

AIR FORCE

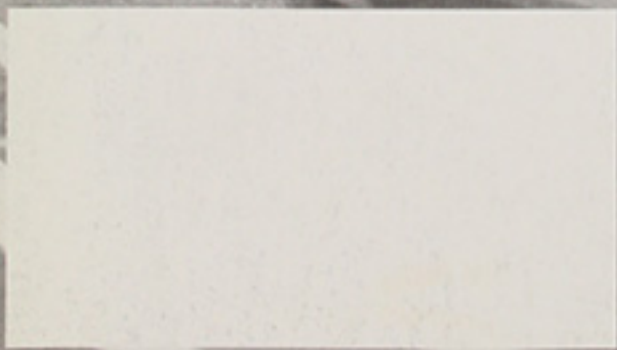
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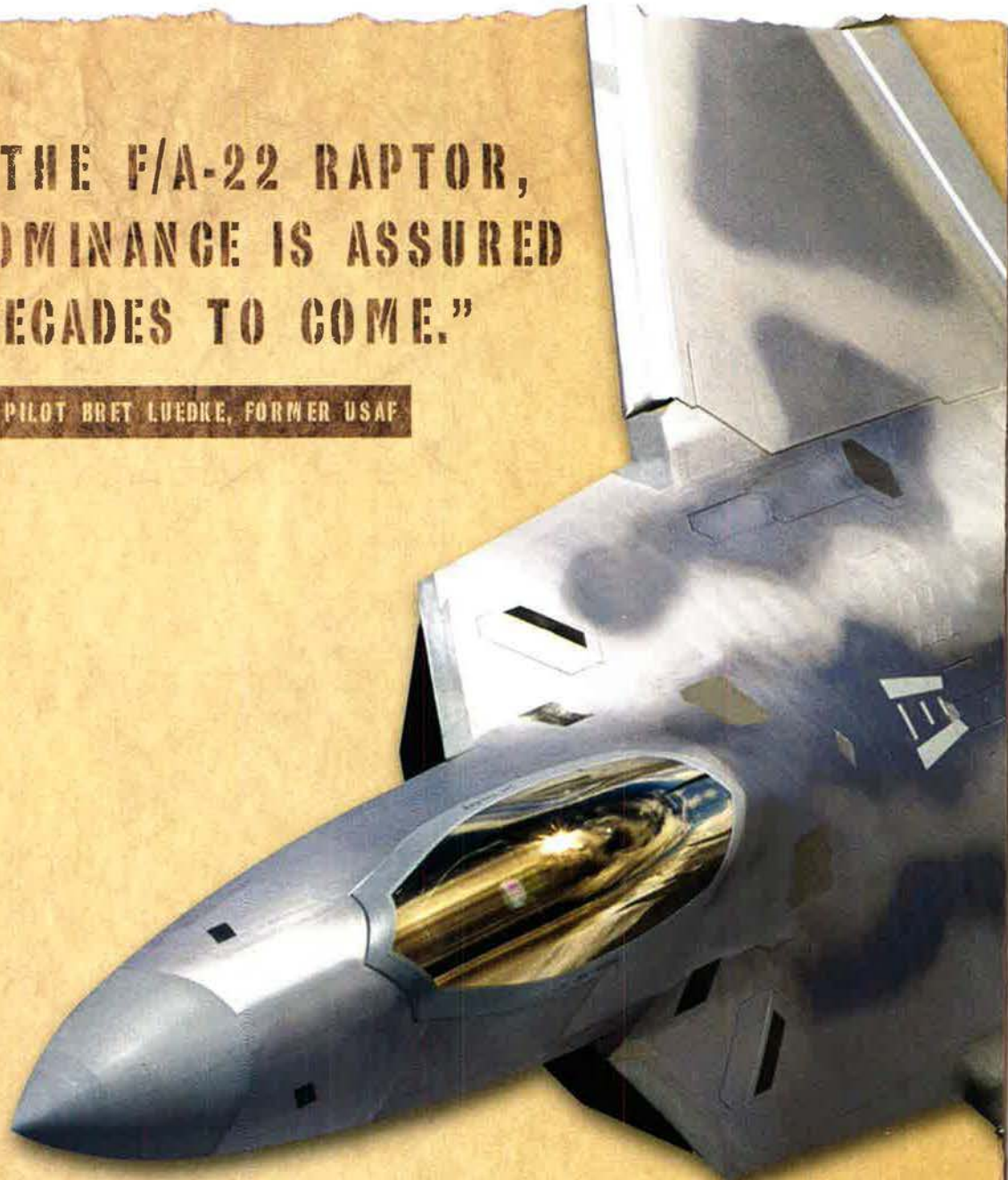
The Air Force and the Cold War A Chronology

Who's In Charge of UAVs?
Ground Warriors of Airpower
The Tanker Blame Game



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By Robert S. Dudney, Editor in Chief

The Air Force at a Crossroads

AT A RECENT House Armed Services Committee hearing, Chairman Duncan Hunter (R-Calif.) produced a chart depicting change in the USAF fighter force. It showed the inventory had steadily shrunk from 63,000 fighters after World War II to 3,400 aircraft in the post-Cold War years to about 2,500 today.

Hunter found this decline “very troubling.”

Indeed, USAF has been ruthless about shedding fighters. In the 1990s, it slashed the force from 37.5 to 20 wings, though it also increased total combat power. More recently, it programmed a new 25 percent cut, which will eliminate the equivalent of a wing per year for five years. This would leave a small but lethal 2,000-fighter force heavy on stealth, speed, and precision.

Despite this record, defense officials still raise sharp questions about USAF fighters. Is the force structure excessive, given changing military needs and competing claims for defense dollars? Should USAF be in the fighter business? The tactical force has been under scrutiny for more than a decade, yet such questions persist.

In the year-long Quadrennial Defense Review, a top-to-bottom assessment of US military forces, strategy, and policies, Pentagon leaders have argued that the fighter force is too large. They see tactical airpower as one area in which the US has “excessive overmatch.”

If press leaks are any guide, the Pentagon also is taking sharper aim at key modernization programs. The July 27 *Los Angeles Times*, for example, reported that DOD “is developing plans to slash the Air Force’s two prized fighter jet programs”—the stealthy F/A-22 Raptor and F-35 Joint Strike Fighter. The reason, according to the *Times*, is a belief they would be of little use in the fight against terrorists.

“What does al Qaeda’s air force look like?” sneered one unnamed QDR participant.

Evidently, the QDR also has raised sensitive service roles and missions issues. Gordon R. England, the deputy defense secretary-designate, openly

expresses a desire to “integrate” Air Force, Navy, and Marine Corps aviation arms. Other critics suggest that the Air Force should let other services take the lead on fighters and concentrate on mobility, long-range strike, space, and ISR missions.

Clearly, the Air Force is engaged in a great struggle over the future of tactical airpower. The outcome remains uncertain, but the stakes are clear enough—the nation’s ability to dominate the air over the battlespace.

The service is engaged in a great struggle over the future of tactical airpower.

The Air Force will have its hands full preventing unplanned reductions in its fighter force structure. Such a step, should it occur, would threaten USAF’s ability to cover its domestic and global commitments.

In the view of Hunter, among others, the Air Force may already have gone too far in reducing its fighter inventory. “It’s not yet clear how we can still [have] the number of aircraft needed for homeland defense while continuing to provide the force structure necessary for the Air Force’s 10 air expeditionary forces,” said Hunter.

Hunter added, “This [is] analogous to the cavalry days. We’re going to have lots of cavalry personnel with no horses.”

The Air Force likely would prefer to have a more-robust force. However, it argues that it needs to divest itself of some older F-15s and F-16s, which are costly to maintain, and use the savings to purchase new aircraft.

Despite claims to the contrary, planned fighter replacement is critical. The service has not fielded a new air dominance fighter since the F-15 in 1974. Large numbers of today’s F-15s and F-16s date to the mid- to late-1980s, when they entered the force with planned 20-year service lives.

The F/A-22 is the centerpiece of USAF’s long-term plans. It combines stealthiness with supercruise and advanced sensors. The Air Force be-

lieves that a fleet of 381 F/A-22s is the key to air dominance, and it maintains that the stealthy F-35 is needed to bring persistent firepower to the battlespace.

Critics assert that this is overkill. However, nobody knows the threats we will face in years to come, and it would be a mistake to neglect our own development of airpower, given the military buildups under way in China and other countries.

We’ve been down that road before. America entered World War II with second-rate fighters. Twenty years later, in Southeast Asia, we made a similar mistake. In a decade in Vietnam, the US lost 2,448 fixed-wing aircraft, the result of encounters with surface-to-air missiles, agile enemy fighters, and dense anti-aircraft artillery.

Said retired Gen. Richard E. Hawley, former commander of Air Combat Command: “The lesson to heed is that adversaries will understand our need for freedom of maneuver through the air and will do all that they can to deny us that freedom.”

According to one insider, it appears that some Pentagon decision-makers “want to take the Air Force out of the tactical air business.” However, senior officials note that no other service can bring to bear the same weight of firepower as that produced by the Air Force. They point out that, in the opening days of Operation Iraqi Freedom, USAF flew nearly 2,000 sorties a day—far more than were produced by the air arms of either the Navy or Marine Corps.

USAF’s fighter force is a “full-service” outfit, with a balance of specialized and multirole capabilities. Some 21 percent is focused on air superiority and 15 percent on close air support, with the remaining 64 percent of the force being multirole aircraft. No other service offers that broad spread of aircraft capabilities.

Pentagon analysts believe the first QDR program actions could begin to emerge sometime this fall. With the Air Force now at a crossroads, the decisions that emerge will go far toward defining the service for years to come—for good or ill. ■



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A Measure of Respect

I was very proud to have spent the large part of my career in the Air National Guard. I consider our Total Air Force to be the best of all, as a result of inspired Air Force leadership that partnered with the reserve components. As a single well-integrated team, we blue-suiters always pioneered the high road.

In the past when we have had seismic changes affecting the reserve components, there was always a give and take between the Air Staff and the National Guard Bureau. We in the ANG were given a measure of respect by our parent service unparalleled in the other services. I was the envy of my Army counterparts as a result.

The changes revealed by the BRAC recommendations make it hard to escape the conclusion that the Air Force leadership no longer respects the ANG enough to discuss such matters as peers. [See "Washington Watch: BRAC Signals Cuts in Force Structure," July, p. 10.] The Air Force leadership conveniently chose to place this below-the-belt initiative behind the protective screen of secrecy of the BRAC process. When revealed to all, it is a "fait accompli."

No one out in the state ANG seems to have seen this one coming, and no one was prepared for it. We've been sucker-punched. That is too bad, because there is a good chance that we could have worked this issue more amicably with a good chance at finding a solution that would work for everyone, as we have done so many times in the past. I'm not sure who gave up on trying to maintain a single fighting team, but their decision destroyed a solid trust built over several generations.

Although this expedient stealth maneuver may neatly protect the Air Staff from having to listen to the ANG point of view, it destroys a more than 50-year record of forward progress in Total Force teamwork. One thing I know for sure: The ANG had no say in this matter and no one representing us at the table. The adjutants general were not consulted, and the governors were not consulted, as required by law.

Col. Kennard Wiggins,
USAF (Ret.)
Elkton, Md.

When Do They Become Terrorists?

In the July issue there is an article, "The Expeditionary Force Under Stress," [p. 30] by Adam J. Hebert. In the article, he mentions, "Airmen are at work ... in Iraq ... protecting convoys from insurgents ... and interrogating captured terrorists." When do these thugs cease to be insurgents and become terrorists?

Preston Patterson
Oklahoma City

Rotten Apples

I do not know how other Air Force retirees feel, but I have listened to, and read, with increasing dismay the media's coverage of one disastrous situation after another involving Air Force personnel. [See "Washington Watch: Close the Druyun Barn Door, Says DSB," July, p. 14.] As far as I am concerned, a few unthinking people have brought great discredit upon our branch of service, and these people have stolen my pride in my military service. Admittedly, I do not know all of the circumstances behind the events, but if half of what is printed is true, the Air Force has some very serious problems.

My pride in the Air Force suffered when the media disclosed rapes at the Air Force Academy. It was further eroded by disclosure of the inept handling of these serious offenses by senior officials. Then we had the Darleen Druyun affair. The US legislature and the media have had a field day, and perhaps well they should. This extremely embarrassing situation reached to the very pinnacle of our civilian hierarchy. Additionally, a [Defense Intelligence Agency analyst who was an] Air Force [Reserve] colonel has apparently been passing

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Letters

military secrets to the Israelis, and the Air Force judge advocate general was forcibly retired and reduced in grade for having sexual relations with 13 women, sometimes involving fraternization.

These are just some of the more notable incidents that have plagued the Air Force for the past few years. I can't believe these incidents are indicative of the majority of Air Force personnel, but it only takes a few bad apples to really make the whole barrel smell rotten. Besides stealing my pride, these incidents really make me wonder about Air Force leadership. During my 26-and-a-half years of service, I cannot count the number of times that the importance of honesty and integrity were driven into Air Force personnel like me.

