaction to President Clinton's new military budget dramatizes the scope and magnitude of the effort that now will be required to rebuild the nation's armed

forces. The Administration's line is that the budget, which increases defense spending \$3.3 billion, protects Clinton's "commitment" to "military excellence." Defense Secretary William S. Cohen said it funds "very robust capabilities" for "current contingencies" even while "protecting our investment for the future."

Yet even prominent skeptics of increased military spending immediately branded the \$291.1 billion program as inadequate and urged Congress to provide additional billions to the Pentagon. The proponents of higher spending say the military must receive a bigger allocation in 2001 and years thereafter because it confronts problems on a truly staggering scale.

A partial listing of those problems includes requirements to replace a huge inventory of aging Cold War weapons, to attract and retain large numbers of increasingly scarce high-quality troops, to provide health care coverage to millions of military retirees, and to develop revolutionary defense technologies.

Each of these efforts will require the addition of billions of dollars to planned budgets.

In these circumstances, calls to raise military spending have come from unusual quarters. Example: Rep. John R. Kasich (R-Ohio), chairman of the House Budget Committee. "We're going to have to put more money into the Pentagon," said Kasich, a longtime "deficit hawk"

who opposed spending on the B-2 bomber.

Others simply pointed out that the approved program is underfunded. The Center for Strategic and Budgetary Assessments, a Washington think tank that is frequently critical of military spending, said the program may be short as much as \$50 billion per year. Another independent group, the Center for Strategic and International Studies, claimed that the underfunding could be as high as \$100 billion per year.

House Armed Services Committee Chairman Floyd D. Spence (R-S.C.), a longtime Administration critic, argues that the needs are simply too great to be fixed quickly. "When you look back at these past eight years," Spence said at a Feb. 9 hearing, "the Administration's cumulative defense budget requests have fallen more than \$300 billion short of even covering ... inflation."

Spence added, "After years of decline, the Administration has dug such a deep hole that it's going to take a decade or more of real growth in defense spending to climb out."

### Warner's Warning

Echoing Spence's comments was Sen. John W. Warner (R-Va.), the chairman of the Senate Armed Services Committee. "One year won't do it," he said. "Two years won't do it. It has to be a succession, in my judgment, of five to six years of increased spending. We've got to continue that momentum at least for five to six years."

The new budget fails even to cover all of today's most urgent needs, let alone work off those that have accumulated over the 1990s. The plan, in fact, fails to finance \$16 billion worth of critical service requirements.

This is hardly a military secret. The nation's top uniformed officers discussed it openly.

Gen. Michael E. Ryan, the Air Force Chief of Staff, noted in February testimony that next year's budget, as is, fails to cover \$3.5 billion worth of requirements. There were

shortages of \$1.1 billion for modernization, \$991 million for infrastructure, \$986 million for readiness, and \$410 million for military personnel.

The situation only gets worse in the future. The total shortfall for the five years of the Future Years Defense Program, covering 2001-05, comes to \$12 billion, according to Ryan's accounting, and that is only a partial list of USAF needs.

The planned budgets of the future do not sufficiently support Air Force modernization needs, according to Secretary of the Air Force F. Whitten Peters. "We are modernizing every one of our old platforms and also replacing some of them with more modern equipment," said Peters. "However, the rate at which we're replacing them will not sustain the force sizes we have today. We would have to get additional funds to do that."

Today, Air Force materiel readiness is in trouble. USAF documents note that the mission capable rate for major Air Force systems stood at 73.5 percent at the end of 1999, the last year for which complete figures are available. That is down a full 10 percentage points since 1991, even as the service carried out major operations such as Northern Watch (northern Iraq), Southern Watch (southern Iraq), Deliberate Force (Bosnia), and Allied Force (Yugoslavia).

### Retention Still an Issue

The Air Force's leaders remain apprehensive about the low pilot retention. Last year, the retention rates in this category fell from 46 percent to 41 percent.

The "take rate" for the pilot bonus at the eight-year mark, which fell from 81 percent in 1994 to 27 percent in 1998, ticked back up in 1999 to 42 percent. This is still far below the Air Force goal of 50 percent, and USAF's pilot shortage grew from about 800 in 1998 to 1,200 last year. Still, the Air Force said the upward trend in the bonus take rate is cause for "a measure of guarded optimism."

The enlisted force continues to be the focus of concerns. That is because 1999 was the second straight year in which USAF failed to meet goals in all three major re-enlistment categories.

First-term enlisted retention dropped to 49 percent (goal: 55 percent). Career airmen retention fell to 91 percent (goal: 95 percent). Second-term airmen retention stabilized at 69 percent (goal: 75 percent).

"As a former wing commander, I will tell you that I worry about declining experience levels," said one top Air Force officer in a background briefing. "It is an experienced force that makes the difference. You can't replace an eight-year engine mechanic except with an eight-year engine mechanic."

In the first quarter of 2000, the Air Force missed recruiting goals again. Ryan told a Feb. 10 hearing of the House Armed Services Committee, "Our recruiting is still a challenge. We're losing too many of our experienced people, both enlisted and officers. Last year, we missed our [recruiting] goal by 1,700 people, and thus far this year, we have indications we may again miss our annual recruiting goal for the second time since 1979."

The new budget attempts to address the worsening personnel problem. It proposes a 3.7 percent raise in military pay to help bring military pay 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). It also fully funds the pay table reforms and changes in military retirement approved last year.

The new budget also initiates a major program to compensate service members for out-of-pocket expenses stemming from use of higher-priced off-base housing.

Moreover, it finances the Air Force's transition from a garrison-based force to the Expeditionary Aerospace Force, a move designed to reduce currently high optempo for USAF forces and inject greater predictability into deployments overseas.

In time, these measures may produce a turnaround in force readiness, but nobody thinks it's happened yet. Ryan, in his testimony to the House Armed Services Committee, sounded anything but overconfident. "The increase in funding that we received in 1999 and 2000 has helped address some of our immediate concerns," said Ryan. "I'm optimistic that, if we sustain that funding, our readiness decline can

be turned around. But it has not yet. Our readiness trends have not reversed."

The underlying problem, said Spence, was only too evident.

Spence's words: "The fundamental point of all this is for us to recognize ... that the nation is going to need to spend a lot more money than the Administration is requesting and projecting to spend in the future in order to maintain even current military capabilities."

#### **Detail of USAF Budget**

The following detail focuses on the budget year 2001, with longer-range projections provided as needed. Figures refer to new budget authority. To facilitate year-to-year comparisons, all amounts are given in constant Fiscal 2001 dollars. The term "this year" refers to Fiscal 2000 and "next year" to Fiscal 2001.

Under the new Administration plan, defense spending rises from \$287.8 billion this year to \$291.1 billion next year, giving the Pentagon a small but real \$3.3 billion increase, the first ever proposed by the Clinton Administration.

The Air Force would get \$85.3 billion, about 2 percent more than this year's amount and a slightly larger share of the DoD budget.

Five categories make up the bulk of next year's Air Force budget. They are:

- Procurement, \$20.9 billion.
- Research and Development, \$13.7 billion.
- Operations and maintenance, \$28.1 billion.
- Military personnel, \$20.9 billion.
- Construction and housing, \$2.0 billion.

About \$300 million of the costs are offset by receipts paid directly to Air Force accounts.

In recent times, Administration spokesmen have tended to put great store in fixing problems in the so-called "out-years," the last four years of the six-year defense program. However, there is not much relief in the out-years.

The Air Force, for its part, has planned out-year budgets of \$86.4 billion, \$85.5 billion, \$85 billion, and \$85.2 billion. In other words, spending will stay essentially flat.

#### **Fighter Modernization**

The new spending plan proposes to take the F-22 Raptor, USAF's fighter of the future, into low-rate initial production. (That was the plan last year, but it was blocked by Congress.)

"The F-22 ... is essential to guar-

anteeing early US air superiority in future conflicts," said a Pentagon statement. "No other aircraft promises to do that."

The budget proposal included \$4 billion next year for the F-22 program. This would be enough to continue development and pay for 10 production aircraft. Officials envision a steady increase in the procurement funding for the F-22 over the next several years, rising to 16 aircraft in 2002, 24 in 2003, and 36 in each year thereafter.

The Air Force budget also supports the Joint Strike Fighter program, which is expected to produce new fighters for the Air Force, Navy, Marine Corps, and Britain's Royal Air Force and Navy. USAF plans next year to commit \$429.1 million of a Pentagon-wide total of \$856.7 million to continue development of the JSF. The Navy provides the rest. No procurement money has yet been requested.

The JSF program will enter the engineering and manufacturing development phase next year, with first USAF procurement in 2005.

To the disappointment of some, the Air Force failed to include money in next year's budget for any new F-16 fighters. It is procuring 10 this year to help alleviate a shortage of attrition reserve aircraft. Service officials said they planned to resume buys of the multirole fighter aircraft with purchases of six in 2003 and seven in each of the two years after that. Originally, the Air Force said it would buy 10 in 2002 and 10 in 2003.

For aerial combat, the Air Force will spend \$152.5 million to buy 204 copies of the AIM-120 Advanced Medium-Range Air-to-Air Missile and \$50 million for 80 AIM-9X Sidewinder air-to-air missiles.

Though Congress added \$275 million to this year's budget to buy five more F-15E fighters, the Air Force did not request more and does not plan to do so.

(In another tactical aircraft development, the Navy put up another \$3.1 billion to develop and procure 42 F/A-18 Super Hornet fighters.)

#### **Mobility Modernization**

The budget allocates a major share of procurement funds to airlifters and refueling aircraft.

It allots \$3.1 billion to procure 12 new C-17 airlifters and to fund their spare parts, R&D, and basing support construction. Original plans called for buying 15 of the advanced airlifters, but the Pentagon deferred three to later years to open a spot on the production line for Britain,

which says it wants to buy some of the aircraft. DoD has an official requirement for 135 C-17s.

The Air Force has programmed extensive C-5 engine and avionics upgrades but allotted only \$268.6 million to buy two new C-130J tactical airlifters.

Aerial refuelers get 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.

The Defense Department committed \$1.8 billion to procure 20 V-22 Osprey tiltrotor aircraft. Most will go to the Marine Corps, but the Air Force kicked in \$380 million to procure four CV-22s for Special Operations Forces.

**Intelligence, Surveillance, Reconnaissance Modernization**

A major focus of effort this year was Air Force aircraft that provide timely information about air and land battles.

Once again, for the second year in a row, the Air Force has been given authority and money to buy an additional E-8 Joint Surveillance Target Attack Radar System aircraft—the 15th of the line—at a cost, with research, of \$427.3 million.

The Pentagon approved purchase of the 14th model in this year. The requirement is for a fleet of 19 Joint STARS aircraft. Defense Secretary Cohen in 1997 cut the Joint STARS buy from 19 to 13, but he had second thoughts about it and shifted course.

For the Joint STARS fleet, the computer replacement program will begin next year. Additionally, the budget continues funding for a major upgrade to the E-8 radar system.

The high-altitude U-2 is receiving several enhancements, most importantly an upgraded radar with greatly improved imagery, while the RC-135 Rivet Joint fleet has been expanded to 16 aircraft. Moreover, plans call for procurement of eight Air Force Global Hawk UAVs through 2005.

**Space Systems Modernization**

USAF has committed \$810 million for continued development of the Space Based Infrared System, successor to the Defense Support Program warning satellite. However, to save money to divert to other programs, the Air Force last year slipped both phases of the program by two years. The so-called SBIRS High goes from 2002 to

2004, and the SBIRS Low from 2004 to 2006.

Elsewhere, the budget contains \$237 million for the Milstar satellite follow-on system and \$461 million for Global Positioning System satellite work.

According to USAF budget documents, space systems consume a huge chunk of total procurement dollars—fully 31 percent. That's less than combat air platforms (36 percent) but more than airlift (26 percent) and weapons (6 percent).

**Long-Range Airpower**

USAF's procurement budget was virtually empty when it came to long-range airpower aircraft and systems.

The Air Force provided \$145.2 million to continue work associated with the B-2 stealth bomber and its systems, but once again the service made no move to acquire more of the stealth bombers beyond the 21 previously ordered.

The new budget contains some \$217 million to continue to modify the fleet of B-1 bombers for conventional theater war.

Some \$645 million will flow next

year to buy substantial numbers of precision and near-precision munitions—9,100 Joint Direct Attack Munition tail kits, 6,300 Wind-Corrected Munitions Dispenser tail kits, 300 Sensor Fuzed Weapons, and 174 Joint Standoff Weapons, plus money to continue development of the Joint Air-to-Surface Standoff Missile.

A major casualty of the budget wars has been the YAL-1 Attack Laser, also known as the Airborne Laser.

USAF plans to allocate next year only \$148.6 million to continue research on the aircraft, a jumbo jet fitted with a high-energy laser which would be able to attack threatening ballistic missiles in their boost phase and perhaps be capable of shooting down aircraft as well. This represented a cut to the Air Force proposal of \$639 million, which DoD officials said was done for "affordability" reasons. The cut delays the first lethal test shot by two years, to 2005.

"It's an aggressive program and a challenging technology," said a senior Pentagon official during a background briefing for the Pentagon

*Let AFA Help Your Résumé*  
**STAND OUT!**

AFA can translate your military experience into a résumé that gets attention in today's marketplace!

Our résumé writing team is lead by David G. Henderson, noted author of "Job Search: Marketing Your Military Experience". Mr. Henderson will critique a résumé you've begun or write one for you. And each résumé service includes a copy of his top-selling book.

**AFA**

Air Force Association  
 Attn: Customer Service  
 1501 Lee Highway  
 Arlington, VA 22209  
 email: [custserv@afa.org](mailto:custserv@afa.org)  
 800-727-3337

*"Your product is undeniably one of the finest on the market. I thank you for taking so much material, condensing it and returning it to me so quickly. And your price is low!"*  
 — Major, USAF

Call or write for more details or click on Member Benefits from AFA's website at [www.afa.org](http://www.afa.org)

**Satisfaction Guaranteed!** Résumé Preparation \$160.00  
 Résumé Critique \$ 50.00

press, "but I think the issue largely revolved around affordability."

### Air Force End Strength

The new budget will take the Air Force to new lows in terms of size.

Today's active duty component is by far the smallest in the history of the Air Force. At its birth in 1947, the Air Force was composed of 386,000 active duty people. In the late stages of the Cold War, end strength topped 608,000. Force size at the start of this year was down to 366,000, and it will now shrink again.

The Air Force plans to cut another 8,000 members this year and 1,000 more next year, dropping the total to 357,000. In the budget out-years, 2002-05, the Air Force will lose another 5,000 active duty members, according to budget papers.

Within the Air National Guard and Air Force Reserve Command, one finds essentially no change in end strength. USAF's next-year budget provides for a combined military force of 182,000—108,000 Guardsmen and 74,000 Reservists.

The Air Force's experience mirrors trends throughout the US armed forces.

After more than a decade of cuts, the US military has suffered a net reduction of 792,000 active duty troops. The armed forces, which numbered 2,174,000 troops at the end of 1987, had shrunk to 1,390,000 on Sept. 30, 1999. By the end of this year, the force will be down to 1,382,000 troops.

### USAF Force Structure

The Total Air Force will maintain slightly more than 20 Fighter Wing Equivalents, 13 of which will be in the active duty force. The number of Guard and Reserve wings will hold at about seven FWE.

Much of the fighter force structure will be forward deployed—3.45 FWEs in the Pacific and Alaska, 2.3 FWEs in Europe, and one FWE in Southwest Asia. Moreover, said the Pentagon, the Air Force is capable of deploying, as part of its expeditionary forces, seven to eight fighter wings to a distant theater in a matter of days. The Air Force will complete its transition to an expeditionary deployment concept next year.

The Air Force next year plans to maintain a fleet of 190 heavy bombers, comprising 76 B-52s, 93 B-1Bs, and 21 B-2s. Of that number, 44 B-52s, 52 B-1s, and all 21 B-2s will be fully funded in terms of parts, maintenance, and load crews and are

ready for immediate deployment in major theater war. Twelve more B-52 bombers are held in reserve for nuclear missions.

The Pentagon reports that all B-52s and B-1s in the inventory, including those in attrition reserve, will be kept in flyable condition and will receive planned modifications.

This will raise the number of B-1 primary mission aircraft to 70 by 2004.

The Air Force airlift fleet of 2001 will consist of 58 C-17s, 88 C-141s, 104 C-5s, and 418 C-130s (all assigned for performance of wartime missions). The long-range tanker force consists of 472 KC-135 and 54 KC-10 Air Force primary mission aircraft.

ANG will operate 1,030 aircraft. AFRC will have 60 flying units containing 351 aircraft.

### Combat Readiness

The Pentagon's proposed Operations and Maintenance account for next year totals \$109.3 billion. The request fully funds the military services' O&M budgets, said officials, so that operations, training, and maintenance goals can be met.

Air Force O&M funding will support the day-to-day activity of 85

major bases, 5,024 primary authorized aircraft, 550 ICBMs, and worldwide space operations. It funds 2.1 million flying hours at a cost of \$4.5 billion next year.

Flying time in the next year for active Air Force fighter and attack aircrews has been set at 17.1 hours per month, down slightly from 17.2 this year but up a bit from 17.0 in 1998. Bomber crews, which flew about 19.3 hours per month in 1998 and 15.8 hours this year, will get only 14.8 hours per month next year. Part of the reason for the decline: The Air Force now does more training on advanced simulators.

Faring somewhat better are the aircrews of airlift and tanker aircraft, which will fly 23.7 and 18.3 hours per month, respectively. Though the airlift rate is about the same as last year, the tanker rate goes up.

The budget funds projected 2001 DoD costs for operations in Bosnia and Kosovo. To make sure of this, the Administration added \$2.2 billion for these operations for next year. To protect readiness for the rest of this current fiscal year, the President is requesting \$2 billion in supplemental appropriations to cover DoD's unbudgeted Fiscal 2000 costs for Kosovo operations. ■

## Affordable Wearables



Order Toll-Free  
1-800-727-3337

Please add \$3.95 per order  
for shipping and handling

**C1 AFA Twill Pro Style Cap.** Black embroidered with "AFA." Silver and teal lettering. **\$12**

**C2 Baseball Cap.** Mesh or full crown with embroidered AFA name and logo. Available in white, tan, red and dark blue. **\$10**

**C3 T-Shirt.** 100% preshrunk cotton with "Air Power For a Strong America" on back and AFA logo on front. Unisex sizes: M, L, XL, XXL. **\$10**

**C4 AFA Sweatshirt.** Crew neck embroidered with double AFA logo. Unisex sizes: M, L, XL, XXL. **\$27**

**C5 Air Force T-Shirt.** 50/50 cotton blend. Full-color print on front. Ash. Unisex sizes: M, L, XL, XXL. **\$12**

**C6 Lightweight Rain Jacket.** Double front zippered pockets, hidden hood and embroidered AFA logo. Unisex sizes: M, L, XL, XXL. Dark blue or maroon. **\$33**

**C7 Denim Shirt.** 100% soft cotton with button-down collar by Gear. Embroidered with AFA/USAF 50th Anniversary logo. **\$40**

**C8 Polo Shirt.** 100% combed cotton with embroidered AFA logo. Unisex sizes: M, L, XL, XXL. Red, white or dark blue. **\$27**

**C9 AFA Silk Tie.** Embroidered AFA logo. Maroon with navy stripes or navy with maroon stripes. **\$23**


**C10 AFA Necktie.** Silk and polyester covered with full-color AFA logos. Dark blue only. **\$15**

USAF leaders and others tell more of the story behind the Allied Force campaign.

# Kosovo Retrospective



USAF photo by 1st Lt. Jack Braden



By John A. Tirpak, Senior Editor

**T**HE Air Force Association held its annual Aerial Warfare Symposium Feb. 24–25 in Orlando, Fla. The principal topic was Operation Allied Force, the 1999 NATO action in the Balkans. Speakers addressed the conduct of the air war, lessons learned, and the implications of NATO's first armed conflict for the future of aerospace power, but they also discussed Gulf operations, recruiting and retention, and USAF's budget, among other topics.

#### F. Whitten Peters

Operation Allied Force showed that the Air Force has been investing wisely in a careful balance of systems, people, and infrastructure, Secretary of the Air Force F. Whitten Peters said. To be successful in the future, USAF must avoid overemphasizing any one element of the "system of systems" that led to the lopsided victory over Yugoslavia.

The Air Force must find balance between "its mix of space, manned air, and unmanned air," according to Peters. The USAF budget "needs to be balanced by time and ... ensure that the key infrastructures on which we rely daily are in place" to support the nation's military. Paraphrasing Federal Reserve Board Chairman Alan Greenspan's famous reference to the stock market, Peters warned against "irrational exuberance" about any particular platform, since all Air Force capabilities are interdependent.

To illustrate, Peters noted that B-2 bombers would not have been so successful in the Balkans without tankers to refuel them en route to the target or without the Joint Direct Attack Munition. JDAM, in turn, relies on targeting data from sensor platforms like the E-8 Joint STARS radar aircraft and guidance from Global Positioning System satellites. The satellites must be put in orbit by affordable launch vehicles.

"None of our platforms is, must, or should be designed to be a Swiss

army knife—a self-contained platform that brings all things to the battlefield," Peters asserted.

An extraordinary infrastructure of airlift, skilled personnel, communications, and other capabilities enabled USAF, "in a matter of hours and days, to establish 21 expeditionary bases where there had been no base before."

This "herculean effort" was "executed so smoothly that it has deserved no mention in any of the lessons learned [studies]," Peters noted.

Allied Force marked the first time the Air Force employed reachback capabilities for intelligence and logistics support, Peters also noted. Through e-mail, video teleconferencing, and other methods, forward based troops were able to tap the expertise of troops remaining Stateside to obtain greater effectiveness.

He cited intelligence collected by U-2s over Yugoslavia making the round-trip to Beale AFB, Calif., then Ft. Meade, Md., for analysis, and then back to the theater "in 10 minutes or less." Likewise, 93 percent of spare parts requested by forward units arrived in less than four days, and overall, USAF combat units achieved a 92 percent mission capable rate—a rate not seen "since the early 1990s."

"Reachback is important because it reduces lift requirements, reduces the number of airmen who must deploy into harm's way—which is absolutely critical as we face the asymmetric threats of terrorism and weapons of mass destruction—and it allows our airmen to work at home where their families are located, No. 1, and the sophisticated computer gear that makes a lot of this possible is also located."

Another notable first from the Kosovo conflict was the integrated use of Unmanned Aerial Vehicles in targeting; work has been stepped up to add more UAVs for reconnaissance and surveillance, as well as for suppressing enemy air defenses, Peters reported.

Making the investment balance work with insufficient funds has been

a challenge, however. Peters noted a \$4 billion backlog in maintenance of real property at Air Force bases and installations and insisted the only way to afford keeping bases up to par is by reducing their number. He urged Congressional approval of two more rounds of the Base Realignment and Closure process.

Peters broke down the budget as follows: 36 percent going to attack platforms, meaning fighters and bombers but including the sensors and reconnaissance systems that go with dropping munitions and firing weapons; 31 percent to space; and 26 percent to airlift, with the remainder primarily to weapons development.

A problem area is recruiting. USAF has missed its goal in 1999 "for the first time in 20 years." The recruiting staff will be doubled, and TV advertising was bought for the first time last year, but these efforts and the new military pay raise have yet to show solid results in recruiting and retention.

Peters also warned that the Air Force's laboratories are graying: 30 percent of their civilian engineers and scientists will be eligible to retire in the next five years. Only 2 percent of the civilian lab work force is under 30.

Finally, Peters pitched for no further delays in procurement of needed aircraft.

Even if all the aircraft now on the books are delivered as planned, the average age of Air Force aircraft will increase nine months for every calendar year, he said. Peters added that operations and maintenance spending will increase "1 to 2 percent, in real terms," every year, because aging aircraft need more service and repair.

As for USAF's top priority, the F-22 fighter, "there is no inexpensive alternative" to it, Peters argued.

"The venerable F-15 simply will not go into the 2025 time period without extremely expensive modernization and [Service Life Enhancement Programs]." The Joint Strike Fighter is optimized for air-to-ground work and would need an expensive redesign to obtain the "leap-ahead technologies that the F-22 puts together."

"We have got to continue it," said Peters.

### **Gen. Michael E. Ryan**

The Air Force budget is moving up slightly. This and the new Expeditionary Aerospace Force structure

should help fix some chronic problems, Gen. Michael E. Ryan, Air Force Chief of Staff, asserted.

"For the first time in almost a decade and a half," the Air Force budget will rise "at a rate of about 1 percent real growth," something "that is dearly needed," Ryan said.

During that period, "I believe we undershot very badly the needs of the Air Force. I don't think any of us realized how very fragile readiness was ... and how very small changes in funding and equipment and spare parts could affect the total force."

Coming out of the Cold War, USAF planned and budgeted "to be located in only a dozen or so overseas bases," Ryan said, but all the contingencies since then have driven the number of overseas operating locations to 44.

"We'd like to decrease it," Ryan said.

The Air Force sent more than 500 aircraft and 20,000 people to Allied Force—a move that rippled through USAF's entire European infrastructure—and "did it over a 78-day period, and then reconstituted the forces very rapidly," Ryan observed. He added, "I think it looked too easy."

This task was accomplished by a force that has been shrunk by 40 percent yet has seen its commitments and operating tempo expand 400 percent since the end of the Cold War, he added.

"If we continued at this optempo, we would have, I think, lost many of our valuable experienced people," Ryan observed, noting that USAF is "about 5 percent overall below the retention rates that we would want." Down the road, the Air Force may have some tough problems due to reduced depth of experience.

Though he said the service is "not betting on it yet," he noted that the numbers on pilot retention are improving, thanks in part to improved pilot pay packages. The airlines are hiring four times as many pilots as the various services produce, so the competition is fierce.

The new Expeditionary Aerospace Force structure is designed to make the operating tempo more manageable, so the troops can have more predictability about when they'll be gone and be assured of getting proper training and schools at the right times in their careers.

The Low Density/High Demand platforms remain a problem not fixed

by the EAF structure. Ryan said he hopes to buy training tools that would allow crews to train at home without using the actual platforms, which could all deploy forward. He also suggested higher crew ratios would leaven the personnel tempo problem, which is acute in LD/HD systems.

An infusion of money two years ago to pay for spare parts has not translated into "mission capability turnaround yet," he said, but the 100 percent funding level for spares indicates "we at least put our money where our mouth was" and that the Air Force effort to fix the chronic problem of empty spares bins "should start paying off."

### **Gen. John P. Jumper**

As superlative as its performance in the Balkans was, the Air Force does a poor job of training its top leaders and should make it a priority to do better at preparing its senior officers for the rigors of war, said Gen. John P. Jumper, commander, US Air Forces in Europe (now commander, Air Combat Command).

Lt. Gen. Michael C. Short, the Joint Force Air Component Commander of Operation Allied Force, "trained himself in the operational level of warfare," Jumper said. Most of those in the Air Force leadership "trained ourselves, because our system did not train us."

Blue Flag, the exercise in which USAF generals are supposed to hone their skills, forces them to deal with the laborious task of managing an Air Tasking Order, Jumper explained.

"We never got to the part where colonels and generals were required to mass and concentrate forces to shift centers of gravity or to do the things that Mike Short was required to do in real time," he said.

Tools need to be developed that will better integrate information into a "decision-quality" picture on which commanders can base decisions about how to fight in a changing situation, Jumper asserted. Leaders should no longer have to integrate a lot of raw data in their heads. The technology to integrate and coherently display such information—which would be analogous to the God's-eye displays that will be available to the next generation of fighters—already exists, Jumper asserted.