What in the world are we teaching our up-and-coming leaders, enlisted and officer alike? Does current Air Force leadership not realize the importance of integrity? Are our current leaders too timid to react to unacceptable behavior?

Col. Orin I. Knutson,
USAF (Ret.)
Schertz, Tex.

USAF and the ICBM

I think that your feature is absolutely outstanding. [See "How the Air Force Got the ICBM," July, p. 68.] It is very well researched, contains fascinating and comprehensive specifics and insights, presents a compelling and important overall perspective, and is superbly written. Kudos to you. Job exceptionally well done, as always.

Maj. Gen. Richard Boverie,
USAF (Ret.)
West Palm Beach, Fla.

Superb article on intercontinental ballistic missiles by John Correll. I had the pleasure of talking, mostly by e-mail, to John while he was researching it. Just a comment on the photo on p. 72. Whites were long gone by the 1970s. We went to two-piece blue uniforms in 1967.

Col. Charlie Simpson,
USAF (Ret.)
Assn. of Air Force Missileers
Breckenridge, Colo.

■ *The historical missileer photo has been in our files for many years. We'll correct our file caption.*—THE EDITORS

The picture on p. 70 cannot be the first operational Atlas launch facility at F.E. Warren AFB, Wyo. The first operational D Atlas launch facilities at F.E. Warren were at site one near Chugwater, Wyo. The entire roof of the first launch facility moved straight out in front of the "coffin" on long rails that set in front of

the coffin. The picture appears to have side rails. I was a member of one of the first combat ready operational crews at F.E. Warren and in the Atlas program at F.E. Warren from 1959 to 1965. I am a regular reader of *Air Force Magazine* and enjoyed the article on ICBMs.

MSgt. Albert R. Thornborrow,
USAF (Ret.)
Fort Worth, Tex.

■ *We'll correct our photo file.*—THE EDITORS

First Class Notes

Valmore Bourque, pictured on p. 80 as the first USAFA cadet to report to the new academy, was a good friend, when both of us were assigned to Tan Son Nhut Air Base in South Vietnam. [See "The Class of 50 Years Ago," p. 78.]

It was my honor to conduct the flight line memorial service at Tan Son Nhut for Captain Bourque and the crew of his C-123 aircraft that was lost to hostile fire in 1964. It is my understanding that Bourque was the first USAFA graduate to die as a result of hostile fire.

The service was attended by Ambassador Maxwell Taylor, Gen. William Westmoreland, and other dignitaries. Gen. Nguyen Cao Ky, then commander of the South Vietnamese Air Force, pinned his nation's medals on the flag-draped caskets of Bourque and his crew. Among the items of memorabilia that I possess are a number of official Air Force photographs of the service. Seeing the picture of Bourque brought back difficult but fond memories.

Lt. Col. George H. Updegrove,
USAF (Ret.)
Pittsburgh

In the excellent article about the inaugural class at the Air Force Academy, you summarized the great career of Lt. Gen. Robert D. Beckel. You could have included one more note. Until recently, he served with distinction as the superintendent at the New Mexico Military Institute in Roswell.

While living in Roswell from 1994 to 2004, and as an old "blue suit," I seldom missed attending and watching parades and other NMMI functions. On such occasions, the general's three-star blue flag stood out because he was the second consecutive USAF officer to lead cadets at that highly rated, but Army-affiliated, school. I commend General Beckel for his excellent after-retirement service to the education of our future military leaders.

Don Rostad
Las Cruces, N.M.

I was pleased to read about the "West



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John Schmidt
Tallahassee, Fla

Must Reading

I've been a life member of the Air Force Association for longer than I care to admit and have enjoyed hundreds of issues of *Air Force Magazine*. But I've got to say that the July issue was one of the best. It was jammed with finely crafted articles which were informative, entertaining, and thought provoking. I especially appreciated the professional way in which controversial subjects were dealt with. In particular, "A Crescent Over Europe?" [July, p. 64], by Peter Grier, was a superb analysis of macro demographic changes that most people choose to ignore.

Lt. Col. Doug Schott,
USAF (Ret.)
Dayton, Tenn.

Congratulations to Peter Grier on his outstanding article. His perceptive insights should be mandatory reading.

There is one aspect the article doesn't address that holds a more imminent threat. During this last session of our US Supreme Court, the majority decided (unconstitutionally, I believe) to use other countries' laws and international law in their determination on several cases before them. If Mr. Grier's assumptions are correct, and I believe they are, then we will begin seeing a dramatic impact on the US well before the middle of this century. Unless our Congress starts holding these judges accountable, then the US will begin feeling the influence of the Islamic influence over Europe within the immediate future.

Lt. Col. Carl Gustke,
USAF (Ret.)
Cabot, Ark.

The Overseas Basing Commission

In the July issue, you have a nice article about the US Overseas Basing Commission and its recommendations. [See "Aerospace World: Pentagon Clashes With Commission on US Overseas Basing," p. 18.] But nowhere do you mention the name of the chairperson or members of this important commission. Could you please list the names of the members of the Congressionally chartered Overseas Basing Commission? Thank you.

Gen. John Michael Loh,
USAF (Ret.)
Williamsburg, Va.

■ *The commission members are: Alton W. Cornella, chairman; retired USAF Maj. Gen. Lewis E. Curtis III, vice chairman; retired Vice Adm. Anthony*

Point of the Air" in the article on the Air Force Academy. Not only did I serve at the academy for almost 10 years, but I also have a significant connection to [Brig. Gen. Harold L. Clark] of the site selection board.

It all began in 1965 during June Week at the Air Force Academy, while I was doing some part-time work at the Officers' Club. I was very privileged to meet General Clark, there to participate in graduation ceremonies. General Clark gave me some of his service

World War II memorabilia. He said he wanted "to find a good home" for his memories.

I traveled to San Antonio, where he presented me 30 items of German, Italian, Spanish, and US origin all from his service during World War I and II. In 1966, he presented me with one final item of his personal collection: his commissioning sword from Feb. 12, 1918. In 1998, I returned the sword, during a most appropriate ceremony, to its rightful place in history—preserved in

A. Less; retired Army National Guard Brig. Gen. Keith Martin; retired Army Lt. Gen. H.G. Taylor; James A. Thomson; and Patricia J. Walker, executive director.—THE EDITORS

Physics Lesson

Your article titled "Near Space" [p. 36] in the July issue contains an error in physics. The article states, in reference to the altitude regime between 12 and 62 miles above the Earth's surface, that gravity is too strong for a satellite to sustain itself in orbit. This is incorrect.

The real reason orbits below about 62 miles are not feasible is that atmospheric drag would cause the orbits to decay very rapidly, accompanied by satellite destruction brought on by heating due to atmospheric friction. This has nothing to do with gravity. In fact, if the Earth did not have an atmosphere, satellites could orbit effectively, for a long time, at very low altitudes.

Lt. Col. Richard F. Colarco,
USAF (Ret.)
Colorado Springs, Colo.

More, Not Less

Mr. Allen is mistaken. Many people stationed in Thailand received more awards than those who served in Vietnam. [See "Letters: Awarding Medals, Not," July, p. 4.] During 1972-73, those stationed in Thailand were eligible for the Vietnam Service Medal, Vietnam Campaign Medal, Vietnam Cross of Gallantry, and Armed Forces Expeditionary Medal. I knew at least two men, personally, who received Bronze Star Medals for service in Thailand. For those actually flying into hostile airspace from Thailand, add the award availability of Air Medals, Distinguished Flying Crosses, and of course valor medals all the way up to the Medal of Honor.

Anyone stationed in Thailand during Vietnam, and anyone flying into hostile airspace during that conflict, was in no way shortchanged in the awards and decorations department.

Capt. Bill Sims,
USAF (Ret.)
San Antonio

Note

We recently learned that our list of now-senior Air Force officers who were young F-15 pilots at Kadana AB, Japan, in 1982 and 1983 was incomplete. It should have included Lt. Gen. Randall Mark Schmidt, now commander of 12th Air Force and US Southern Command Air Forces. Schmidt was an instructor pilot and flight lead as a captain at Kadana in 1982. See "Aerospace World: A Legacy of the F-15," June, p. 18, for the original list.



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By John T. Correll, Contributing Editor

Flat Wrong

"The allegation that it's some sort of quagmire and progress isn't being made just isn't true. ... That's just flat wrong. We are not losing in Iraq."—**Secretary of Defense Donald H. Rumsfeld, NBC News' "Meet the Press," Sunday, June 26.**

Beijing's Concept of Lobbying

"We demand that the US Congress correct its mistaken ways of politicizing economic and trade issues and stop interfering in the normal commercial exchanges between enterprises of the two countries."—**Message from Chinese Foreign Ministry to Congress on bid of an energy firm controlled by the Chinese government to purchase a US oil firm, Washington Post, July 6.**

But Wait, There's More

"If the Americans draw their missiles and position guided ammunition on to the target zone on China's territory, I think we will have to respond with nuclear weapons."—**Chinese Maj. Gen. Zhu Chenghu, warning US not to intervene in any conflict over Taiwan, New York Times, July 15.**

Muslim Response Not Clear Enough

"Until we hear the voices of the Muslims condemning attacks of this kind with no words [of qualification] such as 'but' and 'if,' the suicide bombers and the murderers will have an excuse to think that they enjoy the support of all Muslims."—**Amir Taheri, columnist for London-based Arab newspaper Al-Sharq Al Awsat, quoted by London's Sunday Telegraph, July 10.**

Not Ready to Set Yet

"I'm not old enough to give up and set down."—**Lena Haddix, 73-year-old great-grandmother, finishing a six-month deployment to Kuwait and volunteering for a deployment to Baghdad as an Army & Air Force Exchange Service store manager, Washington Post, July 3.**

Soldier-Citizens

"We are changing the role of citizen-soldier to soldier-citizen."—**Gov. Mark Warner (D-Va.), chairman of**

the National Governors Association, on extended deployment of National Guard to Iraq, New York Times, July 17.

Blix: No Nukes in Iran

"They have many years to go before they will be able to produce highly enriched uranium for a bomb, and I believe there is plenty of room for negotiations."—**Former UN weapons inspector Hans Blix, Swedish Radio interview, quoted by Chicago Tribune, June 24.**

Great Generations

"All of you [veterans] of World War II: You were indeed, and are indeed, the greatest generation. You saved the world from a future that we don't even dare contemplate because it would have been so terrible. But I want you to know that the current generation of young people is no less patriotic or dedicated than any generation that has ever served. We should all be very proud of that. I know I am."—**Air Force Chief of Staff Gen. John P. Jumper, ceremonies at Arlington National Cemetery commemorating the 60th anniversary of the end of World War II, June 30.**

That Wasn't Napalm

"Despite the assertion in the article 'Parliament misled over firebomb use,' the Mk 77 firebomb is not 'a napalm-style firebomb.' 'Napalm' refers to a weapon used during the Korean and Vietnam Wars, made of a mixture of benzene, gasoline, and polystyrene. Napalm's harmful effect on the environment led to it being phased out of the American inventory after the Vietnam War. The Mk 77 is a different weapon, and international law does not prohibit its use. It is a legal, viable weapon to be used in combat against enemy forces."—**Pentagon spokesman Lawrence Di Rita, letter published in London's Daily Telegraph, June 25.**

Allies Warm and Cool

"Why, then, is Japan suddenly warm while Europe is so cool? Is the Bush Administration clumsy in Berlin and adept in Tokyo? No. Rather, the answer

is the rise of China and the collapse of the Soviet Union. For the Japanese government, China and its nuclear patron, North Korea, are not abstract threats. Indeed, they are within tactical missile range."—**Stanford University historian Victor Davis Hanson, Chicago Tribune, June 17.**

British Steel

"If these terrorists thought they could intimidate the people of a great nation, they picked the wrong people and the wrong nation. ... Before long, I suspect that those responsible for these acts will encounter British steel. Their kind of steel has uncommon strength. It does not bend or break."—**Rumsfeld after terror bombings in Britain, London's Daily Telegraph, July 8.**

Like No Other

"There isn't another plane out there that can do what we can do. There are other planes out there that can carry the same types of weapons—there's no doubt about that—however, there's nobody out there that can carry as many of them or as mixed a load."—**Maj. Derek Leivestad, B-1 instructor pilot at Dyess AFB, Tex., Air Force Print News, June 29.**

No Politics

"We worked brilliantly and one condition of this excellent work was that there should be no politics involved. The main thing for us was to set up a system of mutual assistance to each other."—**Russian cosmonaut Alexei Leonov, in Washington to celebrate the 30th anniversary of the first Soviet-American spaceflight, Soyuz-Apollo, RIA Novosti, July 15.**

Honors at Iwo Jima

"Over 28,000 Japanese and American lives were lost on Iwo Jima. I believe today's peace and prosperity is built on their noble sacrifice. Since the Second World War, Japan has never once participated or become involved in war and has maintained peace."—**Japanese Prime Minister Junichiro Koizumi, laying a wreath at a memorial to American dead on Iwo Jima, London's Daily Telegraph, June 20.**

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Washington Watch

By John A. Tirpak, Executive Editor

Delusions in Weapon Procurement; Now Playing: "Enter the Dragon"; More on Unmanned Aerial Vehicles

Martin Says "Realism" Can Save Acquisition

If US weapons buyers want to save time, cut expense, and deliver needed capabilities, they must be more realistic about costs and avoid wishful thinking, according to Gen. Gregory S. Martin, the outgoing chief of Air Force Materiel Command.

Martin, speaking at a July seminar on Capitol Hill, maintained that the Air Force puts too much faith in modern manufacturing technologies, faster processors, and smarter ways of doing business when it estimates what new systems will cost. This, he said, inevitably leads to cost overruns and delays.

Had realistic timetables and costs been used from the beginning, said Martin, some programs "never" would have made it into the Air Force budget, because the service would have known that they were unaffordable.

Martin noted that the F/A-22 Raptor is now "the finest fighter in the world," having revolutionary capabilities that no other aircraft will be able to match for decades. However, he said, the aircraft has been the victim of up-and-down funding, constantly changing procurement plans, cost caps imposed from within by the Pentagon and from without by Congress, and major growth in requirements.

"The whole system believed we could do things differently" from how aircraft were developed and built in the past, but experience has shown "it couldn't," Martin said.

He allowed that the Pentagon's program analysis and evaluation shop, which used historical cost-estimating methods that the Air Force rejected, usually came out with an accurate estimate. "We should listen to those guys," Martin said.

By comparison, he went on, the Small Diameter Bomb program is proving to be "on time, on cost," mainly because realistic estimates of schedule and price were established from the outset. In addition, there has been "disciplined program management," blocking design and requirements changes that were not necessary, and stable funding that both the service and contractor could count on.

The F/A-22 and other troubled programs suffered, Martin said, from a 1990s mind-set that US industry had overcome its biggest challenges, ranging from industrial consolidation and the demand for a post-Cold War "peace dividend" to the Japanese quality revolution.

There was a "belief that we had achieved cultural success" in acquisition, Martin said, fooling acquisition officials into thinking they could sweep away a lot of the old methods and "discard things that worked."

Martin also argued for programs to be given reserve funds "up front" to deal with the unexpected problems and setbacks that invariably afflict the attempt to create new technology.

"It sounds like a slush fund," he admitted, but really, "it's attrition-based planning." Having the funds to deal with a contingency saves money by avoiding the delays and reprogrammings that usually attend a technology setback.

Asked if there has been a "long line" of acquisition professionals fleeing the system after the ordeal of the tanker lease fiasco, Martin pointed out that there are, seven months later, vacancies in all the top leadership and acquisition positions in the Air Force.



USAF photo

Martin says realism equals program stability.

However, retention in the rank-and-file acquisition corps has not suffered. In fact, "we're turning people away" because people are not leaving at the expected rate.

A retirement "time bomb" long predicted—because 65 percent of the acquisition corps is retirement-eligible—has not gone off, Martin said. "Look at me. I was retirement eligible 15 years ago," he said. "People are staying with us," he added, and there is a dedicated effort to recruit "young guys ... and mentor them."

Chinese Military Is Catching Up—Fast

China is building up military strength at an "ambitious" pace and is aggressively seeking ways to challenge US capabilities in unconventional ways, the Pentagon asserted in a comprehensive report issued in July.

Beijing may already have an edge in a face-off with Taiwan and is rapidly building up its nuclear forces, power projection capabilities, and naval power, the Pentagon warned, also noting that China is pursuing "leap ahead" and workaround strategies to blunt American military superiority.

The report, required annually by Congress, pegged China's defense spending at about \$90 billion in 2005, "making China the third-largest defense spender in the world after the United States and Russia, and the largest in Asia."

The figure represents the best US intelligence estimate and is well above China's publicly stated figure of \$29.9 billion. Even China's low, official budget number is double what China quoted just last year.

Moreover, China's \$90 billion buys quite a bit of capability. Unlike the US, China devotes relatively little of its defense budget to pay, benefits, and quality of life for its troops. Some \$80 billion of China's spending goes to buy hardware, resulting in the rapid acquisition of new warships, submarines, fighter aircraft, missiles, and ground vehicles.

If China maintains its annual, double-digit increases in military spending—made possible by a burgeoning economy—it will draw about even with US spending overall by 2025. Well before that, China will have the means to seri-

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LOCKHEED MARTIN

ously challenge US action in East Asia and the Western Pacific.

In nuclear forces, China has developed a new ballistic missile, in mobile land-based and sea-launched versions, that can strike anywhere in the US except southern Florida. The mobility and reach of these missiles will give China a "credible, survivable nuclear deterrent."

In aircraft, China is about to declare operational its own "indigenous" F-10 fighter, a counterpart to the US F-16. China continues to import top-of-the-line Russian Su-30 Flanker fighters and is building a naval version under license. China also is upgrading older designs to antiship configurations and studying conversion of hundreds of obsolete fighters into unmanned aerial vehicles.

Beijing is moving to acquire greater numbers of both

AP photo by Elizabeth Dalziel



With its power growing, China is at a crossroads.

aerial refueling aircraft and airborne warning and control aircraft from Russia. China is buying quiet new submarines from Russia, even as it develops its own nuclear boats.

While the Pentagon believes it will be some time before China can mount distant amphibious assaults, selective landings in Taiwan are well within its capabilities.

The Pentagon said that the purchase of S-300 air defense systems from Russia will give China the ability to engage aircraft over Taiwan itself. A back-engineered version also is being designed and built in China.

In recent years, China has aimed hundreds of tactical ballistic missiles at Taiwanese installations. It also has built a large inventory of precision cruise missiles.

The worry is that China is building the means to attack and defeat Taiwan before the US or any other ally can react.

China is moving forcefully to expand its command and control and intelligence-surveillance-reconnaissance capabilities as well as space capabilities. The planned launch of a two-man Chinese spacecraft this month is indicative of the progress it is making both in launch vehicles and spacecraft.

China's military doctrine also acknowledges that it cannot yet challenge the US or other world powers in a toe-to-toe fight, but it is expanding its unconventional capabilities, such as cyber-attack, the possible use of nuclear electromagnetic pulse, information and psychological warfare, and the economic or military coercion of other parties.

The Pentagon noted that it's tough to gauge China's intentions. Marine Corps Gen. Peter Pace, the vice chairman of the Joint Chiefs of Staff, told a Pentagon press conference that, despite the report's noting of China's military

preparedness, it was not meant to signal that DOD believes an attack is coming.

"You judge military threat in two ways: one, capacity and two, intent," Pace said. "There are lots of countries in the world that have the capacity to wage war. Very few have the intent to do so. And, clearly, we have a complex but good relationship with China. So there's absolutely no reason for us to believe there's any intent on their part."

The Pentagon concluded that China is at a military "crossroads" and that the US "welcomes" the growth of China as peaceful and stabilizing power.

Shortly after the report was released, China complained to the US embassy in Beijing that the document was a pack of "reckless accusations." Vice Foreign Minister Yang Jiechi said the report was "crude meddling in Chinese internal affairs and ... tries to sow discord between China and other countries."

A week earlier, Chinese Gen. Zhu Chenghu said his country lacks the ability to fight a conventional war with the US, and, if the US intervened in a conflict with Taiwan, Beijing "will have to respond with nuclear weapons."

The Chinese government later said the general was making personal comments and that it maintains a "no first use" policy on nuclear weapons.

Sorting Out the UAV Situation

The Pentagon, bowing to pressure from the other services, has turned aside USAF's bid to become the executive agent for US military unmanned aerial vehicles. Instead, a number of joint organizations will try to unify and rationalize the functions of UAV forces.

In June, the Joint Requirements Oversight Council took a look at the proposal to create an executive agent, a designation for which USAF lobbied as part of a broader rationalization of intelligence-surveillance-reconnaissance powers. ISR currently is the primary function for the unmanned aircraft. (See "Washington Watch: The UAV Skirmishes," June, p. 11.)

In the end, however, the JROC decided against creating such an agent at this time. It left open the possibility of doing so in the future. The JROC comprises the vice chiefs of all of the armed services, plus some senior civilian leaders.

The Air Force already serves as the executive agent for space. Doing so for UAVs would have given it authority over how UAV funds are allocated and spent defensewide. USAF had argued that it is the natural service for UAV coordination, given its primacy in most ISR functions, as the lead service on the Joint Unmanned Combat Air System, and its experience



USAF photo by Capt. John Sheets

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guiding the development of air and space systems.

Moreover, some future UAVs could take the form of near-space craft, dwelling for long periods in the extremely thin air just below orbital altitudes. The Air Force believed it was best suited to coordinate UAV activities because these near-space craft will have to be highly interactive with satellites.

In addition, Pentagon regulations call for an executive agent to be designated when there is risk that the services will inefficiently duplicate each other's efforts in a given mission area.

The JROC assembled a "tiger team" to evaluate the Air Force's arguments and the benefits and risks of putting one service in charge of UAV coordination.

The arguments "against" came from all the other services, each of which already has developed and fielded its own UAV systems, and which see UAVs as fulfilling very service-specific functions. (See "The Clash of the UAV Tribes," p. 46.) Making one service the executive agent, they claimed, would somehow make UAV programs less responsive to the specific needs of each branch.

Each service has enthusiastically embraced these robotic craft for their power to quickly—and relatively cheaply—expand situational awareness. They wanted to keep UAVs "tethered" to the commanders that need the intelligence the vehicles can deliver.

Nevertheless, the services agreed that the US needed an overall structure to coordinate UAV efforts. Two organizations were created in July to head up collaborative UAV doctrine and hardware coordination.

The Air Force's new UAV headquarters at Creech AFB, Nev. (formerly Indian Springs Air Force Auxiliary Field), was designated a joint UAV Center of Excellence (COE). There, military officers will try to coordinate concepts, training, and tactics. They will work out best uses of sensors and the optimum ways for UAVs to plug into the Pentagon's information network. The center will have an "operational" focus, the Pentagon said.

To emphasize the joint nature of the COE, leadership will rotate among the services. The first commander will be Army Brig. Gen. Walter L. Davis, who will have an Air Force deputy.

Another new organization was created, this one called the Joint UAV Overarching Integrated Product Team (JOIPT), which will do more of the UAV programmatic work that might have been done by an executive agent. In announcing this organization, the Pentagon said it will "provide a forum to identify and resolve materiel issues and seek solutions common to all the military services."

The JOIPT will also "concentrate on improving UAV system interoperability and will promote standardization and commonality" of UAV systems. DOD expects the outfit to beign work this fall.

The two organizations—COE and JOIPT—are to coordinate their efforts, especially "when the lines between material and nonmaterial solutions blur."

Digging Out of the Readiness Pit

Air Combat Command went back to flying something like a normal schedule in July, but flying hours it gave up under the Air Force's austerity plan will keep readiness under par into October.

Senior USAF leadership ordered major flying hour cuts to make up an overall operations funding shortfall of more than \$3 billion. (See "The \$3 Billion Shave," July, p. 76.) This move resulted in substantial reductions in pilot proficiency during the 45-day period between mid-May and the end of June, ACC officials reported.

In early May, the command slashed \$272 million from its budget for flying hours, which would have cut the hours of some units as much as 60 percent through the end of the fiscal year.

After arguing that a key factor in US war readiness was going to drop too far, ACC won back about \$200 million of its flying hour funds in a "rebate" approved in June by Defense Secretary Donald H. Rumsfeld, but the damage was done.

The effects of the lost training will be felt at least through the end of the fiscal year. The affected pilots will be permanently behind the average flying hours in their career fields. Those pilots who came up for the training-intensive parts of their predeployment cycle won't have missed any hours.

The command lost 11,000 flying hours during the slow-down, part of its \$825 million share of the USAF-wide



USAF photo by TSgt. Debbie Hernandez

A reduction in flying hours means a reduction in readiness.

funding cut. The 2,500 hours returned were targeted at units preparing for deployment to Southwest Asia and other overseas locations. Units that already returned from deployments, and were not scheduled to return for a while, suffered the most.