"We need to put some energy into making that happen—and making it



happen soon." He added, "We need to think of our [Air Operations Center] as a weapon system." Commanders would train with such technology so they are well familiar with it in a real operation, Jumper said.

"One thing we have to keep straight when we are talking about process and product: Our product in war is dead targets, and our product in peace is all that goes into generating the warrior proficiency that kills those targets in wartime."

For example, the Intelligence, Surveillance, and Reconnaissance world "grew up where we paid most homage to the collection process," Jumper noted. It turned out "not to be very agile" in warfare. There is an effort to move up the targeting cycle so that retargeting of an airplane en route to a strike can be done "in single-digit minutes."

"We will have conquered this prob-

lem when we understand that no target ever died in the collection process."

Finally, Jumper exhorted Air Force leadership to better explain to the troops the value of what they are doing.

"There are no greater rewards than the rewards associated with being a part of something that is bigger than yourself," he said. In Allied Force, USAF people "did something very profound. They saved hundreds of thousands of lives in Kosovo. Today, whole families are alive who would otherwise have been brutally murdered. ... We need to make our people understand how very special they are."

#### Gen. Charles T. Robertson Jr.

The way the Air Force responds to crises has changed in the last decade, and the change signals even bigger challenges for airlift, according to Gen. Charles T. Robertson Jr.,

commander in chief, US Transportation Command, and commander, Air Mobility Command.

In Desert Storm, he said, 9.6 percent of the cargo was moved by air. However, "the demand for responsiveness has gotten so significant that in Kosovo, that number is now 62.4 percent of the cargo ... moved by air."

The regional commanders in chief, he said, "want it there yesterday, and the only way to get it there yesterday is to use ... air mobility force to respond."

Allied Force also showed up the "tremendous tanker involvement" needed for the air operation. There were 160 tankers deployed to 11 locations around Europe, Robertson said, and 390 aircrews laid on to operate them.

"Every time there is a major air operation—which means every major

## From Gulf Commander, Great Expectations for Airpower

"Airpower has played the most significant role" in post-Cold War military operations and has made the most significant strides in both technology and doctrine, according to Marine Corps Gen. Anthony C. Zinni, commander in chief, US Central Command.

Zinni gave the perspective of a joint force commander. He said that, from Desert Storm in the Gulf through Allied Force in the Balkans, airpower has provided more technological innovation than any other dimension of warfare and has, as well, paved the way for joint concepts that are now beginning to filter into other aspects of the force.

He noted that "there is a lot of blood on the floor" from early intraservice debates about the Joint Force Air Component Commander.

"Now, you hear nothing about JFACC. I don't hear any gripes or complaints or ... fears or lack of trust" from the other services that a single coordinator of airpower is anything but a sensible approach to organizing for war, Zinni said.

Zinni, in fact, took issue with a claim by USAF Lt. Gen. Michael C. Short implying that only an airman could adequately brief national leaders on aspects of an air campaign. "I would never, ever have an airman go up to Camp David to brief the air campaign," said Zinni. "I would never, ever have an infantryman or artilleryman go up to Camp David to brief the ground campaign. I would never, ever have a sailor [go] to Camp David ... and brief the naval campaign. If I can't do it, I ought to be fired."

He thinks "we are almost there" on a conceptual counterpart for land forces. After that, joint logistics will be the "bear that I am going to leave for my successor."

He worries that the success of airpower has set the bar too high for future operations. "The expectations are so great now: zero ... casualties, perfect execution, completely flawless," Zinni said. However, the technology advances—"precision ordnance, standoff weapon systems, increase in ISR capabilities, space-based systems, and what they give us in terms of accuracy, command and control, visibility of the battlefield"—mean "we can do a lot more with fewer assets." It has been hard to convince some that forces do not have to be immediately at hand, but simply available, to meet the mission, Zinni said.

"Our ability to deploy and get to the scene ... in a short time and meet the requirement ... has been demonstrated" both in the Balkans and the Middle East, he said.

Zinni praised the new Expeditionary Aerospace Force concept as a "clear, dramatic, bold recognition" of the state of the world and asserted that the Air Force has made "the greatest adaptation" to new joint force commander requirements.

"We demand for you to be expeditionary now, to build very bare-based environments, to do this on a short term. This has required significant change in our entire approach. I have seen this change handled exceptionally well. ... It fits exactly what we need to have happen."

CENTCOM has been carrying out a "low-key ... ho-hum" war against Iraq and left Saddam Hussein with an ever-shrinking capability, Zinni noted.

While coalition airpower has vaulted ahead in technology, said Zinni, "his technology has stagnated." Zinni asserted, "He has obviously lost a lot of force structure." He added that 30 percent of Iraq's air defense capability has been destroyed with "minimal, if any, collateral damage."

While the rolling attacks have gotten little attention, "slowly but surely, this guy is losing," said Zinni. "He loses face. He loses capability. He loses the propaganda war. ... He is leaving his forces completely uncovered and naked" both in Northern and Southern Watch areas.

Zinni expected Saddam to attempt some sort of action while the US was focused on the Balkans, but Zinni said, "I don't feel [he] was able to get off the ground." The fact that the US was "helping a beleaguered Moslem population ... didn't give him much traction in our region ... or much sympathy." Also, US forces in Central Command "never were drawn down to the point that we [felt] we couldn't handle the mission."

Despite the prowess of US forces, it would be foolish to assume "that we have enough of a technological advantage and we don't need to pursue more." He said he has supported the F-22 and continues to do so because "I, as a [commander in chief], want to keep this kind of edge. We can't pay today's bill at the price of tomorrow's capability."

Zinni warned against euphoria over the recent Iranian elections supporting a more moderate government. The clash of ideas and the struggle for power in Iran may turn violent, he said, and "it is not time yet" to assume that tensions with the West have eased.

"[Iran is] still the most dangerous country in our region," he asserted.

## Balkan Myths—and Mythmakers

Aerospace power has been proven to be decisive in joint military operations, and should be the centerpiece of such future actions, but myths have arisen, suggesting that it somehow failed in Operation Allied Force.

"I want to take on about nine of those myths," said Rebecca Grant, president of IRIS, an independent research firm in Washington.

The first myth, "coming out from the Army," targeted the Air Force's concept of Rapid Halt with aerospace power. The critics claim Rapid Halt "failed and failed big time in Kosovo, with an implication that the Air Force really has not been telling the straight story all along," Grant said.

Instead, she said that Serb and Kosovar forces were already in close combat "a year before the start of Allied Force." When forces are already mixed together, and there is no line of separation between them, "there is not much of an opportunity for any force to achieve halt," she asserted.

For "a number of reasons—some military and some political"—Rapid Halt couldn't be applied in Kosovo, Grant said, but "we shouldn't back away from it. We should understand the unique circumstances of this particular conflict."

The second myth was that fielded forces don't matter. Rather, Grant said, they do. "A theater commander usually wants to place heavy pressure on a fielded force, particularly one that is running amok as Milosevic's force did in Kosovo." Fielded forces also often tend to drive the size and duration of that air campaign, she said. Hitting a combination of fielded forces and strategic targets proved "the winning combination" in Desert Storm and Kosovo, she said.

The third myth was that the Yugoslav army escaped virtually unscathed, a comment still seen in press reports, Grant noted. Rather, the Yugoslav army was "hit hard," she said, and added that "a good level of destruction was achieved," including hundreds of tanks, artillery, and armored personnel carriers.

Likewise, myth No. 4—that decoys blunted the air campaign—bears no weight, Grant asserted. Out of 1,102 validated strikes, only 25 decoys were struck.

The fifth myth—that Milosevic caved because of the synergy of airpower with a ground force, in this case, the Kosovo

Liberation Army—doesn't hold up either, Grant said, because there was little correlation between damage done by airpower and the days of the KLA offensive. Indeed, tanks destroyed during the offensive were "all over Kosovo," not confined to a specific area as they would be if they had been "flushed" into the open by ground troops.

Another myth—that Milosevic capitulated because he feared a NATO invasion—depends on faith in the idea that only ground forces can be decisive, rather than the evidence, Grant asserted.

"It really is a mythical statement for us to imagine [that] something that may have gone on in someone's mind was more important than the real and physical effects of aerospace power going on throughout that battlespace day and night," she said.

Myth No. 7—that a just war demands bloodshed by the US—ignores the fact that NATO had a moral principle, Grant said.

"A just war is one that is based on just principles, not on the degree or apportionment of bloodshed," she said. Grant quoted Czech Republic President Vaclav Havel as saying that Allied Force "really was an important humanitarian operation." ... This was, at its root, a just operation."

An eighth myth—that Allied Force validated joint doctrine—assumes that such a doctrine for what happened exists, and it doesn't, Grant asserted.

"Kosovo really looked ... like this: shaping and controlling an engagement, done largely with air forces, also with maritime forces. ... Finally, objectives achieved and the termination coming with air. Then ... ground forces going in to monitor this operation and attempt to keep the peace."

There is no joint doctrine that actually spells out "the way that [commanders in chief] constantly employ American military power; getting the optimum effect by using air all it can in shaping, controlling, and achieving the same objectives," she argued.

The final myth Grant attacked was that maybe Kosovo was "an anomaly." She argued that airpower has proven "indispensable ... [in] the last three major operations."

We have to "move beyond the myths and understand what it is that aerospace power really does for us today," Grant said.

contingency that we are going to face in the years to come"—it will require a massive tanker effort, he said.

Robertson said he could not foresee when the KC-135 will need to be replaced, since most of the type have all-new cockpits and fairly new engines and average a 96 percent reliability rate.

The Balkan War also stressed the mobility force by demanding a multi-pronged approach to airlift throughout the operation. The logical progression of deploying forces, sustaining them, and then bringing them home, fanned out to include simultaneous operations in deploying forces from the US, humanitarian relief, intra-theater airlift of Task Force Hawk, and then retrieving everything once the operation was done, even as airlift deployed the NATO peacekeeping force troops.

Given the ever-increasing demand for lift, Robertson pointed out that

USAF is trading in 217 C-141s for 135 C-17s and that a "one for two" swap will cause problems. Despite the C-17's lifting capacity, "one airplane can't be in two places at the same time. ... What we have is a significant loss of flexibility and capability in peacetime to serve all those customers."

Because the C-5 has so much life left in it, Robertson said he's inclined to fix, rather than replace, the airplane. A new high-pressure turbine will cut engine overhauls in half and pay for itself in three years. A new cockpit is being installed, and the first airplane so-equipped will roll out "in about a year."

For the long run, a new engine with greater thrust would go a long way to solving the C-5's reliability problems, but it would be expensive to do, Robertson said. Until then, the C-5 won't be able to take off with a full load on hot days and may not be

able to climb fast enough to get into new international air traffic patterns.

A "select" number of C-17s and C-130s will get a new infrared countermeasures system to defend against shoulder-fired missiles at some austere locations where the threat is judged to warrant it, Robertson reported.

He also said he is keeping closely in touch with the Army as it overhauls its forces with the idea of becoming lighter and more deployable. An Army goal is that future vehicles will be transportable in C-17s and C-130s.

### Lt. Gen. Michael C. Short

Working within coalitions of airpower represents the likely future for the Air Force, but the US needs to do a better job of working with its partners than it did in Allied Force, said Lt. Gen. Michael C. Short, commander, 16th Air Force, and commander, Allied Air Forces Southern Europe.

In the 14 years since the Goldwater-Nichols Act, the US military has "spent a great deal of time talking and thinking and working at joint operations, and I believe ... we are there," Short asserted. While there may be situations in the future where the US will want to act on its own, militarily, it usually will "try to cobble together a coalition, because we want to fight that way, because we want to share the burden, and because we want the cloak of legitimacy" that a coalition affords.

He said the US will probably lead any coalition it enters but that it should set the terms of its participation up front. Any coalition effort should be given clear political objectives, translated into clear military objectives, and a plan for the desired end state. These were lacking in Allied Force, he asserted.

"We began bombing the first night with our objective being to demonstrate NATO resolve. That is tough to tell the kids at Aviano to go out and put it on the line to 'demonstrate resolve.' We need to know what our military objectives are, and we need to understand what we are trying to accomplish."

NATO achieved its five objectives in Kosovo "to some degree by happenstance rather than by design." It's not clear yet "if we won," Short said, because the desired end state has never been articulated.

In future air wars, politicians should be briefed by an airman on what an air campaign will entail.

Short said, "Our politicians need to understand that this isn't going to be clean. There is going to be collateral damage. There will be unintended civilian casualties. We will do our level best to prevent both, but they've got to grit their teeth and stay with us. We can't cut and run the first time we hit the wrong end of a bridge." The reaction to scenes of unintended destruction "placed our kids at greater risk and made it more difficult to do our job," Short said.

(Short's statement provoked a riposte from a theater commander, Gen. Anthony C. Zinni, commander in chief of US Central Command. See box on p. 31.)

For their part, coalition partners must make it clear up front what they believe to be "a valid military target" and what they don't, Short said. He was frustrated during the

war at having aircraft pulled off targets at the last minute because of a political decision by one ally.

Short said he "failed miserably" at building a true coalition command structure. He said he made the air war team leadership almost entirely American, displacing an alliance command structure that "had been there for 50 years."

"Had I to do it over again," Short said, "there would be Dutchmen and Brits and Italians at that level of command. ... We should never again ... run a US-only command structure inside of a NATO alliance. ... We can never do that again to our allies or we will not have allies."

He also urged that future US commanders "shoot straight" with their partners and make them aware of what the US is going to do. There should not be an alliance Air Tasking Order and a US-only ATO, he said. Allies weren't allowed to know what the B-2 and F-117 would be doing, due to "concerns for technology ... and timing," but Short said those issues can be overcome without jeopardizing operational security.

Intelligence should also be more liberally shared with coalition partners, so they know "what is out there. We don't have to reveal the source."

Short noted that "there are not lessons learned from Kosovo. There are lessons. ... Whether we are able to act on those lessons will be an issue of resources and political will. I believe the jury is still out on that."

#### **Lt. Gen. Charles F. Wald**

Ongoing strikes against Iraq are having a telling effect, and, despite tough conditions, morale among USAF troops deployed in the Middle East is high, according to Lt. Gen. Charles F. Wald, commander, 9th Air Force, and commander, US Central Command Air Forces.

Since Operation Desert Fox in December 1998, the Air Force has racked up 30,000 sorties maintaining the aerial blockade of Iraq, Wald said. In that time, coalition pilots have either been illuminated by Iraqi radar or shot at about 500 times.

Since Desert Fox, "we have had the ability to retaliate," Wald said. For each Iraqi violation of the no-fly zones, the retaliation equates to "three to four days of [airstrikes] if we had to go back and do [another] Desert Storm."

"It is working," he reported. "Saddam [Hussein] has basically been cleared out" south of the 32nd parallel and north of the 36th parallel. ... Airpower is what is making that policy work in the Gulf today."

Wald also noted that advances in weaponry since the Gulf War—the JDAM and Joint Standoff Weapon munitions and the range and penetrating ability of the B-1 and B-2—have drastically changed the airpower equation.

"Today, and from home base, you can [have] the same effect as you would if you had several squadrons forward deployed for a long period of time."

Gulf deployments by the Air Force are "not going to end," Wald predicted. Some countries in the area may exhaust their oil reserves in just a few decades, and the resulting shift in standards of living will cause "a lot of social unrest."

"We need to start thinking of ourselves as almost a permanent presence in a semipermanent way," Wald observed. He also noted that Kurdistan, Uzbekistan, and Kazakhstan have been added to Central Command's area of responsibility in the last year.

The morale of Gulf-deployed USAF troops is high, Wald asserted.

"They are fired up," he said, because they believe the senior Air Force leadership is doing things "to make their life better," such as the EAF concept. The troops are talking less about quality-of-life issues than about spare parts and having modern equipment.

"These young folks sincerely believe the US Air Force is going to deliver on [its] promises. That is a really big change. That will [help] retention for us."

High-level training exercises now include Information Operations to be conducted alongside airstrikes, with the information attacks and defensive operations "folded right into the Air Tasking Order," Wald noted.

IO is getting so good that an enemy will have to be told "how bad off he has it. We are actually going to have to tell him because he won't be able to figure it out himself."

Wald also noted that Pentagon war-games still have not caught up to current technology and that USAF still does not get credit for having weapons like JDAM and the JSOW, which sharply increase its effectiveness. ■

**They're saying that the force is going back to its roots as a deployable force to be reckoned with.**

# An



*A mini-Air Force unto itself, the 366th Wing from Mountain Home AFB, Idaho, hustles off on another emergency deployment. With bombers, strike and air superiority fighters, tankers, defense-suppression aircraft, and support crews, the 366th is one of two crisis-response wings now always at the ready for pop-up contingencies requiring flexible air- and space power.*

*The Air Force has restructured its combat elements into 10 Aerospace Expeditionary Forces that will take turns dealing with the ongoing press of deployments worldwide. Though the new structure can't reduce the workload, it can at least make deployments more predictable, manageable, and less haphazard—restoring some of the quality of life for USAF personnel which the harried pace of operations has taken from them in the last decade. The 366th and the 4th Fighter Wing at Seymour Johnson AFB, N.C., won't be part of the 10 AEFs but will trade off being ready to hop to a no-notice crisis. The AEFs are not designed for emergency response but rather for force management.*

# Expeditionary Force

Photography by USAF Combat Camera Photographers



Since the 1991 Gulf War, a slew of contingencies requiring everything from humanitarian relief and rescue to all-out air campaigns has kept the Air Force in perpetual motion. Unfortunately, the old Cold War structure of a chiefly Stateside-garrisoned service made the quickening pace of operations a maddening merry-go-round of deployment after deployment. Normal training, military education, and the family life of service members suffered. The Aerospace Expeditionary Force structure will allow most USAF personnel enough time to get proficiency training, go to school, and have count-on-it time with the family.



USAF photo by SSgt. Paul R. Caron

USAF photo by SSgt. Paul R. Caron



Air Force people by now have grown accustomed to setting up air bases where none existed before. The AEF eliminates much of the ad hoc nature of deployments, keeping units together and giving them months of forewarning of where they'll go, what they'll need there, and what threats they'll face. Conditions likely will remain spartan; as Air Combat Command chief Gen. John P. Jumper has said, the Air Force is "getting back to its roots ... of living under the wing." The troops are getting very good at hitting the ground running: For Operation Allied Force, USAF set up some 21 expeditionary bases almost overnight.

Setting up a new operating site means bringing along only what is absolutely needed: tents to live in, a chow hall, communications, security, and, of course, airplanes and fuel. Above and left, troops work on a tent and line up for chow during a pioneering expeditionary deployment in 1996.

USAF photo by SSgt. Paul R. Caron



While some gear is pre-positioned, much has to be brought from home. At right, a C-17 loadmaster supervises loading an F-16 fuel pylon for the 169th FW, the Air National Guard's first wing dedicated to Suppression of Enemy Air Defenses, on its way to Turkey for AEF 4. The AEF stresses the Total Force: Guard and Reserve play an even bigger role in routine operations than before.



USAF photo by SSgt. Gerold O. Gamble



USAF photos by SrA, Greg L. Davis

Don't leave home without it: The F-16CJ, as the new SEAD specialist aircraft, is crucial to helping pave the way for any pickup air operation. The Air Force has, in fact, ordered 30 more F-16s so that each AEF has enough SEAD airplanes. These two CJs, from the 78th Fighter Squadron at Shaw AFB, S.C., are shown patrolling the no-fly zone in southern Iraq.



USAF photo by SSgt. Paul R. Caron

The threat posed by an F-16CJ equipped with the HARM Targeting System and the High-speed Anti-Radiation Missile kept most anti-aircraft missile operators in Iraq and Yugoslavia either off the air or shooting blind. Above right, SSgt. William G. Staton loads an Advanced Medium-Range Air-to-Air Missile radar-guided dogfight missile onto an F-16CJ from Mountain Home's 389th FS during an early expeditionary deployment to Southwest Asia.



The AEFs can bring with them a wide assortment of ordnance, stocks of which can be tailored for the area in which the AEF will operate. These F-15Es can carry the bruising 2000-pound GBU-15 glide bomb, as shown.

## Buckets of Capability

### AEF 1

<b>Lead Wing</b>	<b>388th Fighter Wing, Hill AFB, Utah</b>
F-15C	19th FS, Elmendorf AFB, Alaska
<b>F-16</b>	<b>115th FW Wisconsin ANG/183rd FW Illinois ANG</b>
F-16CG	421st FS, Hill AFB, Utah
F-16CJ	79th FS, Shaw AFB, S.C.
A-10	74th FS, Pope AFB, N.C.
	442nd FW, Whiteman AFB, Mo.
	926th FW, NAS JRB New Orleans, La.
B-52H	96th BS, Barksdale AFB, La.

#### Combat Support

116 Bases 12,718 People

#### Lead Mobility Wing 43rd Airlift Wing, Pope AFB, N.C.

KC-135	92nd ARS, Fairchild AFB, Wash.
C-130	39th AS, Dyess AFB, Texas
KC-10	305th AMW, McGuire AFB, N.J.
C-21	47th Airlift Flight, Wright-Patterson AFB, Ohio

### AEF 2

#### Lead Wing 7th Bomb Wing, Dyess AFB, Texas

F-15C	58th FS, Eglin AFB, Fla.
<b>F-16</b>	<b>120th FW, Montana ANG</b>
F-15E	494th FS, RAF Lakenheath, UK
F-16CJ	23rd FS, Spangdahlem AB, Germany
B-1	9th BS, Dyess AFB, Texas

#### Combat Support

109 Bases 10,466 People

#### Lead Mobility Wing 43rd Airlift Wing, Pope AFB, N.C.

KC-135	905th and 906th ARS, Grand Forks AFB, N.D.
C-130	39th AS, Dyess AFB, Texas
KC-10	305th AMW, McGuire AFB, N.J.
C-21	47th ALF, Wright-Patterson AFB, Ohio

### Crisis Response AEW

#### Lead Wing 4th Wing, Seymour Johnson AFB, N.C.

F-15E	335th and 336th FS, Seymour Johnson AFB, N.C.
F-16CG	34th FS, Hill AFB, Utah
F-117	9th FS, Holloman AFB, N.M.
B-2	325th BS, Whiteman AFB, Mo.
KC-135	19th ARG, Robins AFB, Ga.
C-130	40th AS, Dyess AFB, Texas

#### Combat Support

35 Bases 2,525 people

The AEFs are intended to be a rounded mix of capabilities: Air Force officials call them "buckets of capability." They will not deploy as a group and have no overall commanders, but will provide necessary elements that can be dispatched as needed. The AEFs will rarely be identically equipped; the capabilities in them will vary depending on the region involved. For instance, F-16s with AMRAAMs may be deemed adequate for fighter cover in one region, while only F-15Cs will do elsewhere.

The AEF 1 and AEF 2 breakouts at left illustrate the capabilities an AEF might employ. Likewise, below left, the breakout for Seymour Johnson illustrates Aerospace Expeditionary Wing capabilities.

A lead wing is designated for each AEF to provide leadership if some of the package is deployed somewhere where there isn't a command structure already in place. Many AEFs will augment USAFE capabilities, for example, and will simply "plug and play," while others will start from scratch on an empty strip somewhere and will need a provisional wing structure. Likewise, a lead mobility wing will be designated for each pair of AEFs, again, tailored with capabilities required at the intended deployment areas. In case there is inadequate infrastructure at the expeditionary site—air traffic controllers and equipment or weather experts, for example—the mobility wings will send their own crews to flesh out the site.

To help the AEFs get ready for their deployments, an AEF Center has been set up at Langley AFB, Va. Two teams—Blue and Silver, which will alternate coaching AEF pairs—will provide continuity, monitor readiness, suggest training germane to the deployment, coordinate it, and suggest improvements for the next time.

Air National Guard Unit

Air Force Reserve Command Unit



# The Schedule

Recovery  
Normal Training and Exercises

Prep and spin up to deployment

AEF 1/2							
		AEF 3/4					
Oct.	Dec.	Jan.	AEF 5/6		AEF 7/8		
						AEF 9/10	
						Oct.	Dec.
<b>Expeditionary Base Leadership</b>							
<b>10 Combat Leads</b>							
388th FW / 7th BW		3rd Wing / 48th FW		355th Wing / 20th FW		2nd BW / 28th BW	
27th FW / 1st FW							
<b>5 Mobility Leads</b>							
43rd AW		60th AMW		22nd ARW		319th ARW	
						92nd ARW	
<b>2 Crisis Response AEWs</b>							
4th FW		366th Wing		4th FW		366th Wing	
						4th FW	

## Low Density/High Demand Units

Two AEFs are on call at any one time. Each will spend 90 days dealing with deployments, followed by a rest period (up to two weeks), then a training/education period (about 10 months), and finally a spin-up block (about two months prior to eligibility) in which they prepare for their next deployment. A 15-month cycle was created so that people wouldn't be away from home base at the same time each year. About 20 percent of the force will be on the hook for deployments at any given time.



USAF photo by TSgt. Lance Chenung

USAF photo by SrA. Gregg L. Davis



USAF photo by SrA. Richard Kaminski

The only people not rescued from backbreaking deployment schedules are the Low Density/High Demand units, such as those operating U-2s, Airborne Warning and Control Systems, and other platforms that regional commanders in chief can never get enough of. Above right, Maj. Scott Winstead does the prebreathing necessary for a U-2 mission. SSgt Vic Obillo (in headphones) and SrA. Larry Boshers help get him ready.



Combat search and rescue forces fall into the LD/HD category. There are never enough HH/MH-60G Pave Hawks to go around, and the pace of their deployments affects the pararescue troops who work with them as well as the pilots and ground crews. Maintenance and aircrew members preflight these choppers (far left), which were deployed to Kuwait. At left, an HH-60 gets a lift from a widemouthed C-5.



Not all AEF deployments will be targeted toward combat operations. Here, relief supplies are loaded on a KC-10 bound for Guatemala in the aftermath of flooding last year. Suffering itself may be the "target" that AEFs will attack.



USAF photo by SrA. Frank Rizzo

Force protection remains a major concern when operating from an austere site, and AEFs will have a hefty contingent of security forces to keep them safe. Above right, SrA. Dan Boudria sets up concertina wire around USAF operating areas in Doha, Qatar, for Operation Southern Watch.

Troops will not always deploy to austere patches of flat ground. Sometimes the operating location will be a well-prepared and provisioned, full-up air base. At right, in an early AEF, an F-16C from Mountain Home is prepared for a quick turnaround at an air base in Jordan. Nearly 10 years of routine deployments to the Middle East have established some very well-equipped forward operating locations.



USAF photo by SSgt. Paul R. Caron



Stealth will be a feature of most combat-oriented deployments. F-117s, such as this one sent to support Southern Watch, will be assigned to AEFs as needed. Intense effort is being devoted to improving the maintainability of stealth materials so that they can be more easily kept combat ready in forward operating locations. Troops have learned from long desert experience to keep the water handy, as the "camelbacks" on these flight-line troops deployed to Kuwait demonstrate.