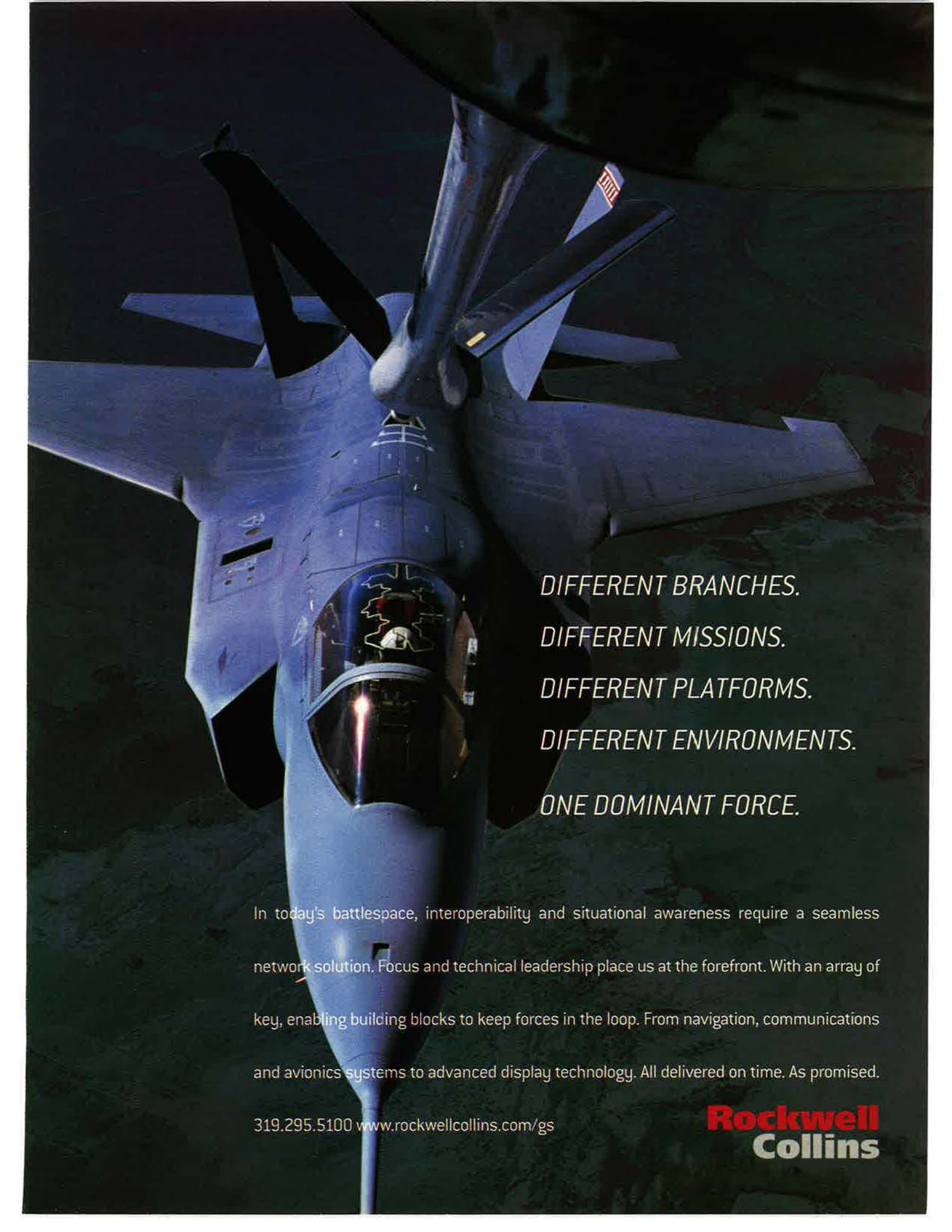
Flying hours were not the only item hammered in the funding cut. Maintenance items that support commanders deemed could be safely postponed—so called "noncritical" items—have been pushed into Fiscal 2006.

The cuts in hours didn't affect all units equally. Bomber hours are typically more costly than fighter hours, and bomber crews tend to accrue more simulator time than fighter crews. However, ACC officials said there was a minimum number of hours below which they would not go for bomber crews.

Under the austerity plan, top priority for hours went to units either just coming up for deployment or just returned, in order to preserve the Air and Space Expeditionary Force combat capability. The second priority was for F/A-22 pilots, who are trying to achieve a December initial operational capability with the fighter.

"Fenced off" were operating hours for E-3 AWACS aircraft and those for the Thunderbirds aerial demonstration squadron, whose touring season kicked off right about the time the cuts went into effect. Testing and training units were also protected from deep cuts. All other units were focused on maintaining sufficient proficiency to be safe.

The Air Force hopes not to have to resort to such moves in the 2006 budget, which is supposed to provide increased baseline account funding for operations. ■



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Aerospace World

By Adam J. Hebert, Senior Editor

Bush Taps Wynne to be SECAF

President Bush on August 17 announced plans to nominate Michael W. Wynne to become the new Secretary of the Air Force. Wynne, a West Point graduate, has served as the principal deputy undersecretary of defense for acquisition, technology, and logistics.

Bush did not say when he would officially forward Wynne's nomination to Congress. If confirmed, he would succeed James Roche, who left the post earlier this year. Bush earlier had appointed Preston M. Geren to serve as Acting SECAF (see p. 28), and he will continue in that post until Wynne is installed in office.

USAF Hits Strength Target

The Air Force announced July 12 that it had finally succeeded in drawing down troop numbers to meet a Congressionally mandated end strength goal.

For months, the Air Force employed several force-shaping measures to get to 359,700 airmen by the end of Fiscal 2005. The service had been allowed to stay above authorized strength to cope with the pressures of fighting the war on terror.

As of June 30, USAF was some 2,000 airmen below that authorized active duty end strength ceiling, spokes-



USAF photo by SSgt. Bennie J. Davis III

During a recent special response team training exercise in Guam, SrA. James Jordan of the Air Force (foreground) and Petty Officer 1st Class Michael Hammes of the Navy prepare to engage opposition forces. Jordan is assigned to the 613th Contingency Response Group at nearby Andersen Air Force Base. The CRG trains, mans, and equips highly mobile units ready to deploy anywhere in the Pacific on short notice.

woman Jennifer Stephens said. She noted that the service projected it would remain "slightly below the ceiling" for the rest of the fiscal year, which ends Sept. 30.

While the overall goal was met, USAF

still has too many officers. The service must continue "shaping" the officer force—"particularly in the junior grades," said Brig. Gen. Glenn F. Spears, force management policy director on the Air Staff, in a press release.



She's more than an airman.

Recruiting, Retention Are Strong

Air Force recruiting and retention efforts remain on track, USAF officials reported in July.

The recruiting target was set at 18,900 airmen this year, a figure lower than normal. This was done to allow the service to shed enlisted personnel and meet its end strength goal.

By July, USAF had brought in 11,446 recruits. Recruiters have made their quotas every month this year, said an Air Force Recruiting Service spokesman.

"If this trend continues," he said, "we'll easily make our target" for the fiscal year.

On the retention front, the Air Force is meeting its goal in two of the three re-enlistment categories, which are first-term, second-term, and career.

In a July 20 statement, officials noted that USAF had secured a re-enlistment rate of 58 percent of first-termers (against a goal of 55 percent) and 95 percent of career airmen (against a goal of 95 percent).

When it comes to second-termers, however, USAF is falling short. Though its goal was 75 percent, re-enlistments are running at about 57 percent, which USAF attributed to "force-shaping" activities.

Hurricane Forces Evacuations

Hurricane Dennis plowed into the Florida panhandle, forcing the Air Force to evacuate many personnel and aircraft from its Gulf Coast bases.

When Dennis came ashore July 10 as a Category 4 hurricane, USAF had already cleared out Florida's MacDill, Tyndall, and Eglin Air Force Bases, as well as Hurlburt Field.

Aircraft from these facilities were dispersed around the nation. MacDill's KC-135s went to McConnell AFB, Kan.; Tyndall's F-15s and F/A-22s deployed

Pilots Praise New F-15E Targeting Pods

New targeting pods aboard F-15E Strike Eagles proved invaluable in Iraq, pilots with the 494th Fighter Squadron, RAF Lakenheath, Britain, recently declared.

Lt. Col. Daniel Debree, 494th FS commander just back from a tour in Iraq, told a Pentagon media roundtable that flying over Iraq these days is very different from what pilots are used to.

"We are more like cops on the beat" than anything else, Debree said, adding that during the entire deployment from January to May, the 494th dropped just eight bombs on targets in Iraq. The new F-15E sensor array, featuring optical and infrared sensor arrays with the Sniper targeting pod, was key, however, in finding deadly improvised explosive devices (IEDs).

Capt. Joseph Siberski, F-15E weapons system officer, cited an example from April. Near Mosul, Siberski said, came reports of a possible IED site. After a fly-over, the Strike Eagle found a hole nearby. The hole "was a square," which was highly suspicious, said Siberski.

An Army Stryker team was dispatched and approached a group of approximately 20 men who had congregated near the site. After detaining many of the men, a search near the hole uncovered three weapons caches, cell phones, and high-grade C4 explosive and shaped-charged weapons. There was enough materiel to build nearly 150 IEDs.

"It was an unqualified success," Debree said, crediting the Sniper pod for being able to locate the site.

Lockheed Martin, the pod's manufacturer, is evaluating the 494th's pods after their deployment, Debree said. With more than 5,500 hours of combat data on the pods, the company wants to fine-tune the sensors before employing them more widely on other strike aircraft.

—Marc Schanz

to Tinker AFB, Okla., and Nellis AFB, Nev., respectively; and Eglin's F-15s went to Wright-Patterson AFB, Ohio.

USAF's 6th Space Operations Squadron, a reserve unit under the 310th Space Group at Schriever AFB, Colo., helped the Air Force prepare timely evacuation plans.

The 6th SOPS collects Defense Meteorological Satellite Program weather data. The unit kept a close watch on Dennis as it approached the coast

with winds that peaked at 120 miles per hour.

DMSP data gave forecasters and authorities advance notice [for] resource protection activities and evacuation directives, said Lt. Col. Mark D. Hustedt, 6th SOPS commander. "There is no doubt this vital information saved lives."

McNabb Heads to AMC

President Bush nominated Gen. (sel.) Duncan J. McNabb to be the new

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The War on Terrorism

Operation Iraqi Freedom—Iraq

Casualties

By Aug. 5, a total of 1,823 Americans had died supporting Operation Iraqi Freedom. The total includes 1,818 troops and five Defense Department civilians. Of those fatalities, 1,411 were killed in action by enemy attack, and 412 died in noncombat incidents such as accidents.

There have been 13,769 troops wounded in action during OIF. This includes 7,118 who returned to duty within 72 hours and 6,651 who were unable to quickly return to action.

Airmen Reach Three Million Convoy Miles

Air Force airmen driving combat convoys reached a major milestone on July 7—the three million mile mark.

USAF's expeditionary combat airmen took on the combat convoy mission in March 2004. Since then, airmen have led more than 3,500 convoys on the dangerous roads of Iraq.

Convoys are run by the 732nd Expeditionary Readiness Squadron, which was "established when combat in Iraq shifted from a force-on-force battlefield to counterinsurgency operations," stated a Central Command Air Forces press release. The 732nd "consists of two light and medium gun truck detachments" and a fuels detachment.

"These detachments forged on despite facing attacks from small-arms fire, improvised explosive devices, rocket-propelled grenades, and car bombs," said Brig. Gen. Allen G. Peck, deputy air component commander, in the release.

Operation Enduring Freedom—Afghanistan

Casualties

By Aug. 5, a total of 216 troops and one DOD civilian had died supporting Operation Enduring Freedom worldwide, primarily in Afghanistan. The total includes 102 Americans killed in action and 115 who died in nonhostile incidents.

A total of 525 troops have been wounded in Enduring Freedom. They include 190 who were able to return to duty within three days and 335 who were not.

19 Die in Firefight, MH-47 Crash

Nineteen US troops died in Afghanistan on June 28.

A four-member special operations forces team came under fire, said a US Central Command spokesman quoted in wire reports, and then "requested additional forces to be inserted."

The support mission led to a greater loss of life. A 16-man SOF team aboard an MH-47 was killed when the helicopter went down near Asadabad in eastern Afghanistan.

Among the rescuers who perished were eight Army and eight Navy SOF members. Three of the initial SOF troops were killed. The fourth was rescued alive.

In mid-July, defense officials had not announced whether the MH-47 was shot down, but did say in a statement that the crash "may have been caused by hostile fire."

Bagram Adds Arresting System

Bagram Air Base recently added a mobile aircraft arresting system specifically designed to stop tailhook-equipped aircraft in emergency situations.

Combined Forces Command-Afghanistan announced in June that the system was needed for Marine Corps EA-6B Prowlers operating out of Bagram for Operation Enduring Freedom.

"To conduct safe flying operations in bad weather or emergencies," the CFC-A release explained, the Prowler has "specific requirements that are not normally found at Air Force airfields, such as a mobile airfield arresting system."

The system is "basically a hydraulically activated set of two modified B-52 brakes," explained Air Force TSgt. Jens P. Walle of the 455th Expeditionary Civil Engineer Squadron. A 175-foot-long steel cable, more than an inch thick, runs between the B-52 brakes. In an emergency, an EA-6B would drop a tailhook and snare the cable.

four-star head of Air Mobility Command at Scott AFB, Ill.

If confirmed by the Senate, McNabb would become the first commander of AMC who did not also command the joint-service US Transportation Command. That is because the President previously nominated Air Force Gen. Norton A. Schwartz for promotion to head TRANSCOM, also headquartered at Scott. Schwartz was confirmed on July 29.

McNabb has been Joint Staff logistics director for the past year. Before that, he was USAF deputy chief of staff, plans and programs.

McNabb began his career as a navigator and became an airlift pilot as a captain. He has served in mobility positions throughout his career. McNabb led the 41st Military Airlift Squadron at Charleston AFB, S.C., during Gulf War I and served as commander of AMC's Tanker Airlift Control Center from 1997 to 1999.

Dividing the job between two general officers will permit TRANSCOM's commander to focus on worldwide mobility operations and the AMC commander to focus on Title 10 "organize-train-equip" responsibilities.

TRANSCOM is busy orchestrating lift and refueling operations in Iraq, Afghanistan, and other hot spots around the world. AMC, meanwhile, has devoted much of its time dealing with modernization and the problems of aging aircraft.

Laser Gets Tagged

Recent contractor assessments of the Airborne Laser (ABL) program have probably been overly optimistic, Air Force Lt. Gen. Henry A. Obering III declared.

Obering, director of the joint-service Missile Defense Agency, told the Defense Writers Group on July 21 that the laser program wasn't out of the woods developmentally.

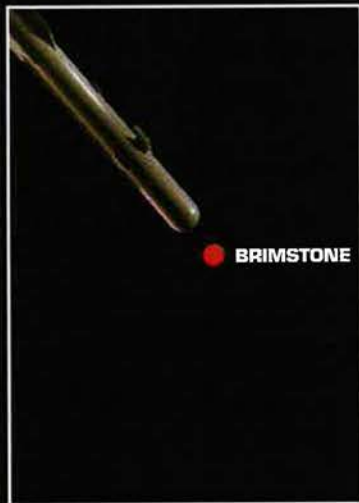
Obering said that he did not want to paint a "rosy picture" about ABL's progress only to come back next year and say, "We didn't accomplish what we thought we were going to get accomplished."

The Pentagon is eager to acquire the ABL's boost-phase defense capability. It would be able to "fly in" to a target area worldwide. The chemical-oxygen-iodine laser (COIL) would target ballistic missiles while they were still taking off, helping to prevent collateral damage over friendly territory.

Obering emphasized that he does not think the program has been a failure; he said great progress has been made. The general was striving for



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realistic understanding of how difficult this development is.

"I did not mean to be downbeat on ABL," he said, noting that all the key technical components have been tested.

However, he went on, the parts of the complex system still must come together in a "more operationally realistic context," which is never as easy as it sounds.

"Too often you hear people say, 'We've done this [and] we've done that—all we've got to do is integrate it.'"

With the laser system demonstrated in atmospheric conditions, MDA must now tear it down, load it aboard a converted Boeing 747 freighter, reassemble it, integrate the components, and fly it in the next couple of years.

"I think we have a long way to go," he said.



USAF photo by A1C Eric Donner

Local specialists remove a stained-glass window from the chapel of Rhein-Main AB, Germany. The window, a memorial to those who lost their lives in the Berlin Airlift, will be conserved and re-installed at the Ramstein Air Base passenger terminal.

New Civilian Personnel System Delayed

Defense Department officials have postponed implementing the National Security Personnel System (NSPS), the DOD pay and evaluation system that will replace the old GS (General Schedule) pay scale for defense employees.

Officials announced this summer that the draft NSPS regulations will be revised again. This made it impossible for DOD to meet its initial goal of beginning the program implementation in July.

Defense officials have said for more than a year, however, that NSPS implementation will be "event driven" and not guided by an arbitrary schedule. (See "Aerospace World: New Personnel System Approved," June 2004, p. 19.)

The NSPS regulations will be modified based on public comments and input from meetings with union representatives, said Mary Lacey, program executive officer, in a June DOD press release. "Revisions will be published in the Federal Register later this summer, and implementation of NSPS could begin 30 days after" the release stated. The implementation date is "flexible, because we are not going to implement it until we are ready," said Charles S. Abell, principal deputy undersecretary of defense for personnel and readiness.

It will take up to three years for all 700,000 eligible defense employees to join NSPS, officials said. According to the *Washington Post*, plans now call for DOD employees to receive their traditional raises in January 2006, with the first NSPS-based pay raises perhaps coming in January 2007.

The new system will scrap the General Schedule pay scales—which compensate longevity above all else and make it difficult to reward top employees or fire poor ones. Under NSPS, defense workers will find their pay tied to performance, as is the case in most private-sector jobs.

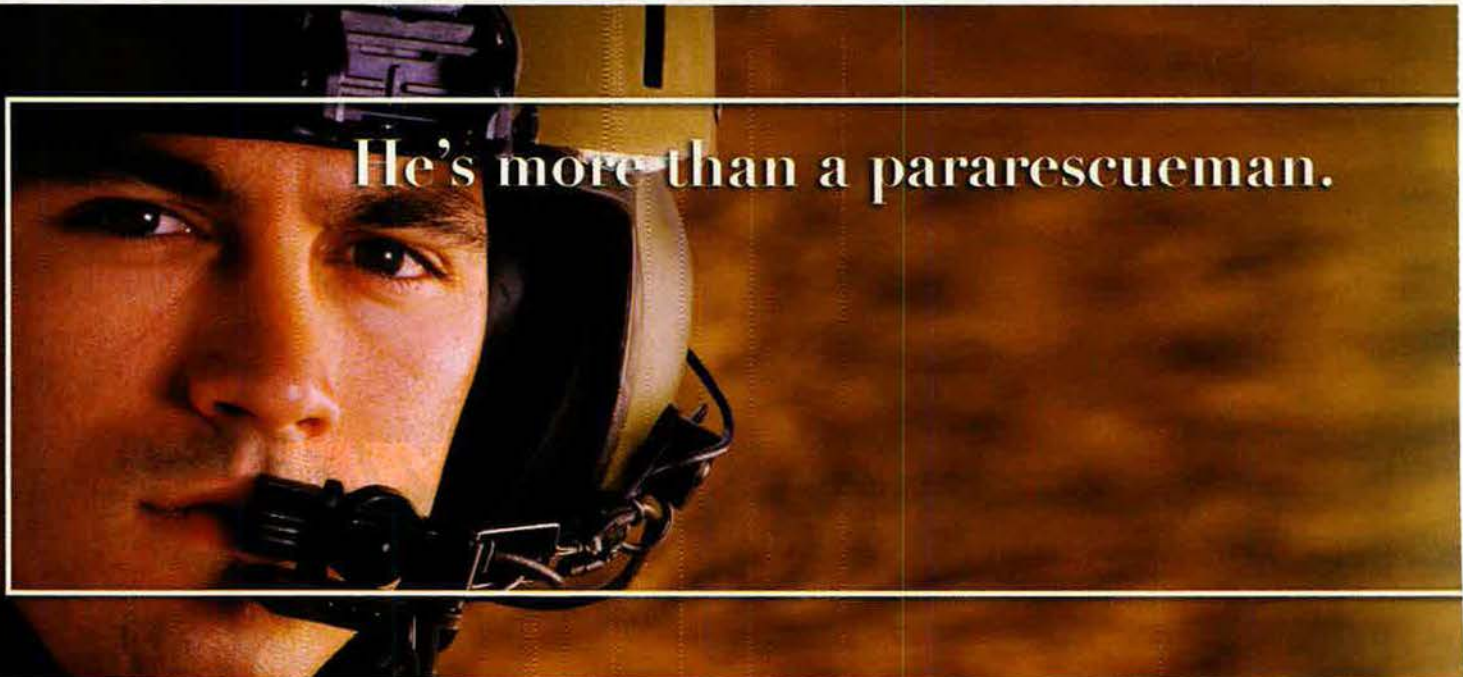
MDA still eyes 2008 as a "good target" date to demonstrate the ability to actually shoot down a ballistic missile during its boost phase.

The ABL program achieved its last major milestone Nov. 10, 2004. That represented the first time that ABL's six COIL modules were successfully linked and fired together. (See "Aerospace World: ABL Achieves 'First Light,'" January, p. 19.)

Bombers Reach Milestones

Two of the Air Force's heavy bombers recently celebrated prominent anniversaries. In June, the B-52 reached 50 years of active service, and the B-1B marked 20 years at its first operational base.

The first B-52 arrived at a combat unit on June 29, 1955, when then-Brig. Gen. William E. Eubank Jr., commander of the 93rd Bomb Wing, delivered the



He's more than a pararescueman.

first operational "BUFF" to Castle AFB, Calif.

According to a recent Air Force press release, Eubank recalled thinking the B-52 looked a lot like the B-47 it was to replace but that it drove "more like a truck."

The Air Force had 744 B-52s built. Many of the 102 H-models built between May 1961 and October 1962 remain in service at Minot AFB, N.D., and Barksdale AFB, La. They are expected to be key parts of the US bomber force for another two decades.

Highly reliable and continuously upgraded, the B-52s recently won praise for providing close air support by dropping satellite guided bombs.

Thirty years to the day after the B-52 went operational, the first B-1B arrived at Dyess AFB, Tex. The "Bone" was originally conceived as a B-52 replacement that would fly at high speed and low level to deliver nuclear weapons against the Soviet Union.

One hundred four B-1Bs were built. When the Cold War ended, however, the service undertook a number of programs that adapted the new aircraft to conventional missions.

The B-1B first saw combat in 1998 during Operation Desert Fox over Iraq. Since then, it has become a key weapon system for combat commanders because of its large payload, versatility of weapon load, and ability to loiter for long periods.

John Alison Honored

Retired Maj. Gen. John R. Alison on July 16 was enshrined in the National Aviation Hall of Fame in Dayton, Ohio. Alison, 92, was on hand as one of four aviation greats enshrined at the ceremony.

Alison was commissioned in the Army Air Corps in 1937. Five years

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later, he was flying P-40s with Claire L. Chennault in China—where he would shoot down two Japanese aircraft (a third was unconfirmed) in his first aerial combat. All told, Alison was credited with six aerial victories. He was awarded a Purple Heart for injuries when he was shot down over China.

Alison and a friend, Lt. Col. Philip G. Cochran, later organized the first air commando unit and personally led it

into combat. He is considered by some to be "the father of Air Force special operations."

Alison "was instrumental in the development of numerous innovative weapons and tactics, including rockets, gliders, and helicopters," said the Hall of Fame's statement.

After World War II, Alison joined the Air Force Reserve, where he continued to serve until his retirement as a major

Continued on p. 26

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Did you know? The HH-92 requires no ground support equipment or post-transport check flight for C-5 or C-17 loading.

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News Notes

By Tamar A. Mehuron, Associate Editor

■ The Air Force District of Washington, Bolling AFB, D.C., on July 7 became fully operational as a direct reporting unit. It will be the Air Force warfighting component of the Joint Force Headquarters-National Capital Region, established in 2004 by US Northern Command officials. AFDW had been a DRU from 1985 to 1994, when it was deactivated.

■ The Pentagon said on July 5 that President Bush had nominated Army Lt. Gen. Keith B. Alexander as the new director of the National Security Agency at Ft. Meade, Md. He succeeds USAF Gen. Michael V. Hayden as head of the supersecret code-breaking and code-making agency.

■ Boeing received a \$175 million contract from the Defense Advanced Research Projects Agency in July to continue its work on the X-45C segment of the Joint Unmanned Combat Air System demonstration program. The funding enables Boeing to further develop and demonstrate a new autonomous aerial refueling technology. An in-flight X-45C refueling by a KC-135 tanker is planned for 2010.

■ Misawa AB, Japan, took top honors as the Air Force winner of the 2005 Commander in Chief's Award for Installation Excellence. The award recognizes superlative efforts by people in the services who operate and maintain US military installations worldwide.

■ Ten firms on June 29 won a \$1.9 billion contract for Air Force Materiel Command weapons engineering and technical services support. They are: Aerospace Engineering Spectrum, Utah; Arinc Engineering Services, Maryland; Battelle Columbus Operations, Ohio; Dynamics Research Corp., Oklahoma; Sverdrup Technology, Florida; Karta Technologies, Texas; Manufacturing Technology, Florida; Northrop Grumman, Virginia; Southwest Research Institute, Texas; and Support Systems Associates, Florida.

■ Boeing in July began installing advanced satellite communications gear in the first of 32 USAF E-3 Airborne Warning and Control System aircraft. The upgrades will enable AWACS aircrews to communicate with other AWACS and USAF aircraft and ground stations. Completion of the first AWACS upgrade is scheduled for January 2006. The rest of the fleet will be upgraded by the end of 2010.

■ Servicemen and -women must now specify who shall dispose of their remains in the event of their death, according to

a DOD announcement July 8. DOD's Record of Emergency Data Form (DD Form 93) was changed to make this previously voluntary information a requirement. The change resulted from two cases in which divorced parents disputed the disposition of the unmarried serviceman's remains.

■ Sturdier, longer-lasting carbon brakes are replacing the steel brakes on KC-135s at the Oklahoma City Air Logistics Center, Okla. The new brakes are good for approximately 1,000 landings and could remain viable for 10 years. By contrast, the steel brakes have a threshold of 100 landings and last only a year.

■ Rockwell Collins received a contract June 23 to upgrade communications for Extremely High Frequency and Advanced EHF satellite systems and improve nuclear command, control, and communications capabilities for aircrew alert messaging. The contract is valued at \$352 million over six years. Work is scheduled to be completed by May 2011.