USAF photo by TSgt. James D. Moseman

*The show's over: Like stage hands striking the set, USAF troops break down a hospital tent to pack up and go home from a 100-day desert deployment in 1998. Under the new EAF concept, they would now have a two-week rest, followed by about 10 months of solid home-based time. There would be time to make up training, go to Red Flag, attend schools, qualify for upgrades, and then start preparing for the next AEF.*

*Home again: At its heart, the AEF structure is meant to give back to USAF families the time they had been missing for family vacations, holiday celebrations, music recitals, little league games. It should also improve morale by restoring time needed to develop proficiency at their jobs and once again feel an enthusiasm about deploying.*



USAF photo by SSgt. Jim Vorchio

USAF photo by SSgt. Paul Holcomb

*Above right, just back from Operation Allied Force, A1C Jerrod Heinlein, a crew chief from the 92nd Aircraft Generation Squadron at Fairchild AFB, Wash., sizes up how his son has grown. His wife Jamie looks on.*



*Left, 1st Lt. Jim Herrington, back to RAF Mildenhall, UK, from Allied Force, gets a welcome home from his wife, 1st Lt. Jen Herrington. ■*

**The Hart–Rudman Commission ponders the ways in which the US can reconcile national security ends and means.**

# Toward a 'Concert for Freedom'

By Keith J. Costa

**A** high-profile panel chartered by Secretary of Defense William S. Cohen geared up to release another major report—a document that aims to lay the basis for a new American national security strategy in the early 21st century.

The so-called Hart–Rudman Commission moved in March to complete Phase 2 of a comprehensive, three-part national security review. Phase 2 focuses on formulating a strategy that matches ends and means, offering an overview of US interests and objectives. It proposes an attainable and supportable strategy for allocating resources and options for carrying out domestic and international security plans.

The panel's Phase 1 report, unveiled in September, gave a future-threat assessment; it asserted that the United States will become increasingly vulnerable to attacks by rogue states and terrorists wielding Weapons of Mass Destruction. The Phase 3 report, due out in March 2001, will make concrete proposals for revamping the nation's security organization.

The Hart–Rudman panel—named for its co-chairmen, former Sens. Gary Hart (D-Colo.) and Warren B.

Rudman (R-N.H.)—was formed in 1998. It is supported by a study group of some 30 scholars, retired military officers, and former career intelligence and foreign service officials. The executive director of this group is retired Air Force Gen. Charles G. Boyd.

In January, the panel's commissioners met behind closed doors for two days in Arlington, Va., to consider what, in the end, would be included in the final Phase 2 report. Commissioners were given a set of working papers, prepared by Boyd's staff, listing major national objectives for the next 25 years and a host of issues to consider in forging a new national security strategy.

Already clear was the panel's fundamental conclusion: Washington cannot and must not try to go it alone but instead act in concert with like-minded nations on a range of issues. This view was evident in a draft of the Phase 2 report circulating in March. "Our basic goals—freedom, prosperity, and security—cannot be achieved by American efforts alone. Nor do the American people wish to carry such burdens alone. Our national strategy thus confronts the necessity—and the opportunity—to help build new patterns of interna-

tional collaboration. ... We call our new strategy a 'Concert for Freedom.' "

With respect to military strategy, the commissioners discussed whether the US should focus on major war, prepare for "teacup wars" and peacekeeping operations, or try to hedge against both possibilities. "Any military component" of strategy, say the papers, "must include" five key types of military forces. They are:

- Highly capable and secure nuclear forces (though there is considerable debate on their proper size and nature).

- Heavy and lethal conventional forces—like today's—that are constantly updated with modern technologies.

- Swift, lethal, high-technology intervention forces based on information advances and space-based support.

- Homeland security forces for handling national missile defense, counterterrorism, infrastructure protection, and border and airspace control.

- "Civil assistance" military forces specifically formed, equipped, and trained for peacekeeping, humanitarian assistance, disaster relief, and similar efforts.

Military space received unusually detailed attention. The working papers state that the United States must remain the premier space power in the coming decades.

"The importance of space cannot be overstated," one paper says. "In the future, satellites could provide warfighters with a wide range of situational data and decisive weapons capability."

The United States will remain dependent on space assets to conduct future smaller-scale contingency operations effectively and affordably as well as to prosecute major wars. As a result, space assets will be prime targets for attacks from enemies.

The papers add that "it is critical" that the US, "as the leading information society," prepare now "to protect its access to and use of space and to respond to any potential threats to its space systems, be they ground- or space-based."

Accordingly, commissioners looked at a range of strategies for space. First, they considered an option called "minimal militarization," which would promote international agreements curtailing the deployment of anti-space systems.

### Hedging on Space

Another option, called "hedging," would develop but not deploy space weapons until a need arises for their use. This approach would depend on US abilities to monitor other nations' space activities, to give ample warning of an attempt to threaten US interests.

The third alternative, termed "strategic shift," would involve moving away from "terrestrial military force structures to a significant investment in a space force structure."

The papers pay special attention to emerging space threats. The papers note that "the Russians have worked to develop an [anti-satellite] capability and the Chinese are doing [research and development]. Coupling such technology with nuclear weapons poses a space environmental threat that could catastrophically degrade the space infrastructure."

Accordingly, the United States must develop with its allies "an effective deterrence environment," say the staff papers.

Moreover, they say, "Ultimately, because of the value of space systems to the US economy and the

military in future conflicts, the United States needs to be prepared for attacks against US and allied space systems."

The study group defines interests as "the most important factors or conditions that determine the fundamental well-being of [US] society." They tend to change slowly over time, the working papers state, and can be divided into three categories: survival, critical, and significant.

In their view, the most basic are survival interests, without which the "continuation of the United States in its present form would be in jeopardy." A threat to these interests may require a massive military response.

Critical interests are those which, if compromised, would greatly diminish the nation's ability to satisfy its survival interests.

The least vital type, significant interests, are further removed from activities that directly bear on survival. Threats to significant interests affect US ability to shape international events.

The papers say that survival interests included basic territorial integrity, economic health, and the physical security of the United States and its citizens. Others are sovereignty and integrity of the federal government, in accordance with the Constitution.

The papers present a list of interests which the commissioners were to rate as survival, critical, or significant. For example, the panel members were invited to consider the relative importance of preventing genocide and mass murder, allowing or preventing uncontrolled immigration across American borders, and preventing the emergence of a hostile hegemony in a critical region of the world.

The six objectives presented in the discussion papers were defined as the "operational expression of interests," to be carried out by national policies. In other words, they describe what a country has to do to secure its interests.

The first national objective presented to commissioners: Washington must "manage major power relations in such a way that heads off the formation of coalitions hostile to the United States."

When a nation becomes as dominant as the United States in international affairs, notes one of the papers, other nations are provoked into

forming coalitions to diminish such influence. "Indeed," notes the study group, "the impulse to counterbalance American preponderance is already a feature of contemporary international politics."

### The Bandwagon Effect

In the study group's view, the United States has powerful means to mitigate such efforts. "We have the leverage—instruments and advantages, both positive and negative—that can maximize other powers' incentives to maintain ties with us and, indeed, to [get on the] bandwagon with us rather than to balance against us," the working papers state.

Next, the primary objectives paper prompts the commissioners to consider adapting US alliances to deal with emerging threats and opportunities, as well as evolving political constraints.

The objectives paper indicates that the North Atlantic Treaty Organization should remain the "main pillar" of US strategy in Europe and that present alliances in East Asia are critical to achieving US interests in the area. However, the United States will face mounting pressure at home and abroad to enforce burden sharing and alter the ways it carries out military commitments.

It adds, "We will also need to adapt to allies' desire for greater autonomy in circumstances where direct major power threats against them have been reduced dramatically since the origins of these alliances in Cold War times."

A third objective deals directly with economic and social issues. Its inclusion in the paper underscores the Hart-Rudman Commission's broad mandate to go beyond thinking just about military and mainstream foreign policy issues. The objective states that the United States must "gain mastery over the economic and social dynamics of accelerated global integration."

The trends fueling globalization must be placed under US policy control to the greatest extent possible, in coordination with key allies, the objectives paper states. "These forces must be harnessed to exploit the opportunities they present for an unprecedented spread of prosperity, while reducing the system's vulnerability to financial crisis and social chaos."

*Continued on p. 46*



**GUARANTEED TO LOWER**

The requirement is clear. A superior strike fighter for each service with



THE PRICE OF VICTORY.



maximum affordability. Based on real-time costs and advanced commercial production processes. A guarantee only Boeing can deliver.



JTSF

## Basics of the Commission

The US Commission on National Security/21st Century is chaired by former Sens. Gary Hart (D-Colo.) and Warren B. Rudman (R-N.H.) and boasts a bipartisan senior advisory board that was chosen to draw from a wide range of military, foreign affairs, economic, and academic expertise. Its work is expected to examine all aspects of US policy that can play a role in defending the nation from future threats.

Panel members, or commissioners, include:

**Anne Armstrong**, former counselor to the President, Nixon and Ford Administrations, and former US ambassador to the United Kingdom.

**Norman R. Augustine**, former chairman and CEO of Lockheed Martin.

**Former Sen. Nancy Kassebaum Baker** (R-Kan.).

**John Dancy**, former NBC News White House, Congressional, and diplomatic correspondent.

**Retired Army Gen. John R. Galvin**, who served as Supreme Allied Commander Europe and is now dean of the Fletcher School of Law and Diplomacy at Tufts University.

**Leslie H. Gelb**, president of Council on Foreign Relations.

**Former House Speaker Newt Gingrich** (R-Ga.), who first proposed starting up the panel.

**Former Rep. Lee H. Hamilton** (D-Ind.), director of the Woodrow Wilson International Center for Scholars.

**Lionel H. Olmer**, former undersecretary of commerce for international trade.

**Donald B. Rice**, former Secretary of the Air Force.

**James R. Schlesinger**, former defense secretary, energy secretary, and director of the Central Intelligence Agency.

**Retired Adm. Harry D. Train II**, former commander in chief, US Atlantic Command.

**Andrew Young**, former mayor of Atlanta and US ambassador to the United Nations.

The fourth and fifth primary objectives are more traditional for a panel on national security issues. The fourth states the United States should work patiently to "expand the zone of democratic peace," with special emphasis placed on "large, strategically situated, and culturally central countries such as Russia, Ukraine, China, Nigeria, Kenya, Congo, Indonesia, Egypt, Iran, Pakistan, and Uzbekistan." The fifth objective: The United States should curb Weapons of Mass Destruction proliferation "through innovations in American diplomacy, military capability, and intelligence capacities." The threat posed by WMD use against the United States and its allies will only grow in time, and the nation must be prepared to prevent, deter, or pre-empt their use, the objectives paper adds.

The last objective presented to commissioners calls for new ways "to manage the disintegrative political tendencies" on display in areas of what used to be the Soviet empire.

Moreover, collapsing governments and ethnic violence throughout the globe threaten key US interests.

The March draft report, however presented a slightly different collection of five principles: ensure US domestic health and international leadership; ensure the integration of Russia, China, and India into the international system; build cooperative global economic, environmental, health, and legal systems; adapt existing regional alliances and friendships to new global realities; and help create new means to deal with the disintegrative tendencies around the world.

### The Next 25 Years

The bulk of the remaining working papers are devoted to an exploration of US potential strategies for the next 25 years. (The study group defines strategy as the "systematic relations of means to ends," and it encompasses interests, objectives, and policies.)

They encouraged commissioners to examine strategies for dealing with transnational threats, economic strategy, and energy security strategies, as well as strategies for Greater Europe, East Asia, the Greater Near East, Russia, the future US military, homeland defense, and space.

As other national security studies have pointed out, the United States will face increasing transnational threats from rogue states and terrorists and those who foment ethnic conflict. Moreover, those threats are exacerbated by vulnerabilities to information warfare and the possible use of Weapons of Mass Destruction. "Also likely is a profusion of other kinds of transnational problems such as global criminal activities, drug trafficking, humanitarian disasters, and environmental dangers," the working papers state.

Vulnerability to transnational threats could lead to the strengthening or creation of new multilateral institutions and mechanisms to address those threats. The United States, the working papers predict, "will face the strategic choice of whether to act unilaterally or cooperatively with others, either in alliances or partnerships, through regional groupings or in global forums. That choice will depend on the character of the threat, the willingness of others to cooperate, the capabilities of international institutions, and the prospects for success."

At the same time, there is likely to be a continuing debate on the efficacy of a wide range of multilateral approaches and on whether the United States should gravitate toward unilateral responses to emerging threats. Furthermore, policy-makers are less apt to rely on the United Nations to address transnational threats. "The United Nations seems not to have the legitimacy or military wherewithal to manage large and complex peace-enforcement missions in dangerous environments," the papers state.

Unilateral action, however, is risky, and the study group leans toward concluding that the United States should take that option only as a last resort. The working papers prodded commissioners to consider whether developments in international law could provide a firm basis for multilateral action, a move that would raise questions about the erosion of US sovereignty.



"Our traditional faith in the development of international law and institutions needs to be balanced against the principle of sovereign decision so long as the nation-state—particularly the American nation-state—remains the unit of democratic accountability," the working papers say.

Boyd's staff identifies three strategic alternatives for commissioners to consider for responding to transnational threats: "reassertive multilateralism," which would involve the sacrifice of some measure of US sovereignty; "multilateralism but with reservations," which calls for weighing proposals for multilateral activity on a case-by-case basis; and a "pull back from multilateralism."

Reassertive multilateralism would accelerate US efforts to enhance or build institutions for international cooperation. For example, the strategy would reinforce the UN's role in conducting peacekeeping missions, embrace international law as a means of curbing human rights abuses, and strengthen arms control regimes. "Treaties, conventions, and international bodies with the powers of arbitration would be a principal vehicle for carrying out American policy and satisfying US grievances," state the working papers.

Multilateralism with reservations would not involve a major change in strategic direction, the papers state. It would mean backing existing commitments for international cooperation but remaining cautious about sacrificing sovereignty.

The final option calls for pulling away from multilateralism, opposing extensions of international law or expanding UN authority. It would encourage forming limited alliances with other nations without placing any major restraints on the United States.

### **Economic and Energy Strategies**

Economic strategy will play a greater role in shaping US national security strategy during the next 25 years, as global economic integration, or globalization, accelerates. In addition, economic competition will have a "higher profile" during that time frame than the kind of mili-

tary competitions that defined earlier times, the working papers state.

Moreover, the US government will have to promote a robust domestic economy to remain a global power. A possible recommendation is "top-to-bottom" education reforms to maintain the country's competitive edge in science and technology.

### **Globalization**

Most of the work of the commissioners in this area will focus on addressing issues related to globalization. For example, they could declare their view as to whether it is best to maximize the country's ability to act unilaterally when it comes to trade and monetary policy, even though such an approach might retard US growth in the long term by slowing down globalization.

Commissioners could recommend a managed approach to promoting global economic integration or an aggressive one.

The managed, or incremental, approach "might produce maximal US control and decision-making independence over the issues that will matter most to us in the next 25 years," although it would limit unilateral economic policy actions.

The working papers also look at energy security strategies for the coming decades, with a special emphasis placed on US policy in the Persian Gulf region. Specifically, commissioners were asked to consider the importance of maintaining access to Persian Gulf oil even if the use of force is required.

The papers suggest that US presence in the region may not prove worthwhile if it invites a dramatic rise in terrorist activities against US forces, leading to a withdrawal. A withdrawal may also be in order, given a regime change in Iraq or dramatically improved US-Iranian relations.

The commission could recommend forming an "international military coalition under the aegis of the UN or a separate military entity" to share the burden of securing the oil supply.

During the January meetings, commissioners engaged in discussions of various regional security strate-

gies. The working papers outline three approaches for northeast Asia, which will be the home of two of the four largest economies—Japan and China—by 2025.

China is likely to become the dominant economic and military power in the region, the papers state, while Japan may boost its defense capabilities and seek a more active role in foreign affairs.

The papers do not make firm predictions about North and South Korea. However, they do say that reunification could mean a permanent withdrawal of US forces in the region. In addition, Japan would "assert a more independent role, less deferential to the United States and less accommodating to the US military. A pivotal issue [for the entire region] will be the possible deployment ... of a Theater Missile Defense (TMD) system to Japan or Taiwan."

One of the alternatives examined for the region is to withdraw US forces incrementally to avoid war. On the other hand commissioners could recommend maintaining the existing structure of alliances in the region or altering the US-Japan defense pact by making "Japan a more equal partner in the alliance."

The panel also examined possible strategies for dealing with Russia, which faces its own uncertain political future.

Capital flight, the absence of the rule of law, and the subsidization of unproductive businesses have caused Russia's economy to falter. Progress toward democratization seems to have been stopped and nationalism has crept into its foreign policy.

Those trends have "disappoint[ed] the hopes of many in America that a democratic Russia would automatically be 'our friend,'" the papers state. "Russia's calls for 'restoring multipolarity to the international system' are a thinly disguised call for building counterweights to American dominance."

Commissioners were presented with three options: isolate and weaken Russia if political and economic reforms there fail and totalitarianism returns; build a partnership with Russia, which could involve further US financial support for the country; and treat Russia as a competing major power and use diplomacy, trade policy, and arms control measures to balance US-Russian relations. ■

---

*Keith J. Costa is a reporter for "Inside the Pentagon," a Washington-based defense newsletter. This is his first article for Air Force Magazine.*

**Health care for military retirees isn't a big priority for the Administration, but Congress may decide otherwise.**

# It's Showdown Time on Tricare

By Tom Philpott

**T**HE Republican-led Congress appears ready once again to surpass the Clinton Administration on quality-of-life initiatives for servicemen and -women, this time in the area of military health care improvements for budget year 2001.

In deliberations last year, Congress pumped additional billions of dollars into military pay and retirement reforms that the Administration had proposed for Fiscal 2000. The results were a pay raise that was bigger than the White House had planned and more robust retirement benefits for service members who entered the military after July 31, 1986.

Now, the Congressional Republican majority intends to push reforms beyond the two relatively modest health care improvements that the Defense Department unveiled in early February. These focused on enhancing the provision of Tricare Prime coverage for active duty families but did nothing for retirees.

The health care portion of the 2001 budget request disappointed members of the Joint Chiefs of Staff. The Chiefs had challenged the Adminis-

tration to earmark part of the federal budget surplus for financing sweeping reforms not only for active duty families but also for retirees under 65 and beneficiaries eligible for Medicare.

Army Gen. Henry H. Shelton, JCS Chairman, took the lead in criticizing the business side of Tricare, the military managed care program. He claimed that beneficiaries 65 and older are being pushed out of the military system as Tricare, for which most elderly are ineligible, is implemented nationwide. Shelton pledged that, just as the 2000 budget brought pay and retirement reform, 2001

would deliver major gains in health care benefits. In this, Shelton was disappointed.

### Billions Needed

Defense officials understood that the kinds of reforms sought by the Chiefs would require billions in additional expenditures. Last spring, the Pentagon established the Defense Medical Oversight Committee, chaired jointly by the undersecretary of defense for personnel and readiness, and one of the service vice chiefs on an annual rotating basis. The committee includes all four service vice chiefs and service undersecretaries.

Through DMOC, senior military leaders with no medical backgrounds gain an appreciation for the pressures on health care costs. It also gives them the authority to recommend ways to close health care benefit gaps that harm recruiting and retention and have angered thousands of older retirees.

Committee members quickly concluded that projected health care budgets through 2007 were underfunded by more than \$3 billion. They also examined why Tricare patients have trouble gaining access to the system, why civilian care providers and patients face delays in claim payments, and why tens of thousands of older retirees are being turned away from military treatment facilities as managed care focuses more of its resources on enrollees only.

By December, the Chiefs had reviewed the committee's initial findings and presented to Defense Secretary William S. Cohen a list of initiatives to reform military health care—starting with the 2001 budget.

The JCS proposals included:

- Extending Tricare Prime Remote coverage to families of 80,000 active duty members living more than 50 miles from a military medical treatment facility and therefore unable to participate in Tricare Prime. Last year, members in remote assignments became eligible for a managed care benefit, but their families had to continue to rely on the more costly fee-for-service insurance program, Tricare Standard (CHAMPUS).

- Ending co-payments, of \$6 or \$12 per visit depending on rank, for service family members receiving civilian care under Tricare Prime.

- Ending Tricare Prime annual enrollment fees, of \$230 per indi-

vidual and \$460 per family, for under-65 retirees. In return for lower out-of-pocket costs, retirees would have to elect to enroll in Prime for as long as two years at a time, and they would be barred from using Tricare Standard. Under-65 retirees and dependents who elect to remain with Standard would see access to military hospitals limited to catastrophic care and the pharmacy. By one estimate, the cost of this provision could reach \$4 billion a year, but as much as \$300 million might be saved by forcing participants to use Tricare Prime.

- Expanding Tricare Senior Prime from a six-site (10-facility) test to full implementation at bases throughout the country. The test is supposed to help determine the size of the potential savings to Medicare of allowing the elderly and persons eligible for Medicare through disability to enroll in military managed care, if they continue to buy Medicare Part B coverage. In other words, they would use Tricare as a Medicare Health Maintenance Organization. In theory, reimbursements to the Defense Department from the Health Care Financing Administration, which oversees the Medicare trust fund, would be lower than what HCFA would pay to treat the elderly through civilian providers.

- In cases where Senior Prime isn't available, making available to beneficiaries 65 and older access to a mail-order pharmacy benefit.

- Making available to the elderly access to government-sponsored Medigap insurance for care not covered under Medicare or through Tricare as a Medicare HMO. The Medigap plan could include giving retirees the option of enrolling in something like the Federal Employees Health Benefits Program for government civilians.

- Providing, starting in budget year 2002, a Tricare Prime Remote-like benefit to retirees under 65 who live away from military hospitals.

- Fully funding future health care budgets. Even the \$17 billion medical budget for Fiscal 2000 was found to be at least \$200 million short of requirements, sources said, though civilian Tricare Prime contractors were claiming DoD owed them at least \$1 billion for unanticipated, but covered, pharmacy costs.

Shelton urged Cohen to support

the entire package but, at a minimum, back at least one substantial initiative for all three categories of beneficiaries: active duty families, under-65 retirees, and Medicare-eligible retirees.

### Low Priority

The undersecretary of defense for personnel and readiness, Rudy De Leon, and the defense comptroller, William J. Lynn III, didn't endorse the plan but fought hard with White House budget officials to support at least a mail-order pharmacy benefit for the elderly. In the end, the Administration endorsed only two health care provisions: to end Tricare Prime co-payments for active duty families and to expand Tricare Prime Remote for families of active duty members living away from military bases. Retiree initiatives weren't considered a high priority.

Shelton didn't hide his disappointment. In testimony before the Senate Armed Services Committee the day after the 2001 budget went to Congress, the JCS chairman said America has broken its promise of lifetime health care to generations of retirees. Said Shelton, "In their minds, we have broken that commitment, and I think we have."

On Capitol Hill, lawmakers already were focusing on reforming military health care, weighing initiatives both large and small. The boldest is the Keep Our Promise to America's Military Retirees Act, sponsored by Reps. Ronnie Shows (D-Miss.) and Charles Norwood (R-Ga.) in the House and by Sen. Tim Johnson (D-S.D.) and Sen. Paul D. Coverdell (R-Ga.) in the Senate. This bill would:

- Restore full access for retirees, their families, and their survivors by making Tricare available for a lifetime rather than only until age 65.

- Allow retirees of any age to enroll instead in the Federal Employees Health Benefits Program, the menu of medical plans offered to federal civilian employees. The government picks up 72 percent of the cost for civilian employees.

- Require that the government pay 100 percent of FEHBP for retirees who entered service before June 7, 1956, and their surviving widow or widower. In 1956 a law was enacted to limit retiree health benefits to space-available care. For decades

## Facing the Music—Finally

"There is a growing issue over what is adequate health care coverage for [65 and over] retirees. This group in particular is being pressed because the benefits they had from their military service in the past have been [on a] space-available [basis] in military treatment facilities. They're being squeezed out of that as our medical structure is downsized and as the retiree population has increased. So there's growing dissatisfaction with that benefit.

"There are a lot of proposals on the table, right now. General Shelton is working very hard on this. The Secretary [of Defense William S. Cohen] is reviewing options. There are a number of bills on the Hill. There's talk about FEHBP, the Federal Employees Health Benefits Program, there's talk about a pharmacy benefit, there's talk about Medigap—a whole series of issues.

"There are two things that you need to know, though, in the end. One, there's a very big issue here—the question of equity and keeping faith with retirees—and, second, there is a very big bill with any of the proposals I just mentioned. We're talking three, four, five billion dollars a year, a major bill. This is an issue we're going to have to tackle and come to grips with—both what is the appropriate benefit and how do we pay for it."

—A "senior defense official," speaking to reporters at a Feb. 4 background briefing at the Pentagon.

more, however, the armed services continued to promise recruits who served until retirement free health benefits for a lifetime.

Shows, a first-term Congressman, said that until he was elected to office, he assumed that military retirees had attractive health care benefits. But retirees in his home district set him straight. "I couldn't believe the stories," he said. They inspired him last fall to introduce an initial piece of reform legislation, one that would have affected only beneficiaries 65 and older.

By mid-February, that bill had 272 co-sponsors, for which lawmakers credited a groundswell of grassroots support from retiree groups throughout the country. After Johnson and Coverdell introduced a similar bill in the Senate—but one that applies to all retirees—Shows and Norwood matched the senators with companion legislation.

The new bill, if it becomes law, could cost taxpayers \$8 billion to \$10 billion a year. "So what?" said Norwood. "It absolutely means nothing to me. We gave our word."

At a Tricare conference in Washington, D.C., in early February, Ed Wyatt, a staff member on the House Armed Services Committee, cautioned, "It's a long swim [for lawmakers] from co-sponsoring a bill to signing a discharge petition" that would force it out of the committee and onto the floor for a vote. Wyatt pointed out that at least 218 members would have to decide "not only do I support this, ... but I might be

willing to sign up to pay for it, which means something else has got to go away."

Cost remains the great obstacle for the Keep Our Promise legislation. Even its most ardent sponsors can't explain how it might be financed except, in general, by tapping into what now appears to be a rising federal budget surplus.

That's easier said than done, according to Congressional staffs. For example, a 1990 deficit-reduction law still requires that any new expenditure on an entitlement program be offset by an increase in taxes or a reduction in spending on some other federal entitlement.

### Support From Heavyweights

Sen. John McCain (R-Ariz.), a Presidential aspirant, not only co-sponsored the Keep Our Promise bill but introduced his own legislation. It would, among other actions, implement Tricare Senior Prime (Medicare Subvention) nationwide and embrace many of the JCS initiatives deferred by the Clinton Administration.

Meanwhile, the staffs of Sen. Trent Lott (R-Miss.), the Senate majority leader, and Sen. John W. Warner (R-Va.), chairman of the Senate Armed Services Committee, were taking a more measured approach, pulling selective ideas from the JCS

list to improve upon Clinton's modest plan. Initial plans called for a Lott-Warner bill to take a \$1 billion-a-year, or bite-size, approach to fulfilling health care promises to retirees. This would stand in contrast to what the staffers viewed as an unaffordable gulp contemplated in the Keep Our Promise bill.

Warner introduced a bill, titled Military Health Care Improvement Act of 2000, on Feb. 23 with an estimated cost of \$600 million.

Some initiatives for 65-and-older retirees are certain to win support. They include:

- Expansion of the mail-order pharmacy program and the Tricare retail pharmacy program to all Medicare-eligible beneficiaries. It would include an annual deductible of no more than \$150.

- Increase in the number of Tricare Senior Prime demonstration sites, from six to 12 and extension of the demonstration through 2005.

- Extension of the test offer of FEHBP enrollment for military beneficiaries 65 and older at additional sites to encourage greater participation, with a view toward nationwide implementation when supporting data are available.