■ An Air National Guard F-16 pilot on June 28 ejected safely after he lost directional control of his aircraft and skidded off the runway while attempting an emergency landing at Lamar Airfield, near Buckley AFB, Colo. He was reacting to a fire in the aircraft's tail section. The pilot suffered minor injuries. The aircraft was assigned to the Colorado ANG's 140th Wing. USAF officials are investigating the accident.

■ An MQ-1 Predator UAV armed with Hellfire missiles crashed June 29 in eastern Afghanistan's Gardez region, close to the Pakistan border. There was no sign that hostile fire contributed to the crash. The accident is being investigated by USAF officials.

■ Air Force investigators concluded that a Jan. 14 Predator crash in Southwest Asia stemmed from a loss of aircraft control. In a report released July 6, Air Force officials said that the pilot and sensor operator used incorrect rebooting procedures after their computer control systems malfunctioned and thus cut the communications link. The Predator, from the 15th Reconnaissance Squadron at Nellis AFB, Nev., was destroyed on impact.

■ The Jan. 18 midair collision of a T-37 trainer and a civilian crop duster in Oklahoma had two causes, according to an accident investigation report. First, the trainer's two-man aircrew and the crop duster's pilot did not see each

other and had no time to avoid a collision. Second, the civilian pilot, Carl Dierk Nash, was at an altitude designated for instrument flying rules when he should have been flying under visual flying rules. Nash died in the collision. The T-37 crew ejected safely.

■ Pilots and maintainers with the 60th Fighter Squadron, Eglin AFB, Fla., were honored with the Raytheon Hughes Achievement Award for outstanding air superiority. This marks the second time since 1996 that the unit, flying F-15Cs, has won the prestigious trophy.

■ Martin-Baker Aircraft Co., Britain, received a \$200 million contract to update the escape system for USAF's T-38C fleet. The work is scheduled to be completed by June 2014.

■ DOD awarded Wright State University in Dayton, Ohio, a \$100,000 grant to collect and preserve information about the role of scientists and engineers at Wright-Patterson AFB, Ohio, in developing Cold War technology. The university libraries' special collections and archives will hire an archivist/historian to carry out an oral history project as the foundation of a Cold War technology-history archive.

■ SMSgt. Robert Altenbernd, Andersen AFB, Guam, was honored by USAF with the 2005 Air Force First Sergeant of the Year Award.



MSgt. Corey Shagg on July 6 marshals to a stop the 13th and final C-17 Globemaster III to be stationed at McGuire AFB, N.J. More than \$85 million in improvements to the base were made to get ready for the C-17s.

USAF photo by Denise Gould

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Technology and the Spy Threat

A recent Defense Department study says technological advances are increasing the threat from espionage. Classified and sensitive information is now easier than ever to access, store, and transmit, according to a report by the Defense Personnel Security Research Center, part of the Office of the Secretary of Defense.

The information revolution and "other changes in the domestic and international environment have converged to create unusually fertile ground for insider espionage," cautions the report. Advances in information storage and retrieval capabilities are "dramatically improving insiders' ability to access and steal classified and proprietary information," it adds.

Another problem is that there are literally millions of Americans with security clearances, and information is not always restricted to those with a need to know.

Database searches and "cut and paste" techniques are not a theoretical threat—the report notes that this is exactly how classified information has been stolen in the past.

- Aldrich H. Ames, a CIA employee, found information for his Soviet customers "by searching large digitized datasets," the report notes.

- Harold J. Nicholson, a CIA officer, found information "for Russian operatives by surfing ... databases that he had no legitimate need to access."

- Brian P. Regan, a retired USAF master sergeant, searched the classified intelligence database Intelink to obtain "the coded coordinates of Iraqi and Chinese missile sites."

- And in perhaps the most damaging case, Robert P. Hanssen, an FBI officer, repeatedly entered databases he had no need to view and "retrieved the identities of foreign agents whom US intelligence services had compromised." He then sold the names to his Soviet handlers.

Technology also has made it easier to distribute stolen information. The report notes that "there is virtually no limit to the amount of information that can be transferred ... by a technically competent insider with access to digitized proprietary files and the Internet."

It is "too frequently assumed that information contained within large databases and computer networks is secure," because users have security clearances—but 2.4 million people currently have access to classified information, the report notes.

Preventing damage to national security requires "the orchestrated efforts of personnel security, information security, and counterintelligence professionals," the report concludes.

Continued from p. 23

general in 1971. He returned to the service during the Korean War.

Alison was national president, then chairman of the board, of the Air Force Association and retired from

Northrop Corporation as a senior vice president.

Eurofighter Gets a No; F-16, a Yes
Greece has decided to purchase at

least 30 new F-16 fighters to help modernize its air force, abandoning an earlier plan to buy 60 Eurofighter Typhoons.

The new purchase plan, announced by Defense Minister Spiros Spiliotopoulos at a meeting with reporters, is estimated to be worth \$1.32 billion.

Greece wants Lockheed Martin to deliver the fighters in 2008 and 2009 and may later decide to purchase as many as 10 more F-16s, Spiliotopoulos said.

The country has already purchased more than 140 F-16s in three different orders.

Larger Global Hawk Is In the Works

The Air Force in July gave Northrop Grumman a \$273 million contract for four RQ-4B Global Hawk unmanned aerial vehicles.

The RQ-4B variant is larger than the earlier models of the high-altitude, long-endurance UAV that has proved to be a highly valuable intelligence-surveillance-reconnaissance platform for the war on terror.

According to the contractor, the Global Hawk B variant will have a 130-foot wingspan (15 feet more than that of the RQ-4A) and will be able to "carry multiple payloads including systems for collecting signals and electronics intelligence."

The Global Hawk has demonstrated the ability to remain on station for more than 30 hours, offering nonstop reconnaissance coverage for that period.

The contract runs through July 2008 and also provides for one launch-recovery element, support equipment, and spares.

Tallii, Meet Ali

The term "Tallii" is an error, the US





Work begins on the first of 32 E-3 AWACS that will receive a suite of new air traffic management systems and satellite communications. The upgrade, to be finished in 2010, will allow AWACS to fly the most advantageous routes around the world.

said in a surprise announcement. From now on, call it "Ali."

The major aviation facility in Iraq came to be known as Tallil Air Base only because of what best can be described as a clerical mistake more than a decade ago. US Central Command Air Forces has now directed that the base be referred to by its proper name—Ali Air Base.

How this situation came to be is "a bit of a mystery," said Lt. Gen. Walter E. Buchanan III, CENTAF commander, in a July 6 press release.

"It appears that, some time after Operation Desert Storm [in 1991], Ali base was incorrectly labeled Tallil on Department of Defense maps," Buchanan said.

The mistake stuck—among coalition forces at least.

Iraqis have always referred to this installation as Ali Base, noted Col. Dennis Diggert, former 407th Air Expeditionary Group commander at what was then Tallil and is now Ali.

The mistake came to light in January at a joint US-Iraqi ceremony marking the creation of the Iraq Air Force's 23rd Squadron at the base. "We learned then that the base had always been Ali," Buchanan said in the release. He subsequently ordered troops to refer to the base by its correct name.

Ali Air Base is located roughly halfway between Al Jaber AB, Kuwait, and Baghdad. It is the primary military airfield in southern Iraq.

Violators Keep NORAD Busy

North American Aerospace Defense Command has been kept busy this year defending the airspace over the national capital.

Seymour Johnson Graduates First Korean F-15K Crews

F-15E pilots and weapons systems officers at Seymour Johnson AFB, N.C., recently trained the initial cadre of South Korean F-15K pilots. After six months of language training at Randolph AFB, Tex., eight South Korean pilots and WSOs spent seven months at Seymour Johnson, graduating July 23.

While at the base, the South Korean officers learned the intricacies of the F-15E, which the new F-15K is derived from. The airmen then proceeded to contractor training with Boeing, to learn F-15K specifics. All told, the South Korean crews will spend 16 months in the United States before heading home to serve as F-15K instructor pilots.

The eight officers are experienced aircrew members, equivalent to US captains and majors. They were selected through a highly competitive process and represent the "future leaders" of the South Korean Air Force, according to Seymour Johnson's Maj. Joel Meyers, one of the primary training pilots.

The new F-15K pilots will transition to the fighter from South Korea's F-4 and F-16 fleets, noted Capt. David Abrahamson, one of the primary instructor WSOs.

South Korea is purchasing 40 advanced F-15Ks at a cost of \$4.3 billion as a follow-on to its retiring F-4 fleet. Deliveries begin this year and will last through 2008. (See "Aerospace World: Boeing Unveils F-15K," May, p. 22.)

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Raptor Crews Train With an Eye Toward Operations

F/A-22 training at Langley AFB, Va., is taking on an increasingly operational tone as the 1st Fighter Wing prepares to reach initial operational capability at the end of the year. The cadre of pilots and maintainers with the 27th Fighter Squadron, the first operational squadron, is small but busy—and growing fast.

The squadron is training its pilots to deploy as needed with a brand-new weapons system that is "very visible," noted Col. Jay T. Denney, 1st FW vice commander. "The last time we went through something like this was with the B-2," the Air Force's then-revolutionary stealth bomber.

As it schools pilots in the tactics they will need in wartime, the wing also realizes the Air Force "can't afford to lose any [F/A-22s]" because of their relatively small numbers, Denney said.

In the past, as the Air Force brought on "F-100s, F-15s, and F-16s, they were [crashing] them—not because they could afford to lose them, but it was a different mentality," Denney noted. Raptor pilots are expected to be exceptionally mature and steady individuals.

Every two months, four to six pilots arrive from Tyndall AFB, Fla., fresh from F/A-22 training and qualification, said Lt. Col. James Hecker, commander of the 27th FS. Some come from Langley's F-15C wing, but many do not.

The requirement is that pilots have experience flying F-15C, F-15E, or F-16 fighters—high-performance fighters with advanced radars, Hecker told *Air Force Magazine*. This creates a mix of air superiority and ground-attack expertise, Denney added.

The first Langley F/A-22 with a ground-attack capability is the 47th Raptor, the first with upgraded avionics. Plans called for it to arrive in the early fall.

The pilots are handpicked, Hecker said, and are "younger guys who could go on to [Air Force] Weapons School"—meaning they are viewed as among the top five percent of USAF pilots.

The Air Force's long-standing goal has been to have the F/A-22 operational by the end of 2005. There is no hard and fast rule about what IOC means, however—it does not represent a specific number of aircraft, pilots, or flight hours.

The Raptor reaches IOC when Gen. Ronald E. Keys, Air Combat Command chief, says so, Hecker said. IOC means ACC is "confident" that six to eight aircraft are ready to deploy and go to war if called to do so.

On the maintenance side, Langley is well-prepared. The base has a good supply of F/A-22 maintainers who are largely learning on the job. Spare parts inventories—initially a sore spot—have grown.

CMSgt. Larry Martin, maintenance superintendent for the 27th, said maintenance teams measured their performance by making sure the Raptors were available to meet the daily training schedule.

Langley also has an "LO Barn," explained Martin, where all standard low-observable maintenance can be performed.

Martin added, however, that he was "kind of worried" about the supply of avionics experts he would have on hand as the number of F/A-22s continues to increase throughout the year.

For the immediate future, the wing expects the F/A-22 will be handled like the B-2 and F-117 for deployments, Denney said. The aircraft and their crews will not belong to a particular Air and Space Expeditionary Force, but instead will deploy where and when they are needed.

Once multimission Raptors are available (existing aircraft are being retrofitted with the ground-attack software), most training sorties will develop both air-to-air and air-to-ground skills. This includes escort missions and close air support. To further prepare for IOC, the squadron plans to deploy in October to Hill AFB, Utah.

Airmen will have to get the fighters ready and deploy to Hill, a "non-Raptor base," on short notice. They will be gone for two weeks, and Hill was chosen so that "nobody can cheat," Hecker said. "They can't walk across the street to ... grab the tool they forgot."

The Raptor teams will conduct "sustained operations," which will "probably generate a bunch of taskers," he said.

The aircraft deploying to Hill are the ones "that go to war, so we want to be sure they're good and ready," Hecker said.

In the latest incident this summer, NORAD scrambled two alert fighters from Andrews AFB, Md., on June 29 when a Beech King Air 350 turboprop aircraft violated Washington, D.C.'s, restricted Air Defense Identification Zone.

The F-16s "intercepted the aircraft within the restricted airspace," a NORAD release stated, and escorted it to a regional airport in Winchester, Va.

The incident came less than two months after a Cessna aircraft came within minutes of being shot down over the capital on May 11. That aircraft's pilot did not respond to repeated demands to divert. (See "Aerospace World: F-16s Intercept Wayward Cessna," July, p. 17.)

In the interim, a new system was activated, designed to reduce accidental flights into restricted airspace. On May 21, NORAD's Visual Warning System became operational. It uses low-intensity laser beams to warn pilots that they are in restricted airspace.

Alternating red and green lights are "designed to prompt immediate action by the pilot to contact air traffic control and exit the restricted airspace," stated NORAD.