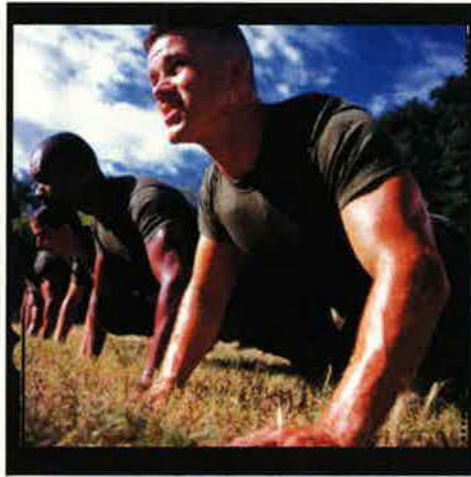
- Establishment of a military home health care program for the disabled. Rather than transfer patients to Medicare or Medicaid, care would continue through Tricare but a cost cap would be imposed on the program of \$100 million a year.

Though the White House response was disappointingly lukewarm, the Chiefs and Pentagon civilian leaders did succeed in pushing military health care into the legislative spotlight. What reforms finally become law in a Presidential election year can't be confidently predicted.

"If ever there was a time when we should move our obligations to retirees from the back of the line to the front of the line, this is it," said Johnson, whose own son, an Army sergeant, was preparing for assignment to Kosovo. Johnson said military people are watching to see if the government steps up to meet its commitment to earlier generations of military retirees. ■

Tom Philpott, the editor of "Military Update," lives in the Washington area. His most recent article for Air Force Magazine, "The New World of Retirement Options," was published in the February 2000 issue.

# “Service



is a responsibility you don't take lightly.”

**Service.** A word we understand. We learn about it from our members, people like us who know what it means to serve in the military. USAA was founded more than 75 years ago by military personnel for military personnel. We serve our members with an array of products and services that stretches from insurance to banking to investments. We even have a unique package of services designed to ease you

through a PCS or deployment. And our member service is consistently rated the highest by a wide range of sources – including our members themselves, whether they're enlisted or officers, on active duty or in the National Guard or Reserves. At USAA, service isn't just a word. It's a way of life. Just ask around.

**Call us at 1-800-292-8561.**



*We know what it means to serve.™*

INSURANCE • BANKING • INVESTMENTS • MEMBER SERVICES



USAA Federal Savings Bank, an equal housing lender and USAA Savings Bank, both FDIC insured, offer banking and credit card products respectively. Securities products offered through USAA Investment Management Company and life, health and annuity products by the USAA Life Insurance Companies. Property and casualty insurance, available only to persons eligible for group membership, provided by United Services Automobile Association, USAA Casualty Insurance Company, USAA General Indemnity Company, USAA County Mutual Insurance Company and USAA, Ltd.

The new surgeon general says the system will center on two "platforms"—expeditionary deployments and the health care clinic.

# The Changing World of Air Force Medicine



Medical Corps



Flight Nurse

By Peter Grier

**A** CANADIAN soldier named Luc Pesant was in Haiti on a peacekeeping assignment in 1996. One day, he was shot eight times by persons unknown. Three bullets produced potentially fatal wounds. One pierced Pesant's hepatic artery, which runs between the liver and heart. The severing of a hepatic artery leads to death in 60 percent of cases, even if top-notch care is available.

Pesant managed to reach a US Navy resuscitation team. They sewed up the artery and stitched his other wounds. Before long, the Navy team called the US Air Force for help.

The Air Force prepared and launched a medical team from Wilford Hall Medical Center, Lackland AFB, Texas. A mere 12 hours after the shooting, it was in Haiti and at work on Pesant. The Navy team had already used up every unit of Pesant's blood type for hundreds of miles around. In fact, the fluids pumped into his body had caused the wounded peacekeeper to gain 100 pounds in

weight. None of his systems were functioning properly.

Air Force doctors figured Pesant would be dead in two hours, meaning they could not hope to get him back to Texas for treatment. Instead they loaded him on their C-21 med-evac aircraft and took off for Jackson Memorial Hospital in Miami, an hour's flying time away.

He lived.

"That's the world we live in," said Lt. Gen. Paul K. Carlton Jr., the new surgeon general of the Air Force. "A Canadian peacekeeper on a UN mission in Haiti shot by unknown assailants, resuscitated by a Navy team, transported by an Air Force team, definitive care given by a level-one trauma center in the United States of America. That's our complexity."

## Dramatic Change

The story of Pesant is just one example of how the context of Air Force medicine has changed dramatically over the past decade as demands, resources, and partners have



Enlisted Medical



Nurse Corps

changed with lightning speed. Today, the air transportable hospitals of the Persian Gulf era look outdated, cumbersome, and inflexible. In the era of Tricare and constricted budgets, some Air Force medical infrastructure looks too expensive to survive.

In recent years Air Force officials have done much to make their medical service more efficient and effective. More work lies ahead, said the service's new top doctor.

"We have to recognize that the world around us has changed," said Carlton. "The question then becomes, how do we change and optimize those things that we've done before and do differently those things that perhaps we need to do differently?"

Air Force medical personnel need to feel an urgency about change, Carlton said in an interview at his office at Bolling AFB, D.C. For various reasons, the military medical system has "disenfranchised" a large number of people, he said. Right-sizing, plus optimum use of resources, could make room for them to be brought back within the system.

"The bottom line is, we can take care of an awful lot more people within the primary care organization that we have," said Carlton. "Where we can't do the direct care, we can partner."

The Air Force mission has changed radically in the last 10 to 15 years. Once, the service was focused almost entirely on the Cold War and the Soviet Union's military forces in Europe and the Far East. Now, it has a multipart readiness mission. That has had a particularly profound effect on Air Force medicine, which is a part of almost every operation the service undertakes these days. As Carlton said, "We do evacuations, we do humanitarian relief operations, we do natural disasters."

In the future, reported Carlton, Air Force medicine will operate from two basic platforms. One is the deployable readiness platform, and the other is the health care clinic.

Carlton has only been in his new post a short while, but he is already hard at work on the readiness side of this equation. Gulf War-era air transportable hospitals were fine for their time, but in today's world they are just too heavy. It takes a long time to fly the unit into a foreign area and construct a fully functioning health care infrastructure.

A new concept—the so-called expeditionary medical support equipment—will be lighter and faster, enabling Air Force doctors to care for their patients from the first aircraft in to the last one out. "Expeditionary medical support is our ticket on the first plane into the future," said Carlton.

The new approach is modular. The basic unit of the expeditionary medical support Air Force theater hospital can be carried on only three pallets and brings with it 25 personnel. It contains four holding beds and can provide the basis for critical care, trauma resuscitation, heart attack revivals—the full spectrum of combat medicine. Plug-in units keep building the basic expeditionary medical support up to a 500-bed hospital.

"We're going to buy eight of these this year," said Carlton. "The demand is tremendous. We've already used this in Kosovo very successfully."

### Fast Movers

In today's fast moving deployment situations, the size of the logistics footprint is critical. USAF's new expeditionary medical support unit takes up about 60 percent fewer pallets than the transportable equipment that it replaces. Small teams of doctors and support personnel will arrive even before the first pallet rolls off a C-17. Those on the first airplane on the ground, in any situation, will have to worry about food, water, and sanitation, noted Carlton. So the flight could carry a public health officer and military flight surgeon—with backpacks, no pallets. In the second phase, a five-member

surgical team would come in with the crew chiefs. "The third phase is the first time we see a pallet," said Carlton.

All this will take place in a joint environment. Air Force medical teams have been practicing their plug-and-play approach with personnel from the other services for some time.

As in the story of the Canadian peacekeeper, most future deployments will also entail practicing medicine with—and for—personnel of other countries. Some nations, such as Chile and the UK, work well with USAF medical personnel today. Others, such as Japan, are studying USAF's sophisticated air evacuation techniques.

The coalition environment is a "challenging" one, said Carlton.

When it comes to the health of the individual member of the Air Force, the medical side of the service is currently focused on learning from an approach its line brethren perfected back in the 1950s.

Forty years ago, service leaders instituted three-level maintenance for its aircraft. Primary prevention kept airplanes healthy. Back-shop maintenance fixed small things that broke. Depot-level maintenance remanufactured aircraft on a rotating basis. The Air Force has translated this approach to the field of medicine, said Carlton.

Preventive care, such as immunizations, can keep people healthy. Back-shop care is done at the base clinic, which patches up small injuries and keeps an eye out for chronic conditions. The medical center is the depot of health care. It cures diseases and does serious operations.

Carlton noted that his son is an F-16 pilot, and, after every flight, his son's crew chief takes a sample of oil from the airplane. That oil is put through a spectral analysis, which examines the levels of minute metal particles. Engines are designed so that the No. 1 rod shaft bearing is made out of tungsten. The No. 2 rod shaft bearing is made out of something else. High levels of tungsten in the oil sample are an indication that the No. 1 rod shaft bearing may be close to failure. It's pulled and replaced.

"That's the level of sophistication we're at," said Carlton. "Can't we do the same with our humans?"



Dental Corps

Carlton added, "That's what we practice now. It's not surgery, it's not medicine, it's not nursing. It's health."

### Optimum Medical Care

Carlton said another major goal is to optimize the Air Force Medical Service—make it more efficient and effective—so that it can take care of many more people than is now the case.

Major growth is quite possible. Right now the AFMS has an enrollment of about 960,000 people, yet officials figure that 2.32 million people are eligible for their services.

The goal is to have one primary care provider for every 1,500 enrolled persons. Each provider should be able to see 25 patients a day and should be helped by 3.5 support personnel and have access to two exam rooms.

Some Air Force facilities have already surpassed this efficiency level.

"Scott Air Force Base [Ill.] laughs at [the ratio of] 1,500-to-1," said Carlton. "The last time I was there, they were at 1,900-to-1, and they still had open appointments."

Carlton reports establishment of the principle of primary care model blocks. A block will have four primary care providers, two nurses, eight medical technicians, and four administrators. It will be able to take care of 6,000 people.

"And then it's a very simple building block," said Carlton. "As you go from 6,000 to 12,000 to 18,000 [people], you add [primary care model] blocks. And it makes us look at the support staff and say, 'Is it value added?' and then [we] eliminate the non-value added."

Carlton cites Aviano AB, Italy, as an example of efficient support staff management. Aviano has instituted a nurse triage system, in which nurses answer patient phone calls and provide simple advice, if necessary. They schedule office visits only for those patients whose conditions truly require a meeting with a physician.

For example: Someone whose child has a 101-degree fever might be told by the nurse to undertake certain basic steps and to call again in 24 hours if the fever does not break. Someone whose child has a 101-degree fever plus trouble swallowing—a red-flag symptom—would be told to come in for a visit.

Scott AFB has a similar system. A recent survey of patients handled by nurse triage found that all of them received good advice. Ninety percent were happy with their experience. Ten percent said they had expected to see a health care provider.

Referring to that 10 percent whose expectations were not met, Carlton said, "That's an education opportunity. We want to make it easier. We want to provide excellent service, but there is a transition that has to occur in all of our minds."

Cost control is important. The world of medicine has changed. The customary fee for a primary care visit used to be around \$140. But in today's competitive world, \$35 is the norm, said Carlton.

### New Types of Clinics

One promising cost-cutting move: establishment of nurse-run clinics to handle the treatment of diabetics, asthmatics, and others with chronic conditions. These clinics focus heavily on preventive moves. For example, a clinic in Little Rock, Ark., warns asthmatics when air-quality levels are unhealthy. As a result, it has presided over a 92 percent reduction in hospital admissions for asthma.

The nurse corps itself could see changes. All Air Force nurses are officers—which many consider an expensive approach to meeting the need. Having a multilevel nurse career field, with nurse assistants, licensed vocational nurses, and then registered nurses, could allow some personnel positions to be moved to the enlisted ranks or even to the civilian side.



Biomedical Science Corps

"The US Army did that in the early '90s," said Carlton. "They transferred half their officer corps, on the nurse side, into the civilian side. And they're very pleased with it."

Increased partnering with civilian institutions is another promising approach to optimization, said the surgeon general. It could turn out to be a two-way street. For example, the Air Force is associated with two graduate medical institutions in the San Antonio area. Both are in financial trouble because they have a high percentage of patients who cannot pay for services. If they agree to waive the required 20 percent co-payment for Air Force patients, said Carlton, he can agree to send them a steady stream of paying patients.

That, he said, could help get more 65-and-over retirees back into the Air Force system.

"If they'll accept the 80 percent [payment], I would tell retired Major Flynn, age 68, that I could do his hip at Wilford Hall with a 19-week waiting time; I could do him at the university next week; or I could do it at Santa Rosa [Hospital] tomorrow."

That would be a step in the right direction, as far as retirees are concerned, according to Carlton. The solution, he said, is to simply be a competing partner with Medicare.

"If we provide the better service, then Major Flynn would say, 'I'll go with you,'" said Carlton. "If somebody else provides the better service, then that's fine. ... I'm not sure our Medicare partners are ready for that right now."

On the question of what 65-and-over retirees deserve from Air Force medicine, the medical service chief said he has no question that a major health care promise was made when these retirees first joined the force. He also said, "I don't have any question that we haven't got the funds right now to fulfill that promise."

The Air Force part now is to make sure that it is giving the best primary care that it can, effectively and efficiently. Then partnering is the way to go for things the AFMS can't do, for whatever reason, according to Carlton.

Of all the demonstration programs currently testing different approaches for providing care to Medicare-eligible military retirees, MacDill 65 is the one Carlton likes best. MacDill 65 is a subvention program that



cares for up to 2,000 enrollees in the Tampa, Fla., region.

"We have actively said to our [65-and-over] population, 'We value you ... and let us do excellent primary care with you,'" said Carlton. "And if you need something more than primary care, then the Medicare piece will cover you—in the superb facilities that we'll keep track of downtown, making sure that they do a good job."

### Senior Prime Disappointment

He said the Tricare Senior Prime demonstration has not gone as well as it could, from the Air Force point of view. The service did not win discussions about how this test of Medicare Subvention would be implemented. The way that details have worked out means that the Air Force, in essence, gets no reimbursement for the care it provides under the test.

"The details haven't worked out for us because no money's coming," said Carlton. "That detail is fairly important."

Implementation of Tricare itself shapes up as a long-running effort. Carlton freely admits that the military has not done as good a job as it could have in Tricare activities. "As we've learned how to do things, what you've seen from the West Coast to the East Coast is the number of con-



Flight Surgeon

cerns peak and then start coming down as we have a mature program," he said. "When somebody's having trouble, we've failed. It's that simple," Carlton continued.

Military officials thought they would have better Tricare contracts and systems in place by now. They thought that the system would have learned permanent lessons from its

stumbles in the early years. The learning process is indeed under way, said Carlton, but it is progressing more slowly than anticipated.

"We're learning to partner with our [contractors] much better than before, and we're getting over the idea that we're in competition with them," said Carlton.

## "The Biggest Quality-of-Life Issue"

*This joint statement by F. Whitten Peters, Secretary of the Air Force, and Gen. Michael E. Ryan, Air Force Chief of Staff, was contained in the Air Force posture statement, presented in February to the Senate and House Armed Services Committees.*

"Perhaps the biggest quality-of-life issue facing the Air Force today and in the coming years is medical care. Access to quality health care is crucial to the quality of life of our airmen (active duty and retirees) and their families and greatly affects our recruiting and retention efforts and, ultimately, our readiness.

"Tricare, the DoD program to ensure health care at a reasonable cost, is designed to provide a quality health care benefit, improve beneficiary access, preserve choices for our beneficiaries, and contain costs, all while providing a structure to support the military medical forces needed to deter and fight the nation's wars. Tricare was fully implemented as of June 1998 and is a good start to providing quality health care.

"However, there have been problems, such as access to care, claims processing, reimbursement levels, and Tricare management requires constant attention. Several of these issues have been resolved, and the rest are being worked aggressively. Our latest Air Force Inspection Agency audit concluded customer satisfaction with Tricare is increasing.

"The Air Force Medical Service initiated bold re-engineering efforts to increase access to Military Treatment Facility medical care and provide a much stronger emphasis on preventive services. The goal is to enable all Tricare Prime beneficiaries to be assigned to an MTF Primary Care Manager by name, as well as to be guaranteed access for acute, routine, and preventive appointments.

"At the direction of the Secretary and the Chief of Staff, the Air Force Surgeon General developed a campaign plan to ensure line commanders understand Tricare and know how to help subordinates with problems. Preliminary results from this program, Operation Command Champion, have been very encouraging.

"Also, numerous demonstration projects to improve the quality of Tricare are under way, especially for retirees and Medicare-eligible beneficiaries. For example, a Medicare Subvention program called Tricare Senior Prime is currently active at five Air Force locations; the MacDill 65 subvention program cares for up to 2,000 enrollees in the Tampa, Fla., region; and the Federal Employees Health Benefits Program 65 test, a nationwide program at eight selected locations, is slated to begin in spring 2000.

"We are now working Tricare and health care issues through the Joint Chiefs of Staff and the Defense Medical Oversight Committee, which has been formed to ensure optimum service participation in the health care agenda and improve health care for active and retired members."

The ideal situation would be that Tricare, five years from now, would have fewer contracts and fewer regions, to eliminate the variations in service that currently bedevil Air Force personnel. "We have to make it simpler," said Carlton. "We have to make it user-friendly. We have to take the hassle out."

That is because, in all its endeavors, the Air Force Medical Service should strive to do more than just meet a customer's basic expectations. Carlton has a different standard. "How do you delight that customer?" he said. ■



Medical Service Corps

*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, "The Investment in Space," appeared in the February 2000 issue.*

# The Congressional Defense Establishment

**HOUSE**

**Armed Services Committee**



**Floyd D. Spence**  
Chairman  
South Carolina



**Bob Stump**  
Vice Chairman  
Arizona



**Duncan Hunter**  
California



**John R. Kasich**  
Ohio



**Herbert H. Bateman**  
Virginia

## Republicans

(Members arranged by seniority in committee)



**James M. Talent**  
Missouri



**Terry Everett**  
Alabama



**Roscoe G. Bartlett**  
Maryland



**Walter B. Jones Jr.**  
North Carolina



**Lindsey O. Graham**  
South Carolina



**Jim Ryun**  
Kansas

## Democrats



**Ike Skelton**  
Ranking Minority Member  
Missouri



**Norman Sisisky**  
Virginia



**John M. Spratt Jr.**  
South Carolina



**Solomon P. Ortiz**  
Texas



**Owen B. Pickett**  
Virginia



**Lane Evans**  
Illinois



**Gene Taylor**  
Mississippi



**Victor F. Snyder**  
Arkansas



**Jim Turner**  
Texas



**Adam Smith**  
Washington



**Loretta Sanchez**  
California



**James H. Maloney**  
Connecticut



**Mike McIntyre**  
North Carolina



**Ciro Rodriguez**  
Texas



**James V. Hansen**  
Utah



**Curt Weldon**  
Pennsylvania



**Joel Hefley**  
Colorado



**Jim Saxton**  
New Jersey



**Stephen E. Buyer**  
Indiana



**Tillie K. Fowler**  
Florida



**John M. McHugh**  
New York



**Howard "Buck" McKeon**  
California



**J.C. Watts Jr.**  
Oklahoma



**Mac Thornberry**  
Texas



**John N. Hostettler**  
Indiana



**Saxby Chambliss**  
Georgia



**Van Hilleary**  
Tennessee



**Joe Scarborough**  
Florida



**Bob Riley**  
Alabama



**Jim Gibbons**  
Nevada



**Mary Bono**  
California



**Joseph Pitts**  
Pennsylvania



**Robin Hayes**  
North Carolina



**Steve Kuykendall**  
California



**Donald Sherwood**  
Pennsylvania



**Neil Abercrombie**  
Hawaii



**Martin T. Meehan**  
Massachusetts



**Robert A. Underwood**  
Guam



**Patrick J. Kennedy**  
Rhode Island



**Rod R. Blagojevich**  
Illinois



**Silvestre Reyes**  
Texas



**Thomas H. Allen**  
Maine



**Cynthia McKinney**  
Georgia



**Ellen Tauscher**  
California



**Robert Brady**  
Pennsylvania



**Robert E. Andrews**  
New Jersey



**Baron P. Hill**  
Indiana



**Mike Thompson**  
California



**John B. Larson**  
Connecticut

## Republicans



**John W. Warner**  
Chairman  
Virginia



**Strom Thurmond**  
South Carolina



**John McCain**  
Arizona



**Bob Smith**  
New Hampshire



**James M. Inhofe**  
Oklahoma



**Rick Santorum**  
Pennsylvania



**Olympia J. Snowe**  
Maine



**Pat Roberts**  
Kansas



**Wayne Allard**  
Colorado



**Tim Hutchinson**  
Arkansas



**Jeff Sessions**  
Alabama

## Armed Services Committee

## Democrats



**Carl Levin**  
Ranking Minority Member  
Michigan



**Edward M. Kennedy**  
Massachusetts



**Jeff Bingaman**  
New Mexico



**Robert C. Byrd**  
West Virginia



**Charles S. Robb**  
Virginia



**Joseph I. Lieberman**  
Connecticut



**Max Cleland**  
Georgia



**Mary L. Landrieu**  
Louisiana



**Jack Reed**  
Rhode Island



## Republicans

**Jerry Lewis**  
Chairman  
California



**C.W. "Bill" Young**  
Florida



**Joe Skeen**  
New Mexico



**David L. Hobson**  
Ohio



**Henry Bonilla**  
Texas



**George R. Nethercutt Jr.**  
Washington



**Ernest J. Istook Jr.**  
Oklahoma



**Randy "Duke" Cunningham**  
California



**Jay Dickey**  
Arkansas



**Rodney P. Frelinghuysen**  
New Jersey

# HOUSE

## Defense Appropriations Subcommittee



## Democrats

**John P. Murtha**  
Ranking Minority Member  
Pennsylvania



**Norman D. Dicks**  
Washington



**Martin Olav Sabo**  
Minnesota



**Julian C. Dixon**  
California



**Peter J. Visclosky**  
Indiana

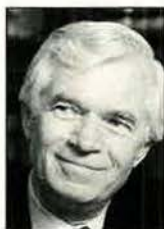


**James P. Moran**  
Virginia

## Republicans



**Ted Stevens**  
Chairman  
Alaska



**Thad Cochran**  
Mississippi



**Arlen Specter**  
Pennsylvania



**Pete V. Domenici**  
New Mexico



**Christopher S. Bond**  
Missouri



**Mitch McConnell**  
Kentucky



**Richard C. Shelby**  
Alabama



**Judd Gregg**  
New Hampshire



**Kay Bailey Hutchison**  
Texas

## Defense Appropriations Subcommittee



**Daniel K. Inouye**  
Ranking Minority Member  
Hawaii



**Ernest F. "Fritz" Hollings**  
South Carolina



**Robert C. Byrd**  
West Virginia



**Patrick J. Leahy**  
Vermont



**Frank R. Lautenberg**  
New Jersey



**Tom Harkin**  
Iowa



**Byron L. Dorgan**  
North Dakota



**Richard Durbin**  
Illinois

## Democrats

# House

## Republicans



**David L. Hobson**  
Chairman  
Ohio



**John Edward Porter**  
Illinois



**Todd Tiahrt**  
Kansas



**James T. Walsh**  
New York



**Dan Miller**  
Florida



**Robert Aderholt**  
Alabama



**Kay Granger**  
Texas



**Virgil H. Goode Jr.**  
Virginia

## Democrats



**John W. Olver**  
Ranking Minority Member  
Massachusetts



**Chet Edwards**  
Texas



**Sam Farr**  
California



**Allen Boyd**  
Florida



**Norman D. Dicks**  
Washington

## Military Construction Appropriations Subcommittee

# Senate

## Republicans



**Conrad R. Burns**  
Chairman  
Montana



**Kay Bailey Hutchison**  
Texas



**Larry E. Craig**  
Idaho



**Jon Kyl**  
Arizona

## Democrats



**Patty Murray**  
Ranking Minority Member  
Washington



**Harry Reid**  
Nevada



**Daniel K. Inouye**  
Hawaii

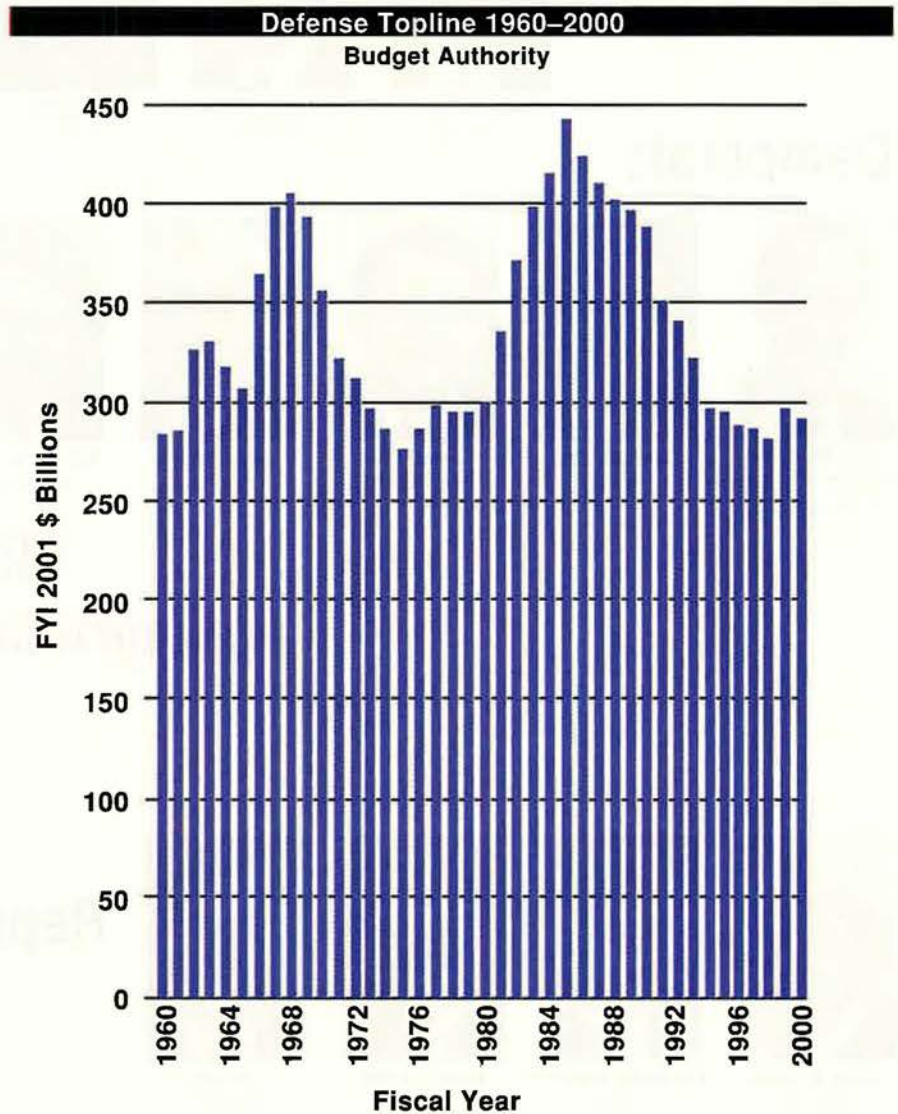
# Defense Spending: Illusions and Reality

By Robert S. Dudley, Executive Editor

**T**HE Pentagon budget—specifically, whether and by how much it should be raised—has once again become a hot political topic in Washington. According to the Congressional Budget Office, the federal government in the next decade will run a surplus of \$838 billion (not counting Social Security surpluses). Defense-minded lawmakers and others want to use part of that windfall to beef up the armed services. They seek major budget increases to make up for years of slack funding in the 1990s.

As the charts on these pages show, DoD has just been through its longest year-to-year decline in four decades. Budget reductions resulted, in part, from the collapse of the Soviet threat, but it is now apparent that the cuts went too deep for too long.

These charts present an array of quantitative measurements of defense spending, its role in the larger fiscal equation, and how the money has been allocated. The financial charts represent new budget authority (value of new DoD obligations) and are expressed as constant Fiscal 2001 dollars, which permits legitimate year-to-year comparisons. (Detailed explanation on p. 64).



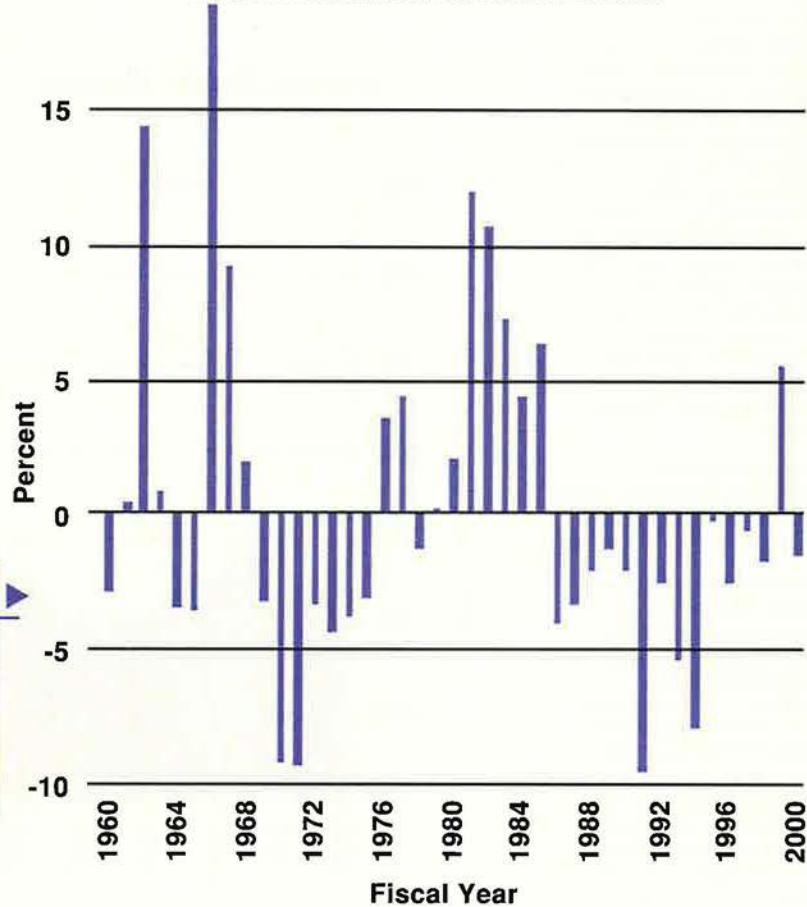
### Defense Topline

Defense spending has fluctuated greatly over 40 years, ranging from a low of \$272.8 billion in 1975 to a high of \$436.4 billion in 1985. During the past four decades, the US financed two major buildups—one for the Vietnam War under President Lyndon B. Johnson and one for the latter Cold War under President Ronald Reagan. There have also been two major busts—the post-Vietnam defense collapse of the 1970s and the post-Cold War drawdown of the 1990s. As the chart shows, current spending today is again at a low ebb. The most recently enacted defense budget—for Fiscal 2000—is lower than all but eight of the previous 40 budgets.



# ties

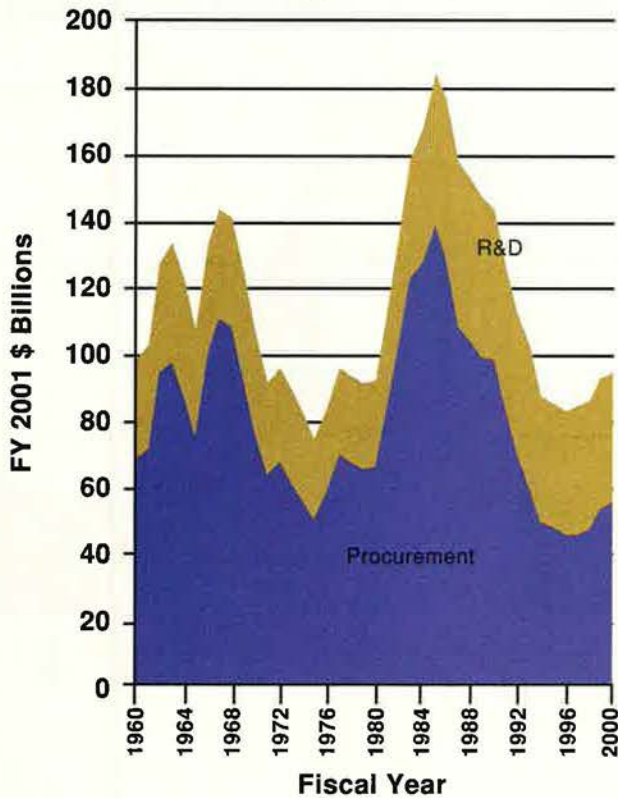
**Ups and Downs 1960–2000**  
Percent Annual Real Growth or Decline



**Ups and Downs**

The need to pay for the Kosovo air operation generated a real increase in the 1999 program. Before that, however, DoD's budget had fallen every year for 13 straight years. That was the longest decline in the postwar era. Even the post-Vietnam decline of the 1970s lasted only seven years.

**Defense Investment 1960–2000**  
Budget Authority



**Defense Investment**

Defense investment—that is, provision for the future force—comprises procurement and research and development spending. Ever since 1985, the peak of the Reagan buildup, investment has been plummeting, falling even more rapidly than the budget as a whole. US military power today stems largely from investments made in the Reagan era, and those systems are now reaching advanced age. CBO estimates that it will take \$90 billion a year to maintain a "steady state" in weapon systems. DoD's latest budget proposal provides only \$60 billion.

## Illusion vs. Reality

*Inflation erodes the purchasing power of the dollar over time. When funding is expressed in current dollars, no adjustment for inflation has been made. This has a distorting effect.*

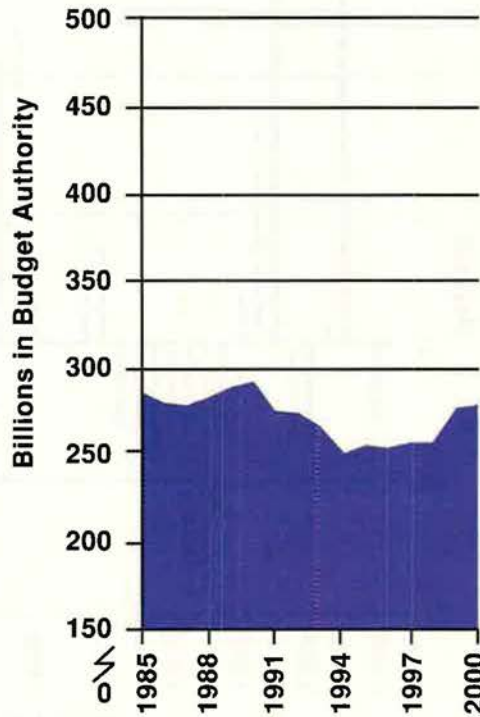
*Spending in the past seems less impressive than it really was. The reverse is true of spending in the present or future; though a budget has less real purchasing power, it contains more actual dollars.*

*Some analysts—including officials at the Pentagon—frequently present data in this way.*

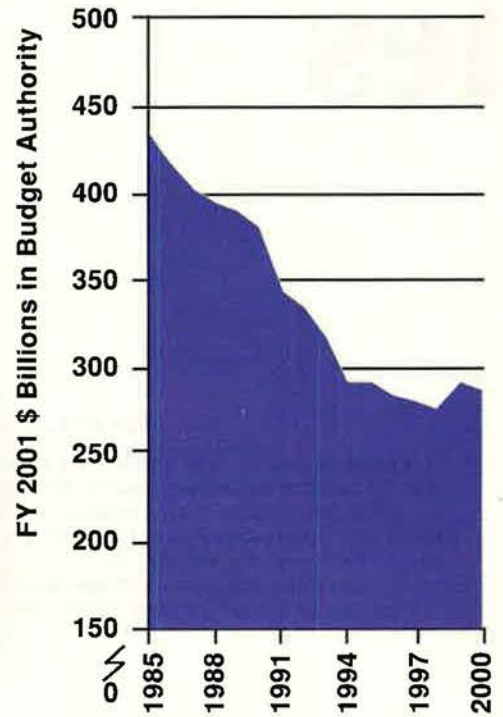
*To overcome current-dollar distortion, one must recalculate all defense spending into constant dollars, choosing a single year as a basis for all budgets in a series. Then, true year-to-year comparisons can be made. The differences are readily apparent in the examples on this page.*

## Total Budget

### Current Dollar Illusion

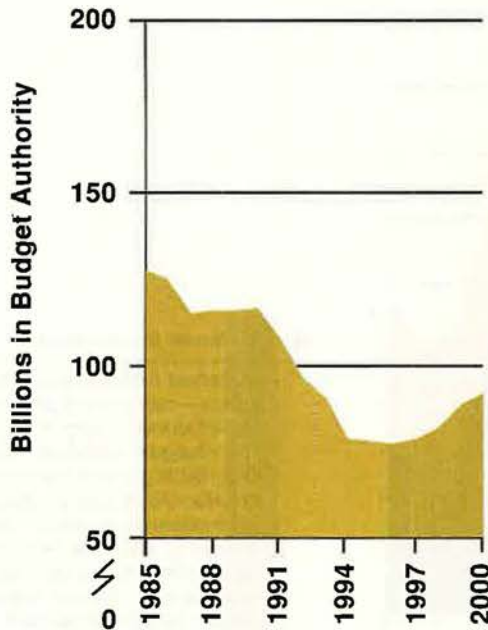


### Constant Dollar Reality

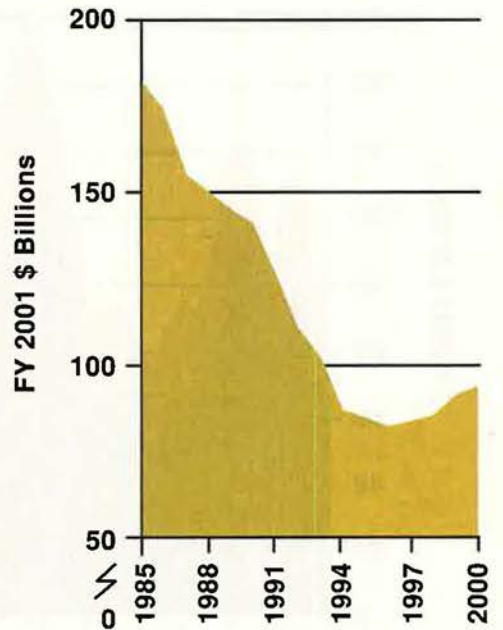


## Investment

### Current Dollar Illusion

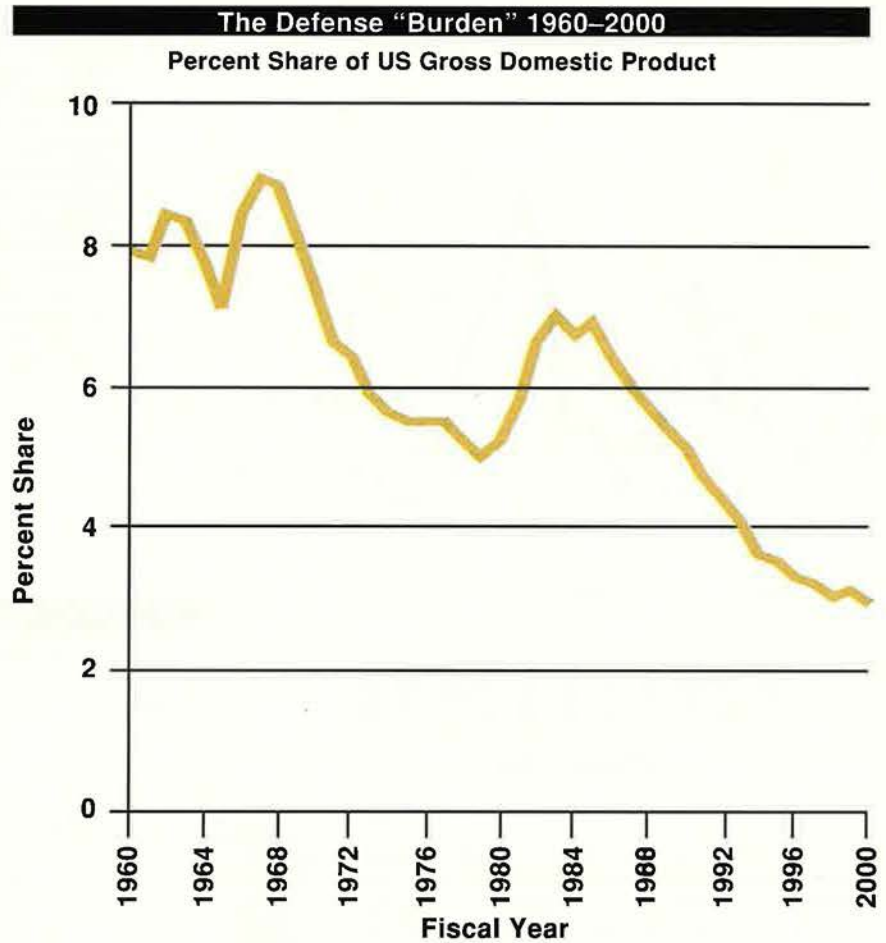


### Constant Dollar Reality



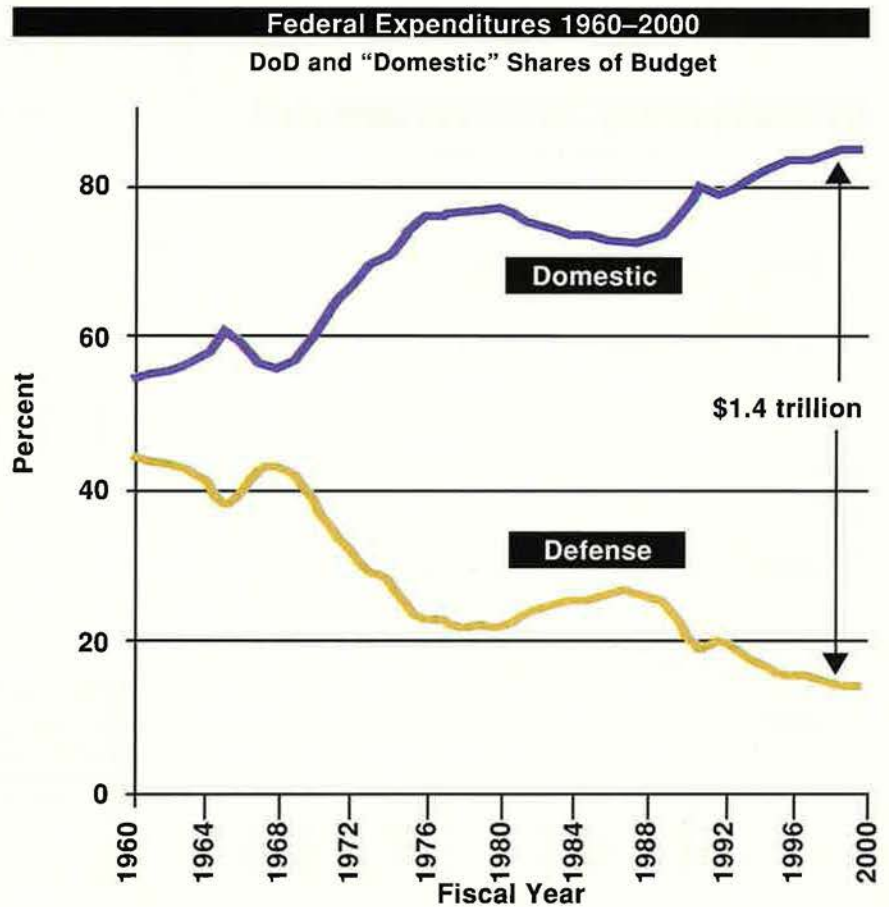
### The Defense "Burden"

Critics often speak of the "burden" defense spending places on the US civilian economy, asserting that such expenditures rob the economy of the flexibility and vitality needed to fuel growth. As can be seen, this burden, if it exists at all, has declined dramatically in modern times. During the Kennedy and Johnson Administrations, Pentagon spending exceeded 8 percent of US Gross Domestic Product. Today, the figure stands at about 3 percent and is still going down.

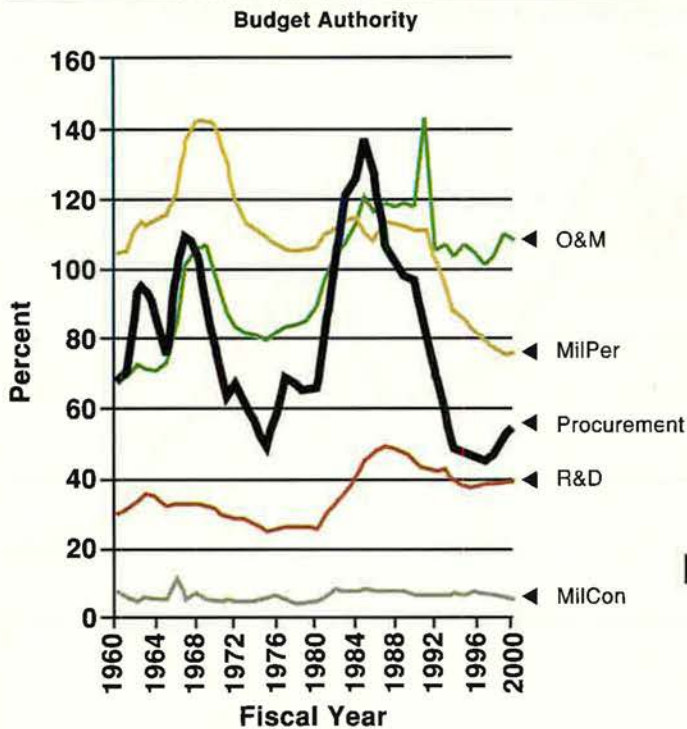


### Federal Expenditures

In 1960, the Pentagon consumed 45 percent of the federal budget. Except for brief periods in the 1960s and 1980s, DoD's share has been declining ever since. Today, the figure stands at about 15 percent, a historically low level. This reflects not only cuts in defense but also increases in other forms of federal spending, particularly entitlements such as Medicare and Medicaid. After 40 years of divergence, spending on non-defense "domestic" items this year exceeds defense spending by more than \$1.4 trillion.



## Major Categories 1960–2000



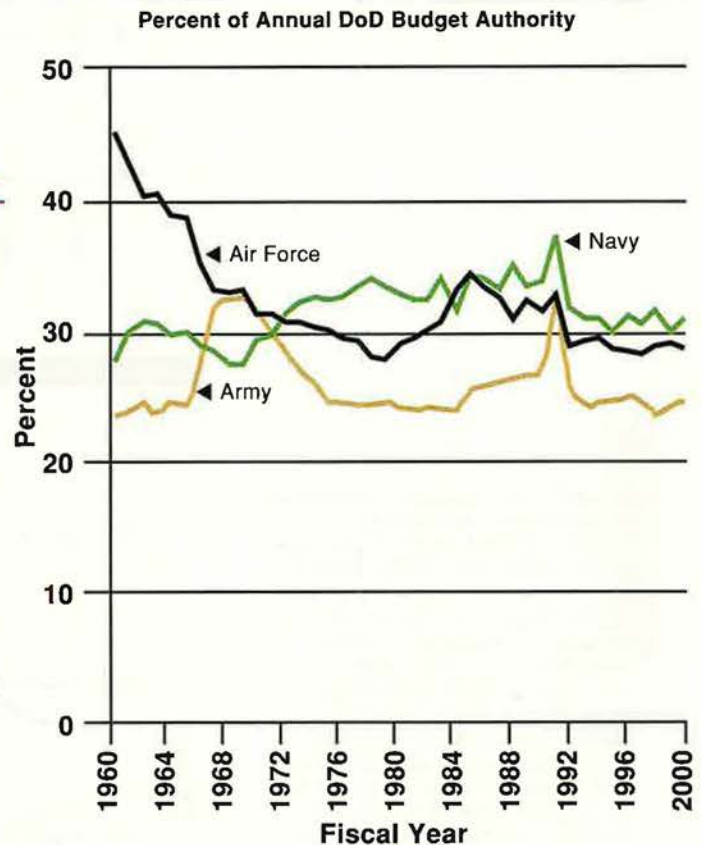
## Major Spending Categories

Procurement fell off dramatically in the post-Vietnam War 1970s, picked up again in the 1980s, then fell to near all-time lows in the Clinton era. In contrast, the military has seen real increases in Operations and Maintenance spending—for repairs, consumables, and the like. (The O&M spike in 1991 correlates to the Gulf War, financed largely by coalition allies). The rise in O&M reflects to some extent more robust readiness funding, but also the higher optempo in the 1990s and higher cost of maintaining older weapon systems. Military personnel outlays dropped in the post-Vietnam and post-Cold War force reductions.

## Service Shares

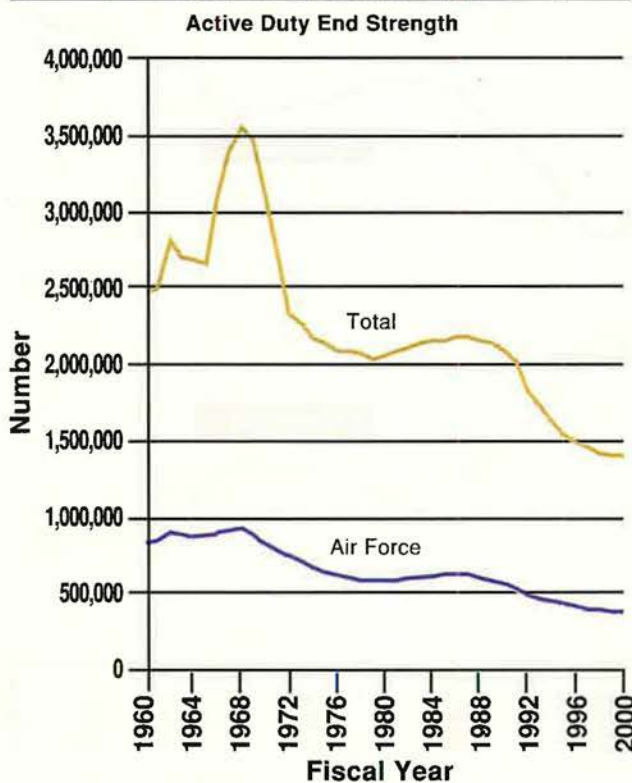
The Air Force's share of the budget relative to the other services fell precipitately in the 1960s. In 1972, the Navy-Marine Corps surpassed it and has held the lead ever since, with the exception of two years in the mid-1980s.

## Service Shares\* 1960–2000



\*Defense agencies line (not shown) averaged \$9.8 billion over the 40-year period.

## Troop Levels 1960–2000



## Troop Levels

Over four decades, the budget reductions have been mirrored by force reductions—from more than 3.5 million troops at the height of the Vietnam War to fewer than 1.4 million today.



## Masters of Airborne Video Technology

# & More.

IT'S NOT A COINCIDENCE THAT WE FLY ON 75% OF THE WORLD'S FIGHTER AIRCRAFT. OR THAT THE RELIABILITY OF OUR airborne videocassette recorder systems dramatically exceeds the nearest competitor. Or that we deliver the lowest life-cycle costs in the industry. TEAC engineering developed the technology specifically for the harsh cockpit environment. We didn't convert a living room VCR or a consumer video camcorder. TEAC engineers specifically developed our Hi-8mm technology for the harsh operational environment of fighter aircraft. And since we own our own technology, we guarantee production, configuration control, spares and logistics support for the life of your program. In airborne video, if it's worth a mission, it's worth a TEAC.



**TEAC**  
AIRBORNE PRODUCTS DIVISION

**Twenty-five years ago this month, the Vietnam War came to an end with bewildering speed.**

# The Fall of

**By Walter J. Boyne**

**O**n April 30, 1975, North Vietnamese troops accepted the surrender of Saigon and thus snuffed out the Republic of Vietnam, humiliating Washington in the process. Saigon, within 24 hours, had become Ho Chi Minh City. The surrender of the capital and its prompt renaming—25 years ago this month—became the ultimate symbol of the failure of US policy in Southeast Asia.

For Americans, that day forever will be remembered for the spectacle of overcrowded US helicopters fleeing in a badly timed but well-executed evacuation, their flight to safety contrasting with the terror that gripped thousands of loyal South Vietnamese left to their fates. The media presented hundreds of wrenching scenes—tiny boats overcrowded with soldiers and family members, people trying to force their way onto the US Embassy grounds, Vietnamese babies being passed over barbed wire to waiting hands and an unknown future.

Saigon fell with bewildering speed. After 21 years of struggle against the Communist forces, the South Vietnamese army collapsed in just weeks into a disorganized mass, unable to slow, much less halt, forces from the North.

In nearly 30 years of war, Hanoi had defeated France and South Vietnam on the battlefield and the US at the negotiating table. The Communist regime was expert in manipulating US opinion. For example, Hanoi had converted its debilitating defeat in the 1968 Tet Offensive into a stunning propaganda victory, one that ultimately drove the United States out of the war.

Still, North Vietnam had suffered about 50,000 casualties in Tet and

was similarly mauled in its spring 1972 offensive against the South. The People's Army of Vietnam needed time to recuperate.

## **Thieu's Gambit**

South Vietnam's president, Nguyen Van Thieu, took advantage of Hanoi's decision to refit and re-equip, extending the South Vietnamese hold on territory wherever possible. The result was that the South Vietnamese army was spread out over a large area and by late 1974 was ripe for an attack. Its condition was worsened by the drying up of US assistance, a drastic increase in inflation, and, as always, flagrant corruption.

The January 1973 Paris peace accords led to a near-total withdrawal of US forces in early 1973. In fall 1974, leaders in Hanoi had decided upon a two-year program to conquer the South and unite the two countries under Communist rule. Called "General Offensive, General Uprising," the program was designed so that a series of major military offensives in 1975 would bring the South Vietnamese population to the point of revolution and permit a conclusive victory in 1976.

North Vietnam was well aware of the disarray in American politics since President Richard M. Nixon's August 1974 resignation, and it decided to test the waters. In January 1975, it conquered Phuoc Long province on the border with Cambodia. North Vietnamese regular units, supplemented by local guerrillas, routed the South Vietnamese army in a mere three weeks. More than 3,000 South Vietnamese troops were killed or captured, and supplies worth millions were lost to the invaders. Although Phuoc Long was not particularly important in either military

*After more than two decades of fighting the Communists, the South Vietnamese army collapsed quickly in early 1975, setting in motion chaotic evacuations like this one from a rooftop in Saigon.*

# Saigon





**South Vietnamese President Thieu withdrew his forces from the Central Highlands after Ban Me Thuot fell March 12. The North Vietnamese then moved to take over Pleiku, triggering this exodus of soldiers and civilians.**

or economic terms, it was the first province the North Vietnamese had taken since 1972—and it was only 80 miles from Saigon.