Despite fielding the Visual Warning System, NORAD still needed to scramble air defense fighters for the June incursion. The command "takes every reported incident seriously," the release noted.

Geran Up for USAF Leadership

The White House on July 29 announced it had chosen Preston M. "Pete" Geren as Acting Secretary of the Air Force. Geren would fill the post vacant since Roche's departure, and which was subsequently filled temporarily by former Undersecretary Peter B. Teets and Assistant Secretary Michael L. Dominguez.

Since September 2001, Geren has served as special assistant to Defense Secretary Donald H. Rumsfeld. Geren's post with Rumsfeld was Senate-confirmed, meaning no Senate action was needed to shift him, temporarily, to be the Acting Secretary of the Air Force. The appointment complied with the Federal Vacancies Reform Act, USAF officials said, and took effect immediately.

Geren's duties for Rumsfeld have included special projects, legislative affairs, and interagency liaison work.

A former Congressman, Geren represented the 12th district in Texas from 1989 to 1997, serving on the Armed Forces and Science and Technology Committees, among others. He holds

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Photos by Clive Bennett



test and evaluation, or FOT&E, with the Raptor, evaluating it in a number of roles and under a variety of conditions.

US Out of Uzbekistan

Uzbekistan has decided to eject the US from its bases, costing the US some basing access in Central Asia, but neighboring Kyrgyzstan and Tajikistan, after threatening similar evictions, have both pledged that the US can continue to operate from their soil.

On July 29, Uzbekistan notified the US that it must remove its aircraft and personnel from bases in that country within 180 days. The chief US operating station in Uzbekistan, Karshi-Khanabad Air Base—referred to by US personnel as K2—is located north of central Afghanistan and is used to stage resupply operations around both countries. At the

a law degree from the University of Texas.

Sega Confirmed as Undersecretary

Ronald M. Sega was confirmed as the new undersecretary of the Air Force in late July. The former director of defense research and engineering for the Pentagon, Sega is also a major general in the Air Force Reserve. In that capacity, he is the Reserve assistant to the Chairman of the Joint Chiefs of Staff.

Sega also becomes the chief acquisition executive for the Air Force, as well as the Defense Department's executive agent for space. In the latter post, Sega will oversee programs and funding for Pentagon space programs across the armed forces.

Sega is a former astronaut, having flown as a mission specialist on two space shuttle flights.

Supersonic F/A-22 Drops JDAM

An F/A-22 Raptor successfully released a 1,000-pound Joint Direct Attack Munition during a July 14 test over the Mojave Desert, the Air Force reported. The test is a significant milestone, establishing that the first version of the fighter to enter operational service will be able to perform high-speed ground-attack, as well as air supremacy missions.

The F/A-22 design was modified in the early 1990s to accommodate four of the 1,000-pound, satellite guided JDAMs in its internal weapons bay. Since then, concepts of operations for the aircraft have it performing high-speed, stealthy attacks against heavily defended targets, a supersonic version of the mission now performed by the



A B-1B (top) from Dyess AFB, Tex., and a B-52H (above) from Barksdale AFB, La., taxi on the apron of RAF Fairford, Britain, in July. The two were on display at the 2005 Royal International Air Tattoo held in July. Ten types of USAF aircraft participated, including A-10s, B-52s, KC-135s, F-15s, and F-16s. A B-1B, B-52, and F-16 took part in the flying display.

F-117A stealth attack aircraft.

The JDAM is considered a "near-precision" weapon, able to score hits within 10 feet of the intended target and through any kind of weather. Release at supersonic speeds also will give the JDAM greater glide range, expanding the distance at which the F/A-22 can engage a ground target.

The first F/A-22 squadron is expected to be declared operational at Langley AFB, Va., in December. Throughout the summer, the Air Force was conducting follow-on operational

time of the notification, more than 800 troops were stationed at the facility.

Uzbekistan was the first central Asian nation to grant the US basing rights after the 9/11 terrorist attacks. However, in early July, a regional security body including China, Russia, Uzbekistan, Kyrgyzstan, and two other Central Asian nations declared that the situation in Afghanistan has "stabilized" and that the US should set a date for its withdrawal from their territories.

Newly elected Kyrgyzstan President Kurmanek Bakiyev said in early

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PROMOTIONS: To General: John D.W. **Corley**. To Lieutenant General: David A. **Deptula**, Donald J. **Hoffman**, John L. **Hudson**. To Major General: Gregory L. **Trebon**.

NOMINATIONS: To be General: William T. **Hobbins**, Duncan J. **McNabb**. To be Lieutenant General: Frank G. **Klotz**.

CHANGES: Brig. Gen. (sel.) Andrew E. **Busch**, from Dep. Dir., Log., AFMC, Wright-Patterson AFB, Ohio, to Cmdr., 402nd Maintenance Wg., Warner Robins ALC, AFMC, Robins AFB, Ga. ... Brig. Gen. (sel.) Arthur B. **Cameron III**, from Assoc. Dir., Resources, DCS, Instl. & Log., Pentagon, to Cmdr., 309th Maintenance Wg., Ogden ALC, AFMC, Hill AFB, Utah ... Gen. Bruce A. **Carlson**, from Cmdr., 8th AF, ACC, Barksdale AFB, La., to Cmdr., AFMC, Wright-Patterson AFB, Ohio ... Maj. Gen. John J. **Catton Jr.**, from Dir., Operational Plans & Jt. Force Dev., Jt. Staff, Pentagon, to Dir., Rqmts., ACC, Langley AFB, Va. ... Lt. Gen. Kevin P. **Chilton**, from Spec. Asst. to Vice C/S, USAF, Pentagon, to Cmdr., 8th AF, ACC, Barksdale AFB, La. ... Gen. John D.W. **Corley**, from Principal Dep. Asst. SECAF (Acq.), Pentagon, to Vice C/S, USAF, Pentagon ... Maj. Gen. Scott S. **Custer**, from Asst. DCS, Air & Space Ops., USAF, Pentagon, to Vice Dir., Jt. Staff, Pentagon ... Lt. Gen. David A. **Deptula**, from Dir., Air & Space Ops., PACAF, Hickam AFB, Hawaii, to Vice Cmdr., PACAF, Hickam AFB, Hawaii ... Lt. Gen. Donald J. **Hoffman**, from Dir., Rqmts., ACC, Langley AFB, Va., to Mil. Dep., Asst. SECAF (Acq.), Pentagon ... Lt. Gen. John L. **Hudson**, from Asst. Dep. Under SECAF, Intl. Affairs, Pentagon, to Cmdr., ASC, AFMC, Wright-Patterson AFB, Ohio ... Brig. Gen. Stephen L. **Lanning**, from C/S, DISA, Arlington, Va., to Spec. Asst. to Cmdr., AFSPC, Peterson AFB, Colo. ... Brig. Gen. Erwin F. **Lessel III**, from Dep. Dir., P&P, AFMC, Wright-Patterson AFB, Ohio, to Dir., P&P, AFMC, Wright-Patterson AFB, Ohio ... Gen. (sel.) Duncan J. **McNabb**, from Dir., Log., Jt. Staff, Pentagon, to Cmdr., AMC, Scott AFB, Ill. ... Lt. Gen. Victor E. **Renuart Jr.**, from Vice Cmdr., PACAF, Hickam AFB, Hawaii, to Dir., Strat. Plans & Policy, Jt. Staff, Washington, D.C. ... Gen. Norton A. **Schwartz** from Dir., Jt. Staff, Pentagon, to Cmdr., TRANSCOM, Scott AFB, Ill. ... Maj. Gen. Norman R. **Seip**, from Spec. Asst., DCS, Air & Space Ops., USAF, Pentagon, to Asst. DCS, Air & Space Ops., USAF, Pentagon.

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July that the time had come to "begin discussing the necessity of [the] US military forces' presence" in his country. Manas Air Base in Kyrgyzstan is the Air Force's primary strategic airlift hub for support of operations in and around Afghanistan.

Uzbekistan's intention to invite the US to leave became known soon after a July 5 meeting of Asian nations.

However, on July 26, Kyrgyzstan Defense Minister Ismail Isakov, at a news conference with visiting US Defense Secretary Donald H. Rumsfeld, said, "The air base at Manas will stay as long as the situation in Afghanistan requires."

On a tour of the region, Rumsfeld also met with Tajikistan's President, Emomali Rahmonov, and foreign minister, Talbak Nazarov, who pledged their continued support to provide overflight privileges and ground facility access.

"We intend to continue our active cooperation with the United States and other anti-terrorist coalitions," Nazarov said.

Rumsfeld, in remarks during the trip, said the bases in Central Asia are vital not only to continued operations in Afghanistan but also to combat terrorist organizations like al Qaeda and to stem the narcotics trade from Afghan poppy production. Published reports suggested that Rumsfeld carried with him promises of greater financial aid to countries allowing US operating privileges.

3,000 NCOs Face Retraining

The Air Force announced in August that more than 3,000 staff, technical, and master sergeants were notified that they were "vulnerable" for involuntary retraining. Notification was announced through the 2006 Noncommissioned Officer Retraining Program.

The service needs noncommissioned officers in oversupplied career fields to volunteer for retraining into Air Force Specialty Codes (AFSCs) that are short of personnel. These airmen are being asked to select AFSCs they are interested in moving to by Oct. 14, or a new career field may be picked for them.

Obituary

Ted E. Lines, an Army Air Forces pilot who became a double ace over Europe during World War II, died June 13 in Gilbert, Ariz. During the war, he was assigned to the 335th Fighter Squadron, 4th Fighter Group, part of Eighth Air Force.

Lines was a P-51D Mustang pilot. In 1944, he accumulated 10 confirmed kills of Nazi aircraft over France and Germany.

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Action in Congress

By Tom Philpott, Contributing Editor

Senate Wants Guard, Reserve Tricare; More on Death Benefits; Fix the Ex-Spouse Law?

Senate Backs Full Reserve Tricare

Any drilling National Guard or Reserve member would be eligible to enroll in Tricare Reserve Select, a premium-based version of Tricare Standard, under an amendment to the Fiscal 2006 defense authorization bill approved by the Senate in late July. The measure passed on a voice vote.

Sen. Lindsey Graham (R-S.C.), chairman of the armed services' military personnel subcommittee and sponsor of the legislation, warned that he was prepared to fight to enhance reserve health benefits during final negotiations on the defense bill in a House-Senate conference committee.

The House Armed Services Committee in May approved a measure similar to the one passed by the Senate, but the committee chairman, Rep. Duncan Hunter (R-Calif.), pulled it from the defense bill before sending the bill to the House floor. Hunter used his prerogative as chairman to strike the provision, which he decided would violate House budget rules by raising mandatory spending without providing an offsetting reduction.

The Senate legislation has backing on both sides of the aisle. Sen. John Warner (R-Va.), chairman of the Senate Armed Services Committee, Sen. Hillary Clinton (D-N.Y.), and Sen. Carl Levin (D-Mich.) signed on as co-sponsors. And Warner promised to press House colleagues.

The measure would provide full-time military health insurance for drilling reservists who would pay monthly premiums of \$75 for member-only coverage and \$233 for family coverage, plus Tricare Standard's usual deductibles and co-payments.

The estimated cost to taxpayers is \$3.85 billion over the first five years, rising to roughly \$1 billion annually.

Congress voted last year to limit Tricare Reserve Select to Guard and Reserve members who are deactivated from post-9/11 deployments after continuous active service of 90 days or longer. They are eligible for a year's coverage for every 90 days served. They also must agree to remain in the Selected Reserve for the period of coverage.

AP photo/Khalid Mohammed



Levin: retroactive death benefits unfair.

TRS Pros and Cons

House Republican leaders and the Bush Administration oppose expanding TRS to all reservists because of the cost and worry that many civilian employers will take advantage of the government's generosity to tighten their own health benefits for employees in the reserve components.

Hunter complained it would be impossible to "keep people from gaming the system and piling enormous costs onto the federal government."

However, proponents of TRS expansion point to the role Guard and Reserve members play in the war on terrorism, with tens of thousands fighting side by side with active duty members in Iraq and Afghanistan. They estimate that 18 percent of drilling reservists, when in a drill status, lack health insurance.

Graham said they "are the only part-time federal employees who are currently ineligible for federal government full-time health care benefits."

He maintains that full-time medical benefits will help Guard and Reserve recruiting and retention.

"You cannot help these families enough, and \$3.8 billion over five years is the least we can do," Graham said. He added, "What does it cost to have

the Guard and Reserve not ready and not fit to go to the fight? What does it cost to have about 20 percent ... unable to go to the fight because of health care problems? This is the best use of the money we could possibly spend."

Differences Over Death Benefits

The Senate on July 21 approved by unanimous consent a measure that would broaden eligibility for a retroactive increase in death benefits. Senators want to change the current law to include surviving spouses of all service members who died on active duty since Oct. 7, 2001, the start of combat operations in Afghanistan.

The retroactive payment—an increase in the military death gratuity from \$12,400 to \$100,000—now applies only for service members who died in war zones or in training for combat or from combat-related conditions. It was included as a temporary measure in the Fiscal 2005 emergency wartime supplemental. (See "Action in Congress: Death Benefits," June, p. 27.)