This absolutely crucial event was scarcely noted in the American news media. Washington had pledged to “respond with decisive military force” to any North Vietnamese violation of the 1973 accords. In the end, however, the US did nothing at all. Hanoi doubtless was encouraged to continue.

Oddly enough, Thieu was not discouraged. That is because he continued to believe in Nixon’s promises, even after Nixon had been forced to resign, and he would continue to believe in those promises almost to the end, frequently musing about “when the B-52s would return.”

March 1975 saw Hanoi make its next seriously aggressive move. In the preceding two years, North Vietnam’s army patiently moved into the South enormous quantities of Soviet artillery, surface-to-air missiles, and armored vehicles, along with 100,000 fresh troops. The Paris accords allowed more than 80,000 North Vietnamese regular troops to remain in the South, and their numbers had already increased to more than 200,000.

North Vietnamese regular and guerrilla forces now numbered some 1 million, despite the heavy losses of the previous decade. North Vietnam’s army units, created by Gen. Vo Nguyen Giap, were weapons-intensive, with few logistics or support personnel. In contrast, South

Vietnam’s army was modeled on the US Army. It had about 750,000 troops, of which only about 150,000 were combat troops. They were well-equipped but poorly supported, despite the Army’s huge logistics tail.

Giap in 1973 had become ill with Hodgkin’s disease, and power passed to his protégé, Van Tien Dung, North Vietnam’s only other four-star general. Dung, a short, square-faced peasant who had worked his way up through the ranks, carefully infiltrated his forces so that he was able to set up his headquarters at Loc Ninh, only 75 miles north of Saigon. The elaborate preparations included construction of an oil pipeline and telephone grid that was impervious to electronic countermeasures.

Dung dictated tactics designed to minimize casualties from the massed firepower upon which South Vietnam’s army had been trained to rely. Unfortunately for the South Vietnamese, their supplies of ammunition were badly depleted by rampant inflation and severe reductions in American aid.

### Final Battle Begins

Dung arrived at Loc Ninh via the Ho Chi Minh Trail, now expanded from foot paths to include paved, two-lane highways with extensions that reached within 30 miles of Saigon. His first target was Ban Me Thuot, a city in the Central Highlands and the capital of Darlac province. It was the absolutely vital link

in the South Vietnamese army’s defenses. If it were lost, Communist forces could easily cut South Vietnam in half.

North Vietnam disguised its real assault by mounting pinprick attacks in the two northernmost provinces of South Vietnam. Minor though they were, they triggered a panic flight of more than 50,000 refugees that would have immense effect on battles soon to come.

Northern forces isolated Ban Me Thuot by cutting off or blocking the main highways to it. On March 10, 1975, three North Vietnamese army divisions, well-equipped with tanks, assaulted the city, which was defended by two reinforced regiments of the 23rd Division. Despite a barrage of 122 mm artillery fire, the South Vietnamese army, commanded by Maj. Gen. Pham Van Phu, fought well. However, they were worn down and, by March 12, Dung had essentially captured the city.

It was at Ban Me Thuot that there first occurred a phenomenon that would increasingly undermine the South’s morale. Many of its army officers used helicopters to pick up their families and flee to the south with them. Phu himself fled when the time came.

South Vietnamese hordes then began to flee the countryside, crowding the main roads and the pathways in a mass exodus for the coast, where they ultimately jammed seaports seeking transport to the south. The refugees included not only those civilians who had helped the South’s army or the Americans, but also a great mass who had no reason to expect bad treatment from North Vietnam’s army. They were simply fleeing in the general panic.

The refugee crowd had another characteristic, one that would prove to have a disastrous effect upon South Vietnamese resistance. South Vietnamese soldiers were leaving the line of battle to find their families and escort them to safety. It was a natural response to the war, but it accelerated the dissolution of the South’s capability to resist.

### Fatal Error

Thieu had believed the target of Dung’s attack would be Pleiku. He panicked on learning of the fall of Ban Me Thuot and on March 14 secretly ordered the withdrawal of the



South's forces from the Central Highlands. It was a monumental error, for no plans for the withdrawal had been drawn up, and the orders to leave simply plunged the remaining troops into a mass of refugees whose agonizing journey came to be called "the convoy of tears."

This flight of refugees was unlike those seen in World War II. Those fleeing the Communists in Vietnam resorted to each and every kind of conveyance: buses, tanks, trucks, armored personnel carriers, private cars. Anything with wheels was pressed nose to tail along Route 7B. The vehicles were jammed with soldiers and overloaded with family members—from babes in arms to aged grandparents—packed on top or clinging to the side, like jitney riders. Many of those who fell off were crushed by the vehicle behind.

Thousands more fled on foot, carrying their pathetic belongings with them. For 15 hot days and cold nights there was no food or water available, and the route was littered with abandoned people—children, the elderly, the infirm.

North Vietnamese army troops of the 320th Division pounced on the disorganized mob trying to get to the coast and kept them under constant attack, killing thousands of civilians. North Vietnamese artillery would destroy one vehicle after another at near point-blank range, throwing body parts into trees and drenching the ground with blood.

It was a different kind of slaughter. Unlike Kosovo where long-standing ethnic hatred led to the killing of a few thousands, the slaughter here was between people of the same blood. As many as 40,000 died on the road. The situation worsened when renegade South Vietnamese army troops also began firing on the refugee columns.

Compounding this sad spectacle was the fact that, when the exhausted survivors finally made it to a seaport, they were exploited by fellow countrymen who charged exorbitant prices for food and sold water for \$2 a glass. Here the South Vietnamese army turned into an armed mob, preying on civilians and looting whatever could be found.

Dung swiftly swung north and on March 18 occupied Kontum and Pleiku, putting the invasion weeks ahead of schedule. It was a South Vietnamese debacle, with the southern army managing to lose the war faster than North Vietnam's army could win it.

Thieu's hasty and ill-advised surrender of the Central Highlands had cost South Vietnam six provinces and two regular army divisions. More than a billion dollars in materiel was abandoned.

### Improvisation and Delusion

The South Vietnamese leader now began to improvise an enclave policy. His forces would concentrate on holding certain coastal cities, including

Da Nang, along with Saigon and the Delta region. Thieu, a tough politician, had an almost childlike belief that holding these areas would give the United States time to exert its military power and once again force the North Vietnamese to negotiate.

North Vietnamese forces unleashed attacks in Quang Tri province in late March, accelerating the flow of refugees. In Hue city, the citizens were alarmed. The city had suffered greatly in 1968 during the Communists' 25-day Tet occupation. It lost another 20,000 civilians during the North's 1972 offensive. Once again, soldiers and citizens merged to join the throng headed for Da Nang. By March 23, a combination of rumors, desertions, and North Vietnamese propaganda had made Hue indefensible. It fell on March 24.

As Communist artillery shelled Hue and all of the roads leading to and from it, other forces surrounded Da Nang, to which more than 1 million refugees had fled, leaving behind those killed by artillery, collisions, and mob stampedes. Thousands attempted to escape by sea, fleeing in anything that would float. Many drowned.

At Da Nang, a civilian airlift began, presaging the later confusion and terror at Saigon. Edward J. Daly, president of World Airways, defied US Ambassador Graham A. Martin and dispatched two Boeing 727s to Da Nang, flying on the first one himself. After landing, his airplane was mobbed by thousands of people, some 270 of whom were finally jammed on board. (All but a handful of these were armed soldiers—not the civilians that Daly had intended to evacuate.) The 727 took off amid gunfire and a grenade explosion that damaged the flaps. It hit a fence and a vehicle before staggering into the air. People had crowded into the wheel well, and one man was crushed as the gear came up and jammed.

Somehow the 727 made it back to Saigon, gear down and with split flaps, managing to land safely. The dreadful photos of the dead man's feet hanging from the gear doors told the miserable story. Ironically the one man's death saved four others who had also climbed into the wheel well, for his crushed body had prevented the gear from retracting all the way. Later, when the details of the overweight and damage-laden takeoff were sent to Boeing for analy-



*On a bridge in Saigon two days before the city fell to the Communists, a South Vietnamese soldier hangs on to a wounded comrade during an enemy attack April 28.*



**On foot and on anything with wheels, refugees evacuate ahead of Communist forces. Their numbers included civilians who had aided the South Vietnamese army or the Americans, as well as those simply fleeing in general panic.**

sis, the response was that the 727 should not have been able to fly.

The seaborne disasters that occurred at Hue were repeated at Da Nang on a larger scale, as people were trampled to death by crowds fighting to board the larger ships. More than 2 million people were crowded into Da Nang, but only 50,000 would escape by sea. In what was now a familiar pattern, discipline broke down as Communist artillery fire raked the city and widespread looting began. Organized resistance crumbled, and fleeing civilians were caught in a murderous cross fire between North Vietnamese and South Vietnamese troops.

The Communist forces entered Da Nang on March 29. Qui Nhon fell on March 31 and Nha Trang on April 3. The battle for Nha Trang lasted only three hours. The rich resources of Cam Ranh Bay fell on the same day after only 30 minutes of fighting. These reverses soon were followed by the fall of other coastal towns. Phu Cat airport was captured with more than 60 flyable aircraft in place.

Lost in the melee was materiel valued at billions of dollars. Anyone who flew in or out of Da Nang or Cam Ranh during the Vietnam War will recall the thousands of acres of supplies stacked around the airfields. That gigantic supply stockpile fell into Communist hands.

### Going for Broke

Now it was Hanoi's turn to impro-

vis. Shocked by the speed of its success, North Vietnam hastily proclaimed a new goal: the conquest of South Vietnam in time to celebrate the May 19 birth date of the late Ho Chi Minh. Dung termed his military action "the Ho Chi Minh Campaign" and gave his troops a new slogan: "Lightning speed, daring, and more daring."

They complied, and by early April, North Vietnam's forces had severed the roads around Saigon and had begun shelling Bien Hoa airfield. A battle began on April 9 at Xuan Loc, located on National Route 1 only 37 miles northeast of Saigon.

Southern forces fought well during the course of the bitter 15-day fight. This was particularly true of the 18th Division, an outfit that previously had a bad reputation. Here, it fought on after suffering 30 percent casualties. However, it received no reinforcements, and it faced North Vietnam's 4th Corps. During this battle, the remnant of South Vietnam's air force carried out its last effective operation, using cluster bombs, 15,000-pound daisy cutters, and even a CBU-55B asphyxiation bomb.

Elsewhere in the region, the United States on April 12 evacuated 276 Americans from Phnom Penh, Cambodia, in Operation Eagle Pull. The withdrawal sent Hanoi yet another signal that US intervention was not to be feared in South Vietnam. Unaccountably, Thieu for another nine days clung to the hope of US intervention. Then, on April 21, he resigned, turning the government over to aging and feeble Tran Van Huong.

South Vietnamese morale was not helped by rumors, which turned out to be true, that Thieu was sending personal goods and money out of the country. In short order, the man followed his valuables into exile in Taiwan and then Britain.

Xuan Loc fell on April 23, and there was now little to prevent or slow the Communist advance on Saigon. That same day, in an address at Tulane University, President Gerald Ford stated that the war



**South Vietnamese civilians scale the wall of the US Embassy in Saigon on April 29 to reach evacuation helicopters that were using the embassy's courtyard and rooftop as landing pads.**

in Vietnam "is finished as far as America is concerned." He got a standing ovation.

Huong, South Vietnam's new president, transferred power to Gen. Duong Van Minh. "Big Minh," as he was called, had planned the assassinations in 1963 of South Vietnam's president, Ngo Dinh Diem, and Diem's brother, Ngo Dinh Nhu. The South Vietnamese leadership was out of options and had come to the fantastic conclusion that the Communists might negotiate with Minh. This was far from reality; North Vietnamese regular army troops and tanks had by then surrounded Saigon, which became yet another city in panic.

### On Life Support

South Vietnam's capital city was located some 45 miles from the coast of the South China Sea on the Saigon River. Long called the "Paris of the Orient," it had lost only part of its French-colonial beauty in the long war. It had, however, lost confidence in its government. Despite many officials who did their jobs well, there were far too many high-ranking people who were not only corrupt but incompetent. It was not a government to inspire its people to fight to the last, but it was the government to which the United States had obligations. It was also a government that the American Embassy had to keep functioning as long as possible in order to evacuate the maximum number of Americans and loyal South Vietnamese.

Martin, the US envoy, had tried to shore up Thieu, lobbying for additional US military and financial aid. His efforts were sincere but they delayed the implementation of plans to evacuate American and South Vietnamese supporters of the administration from Saigon until it was far too late.

Fortunately, two evacuation operations were already in action, and the execution of the third was in the hands of professionals. The first of these, Operation Babylift, had been conducted between April 4 and 14, and some 2,600 Vietnamese children were taken to the United States to be adopted. Babylift was marred by a tragic accident on the first flight of the operation, April 4, 1975.

A C-5A transport had taken off and climbed to 23,000 feet when an



*During the last two days, more than 600 US military flights airlifted evacuees from Saigon to ships offshore. Air America also joined the effort. Above, civilians head for a helicopter at Tan Son Nhut.*

explosive decompression blew out a huge section of the aft cargo door, cutting the control cables to the elevator and rudder. Capt. Dennis Traynor did a masterful job of flying the airplane, using power for pitch and ailerons for directional control. He managed to bring the aircraft back to within five miles of Tan Son Nhut, where he made a semicontrolled crash. Of the 382 people aboard, 206 were killed, most of them children.

All subsequent flights were made safely. The Babylift operation later came under criticism for its overt attempt to create good public relations and for some of the criteria used in selecting the children. In the end, Babylift could be evaluated as yet another good-hearted attempt by the United States to do the right thing under difficult circumstances.

The second evacuation had been going on quietly for many days, relying on standard civilian and military airlift and virtually anything that would float. Some 57,700 were flown out by fixed wing aircraft, and 73,000 left by sea. About 5,000 Americans were evacuated—everyone who wished to come—plus many foreigners. South Vietnamese who were airlifted out were for the most part people whose service to their government or to the United States made them candidates for execution by the Communists.

There were many instances of individual courage, as exemplified by Francis Terry McNamara, the US

consul general in Can Tho. McNamara, at great personal risk, commandeered landing craft to ferry hundreds of Vietnamese down the Bassac River to safety. Neither blinding rainstorms, South Vietnamese navy, nor North Vietnamese regulars stopped him.

### Frequent Wind

Martin, who was perhaps too courageous for his own and for his people's good, was not persuaded to begin a formal evacuation until April 29. Tan Son Nhut had been hit by a small formation of Cessna A-37 aircraft, led by the renegade South Vietnamese pilot, Nguyen Thanh Trung, who previously bombed the presidential palace from his F-5. Then North Vietnamese rockets and 130 mm artillery shells began dropping on the airfield, while SA-7 missiles were being used successfully outside the perimeter.

Finally, after a personal visit, Martin became convinced that Tan Son Nhut was no longer suitable for use by fixed wing aircraft. He reluctantly initiated Operation Frequent Wind.

Frequent Wind turned out to be the helicopter evacuation of Saigon from the Defense Attaché's Office at Tan Son Nhut and from the embassy compound itself. Some 6,236 passengers were removed to safety, despite severe harassing fire. To some, however, it seemed that the DAO area and the evacuation pro-



**US Navy personnel push a helicopter off USS Blue Ridge to make room for more evacuation flights out of Saigon. Below, Communist soldiers in a Russian-made tank wave the flag after taking over the presidential palace in Saigon on April 30.**

cess itself were deliberately spared by the North Vietnamese.

At the embassy, large helicopters used the walled-in courtyard as a landing pad while small helicopters lifted people from the roof. Despite the lack of time and inadequate landing facilities, crews performed with remarkable precision.

On April 29 and 30, 662 US military airlift flights took place between Saigon and ships 80 miles away. Ten Air Force HH/CH-53s flew 82 missions, while 61 Marine Corps CH-46s and CH-53s flew 556 sorties. There were 325 support aircraft sorties by Marine, Navy, and USAF aircraft. Air America, the CIA proprietary airline, joined in, having flown 1,000 sorties in the previous month. Air America crews distinguished themselves with a selfless bravery not usually attributed to "mercenaries."

The end came on April 30. At 4:58 a.m., a CH-46 helicopter, call sign "Lady Ace 09," flown by Capt. Jerry Berry, transported Martin from the embassy roof to the waiting US fleet. At 7:53 a.m., the last helicopter lifted off, carrying Marine personnel who had been defending the embassy. It left behind many South Vietnamese (250 to 400, depending upon which source is consulted) who had been promised escape. They were simply abandoned. It was the last of a long series of US betrayals in Vietnam.

There were more evacuations to come, unplanned and totally chaotic.



Every South Vietnamese helicopter was crammed with people and these were flown, like a swarm of bees, to the waiting ships of the 7th Fleet. The helicopters would land (sometimes on top of each other) and their occupants would be disarmed and led away. The helicopters would then be dumped over the side to make room for the next one incoming. At least 45 were disposed of like this; many more were stored for future use.

controlled anything that could be surrendered.

At 3:30 p.m., however, the North Vietnamese conquerors relented just a bit. Reconsidering, they allowed the last chief executive of South Vietnam to broadcast over the radio an abject, two-sentence speech of surrender. By then, a new darkness already had descended on the people of what once had been South Vietnam. ■

*Walter J. Boyne, former director of the National Air and Space Museum in Washington, is a retired Air Force colonel and author. He has written more than 400 articles about aviation topics and 29 books, the most recent of which is Beyond the Horizons: The Lockheed Story. His most recent article for Air Force Magazine, "The All-American Airman," appeared in the March 2000 issue.*

**Critics complain that it teaches militarism, but a great many schools and communities like it, and so does Congress.**

# The Surge in JUNIOR ROTC

**By Bruce D. Callander**

**D**OES the Junior Reserve Officer Training Corps teach young people good citizenship and personal responsibility, as backers claim? Or does it, as critics claim, squander educational funds and divert young people into unproductive occupations?

Such questions were the focus of a recent study of JROTC by the Center for Strategic and International Studies in Washington.

The CSIS Political-Military Studies Project on the JROTC reached a firm conclusion: JROTC benefits both the nation's youth and their communities. Still, the report said that the services should be sensitive to local concerns about weapons on school property and funding.

For the Air Force, the immediate problem comes down to finding more American high schools interested in

the program and then recruiting enough retirees to serve as instructors.

Congress recently voted funds to expand the number of AFJROTC units over the next six years from 609 today to 945. It won't be easy, conceded Lt. Col. Jimmie N. Varnado, chief of the AFJROTC branch at Air University's Air Force Officer Accession and Training Schools.

"We have about 189 [schools] on the waiting list," said Varnado, "and have letters out offering contracts to some. Others are waiting for site surveys to make sure they have space for classrooms, offices, storage, and drill practice."

The waiting list should take the Air Force through the first year or two of expansion, he said. Then, it will have to have other schools in the pipeline.

His office sends representatives to

meetings of groups such as the National Association of Secondary School Principals and National School Boards Association.

"For a while, we had to tell interested schools that we were only funded for 609 units and we would only open new ones as others closed," said Varnado. "That discouraged a lot from applying. Now, we can give them more encouragement."

## **The Scarcest Resource**

Finding instructors to staff the new schools and replace losses at the old ones also is a challenge. By law, the retirees must be paid enough to bring their incomes up to the level of pay and allowances they would receive if they returned to active duty. The Air Force and the schools share that amount 50-50. Some schools pay more than the minimum, but many retirees still are not interested.

"We have a pool of people who have applied," said Varnado, "but we are not getting as many as we used to. With the drawdown over, there are not as many people retiring, and with dual-compensation limits gone, more are looking at federal jobs. Traditionally, too, when the economy is doing well, we get fewer applicants."

He went on, "We have sent people to job fairs to recruit, and the Project Transition Office at the [Air Force] Personnel Center has agreed to let us speak at their next worldwide conference. Once we know which schools we are going to open, [Project Transition] will advertise those vacancies on [its] Web site. The center also sends us electronic lists of members who have applied for retirement, so we send [those members] letters telling them about the program. We encourage them to apply or even to contact school officials in their areas and try to interest [the schools]. If the schools apply, we also may get those retirees to become instructors."

The AFJROTC program often has drawn fire and it still does. The CSIS report notes that several groups charge that it wastes school resources, teaches militarism, and is little more than a recruiting gimmick for the services.

A typical opponent is the Central Committee for Conscientious Objectors, whose Web site claims, "JROTC promotes violence, gangs, and guns." It cites purported instances where cadets have instigated fatal incidents in public schools.

"There are critics of the program," Varnado conceded, "but, as for its being too militaristic, the Air Force curriculum is based primarily on aerospace science. That makes up about 60 percent of our curriculum, and our textbooks [on the history of aviation, flight, and space exploration] probably are comparable to any other texts in the schools."

Varnado added, "Cadets do not use operable weapons of any type. The only arms they are authorized are demilitarized weapons for color guards and drill teams. For a long time, we even shied away from letting cadets wear BDUs [camouflage Battle Dress Uniforms] because some communities didn't accept them. Now, we allow cadets to wear them occasionally but only if they have

## Ninety Years of JROTC

For much of its nearly 90-year history JROTC has faced difficulties with both acceptance and funding. The idea of JROTC goes back to 1911, when Army Lt. Edgar R. Steevers suggested a noncompulsory cadet corps to teach youngsters self-control and community service.

The National Defense Act of 1916 authorized senior ROTC for college and a junior version for high schools. The Army was to supply uniforms, equipment, and instructors—active duty members for colleges and active or retired members for high schools. JROTC graduates would earn certificates making them eligible for a reserve commission at age 21.

A rival program, known as the National Defense Cadet Corps, came into being. Unlike JROTC, the schools paid most of the costs for the NDCC. Following World War II, when peacetime funding and manning became tight, JROTC suffered from lack of support.

In 1963, Defense Secretary Robert S. McNamara cut JROTC funds and converted some units to the cheaper NDCC. Powerful lawmakers rose to defend JROTC, however, and Congress passed Public Law 88-647 (the ROTC Vitalization Act of 1964) to pump new life into the program.

Under this law, all services were to offer JROTC programs and increase the number of programs. It also carried a provision that gave incentives to high schools that hired military retirees as instructors. In recent years, the services have turned increasingly to retirees as their instructor source.

The Air Force entered the program in 1966 with 20 units, 11 of which still exist. In 1972, it opened the previously all-male units to women, who now make up some 43 percent of the cadet corps.

permission from the superintendents and principals, and the schools pay for them."

The question of JROTC's being a recruiting tool for the service is more complicated. "The program is designed to promote citizenship," said Varnado, "not to recruit. There is no requirement or commitment that the members must serve on active duty after JROTC."

"But," he added, "there is no doubt that some people join the military service because they have been in Junior ROTC. ... Often, too, units will invite service recruiters in to talk to students about their lives after high school. But if they have a GE plant in the city, or ITT, or some other major corporation, they're encouraged to invite people from those companies to come in and talk about careers other than in the military.

"Some students also receive ROTC scholarships for college and some have appointments to the [US Air Force] Academy. Sometimes, they have a choice among academies."

### Incentives to Join

It is true, too, that JROTC graduates are offered more incentives to join the service than are other high schoolers. Under DoD instructions, a student who completes at least two years is entitled to the grade of no less than E-2 on enlistment, and services may offer grade E-3 for completing three years.

Still, said Varnado, JROTC's main emphasis is on character building. The curriculum covers everything from the dangers of drugs and the importance of good health to such practical subjects as how to balance a checkbook and develop interviewing skills.

"Some units begin when a kid comes into JROTC in ninth grade, having that kid prepare a résumé," he explained. "Each year, as he or she gains community experience through volunteering, it's added to that résumé. We encourage them to be involved. They work in food drives, adopt-a-highway programs, Special Olympics, Habitat for Humanity, and similar activities. In fact, community service is a requirement that we look at in our inspections. We also look at academic performance. Units have drill teams, color guards, and the Kitty Hawk Honor Society. But if kids aren't doing their schoolwork, they are prohibited from those activities."

Critics also contend that JROTC teaches unquestioning obedience and discourages individuality.

Not so, concluded CSIS. "Although adherence to chains of commands and respect for authority are essential in a profession whose activities can be lethal," said its report, "the military does not need or want blind submission to authority. ... JROTC seeks to nurture individualism in the service of a common cause."

Varnado agrees. "I have gone to most of the units and observed cadets in the program," he said. "The cadets actually run the cadet corps. The instructors are the facilitators. Those cadets go to officer leadership training programs to learn how to run the cadet corps."

Some are on college campuses. They also exist at Air Force installations such as Barksdale AFB, La., Elmendorf AFB, Alaska, Maxwell AFB, Ala., Luke and Davis-Monthan AFBs, Ariz., MacDill AFB, Fla., and Moody AFB, Ga.

### Randolph-Macon Model

At some schools, JROTC is more than an optional activity, and training goes beyond the classroom. Randolph-Macon Academy in Virginia, for example, operated under the National Defense Cadet Corps program until 1974 and then simultaneously adopted AFJROTC and opened its doors to female students.

Today, it is the only coeducational boarding school in America with an AFJROTC unit and an active flight training program, said Ellen Piazza, the school's director of public affairs. This year, 38 cadets are flight students, six of them girls.

The program has two full-time, certified flight instructors, a computer-driven flight simulator, and its own single- and twin-engine trainers. Courses range from ground school through single- and multi-engine commercial licenses with instrument and instructor ratings.

While flight training is optional, aerospace science is required for all cadets in the upper school (high school) each year, said Piazza. Classes are taught by four Air Force retirees.

Randolph-Macon's president, Maj. Gen. Henry M. Hobgood, USAF (Ret.), earned his own commission through ROTC in college and retired in 1996 as commander of 2nd Air Force.

Florida Air Academy, an all-male school, also offers AFJROTC and a flight training option in cooperation with the Florida Institute of Technology and Melbourne IAP. A number of other private military schools use the basic aerospace curriculum.

The program also is a popular option at US military base schools overseas. Lt. Col. Francis W. Jowett, USAF (Ret.), has been senior aero-

## Support in High Places

*From Feb. 10 testimony of the service chiefs before the House Armed Services Committee:*

### Gen. Michael E. Ryan, Chief of Staff, US Air Force

"We currently have over 600 schools where we have Junior ROTC for the Air Force, and we are growing that to 945, which is the limit of the law, by 2005, at about 45 a year as we add them in. It's a wonderful program for our kids. ... We encourage that program and we have some wonderful people—wonderful retirees—who work in that program. ... Almost 50 percent of the folks who go into [Air Force] Junior ROTC go on to one of our services, ... either by enlisting, or going through ROTC, or going to one of the academies. So we support the program and would like to see the cap [on the number of units] raised."

### Gen. James L. Jones, Commandant, US Marine Corps

"We have 60 high schools across our nation that are waiting for funding to start a [Marine Corps JROTC] program. The value of this program is beyond contest. Fully one-third of our young men and women who join the Junior ROTC program wind up wearing the uniform of a Marine. It comes at a very affordable cost, because the people who ... teach these young people the values of good citizenship, of responsibility, of service to the nation, generally come from our retired ranks. ... You recently allowed us to expand to 210 units, which is what we currently have. ... I believe that figure could expand dramatically."

### Gen. Eric K. Shinseki, Chief of Staff, US Army

"Youngsters in my family participate in [the] JROTC program, all the way out in Hawaii. I hear from family, as well as lots of other parents in communities that find the JROTC a great initiative in our schools. ... Our indications are about 30 percent of those youngsters—we don't recruit them, as you know, we're not permitted to do that, but, by virtue of the things that they like about that experience—about 30 percent of them end up joining the Army, either enlisting or going on through ROTC and then joining the officer population."

### Adm. Jay L. Johnson, Chief of Naval Operations, US Navy

"It's a powerful tool for us. ... [L]ast year, we stood up 55 more units. ... [W]e have about 434, I think is the number—that's close—in JROTC units. We're on a pathway to take ourselves, by Fiscal Year 2005, to 700, which is the limit. There's great interest in that, and even if the number is only 30 percent, you know, that's a good number. Think about what we get out of the other 70 percent. They have exposure to us. They have exposure to the military. ... That's a powerful tool, I think, to educate, whether or not they end up in the service. ... It's well worth the investment for lots of different reasons."

space science instructor at Kaiserslautern American High School, near Ramstein AB in Germany, for more than six years and taught earlier at other schools in Germany. The Kaiserslautern corps has won numerous awards and sent several graduates to service academies. These include Alonzo Babers, a USAF Academy graduate and double Olympic gold medal winner.

More typically, however, JROTC units are at public schools in the US. Many are concentrated in a few geographic areas. "There are parts of the country that are very pro-military and really support it," said Varnado. "If you look at the distribution, the majority of our current schools are in the Southeast and Southwest, and most of those on our waiting list are in those same areas."

The CSIS study bears out that assessment but notes that recent emphasis on expanding into inner-city

schools has increased the number of units in Northeast, mid-Atlantic, and Northwest states.

Moving into new areas is not always easy. Varnado cited cases in which school principals have applied for the program and later found resistance to it in their communities. "Even if they apply and then say they don't want it, that's OK," he said. "We just move to the next school on the waiting list. But we have not received any direct pressure from any community or group against JROTC. Nor have our schools reported any."

### Up to the Instructors

Making the program work is largely up to the instructors. The CSIS report showed that most AFJROTC instructors are retired lieutenant colonels and master sergeants. The next two largest groups are colonels and chief master sergeants, with majors and

senior master sergeants not far behind. All of the officers and 27 percent of the NCOs have bachelor's degrees, and 90 percent of the officers and 14 percent of the NCOs have master's degrees.

Although most come to the job with little experience in high school teaching, many have strong backgrounds in training and broad military experience.

Lt. Col. James Adams, USAF (Ret.), for example, left the Air Force in 1993 with 34 years of service, 14 as an enlisted man. Five years ago, he became senior aerospace science instructor at Edgren High School, Misawa AB, Japan. He holds bachelor's, master's, and juris doctor degrees and, on active duty, instructed at Squadron Officer School and the International Officer School. He also served with the recruiting service, on group and wing staffs, and as a squadron commander.

"We attempt to expose our students to the real world of work," said Adams, "and at the same time we attempt to motivate them to pursue college degrees."

Lt. Col. William Jenkins, USAF (Ret.), left the service after a career flying T-38s and F/RF-4s. He is senior aerospace science instructor at Unit SC-936 at Lakewood High School, in Sumter, S.C. The school's other instructor, CMSgt. Michael Welch, USAF (Ret.), spent his active duty career in maintenance and services.

"We both had lots of experience with teaching adults," said Jenkins. "I was an instructor pilot and ran several academic facilities for the Air Force. Neither of us had any experience in public schools or with teenagers, other than our own. But I think we both liked the idea of being able to have an influence on young people and felt the military has a lot to offer today's young adults. After seven years and about 1,400 students, I feel even more that way."

JROTC programs in the other services are similar to the Air Force's in most respects. The Army's, the oldest and still the biggest with some 1,370 units, shares the same general

curriculum with the other services and claims it is in line with national educational programs such as Goals 2000, the Labor Department's Commission on Achieving Necessary Skills, and the President's Education Summit.

The Navy's program, with 435 units, is designed to develop informed and responsible citizens, promote a healthy and drug-free lifestyle, and encourage completion of high school.

The Marine Corps has 174 units. The Corps pamphlet on the subject stresses that the curriculum aims to "develop pride, confidence, and self-discipline but fosters neither combat training nor service recruiting."

### Costs, High and Low

Funding for the four services' programs is roughly proportional to their size, but the per-cadet investment of each varies substantially, the Marines spending the most (\$539 per cadet) and the Air Force the least (\$358 per cadet).

The reason the goals of the four programs are the same, Varnado said, is that all operate under the same legislation. Where they may differ, he said, is in structure and approach.

"The daily operations are structured somewhat differently," he said. "In the Air Force decisions are made at headquarters level. The Army has regions directly under headquarters that have a lot of that work, and then directly below them they have brigades. The Navy also has regions below the headquarters that take a lot of responsibility.

"The Air Force stresses aerospace science. It makes up the biggest part of our program. The Navy emphasizes naval science but the Army and, I think, the Marine Corps base most of their curriculums on leadership training.

"The Army has weapons teams that use pellet guns and have ranges. Navy and Marines also participate in weapons training. We in the Air Force can't see that that adds much to leadership training. We have more individual programs, such as rocketry training, where they put rockets together and compete in meets."

One recent trend for all services has been to introduce more units into metropolitan areas. The CSIS report recommended an even greater JROTC presence in inner cities, arguing that the program is particularly helpful to youths in that environment.

Varnado agrees, although he said the services feel the term "inner city" can be misleading, since it can include some suburban schools that are well-financed.

He prefers "at-risk schools." A DoD instruction defines schools in "an educationally or economically deprived area" as those where (1) more than 30 percent of students are in the subsidized meals program or (2) fewer than 75 percent graduate or (3) on-site visits show neighborhoods have high incidences of violent crime and many families living below the poverty level. Any one of these conditions qualifies a school as at risk.

Until recently, the services could subsidize JROTC units in such schools by paying more of the instructors' salaries. Varnado said, "Typically, we paid 100 percent for the first two years, then 75 percent for three years, and then it went to 50-50.

"We still have about 14 schools that we are subsidizing for this academic year. After that, we will go to the 50-50 split. There are provisions of law that allow us to subsidize, but there are no additional funds that are available to support that. We have not yet had a school come in to say it cannot pay, but we may have to consider that."


With or without subsidies, the Air Force remains deeply involved in such schools. Last year, said Varnado, 31.5 percent of AFJROTC schools (192) were inner city, 27.9 percent (170) were at risk, and about 13.1 percent (80) were both.

Often, he said, having a JROTC program in the community makes a major difference in the outcome of the students' lives. "I can tell you up front, the program doesn't save every student," he said. "It's not for every kid in high school. But we get back stories about a cadet who was going in the wrong direction, got into JROTC, learned a little about discipline [and] acceptance of responsibility. It turned the kid around." ■

---

*Bruce D. Callander, a regular contributor to Air Force Magazine, served tours of active duty during World War II and the Korean War. In 1952, he joined Air Force Times, serving as editor from 1972 to 1986. His most recent story for Air Force Magazine, "Pilots for a Day," appeared in the March 2000 issue.*





This real-time  
image may never win  
an award.  
But it could help  
win a war.



Excellence in Airborne Ground Surveillance and Battle Management requires a system with simultaneous multi-mode radar operations providing both high performance Ground Moving Target Indicator (GMTI) & Synthetic Aperture Radar (SAR), rapid exploitation and timely dissemination to air and surface component forces. Only Northrop Grumman has operationally demonstrated time and time again the ability to provide the necessary performance through the unprecedented development and evolution of our unique Airborne Ground Surveillance Technologies.

# AFA / AEF National Report

By Frances McKenney, Assistant Managing Editor

## AFA Hosts Force Modernization Reception

Nearly 500 guests—including Rep. Floyd D. Spence (R-S.C.), House Armed Services Committee chairman, and Rep. Jerry Lewis (R-Calif.), House Appropriations Defense Subcommittee chairman—attended a February Capitol Hill reception organized by the Air Force Association and the Air Force Office of Legislative Liaison. The event focused on Air Force modernization and had the biggest turnout of any reception so far.

House Armed Services Committee members who attended were: Reps. Neil Abercrombie (D-Hawaii), Steve Buyer (R-Ind.), Saxby Chambliss (R-Ga.), who is also co-founder of the Airpower Caucus, Jim Gibbons (R-Nev.), Baron Hill (D-Ind.), Van Hilleary (R-Tenn.), Steven T. Kuykendall (R-Calif.), Mike McIntyre (D-N.C.), Howard "Buck" McKeon (R-Calif.), Ciro D. Rodriguez (D-Texas), Jim R. Ryun (R-Kan.), Norman Sisisky (D-Va.), Gene Taylor (D-Miss.), and Curt Weldon (R-Pa.).

Two members of the House Appropriations Committee's military construction subcommittee attended: Reps. F. Allen Boyd Jr. (D-Fla.) and Kay Granger (R-Texas).

Rep. Benjamin A. Gilman (R-N.Y.), chairman of the House International Relations Committee, was among the attendees, along with Rep. Cliff Stearns (R-Fla.), chairman of the Air Force Caucus, and Rep. Sam Johnson (R-Texas), caucus co-chairman.

Also present were Howard Coble (R-N.C.), Robin Hayes (R-N.C.), Steny H. Hoyer (D-Md.), Johnny Isakson (R-Ga.), Ken R. Lucas (D-Ky.), Patsy T. Mink (D-Hawaii), Doug Ose (R-Calif.), Ron Packard (R-Calif.), and Roger Wicker (R-Miss.).

Several senior Air Force leaders, including Gen. Michael E. Ryan, the Air Force Chief of Staff, and Gen. Lester L. Lyles, USAF vice chief of staff, joined AFA National President Thomas J. McKee for the event.

Built around the theme of "Force Modernization: A Balanced Approach," the educational material—developed



Photo by Paul Kennedy

**AFA National President Thomas McKee (right) chats with Rep. Steve Buyer (R-Ind.) (left) and Gen. Lester Lyles, USAF vice chief of staff, at the most recent—and most well-attended—Capitol Hill reception hosted by AFA and the USAF Office of Legislative Liaison.**

by AFA's Policy and Communications Department—included storyboard panels displaying information and handouts describing six key modernization areas: space, airlift, bombers, fighters, training, and munitions.

Previous receptions for members of the 106th Congress have focused on the F-22, airborne laser, advanced munitions, stealth technology, and recruiting and retention.

These gatherings provide an opportunity for AFA and members of Congress to exchange ideas in a casual atmosphere, but their educational angle has taken on an increased importance now that the number of members of Congress with military experience has declined. AFA's Government Relations Department reports that only 33 percent of those in the 106th Congress have served in the military, in the "freshman class" only 21 percent.

### Space Day 2000

AFA and the Aerospace Education Foundation are among the partners supporting the fourth annual international Space Day on May 4.

The celebration begins in Washington at the National Air and Space Museum. Events include Cyber Space Day, a live, interactive broadcast on the Internet. It will feature interviews with former senator and astronaut John Glenn, other astronauts, and scientists. They will also answer questions online.

The Webcast will showcase work by students who have participated in a Space Day project called Design Challenges that motivates teams of youngsters in grades four through six to solve the problems of living and working in space.

Space Day's more than 60 sponsors are encouraging local Space Day events, such as school assemblies featuring experts on space, classroom art projects, film festivals, fun runs, and displays highlighting this year's theme: Living and Working in Space.

AEF recently alerted AFA chapter vice presidents for aerospace education about Space Day, reminding them that it presents an opportunity to educate their communities about AFA and AEF.



Last year, AFA chapters from California to New York participated in Space Day. The **Colorado Springs/Lance Sijan Chapter** invited astronauts Bruce McCandless II, Michael L. Coats, and Ronald Sega to visit schools. The **Maj. Gen. Charles I. Bennett Jr. Chapter** helped carry out Space Day in Merced, Calif., with an astronomy club and a play on aviation history. In New York, the **L.D. Bell-Niagara Frontier Chapter** participated in a Space Day school assembly.

#### F-22 Road Show

AFA organizations have an opportunity to educate their members and guests about the F-22, as part of a nationwide effort to disseminate information on the air superiority fighter whose production Congress threatened to stop last year.

Lockheed Martin, the Raptor's contractor, is taking an F-22 cockpit demonstrator around the country this year to conventions, trade shows, and other functions, in cities ranging from Nashua, N.H., to Seattle. The company has offered to open the display after hours so that AFA members and guests can visit it. In February, the **Alamo (Texas) Chapter**, for example, visited the display the night before it opened to the media and general public.

The F-22 display is similar to the Lockheed Martin booth at the AFA National Convention last September. It features a computer flight simulator, videos, storyboards, and information brochures.

The tour began in Huntsville, Ala., and traveled to Jackson, Miss., San Antonio, Detroit, Charleston, W.Va., and Sacramento. This month it travels to Hartford, Conn., and Cincinnati (April 17-20).

Future stops: Charlotte, N.C. (May 26-29); Johnstown, Pa. (May 31-June 1); Nashua, N.H., and Berwick, Maine (July 5-7); Seattle and Rockford, Ill. (Aug. 7-10); Indianapolis and Norfolk, Va. (Aug. 21-24); and New York City (Dec. 6-8).

AFA has stated that the F-22 next-generation, stealthy fighter is central



*At Marshall Space Flight Center, Huntsville, Ala., Greg Schumann, president of the Tennessee Valley (Ala.) Chapter, presented an AFA award to astronaut Col. Eileen Collins (right) and Lt. Col. Cady Coleman, mission specialist. The award recognizes the successful deployment of the Chandra X-ray Observatory from the shuttle commanded by Collins, a member of the San Jacinto (Texas) Chapter.*

to US dominance in the air. When its production was threatened last July, AFA National President McKee issued a call to action. AFA also met with Congressional staff; provided background material to the Airpower and Air Force caucuses on Capitol Hill; and helped obtain media coverage of the issue.

Chapters can arrange to visit the display by contacting Greg A. Cairns at Lockheed Martin, (770) 494-1671.

#### Online Update

"AFA/AEF National Report" began appearing on the AFA Web page in January, increasing visibility for the association's 280 chapters.

AFA's Policy and Communications Department also reported in February that visits to the AFA Web page now number more than 1,100 hits each day. Forty-six percent go directly to [www.afa.org](http://www.afa.org), while other visitors find the site through search engines or links.

In 1999, 575 Web site visitors joined AFA through the Web. That's up from 309 in 1998. This online sign-up ca-

pability was established in December 1996.

In addition, more chapters and chapter members have used e-mail and the AFA Web site to efficiently carry out AFA business. This is possible because a host of AFA documents are available in the Members Only section of the Web site. The documents include the constitution, chapter operations handbook, field operations guidebook, and forms for reports and nominations.

AFA's Customer Service Department now receives an average of 800 e-mails per month, the highest number being more than 1,200 in November 1999. The e-mails contained requests that used to come in by telephone. The department still fields about 3,000 telephone calls each month and sends out more than 1,500 brochures and letters in response to various requests.

#### AEF Scholarships Awarded

AEF announced the recipients of 30 Air Force Spouse Scholarships in February. The list of names will be



*An annual Pearl Harbor Day memorial service at Republic Airport in Farmingdale, N.Y., on Dec. 7 was hosted by William Stratemeier Jr., national director. Following the ceremony, a flight of World War II-era aircraft took off from the airport and dropped roses over the water surrounding the Statue of Liberty. The Nassau Mitchel, Francis S. Gabreski, and Queens Chapters conducted community outreach at the Long Island event. Fred DiFabio, Nassau Mitchel president, and chapter members Marylyn Zywan and Irwin Hansen were among those who helped organize it.*

posted on AEF's section of the AFA Web site.

The \$1,000 scholarships—for undergraduates and graduates—went to spouses of active duty USAF, Air National Guard, and Air Force Reserve members stationed everywhere from Aviano AB, Italy, to Los Angeles AFB, Calif. Three scholarship winners have spouses stationed at Ellsworth AFB, S.D., and three at Malmstrom AFB, Mont. A third of the scholarships went to spouses pursuing graduate degrees.

About 70 applicants applied for the 30 scholarships that are funded by contributions from AFA members and chapters.

The AEF Spouse Scholarships were established in 1995. Applications for the scholarships become available in August at base education offices, family support centers, and from AEF.

#### National Security Briefing

The **Gen. Nathan F. Twining (Fla.) Chapter** gathered for a presentation in January by Lt. Col. Peter Faber, head of the Air Force Strategic Planning Directorate's national security briefing team.

Called "Nation's Edge," Faber's briefing builds a historical case for airpower as a vital means to minimize casualties. It is one of seven that the Air Force Strategic Planning Directorate has been presenting since

February 1999 to groups interested in promoting the aerospace power perspective. According to Capt. Mike Pierson, who is one of the briefers, they hit the road one to two times a month and have done more than 60 presentations, reaching more than 4,000 people in the US and Canada.

Pierson said the team would like to continue the program and expand it to include more speakers. They have even made cold calls to invite themselves to AFA events. Pierson added that they also ask local bases, recruiters, and AFA chapters to help them make trips worthwhile by lining up other speaking engagements with local civic groups, universities, and radio stations.

Twining Chapter President Henry Marois said the noontime presentation—at a yacht club in St. Petersburg, Fla.—attracted many non-AFA people. "Yes, we gave them all applications," he said.

#### Outstanding

Several **Frank Luke (Ariz.) Chapter** members attended the annual Outstanding Awards banquet at Luke AFB, Ariz., in February to help recognize the base's top 10 military and civilian personnel, including chapter member SMSgt. Robert D. Jenkins.

Jenkins, who earned the Senior NCO of the Year award, is deputy fire chief with the 56th Civil Engineer Squadron.

Retired CMSAF Robert D. Gaylor, the Air Force's top enlisted leader from 1977 to 1979, served as guest speaker at the dinner, which was attended by Harry H. Bailey, chapter president, John F. Adams, chapter vice president for government relations, and John L. Dearnness, vice president for community relations.

The chapter donated \$150 to help support the event, and two Community Partners also helped: John H. Nix with \$150, as well as watches and plaques for six award recipients, and Kemp Biddulph with a donation that paid for 10 guests.

The awards banquet was among the last official events at Luke for 56th Fighter Wing Commander Brig. Gen. John L. Barry. He is now director, strategic planning, in the office of the USAF Deputy Chief of Staff, Plans and Programs. William A. Lafferty Jr., a former AFA national director, Bailey, and Dearnness attended the change of command ceremony for Barry, whose successor is Brig. Gen. (sel.) Stephen T. Sargeant, former deputy executive secretary for the National Security Council.

#### Total Force in Spotlight

At a November meeting of the **Gen. Russell E. Dougherty (Ky.) Chapter**, Col. Clifton W. "Bill" Leslie, commander of the 123rd Airlift Wing (ANG) at Louisville IAP AGS, Ky., spoke about the role of the Air National Guard and his unit in the Total Force.

He also described the 123rd's participation, from September to December 1999, in Aerospace Expeditionary Force 1 to Oman. It was the latest accomplishment of his unit, which earned its 10th Outstanding ANG Unit award last year.

In other events at this quarterly meeting, Leslie joined Chapter President Thomas N. "Nat" Millican and State President Daniel G. Wells in presenting a check for \$500 to the Great Lakes Regional Teacher of the Year. Dewey Beadle received the honor for his work as a physics teacher at Seneca High School, Louisville, Ky. Wells also presented a Chapter of the Year award to Dougherty Chapter leaders.

#### Cadet Scholarships

Eleven AFROTC cadets at Louisiana State University in Baton Rouge, La., received \$3,100 in scholarships from the **Maj. Gen. Oris B. Johnson (La.) Chapter** in a February ceremony at the school.

Katherine S. Johnson, wife of the late general for whom the chapter is

Search for a long lost  
Air Force buddy.  
Contact old friends.  
Make new ones.  
It's fast. It's easy.

# Use AFA'S NEW Online Directory



Take advantage of fast and easy access to other AFA members through our brand-new Online Directory. This new membership benefit is your connection to old friends and an opportunity to make new ones. It also allows other AFA members to search for and contact you.

Once you find your friends on AFA's Members Only Online Directory, use our Chat Rooms to reminisce. AFA also offers you a FREE Permanent E-Mail address so others can contact you directly (no matter which Internet provider you subscribe to).

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

To use the new Online Directory and other AFA online services, visit [www.afa.org](http://www.afa.org), click **Members Only** and follow the registration instructions to establish a **NEW USER ID** and **PASSWORD**.



*You are a valuable member of AFA's Online Community.  
Once registered you may add to and update your record at any time.  
Of course, members may opt out of the Directory by calling: 1-800-727-3337.*

**Take advantage of the other AFA Online Services:**

**AFA Marketplace, Career Center, Message Boards,  
Chat Rooms, Permanent Email, Yellow Pages,  
White Pages, Events Calendar, Community Member Services.**

Staff photo by Guy Acebo



For the seventh year, a generous contribution from Jack Gross, national director emeritus, made possible the AFA staff member of the quarter and staff member of the year awards. The 1999 winners were Jim Brown, Deborah Scott (both seated), Frances McKenney, and Maria Winter. McKenney also won the staff member of the year award.

named, and daughter Judy Johnson attended the event, along with Thomas H. Normile, chapter president, Ralph W. Stephenson Jr., chapter secretary, and Rodney L. Breland, chapter treasurer.

Speaking about the cadets' future Air Force careers, Normile said they will be "the pilots, missilemen, computer experts, security forces, and flight crews that will stand guard in all of the far-flung air bases around the world. They will be on duty on holidays, at night, on weekends, and while we are asleep. They will be away from home and families to protect our freedom, and that is why we, the members of the chapter, are proud to present these scholarships."

Col. Elwood C. Tircuit, Det. 310 commander and professor of aerospace studies, and Capt. Erik M. Olness, commandant of cadets, conducted the ceremony. They are both chapter members.

The scholarships are funded through the chapter and the Gen. O.B. Johnson Memorial Fund at LSU.

#### Boost for the Boosters

A donation from the **Harry S. Truman (Mo.) Chapter**, presented by Chapter President Rodney G. Horton to the JROTC Booster Club of Lee's Summit Senior High School in Lee's Summit, Mo., enabled the drill team to buy new uniform pants and trophies.

The trophies were awarded during a day-long drill team competition in February among 18 JROTC units.

The chapter has recently begun focusing on four JROTC units at two local high schools, fund-raising specifically to help these groups. At the request of the units, the AFA chapter will sponsor two JROTC cadets selected to attend the American Legion's Boys State program in Missouri. Boys State is a week-long event where selected high school juniors develop citizenship and knowledge of government structure.

The chapter has also refocused its efforts in sponsoring Visions of Explo-

ration classrooms, Horton said. This year, the chapter placed the Visions program in middle schools that feed their students into high schools having JROTC programs. The chapter felt that youngsters in these middle schools might have more of an interest in the Visions program's topics.

Visions of Exploration is a cooperative program between *USA Today* newspaper, AFA state organizations and chapters, and AEF to encourage the development of math and science skills among elementary and middle school children. The program provides teachers with a multidisciplinary science, math, and social studies curriculum, using the exploration of space as a central theme to motivate students.

#### More AFA/AEF News

■ In December, **Total Force (Pa.) Chapter** President Lee W. Niehaus described a test program involving chapter members and local recruiting offices at a gathering of more than a dozen recruiters in Cannonsburg, Pa. Niehaus explained that the chapter is one of four in AFA that has been invited to participate in a test program that places chapter volunteers in a local recruiting office, to ensure that it is manned while the regular recruiter is out on Air Force business.

Niehaus also presented several awards for recipients who weren't able to attend the Pennsylvania State Convention in July or the AFA National Convention in September.

■ The **Col. H.M. "Bud" West (Fla.)**

### AFA Conventions

Apr 1  
Apr 23-30  
Apr 23-30  
May 5-7  
May 5-7  
June 1-4  
June 3-4  
June 3-4  
June 9-11

June 9-11  
June 16-18  
July 21-23  
July 21-23  
July 28-30  
Aug. 11-13  
Aug. 11-13  
Aug. 18-19  
Aug. 18-19  
Aug. 25-26  
Sept. 29-Oct. 1

**Maryland State Convention**, Andrews AFB, Md.  
**Iowa State Convention**, Marion, Iowa  
**Tennessee State Convention**, Memphis, Tenn.  
**New Jersey State Convention**, Cape May, N.J.  
**South Carolina State Convention**, Myrtle Beach, S.C.  
**California State Convention**, Palm Springs, Calif.  
**Mississippi State Convention**, Biloxi, Miss.  
**Ohio State Convention**, Cincinnati  
**Arizona-Nevada-New Mexico State Convention**, Albuquerque, N.M.  
**New York State Convention**, Lockport, N.Y.  
**Missouri State Convention**, Whiteman AFB, Mo.  
**Pennsylvania State Convention**, Pittsburgh  
**Texas State Convention**, Dallas  
**Florida State Convention**, Homestead AFB, Fla.  
**Georgia State Convention**, Robins AFB, Ga.  
**Indiana State Convention**, Indianapolis  
**Colorado State Convention**, Aurora, Colo.  
**Virginia State Convention**, Roanoke, Va.  
**Illinois State Convention**, Springfield, Ill.  
**New Hampshire State Convention**, Portsmouth, N.H.

Chapter helped expand a Florida State University Det. 145 AFROTC flight orientation program. Chapter board members John G. Brennan and Col. John L. Carnduff Jr., who is also the detachment commander, joined in the effort to persuade the Civil Air Patrol Florida Wing to station a Cessna 172 in Tallahassee to support local state legislators and CAP and AFROTC programs.

Two FSU cadets and Carnduff received an orientation flight in the Cessna in January, giving the cadets an opportunity to learn firsthand about flying light aircraft.

■ **The Northeast Iowa Chapter** cooled off bicyclists in the *Des Moines Register* newspaper's annual 464-mile bike ride across Iowa, providing a mist of water for them to cycle through, just outside of Waverly, Iowa.

John L. Schlimmer, now chapter secretary, built the drive-through mister by fastening a hose onto a wooden archway. A huge marquee directed the bicyclists to the mister with the announcement, "Cool down here. Water mist by Air Force Association."

A local newspaper featured the mister on its front page, while a TV station used it as background for news coverage of the event. ■

## Unit Reunions

reunions@afa.org

**46th and 72nd Recon Sq**, Ladd Field, AK; Mountain Home AFB, ID; and Travis AFB, CA. Sept. 2-5, 2000, at the U.S. Grant Hotel in San Diego. **Contact:** Mario Peyrot, 1600 Cormorant Dr., Carlsbad, CA 92009-4004 (phone: 760-929-9999 or fax: 760-931-0033) (mpeyrot@msn.com).

**48th FS, FIS, FTS**. May 24-28, 2000, at the Wyndham Palm Springs in Palm Springs, CA. **Contact:** Joe Onesty, 455 Galleon Way, Seal Beach, CA 90740 (562-431-2901) (inaflash@flash.net).

**49th FG Assn**, Holloman AFB, NM. May 4-8, 2000. **Contacts:** William B.N. Schultz, PO Box 41539, Mesa, AZ 85274-1539 (480-833-8187) or Budd Butcher (719-540-0241).

**68th FS Assn (WWII)**. Aug. 23-27, 2000, at the Radisson Hotel in Annapolis, MD. **Contact:** James E. Dooley, 961 Cloverfields Dr., Stevensville, MD 21666-2257 (phone: 410-643-4727 or fax: 410-643-4723) (dooleyje@crosslink.net).

**90th BG (H)**, Fifth AF (WWII). April 10-13, 2000, at the Best Western Pea Soup Andersen Inn in Buellton, CA. **Contact:** W.J. Bomicino, 1041 Wailea Way, Nipomo, CA 93444 (phone: 805-929-2286 or fax: 805-931-0973).

**303rd BG**, Eighth AF (WWII), Molesworth, UK. May 31-June 8, 2000, in Molesworth, UK. Also Sept. 25-29, 2000, at the Hanalei Hotel in San Diego. **Contact:** James B. Taylor, 421 Yerba Buena Ave., Los Altos, CA 94022-2152 (650-948-6596).

**355th FG**, Eighth AF (WWII). Oct. 12-15, 2000, in Irving, TX. **Contact:** Bob Kuhnert, 587 Pine Needles Dr., Dayton, OH 45458-3323 (937-439-1893).

**394th BS and 4th Recon Sq**, Pacific theater (WWII). May 4-7, 2000, at the Wyndham Garden

Hotel in Waltham, MA. **Contact:** Dag Larsen, 1401 N. Taft St., Apt. 1420, Arlington, VA 22201-2657 (703-465-9844).

**435th BS (WWII)**. May 5-7, 2000, at the Fredericksburg Inn & Suites in Fredericksburg, TX. **Contact:** Mike Ramsay, 942 Grand Ave., Abilene, TX 79605-3233 (915-673-8380).

**530th FS**, 311th Gp, Tenth AF, CBI (WWII). Sept. 24-26, 2000, at the Holiday Inn Bossier City in Bossier City, LA. **Contact:** F.H. Wilbourne, 4118 Keagy Rd., Salem, VA 24153 (540-387-0562).

**AF Public Affairs Alumni Assn**. June 15-17, 2000, in Long Beach, CA. **Contacts:** John Gura (909-792-5188) (www.afpaaa.org) or AFPAAA, PO Box 540, Fairfax, VA 22030-0540.

**Aviation Cadet Class 54-H**. April 26-30, 2000, at the Imperial Palace Hotel and Casino in Las Vegas. **Contact:** Gary A. Denzer, 280 St. Ives Dr., Talent, OR 97540 (541-535-9000) (denzer@medford.net).

**Eighth AF Historical Society**, Pennsylvania Chapter. June 23-26, 2000, at Al Monzos Palace Inn in Monroeville, PA. **Contacts:** Art or Carolyn Swanson, PO Box 58, Pine Grove, PA 17963-0058 (570-345-4521).

**F-86 Sabre Pilots Assn**. April 16-20, 2001, at the Monte Carlo Resort & Casino in Las Vegas. **Contact:** Glenn L. Nordin, F-86 Sabre Pilots Assn, PO Box 97951, Las Vegas, NV 89193.

**Navigator Training Class 57-04**, Ellington AFB, TX. May 17-19, 2000, at the Hilton Houston Nassau Bay & Marina in Houston. **Contact:** A.E. Pike, 1652 Tanglewood Drive E., Lindale, TX 75771 (903-882-8351) (aeplindale@aol.com).

**Pilot Class 54-M**. June 1-3, 2000, in Tulsa, OK.

**Contact:** Jack R. Seay, 1219 E. 13th St., Tulsa, OK 74120-5093 (918-599-9803 or 918-583-3181) (seachal@aol.com).

**Tan Son Nhut Assn**. June 22-25, 2000, in San Antonio. **Contacts:** Public Affairs Office, Tan Son Nhut Assn., 330 W. Brambleton Ave., Ste. 709, Norfolk, VA 23510 (phone: 757-627-7746 or fax: 757-627-0878) (hercules29@worldnet.att.net) or Norman Whitlow, 1451 Chapman Dr., Lancaster, TX 75134 (phone: 972-227-8075 or fax: 972-218-9669).

**UPT Class 71-01**, Randolph AFB, TX. July 14-16, 2000, at the Dallas-Fort Worth metroplex. **Contacts:** Dave Shuffer, 3200 Scarborough Ln. E., Colleyville, TX 76034 (phone: 817-571-5787 or fax: 817-571-6643) (dshuffer@prodigy.net) or Flip Keck, 786 Windmere Way, Keller, TX 76248 (817-431-0924) (afafli@msn.com).

Seeking former students of dependents schools at **Brady AB, Itazuke, Ashiya, Camp Hakata, or Fukuoka, Japan**, for a reunion July 21-23, 2000, in Branson, MO. **Contact:** John O'Brien (816-229-7648) (obriens@sky.net).

Seeking civilians, dependents, and military from all units at **Chambley AB, France (1953-66)**, for a reunion May 5-8, 2000, at the Holiday Inn Hampton Hotel in Hampton, VA. **Contact:** Chuck Timms, PO Box 293, Fair Play, SC 29643 (864-888-4133). ■

Mail unit reunion notices well in advance 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.

## Bulletin Board

bulletin@afa.org

Seeking contact with the **Wilson** family whose daughter Joan married Carl Frederick Wilson, with USAF in WWII in Buckinghamshire, UK. **Contact:** Joan Cracknell Vitale, 95 Oakside Rd., Smithtown, NY 11787-1116.

For a book, seeking information on the initial deployment of the **B-45 Tornado** with Det. A, (from Biggs AFB, TX) in Korea in 1950 and the final disposal of all B-45s in 1958. **Contact:** John C. Fredriksen, 461 Loring Ave., Salem, MA 01970 (978-745-9849) (jfredriksen@boston.sisna.com).

Seeking contact with or information on **2nd Lts.**

**Carroll C. Biggs, William W. Chapman Jr., John R. Pedevillano, and Joseph P. Weldon, TSgt. Gerald E.F. Swift, SSgt. George Ecoromoe, and Sgts. Walter Garr, Matthew G. Moore, Lee A. Prugh, and Luther Victory**, who were on a bombing mission from Thurleigh, UK, to Germany. Their B-17G #42-31768 was lost near Augsburg, Germany. **Contact:** Josephine H. Schulte, Eagle's Nest Apt. 933, 5211 Fredericksburg Rd., San Antonio, TX 78229 (210-524-9853).

Seeking photos of **Cessna O2A #69-7648** while assigned to the 24th Composite Wg, Howard AB, Panama, 1981-86, and the 111th, 182nd,

602nd, and 931st Tactical Air Support Gps. **Contact:** Mike Lavell, 1701 Sand Rd., Ossian, IA 52161 (mlavell@means.net).

Seeking information on the **Cocker mission**, led by Bernt Balchen, that involved reconnaissance and bombing of German weather stations in northeast Greenland, May-August 1943. **Contact:** Maxine Donnelly, 236 Farber Dr., W. Babylon, NY 11704 (516-888-0037).

Seeking members of **488th Air Service Gp**, Ninth AF, Sept. 13, 1943, to Oct. 14, 1945. **Contact:** J. Ivan Potts Jr., PO Box 1021, Shelbyville, TN 37162.

Seeking **Henry W. Lyons**, from Laredo, TX; **Robert P. Rasmussen**, from Portland, OR; **Paul L. Spurgeon**, from Dallas; **Sterling O. Strong**, Houston; **Aubrey L. Wolf**, Beaumont, TX; or **Solomon A. Womack Jr.**, Shreveport, LA, who knew **A1C Fred Lyman Bigham** at Eagle Field, CA. **Contact:** M. Victoria Bigham, 1400 Geary Blvd., Apt. 2003, San Francisco, CA 94109-6572 (415-771-3986).

Seeking information about Korean War **B-29 crews** MIA, KIA, or POWs during 1950 and USN F4U and AD (Skyraider) activities, 1951-52, specifically airplanes shot down and aircrews that escaped. **Contact:** Don Wade, 560 Campbell Hill St. NW, Marietta, GA 30060-1316 (770-426-7883).

Seeking **Lt. Col. Elwyn Crawford**, a doctor stationed at Kincheloe AFB and K.I. Sawyer AFB, MI. **Contact:** Loretta A. Williams, 3271 State Rte. 508, Bellefontaine, OH 43311-9768 (mamadoll@loganrec.com).

Seeking the relatives of **Cadet Clair E. Bonner** of Portland, OR, who was killed in a Martin MB-2 crash near Kelly Field, TX, on April 4, 1928. **Contact:** Morris Baxter (830-741-4506) (baxmor@worldnet.att.net).

Seeking information on and contact with members of **58th Troop Carrier Sq.**, Fifth AF, 1944-45. **Contact:** Calvin Friedman, c/o Joel Wallis, RR1 Box 79A, Birmingham, IA 52535 (319-498-4279) (joelw@cec-waterjet.com).

Seeking information about B-29 tail gunner **SSgt. Charles Johnson**, Ninth AF, who was killed July 7, 1944, on a bombing mission over France. **Contact:** Don Jordan, 315 Crestwood Dr., Aiken, SC 29803 (803-952-6105) (don.jordan@srs.gov).

Seeking information on **P-47D #28460** that participated in Operation Ugly, was condemned May 24, 1944, bought by schoolchildren in Healdsburg, CA, and named *City of Healdsburg*. **Contact:** Harrison W. Rued, 2321 Oakwild Ln., Santa Rosa, CA 95401.

Seeking members of the **461st OMS**, Amarillo AFB, TX, 1963-67, for OMS and 461st BW patches. **Contact:** Ron Schrack, 16 Tudor Ct., Dover, DE 19901-6119 (302-698-1148) (ramblinreg@webtv.net).

Seeking **AAF memorabilia** from WWI and WWII, specifically leather flight jackets, uniforms, flight equipment, and photo albums. **Contact:** Jon Cerar, 425 John St., Carlisle, IL 62626.

Seeking the names of crew members of two **B-17Fs**, #42-30046 (*Merrie Hell*), piloted by E. Sierens, and #42-3231 (*The Inferno*), piloted by R. Carrington, lost over Germany on Aug. 12, 1943. They were assigned to the 546th BS, 384th BG. **Contact:** Gerald K. Richey, 145 Old Airport Rd., Commerce, GA 30530 (grichey558@aol.com).

Seeking information on the visit of **Gen. Carl A. "Tooney" Spaatz** and **Robert A. Lovett** to an underground aircraft factory near Kahla, Germany, in the spring of 1945. **Contact:** Ulrich Koch, 157 Greifswalder Str., Berlin, Germany D-10409 (49-030-42 85 18 07) (ulrich.koch@koch-athene.de).

Seeking an **F/RF-101 Voodoo medicine man patch**. **Contact:** Edgar M. Mays, 501 Windham Town Rd., Lamar, SC 29069 (843-326-5269).

Seeking dress uniform **EAME medal** from WWII. **Contact:** Elden G. Shook, PO Box 413, Enon, OH 45323 (937-864-2983) (shook585@aol.com).

For a German air force officers school dedication

ceremony April 5, seeking contact with the family of **Capt. Richard Higgins**, who died in an F-84F crash near Fürstenfeldbruck, Germany, on April 5, 1957. **Contacts:** Maj. Steve Drago (49-8141-349-946) or Bob Byrom (804-823-4596).

Seeking **Jo Avery** and **Bob Young**, who were stationed at Mackay, Queensland, Australia, from 1942-43 and may have known Joseph Thompson, missing in December 1943 over the Bismarck Sea near New Britain. **Contact:** Sandra Smith (kcsdsmith@telstra.easymail.com.au).

Seeking **Cpl. Darwin E. Welsh**, of the 515th FGTS, San Marcos AAF, TX, 1944-45, who was transferred to Ellington Field, TX, September 1945, and to Randolph Field, TX, in November 1945. **Contact:** Paul H. Ness, 527 S. Baltimore St., Dillsburg, PA 17019-9601 (717-432-3594).

Seeking information on **Lt. Col. William A. McWhorter**, a B-24 pilot in the Mediterranean Theater and Ploesti, Romania, raids during WWII. He was a faculty member of the Air Command and Staff School at Maxwell AFB, AL, after WWII and was killed in an aircraft accident at Eglin AFB, FL, in 1953. **Contact:** Ron McWhorter, 2200 Vaughn Lakes Blvd., Apt. 1926, Montgomery, AL 36117.

Seeking **Major Blanchard**, who married **Debra Wehinger** of Quakertown, PA, daughter of Lt. Robert P. Wehinger, a fighter pilot with the Fying Tigers and probably the 23rd Fighter Gp, 1944-45. **Contact:** Dick Stiles, 646 Mallard Rd., Wayne, PA 19087 (610-688-6219) (stiles70@juno.com).

Seeking stories, photos, and personal anecdotes on the **3rd Combat Mapping Sq**, **3rd Photo Recon Sq**, **3rd Satellite Control Sq**, and the **3rd Space Operations Sq** for squadron history. **Contact:** 1st Lt. Richard M. Operhall, 3 SOPS/DOUA, 400 O'Malley Ave., Ste. 47, Schriever AFB, CO 80912-4047 (719-570-0076) (roper1a@concentric.net).

Seeking **Cpl. Robert M. Coles**, a weather observer with 8th Weather Sq, Mecatina, Quebec, Canada, 1947-48. **Contact:** William L. Havenor, 1409 6th Ave., Sterling, IL 61081-2541 (815-626-0910).

Seeking **Louis Moskowitz** of Brooklyn, NY, a gunner on A-20s and A-26s in the 669th BS in the UK and France during WWII. **Contact:** Edward J. Renth Jr., 7731 Broadway St., J-45, San Antonio, TX 78209 (210-821-6122).

Seeking **John Corliss Campbell** of ND who transitioned to B-17s at Hobbs AAF, NM, June-August 1943. **Contact:** Loren Jackson, 513 N. N St., Lompoc, CA 93436 (loralixn@impulse.net).

For a book, seeking memorabilia from members of the **421st Night Fighter Sq/TFS**. **Contact:** Jeff L. Kolln, 17125 Briar St. SE, Yelm, WA 98597 (360-458-9793) (blkwidw421@aol.com).

Seeking members of **Pilot Class 43-F**, Moore Field, TX. **Contact:** Don Keating, 3901 Briarcrest Dr., Norman, OK 73072 (405-321-8042).

Seeking missing members **Berra**, **Billerbeck**, **Cassidy**, **Daly**, **Deimeke**, **Flaherty**, **Goodwin**, **Graft**, **Heil**, **Hoopingarner**, **Jumper**, **Meservy**, **Molitor**, **Morris**, **Owens**, **Page**, **Rian**, **Rumpel**, **Sager**, **Sanders**, **Sands**, **Scarafoni**, **Simonsen**, **Train**, and **Wheat** of **Navigator Training Class 57-04**, Ellington AFB, TX. **Contact:** A.E. Pike, 1652 Tanglewood Dr. E., Lindale, TX 75771 (903-882-8351) (aeplindale@aol.com).

Seeking information on and photos of **USAF and USN full or partial pressure suits and helmets** worn by test pilots and flight crews (ADC, SAC,

TAC, etc.) from 1950 to the present. **Contact:** Terry Panopalis, 30 D'Auvergne Pl., Candiac, Quebec, Canada J5R 5R2 (tpanopalis@sprint.ca).

Seeking 28th BS patches from Homestead AFB, FL, Robins AFB, GA, Anderson AB, Guam, and Clark AB, Philippines, and desktop model airplanes and missiles. **Contact:** Bob Kasprzak (937-836-1609) (tokasprzak@aol.com).

Seeking anyone who knew **Cpls. Thomas T. Nishigawa** or **Ray Tribble**, members of the 529th Aircraft and Warning Gp, on Myako-Jima, Japan, September-November 1951, or anyone stationed on Kume-Shina during September-November 1950. **Contact:** Robert M. Hougan (call collect at 281-970-4890) (rhougan@hotmail.com).

Seeking **scale model kits and desktop models** representing the 1940-60 time period. **Contact:** George Dively, PO Box 10743, Alexandria, VA 22310.

Seeking **MSgt. Sanford "Sandy" Roy Goodman** of Baltimore, MD, who was stationed near Long Stratton, UK, during WWII until his return to Oklahoma in August 1945. **Contact:** Wendy Fox, The Keyes, Soham Rd., Stuntney, Ely, Cambridgeshire, UK CB7 5TL.

Seeking photos and memorabilia for **823rd RED HORSE Sq** "Walls of History" to commemorate squadron activities over the last 35 years. **Contact:** CMSgt. Floyd (850-881-2189).

Seeking contact with survival instructors of the **3904th Tng Sq (SAC)**. **Contact:** Charles Beck (seebex@aol.com).

For a documentary on American military personnel and German citizens, seeking **home movies** taken between 1945 and 1995 by those stationed in **Germany**. **Contact:** Rainmaker Productions, 6 W. 18th St., 3rd Floor, New York, NY 10012 (erica@rainmakerproductions.com).

For a Fremont High School class reunion, seeking **Michael Bock**, USAFA Class circa 1963, a C-141 pilot captain, probably at Travis AFB, CA. **Contacts:** Chuck Highbaugh (chuckh@ns.net) or Pete Johnson (pajohnson@jps.net).

Seeking **James M. Gray** and **James R. Stephens**, graduates of OCS Class 1957-B. **Contact:** Jack Fox (57-C), 17821 Rainier Dr., Santa Ana, CA 92705 (714-633-0207) (jfox@clubnet.net).

Seeking photos—to copy and return—of **Korean War-era aircraft**. **Contact:** Butch Bejna, 931 Babbitt Ave., Addison, IL 60101-1221 (630-543-9213).

**If you need information on an individual, unit, or aircraft, or want to collect, donate, or trade USAF-related items, write to "Bulletin Board," Air Force Magazine, 1501 Lee Highway, Arlington, VA 22209-1198. Items submitted by AFA members have first priority; others will run on a space-available basis. If an item has not run within six months, the sender should resubmit an updated version. Letters must be signed. Items or services for sale, or otherwise intended to bring in money, and photographs will not be used or returned.**





# This Is AFA

## NATIONAL OFFICERS



**PRESIDENT**  
Thomas J. McKee  
Fairfax Station, Va.



**BOARD CHAIRMAN**  
Doyle E. Larson  
Burnsville, Minn.



**SECRETARY**  
William D. Croom Jr.  
Colorado Springs, Colo.



**TREASURER**  
Charles H. Church Jr.  
Lenexa, Kan.

## 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  
**John E. Craig II**  
547 26th St. S.  
Arlington, VA 22202-2442  
(202) 863-2306



**Far West Region**  
California, Guam, Hawaii  
**Rich Taubinger**  
12 Century Ct.  
Roseville, CA 95678-1088  
(916) 771-3639



**Florida Region**  
Florida, Puerto Rico  
**David R. Cummock**  
2890 Borman Ct.  
Daytona Beach, FL 32124-6846  
(904) 760-7142



**Great Lakes Region**  
Indiana, Kentucky, Michigan, Ohio  
**W. Ron Goerges**  
4201 W. Enon Rd.  
Fairborn, OH 45324-9412  
(937) 429-6070, ext. 102



**Midwest Region**  
Illinois, Iowa, Kansas, Missouri, Nebraska  
**Robert M. Williams**  
6014 Country Club Oaks Pl.  
Omaha, NE 68152-2009  
(402) 572-7655



**New England Region**  
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont  
**Eugene M. D'Andrea**  
P.O. Box 8674  
Warwick, RI 02888-0599  
(401) 461-4559



**North Central Region**  
Minnesota, Montana, North Dakota, South Dakota, Wisconsin  
**Charles A. Nelson**  
1517 S. Minnesota Ave.  
Soux Falls, SD 57105-1717  
(605) 336-1988



**Northeast Region**  
New Jersey, New York, Pennsylvania  
**Raymond "Bud" Hamman**  
9439 Outlook Ave.  
Philadelphia, PA 19114-2617  
(215) 677-0957



**Northwest Region**  
Alaska, Idaho, Oregon, Washington  
**Barbara M. Brooks-Lacy**  
7315 N. Curtis Ave.  
Portland, OR 97217-1222  
(503) 283-4541



**Pocky Mountain Region**  
Colorado, Utah, Wyoming  
**Eoyd Anderson**  
1120 Canyon Rd., Apt. 15  
Ogden, UT 84404-7649  
(801) 621-2639



**South Central Region**  
Alabama, Arkansas, Louisiana, Mississippi, Tennessee  
**Billy M. Boyd**  
LSI Bldg. 268  
196 Liberty St.  
Columbus AFB, MS 39710-2001  
(662) 434-2644



**Southeast Region**  
Georgia, North Carolina, South Carolina  
**Zack E. Osborne**  
306 Lake Front Dr.  
Warner Robins, GA 31088-6064  
(912) 929-3384



**Southwest Region**  
Arizona, Nevada, New Mexico  
**Scotty Wetzel**  
E28 Via Linda Ct.  
Las Vegas, NV 89144-1501  
(702) 382-1767



**Texas Region**  
Oklahoma, Texas  
**Thomas J. Kemp**  
3608 Kimberly Ln.  
Fort Worth, TX 76133-2147  
(817) 695-7644



**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**  
**Frank M. Swords**  
PSC 3, Box 1469  
APO AE 09021-1466  
0-1-49-6308-7237

## NATIONAL DIRECTORS

**R. Donald Anderson**  
Poquoson, Va.  
**Eric W. Benken**  
Spring, Texas  
**Roy A. Boudreaux**  
Montgomery, Ala.  
**Dan Callahan**  
Centerville, Ga.  
**Robert J. Cantu**  
Universal City, Texas  
**Gerald S. Chapman**  
Oceanside, Calif.  
**Michael J. Dugan**  
Dillon, Colo.  
**Charles G. Durazo**  
McLean, Va.  
**Ted Eaton**  
Springport, Ind.  
**Ronald R. Fogleman**  
Durango, Colo.  
**Samuel M. Gardner**  
Garden City, Kan.  
**Richard E. Hawley**  
Hampton, Va.  
**Daniel C. Hendrickson**  
Layton, Utah

**Sam Johnson**  
Washington, D.C.  
**Stephan R. Kovacs Jr.**  
Grand Island, N.Y.  
**Ivan L. McKinney**  
Bossier City, La.  
**Raymond C. Otto**  
Laurel, Md.  
**Jennifer J. Petrino**  
Dublin, Calif.  
**John J. Politi**  
Sedalia, Mo.  
**Jack C. Price**  
Pleasant View, Utah  
**William T. Rondeau Jr.**  
Great Falls, Mont.  
**I. Fred Rosenfelder**  
Renton, Wash.  
**Victor C. Seavers**  
Eagan, Minn.  
**Phillip J. Sleeman**  
Tolland, Conn.  
**R.E. Smith**  
West Point, Miss.  
**William L. Sparks**  
Daytona Beach, Fla.  
**Jack H. Steed**  
Warner Robins, Ga.

**Max Stitzer**  
North Ogden, Utah  
**William G. Stratemeyer Jr.**  
Quogue, N.Y.  
**Charles G. Thomas**  
Albuquerque, N.M.  
**Mary Anne Thompson**  
Oakton, Va.  
**Walter G. Vartan**  
Chicago  
**L.B. "Buck" Webber**  
Fort Worth, Texas  
**Mark J. Worrick**  
Denver, Colo.  
**Joseph A. Zaranka**  
Bloomfield, Conn.  
**directors emeritus**  
**John R. Allison**  
Washington, D.C.  
**Joseph E. Assaf**  
Mashpee, Mass.  
**Richard H. Becker**  
Oak Brook, Ill.  
**David L. Blankenship**  
Tulsa, Okla.

**John G. Brosky**  
Pittsburgh  
**Dan F. Callahan**  
Nashville, Tenn.  
**Robert L. Carr**  
Pittsburgh  
**George H. Chabbott**  
Dover, Del.  
**O.R. Crawford**  
Blanco, Texas  
**R.L. Devoucoux**  
Portsmouth, N.H.  
**Jon R. Donnelly**  
Richmond, Va.  
**Russell E. Dougherty**  
Arlington, Va.  
**George M. Douglas**  
Colorado Springs, Colo.  
**Joseph R. Falcone**  
Ellington, Conn.  
**E.F. "Sandy" Faust**  
San Antonio  
**Joe Foss**  
Scottsdale, Ariz.  
**John O. Gray**  
Washington, D.C.  
**Jack B. Gross**  
Harrisburg, Pa.

**Martin H. Harris**  
Montverde, Fla.  
**Gerald V. Hasler**  
Albany, N.Y.  
**Monroe W. Hatch Jr.**  
Clifton, Va.  
**H.B. Henderson**  
Ramona, Calif.  
**John P. Henebry**  
Deerfield, Ill.  
**David C. Jones**  
Arlington, Va.  
**Arthur F. Kelly**  
Los Angeles  
**Victor R. Kregel**  
Colorado Springs, Colo.  
**Jan M. Laitos**  
Rapid City, S.D.  
**Frank M. Lugo**  
Mobile, Ala.  
**Nathan H. Mazer**  
Roy, Utah  
**William V. McBride**  
San Antonio  
**James M. McCoy**  
Bellevue, Neb.  
**Edward J. Monaghan**  
Anchorage, Alaska

**J.B. Montgomery**  
Piedmont, Calif.  
**Bryan L. Murphy Jr.**  
Fort Worth, Texas  
**Ellis T. Nottingham**  
McLean, Va.  
**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 Selbel-Porto**  
Clayton, Mo.  
**Joe L. Shosid**  
Fort Worth, Texas  
**James E. "Red" Smith**  
Princeton, N.C.  
**William W. Spruance**  
Wilmington, Del.  
**Thos. F. Stack**  
San Mateo, Calif.  
**Harold C. Stuart**  
Tulsa, Okla.  
**James M. Trail**  
Oro Valley, Ariz.

**A.A. West**  
Hayes, Va.  
**Sherman W. Wilkins**  
Issaquah, Wash.  
**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.  
**Justin T. Golart**  
National Commander  
Arnold Air Society  
Atlanta  
**For information on state and local AFA contacts, see [www.afa.org](http://www.afa.org)**

# Pieces of History

Photography by Paul Kennedy

## The Gunners



The first known aerial combat took place over Mexico in late 1913 and involved two pilots firing pistols at each other. By World War II, aircraft bristled with armaments, like the B-25 and its gun turret above, and thousands of AAF personnel went through gunnery school. As aerial gunners, they played a critical part in World War II combat. Three of the four enlisted Medal of Honor

recipients in that war were aerial gunners: TSgt. Forrest L. Vosler, SSgt. Archibald Mathies, and Sgt. Maynard H. Smith. The art of aerial gunnery continued into the modern era through, for example, the B-52, symbolized here by an MA-1 jacket from the 1970 Fairchild Trophy competition. Today aerial gunnery is a matter of high-tech precision and is conducted with missiles

and computers and other electronic gear.

# *Next Generation Small Loader*

**Air superiority depends on superior mobility  
and maneuverability . . .**



**even on the ground!**

*Proven Performance – Worldwide in All Environments*

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



**TELEDYNE  
BROWN ENGINEERING**

A Teledyne Technologies Company

The Boeing logo, consisting of a stylized 'B' symbol followed by the word 'BOEING' in a bold, sans-serif font, is positioned in the upper right corner of the advertisement. The background of the entire advertisement is a dark blue gradient with a silhouette of a person's head and shoulders in the center, looking upwards. The overall aesthetic is professional and technical.

# THE BEST TRAINING IN THE WORLD STARTS ON THE GROUND.

Boeing Training & Support Systems offers the most complete, cost-effective, innovative military aviation training in the world. We've applied our unparalleled experience and research to develop advanced Integrated Training Systems. Our total package of products and services includes Aircrew Training Devices, Maintenance Trainers and Instructional Systems to train every branch of the U.S. armed forces and those in countries around the world.

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