Both the Senate and the House want to make the payment increase permanent in the Fiscal 2006 defense bill. However, the House voted, in its version of the bill, to sustain the existing requirement that the death be in combat or combat-related.

The Joint Chiefs had opposed the two-tiered death benefit during testimony in February, but, at that time, Congress made it law in the 2005 supplemental.

During recent debate on the Senate floor, Sen. Carl Levin (R-Mich.) and Sen. John Kerry (D-Mass.) cited the circumstances of Vivianne Wersel, widow of Marine Corps Lt. Col. Richard M. Wersel Jr., who died last winter a week after returning from a second tour in Iraq, from a heart attack while lifting weights in the base gymnasium.

"The fact that he died a week after returning from a second, stressful tour in Iraq should not cause his surviving spouse to receive such a significantly smaller death gratuity," said Levin.

New Scrutiny of Ex-Spouse Law?

Though his comments are unlikely to produce movement on Capitol Hill



April 2004

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anytime soon, USAF Gen. Richard B. Myers, Chairman of the Joint Chiefs of Staff, said during a "town hall" meeting at the Pentagon in June that it's time to take a new look at the Uniformed Services Former Spouses' Protection Act.

Myers was responding to an Army officer's complaint that the 1982 law, which allows state divorce courts to divide military retirement as jointly earned marital property, was forcing her to retire.

Lt. Col. Patricia Larrabee told Myers and Defense Secretary Donald H. Rumsfeld that a court order directs her to pay her ex-husband a share of her retirement when she reaches 20 years of service next year, whether or not she retires. It will have the effect of forcing her out, Larrabee said.

"I can't afford to write a check to my ex-husband every month out of my military pay," she told Rumsfeld and Myers. She added that her ex-husband "makes thousands and thousands of dollars more than I do."

Rumsfeld said he had "never heard" of the USFSPA. Myers had, however. He said the law had been written in an earlier era when military spouses were almost always women and "probably did not work" outside the home.

"It needs to be looked at," Myers said.

Is It a "Third Rail?"

The Defense Department has already made one run at Congress on this issue. The 2006 defense budget proposal included a request that Congress amend the USFSPA to prohibit court-ordered payments based on the "imputation of retired pay."

However, both the House and Senate Armed Services Committees dropped the proposed change from their versions of the authorization bill.

One Capitol Hill staffer described touching USFSPA as the infamous "third rail" of military personnel politics. Like the difficult issue of trying to change Social Security, he suggested, proposing to change the ex-spouse law brings an avalanche of bitter, emotional claims and counterclaims that smart politicians avoid.

Aiming for Financial Protection

The House has passed the Military Personnel Financial Services Protection Act (HR 458) to shield service personnel and their families from questionable financial products and abusive sales practices, particularly on military installations.

The bill, approved 405-2 on June 28, is similar to a bill the House passed last

year but that failed to gain Senate approval. A companion Senate bill (S 418) this year is before the Committee on Banking, Housing, and Urban Affairs, but it had only seven co-sponsors by late July.

The House measure would clarify regulatory oversight of financial products sold on base and would establish a Defense Department registry of banned agents to be made available to federal and state regulators.

Rep. Geoff Davis (R-Ky.) said he introduced the bill to address "a long history" of certain companies and their agents using abusive sales tactics to sell financial products of questionable value to service members.

The Pentagon, he said, has issued directives intended to prevent such abuses, but the sale of harmful insurance and investment products to service members continues for lack of effective communication between government agencies and confusion over regulatory jurisdiction.

Davis said that when he was a young Army officer, he was so impressed by an "infomercial-like presentation" on post that he bought into an investment plan involving insurance and mutual funds.

"It was not until I got out of the Army and into the business world that I discovered how uncompetitive these products were compared with other opportunities. ... I knew many soldiers who fell victim to such 'contractual plans.' ... I did not make the decision because I was a financial expert, because I was not; I made the decision because a retired service member, whom I respected, working as a salesman, presented this, and he was using referrals from other service members whom he convinced it was a good thing."

The bill would make clear that state insurance regulators have jurisdiction over insurance sales on military bases. It would ban the sale of contractual mutual funds and require that military personnel be informed of government life insurance programs and the military Thrift Savings Plan as part of any pitch to buy private life insurance. It would allow base commanders to ban unscrupulous agents and forward a list of banned agents to DOD where lists would be compiled and sent to state insurance departments for further investigation.

Targeting High-Cost Loans

In another financial protection effort, Rep. Sam Graves (R-Mo.) also is pressing colleagues to curb abusive high-interest loan offers to cash-strapped service members and families.

Graves introduced the Servicemembers Anti-Predatory Lending Protection Act, which would amend the Servicemembers Civil Relief Act to protect families from costly consumer credit offerings. The bill would:

- Prohibit creditors from imposing an annual percentage rate greater than 36 percent on extended consumer credit.

- Establish mandatory loan disclosure information, including a statement of annual percentage rate applicable to the extension of credit, and a clear description of the payment obligations.

- Prohibit creditors from automatically renewing, repaying, refinancing, or consolidating consumer credit using proceeds of other credit extended to a service member or military dependent. It would mandate executing new loan documentation, signed by the service member and providing the mandatory loan disclosures.

The bill also would set specific criminal penalties for violations of its provisions.

Delay on Authorization Bill

Senate Majority Leader Bill Frist (R-Tenn.) failed July 26 to gain the 60 votes required to approve his cloture motion and stop further debate and votes on amendments to the 2006 defense authorization bill. That was a temporary victory for surviving military spouses and disabled retirees who have a stake in several proposals still to be offered.

Frist succeeded, however, in delaying further consideration of the bill and the numerous amendments until September.

Under consideration is one amendment that would move up the effective date of a 30-year paid-up rule for Survivor Benefit Plan premiums and end reductions in SBP payments tied to receipt of VA survivor benefits. Sen. Bill Nelson (D-Fla.) introduced the legislation, but he surprised proponents by voting with Frist to end further consideration of the defense bill before his measure could be voted on.

Sen. John Warner (R-Va.), who supported Frist's cloture motion, said critics should know that Nelson, for example, was invited to offer his amendment days earlier, long before the cloture motion came into play, and he declined.

Another delayed amendment, from Sen. Harry Reid (D-Nev.), would provide full, immediate concurrent receipt of both military retirement and VA disability compensation to 28,000 military retirees rated as "unemployable" by the VA. ■



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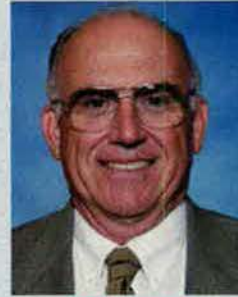
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The Ground Warri



In this exercise, A1C Michael Warner, combat controller, provides cover while the rest of his combat control team prepares to check wind direction and velocity.

Photo by SSGT Scott P. Stewart

ors of Airpower

Operation Anaconda, the March 2002 battle against Taliban and al Qaeda fighters in the mountains of Afghanistan, profoundly changed the Air Force's relationship with the Army. The battle revealed a deep operational rift between senior air and land force planners, a rift that both services have subsequently worked hard to repair. Anaconda also served to highlight the importance of airmen who work in far forward areas, where little support is available.

In fact, some officials point to the March 4, 2002, struggle for a place called Takur Gar as the moment in which these so-called "battlefield airmen" gained permanent prominence, though that specific term did not then exist.

Today, the Air Force is taking a number of steps aimed at making its group of battlefield airmen a more effective force. A new, centralized training program is in the works; the community is growing; and the service is working closely with the Army to maximize capabilities.

Seven USAF specialties are now officially part of the battlefield airman community. These are: combat controllers, special tactics officers, tactical air control party personnel, pararescue jumpers (PJs), combat rescue officers, conventional battlefield weathermen, and special operations forces weathermen.

Two battlefield airmen died at Takur Gar. They were awarded Air Force Crosses for their efforts to save their stranded partners.

TSgt. John A. Chapman, a combat controller, was assigned to the initial assault team whose helicopter took a direct hit from a rocket-propelled grenade. In the ensuing confusion, a Navy SEAL, Petty Officer 1st Class Neil

C. Roberts, fell from the helicopter, and the team returned to recover him. Upon landing, the rescue crew members immediately found themselves surrounded by well-armed enemies occupying the high ground around the site. Chapman died charging a dug-in enemy machine gun, trying to buy his companions enough time to reach safety.

Later, a reinforcing helicopter arrived at the scene. It also took heavy fire, and four Army Rangers soon were dead. Aboard that helicopter was SrA. Jason D. Cunningham, a pararescue jumper, who immediately began caring for the wounded, repeatedly exposing himself to enemy fire in order to move injured teammates to safety. Cunningham received a mortal wound while carrying an injured crew member at an elevation of 10,000 feet.

A handful of other battlefield airmen were also present for the Takur Gar firefight, and they contributed greatly to the recovery of trapped and wounded troops and the eventual defeat of the enemy, all under the most difficult conditions.

The battlefield airmen who earned Silver Stars for their contributions on Takur Gar included an enlisted terminal attack controller, a combat controller, and a pararescueman. They fought off the enemy, called in air support (including the first-ever strafing mission by an F-15E), and helped coordinate the exfiltration after the 17-hour battle.

Saving the Day

This handful of battlefield airmen "saved the day" at Takur Gar, one official said, and the Air Force quickly realized that these skills would be ever more important in modern war.

In Operation Iraqi Freedom in 2003,

the battlefield airmen exerted an influence disproportionate to their numbers. Officials say the battlefield airmen and special operations forces from all services were able to control large sections of enemy territory with limited numbers.

In June 2003, Gen. John P. Jumper, Air Force Chief of Staff, ordered creation of a "ground warrior team" to "identify synergies and processes by sharing information on ... acquisition, sustainment, and modernization programs" for the gear battlefield airmen would need in the future. Much of the equipment these warriors used had been obtained in an ad hoc manner—or borrowed from the Army.

In February 2004, then-Air Force Secretary James G. Roche brought the concept of battlefield airmen to the public, when he called their performance in Iraq "a powerful lesson that won't be forgotten."

But the various specialties had traditionally trained separately and had varying levels of preparation when it came time to deploy. Roche called for them to be consolidated "under a common organizational and training structure [to] strengthen the combat power they bring to the field."

Closer coordination with the Army also was needed. "We're going to exercise our air and ground together in ways that assure that our Army leaders understand ... what air and space power can do for them," Jumper said at the Air Force Association's Air Warfare Symposium in Orlando, Fla., in February 2004.

USAF's seven battlefield airman specialties are spelled out in Air Force Policy Directive 10-35, published this February. They "primarily operate as surface combatants removed from traditional air base support, logistics, and sortie gen-



Battlefield airmen comprise less than one percent of the Total Force, but frequently generate major effects. Combat controllers such as A1C Dale LaFleur (foreground) secure landing zones in hostile territory and direct precision airpower from the ground.

eration efforts,” said Maj. Gen. Teresa Marné Peterson, director of operations and training on the Air Staff.

According to the policy directive, these are the airmen who “directly assist, control, enable, and/or execute operational air and space power functions in the forward battlespace independent of an established air base or its perimeter defenses.”

One Percent Solution

All battlefield airman specialties are low-density, high-demand fields and have extremely high operating tempos. They are equipped like land forces, including M-4 machine guns to fight on the ground, and they may be subjected to “the most austere conditions for extended periods.” There are only about 3,200 such airmen, less than one percent of the force.

Because of the importance, prestige, and exclusivity of the job, recruiting is “generally successful,” said officials at Air Combat Command, because “people are interested in these disciplines.”

Battlefield airmen, most of whom are assigned to ACC or Air Force Special Operations Command, have always been a small, elite force. Officials expect each specialty to grow in size in the coming years.

A variety of means will be used, said Peterson, who is leading the battlefield airman improvement effort. There will be “an increased recruitment effort,” including enlistment and promotion incentives, she told *Air Force Magazine*.

The tactical air control party (TACP)

community will see the largest increase; plans call for adding 800 members over a period of years. Battlefield weather teams will grow by 150 airmen; combat controllers by 122; and PJs by 101, according to projections.

The policy directive notes that battlefield airmen provide a wide range of specialized capabilities. These airmen perform reconnaissance and surveillance missions, conduct airfield surveys, perform battle damage assessment, mark assault zones, conduct information operations, perform field trauma care, and offer terminal attack control.

They break down this way:

- **Combat Rescue Officers.** The CROs, commissioned search-and-rescue experts, are severely understaffed. In June, only 66 CROs were assigned, though 166 are authorized.

- **Pararescue Jumpers.** Enlisted PJs also suffer from a staffing shortfall, largely attributable to very high washout rates among candidates. Of 642 authorized PJs, only 415 are in place.

- **Special Tactics Officers.** There are only 67 of these combat control officers, by design the smallest battlefield airman specialty. The field is currently at full strength.

- **Combat Controllers.** There are 441 authorizations for enlisted airmen who secure assault zones in hostile territory and control air traffic. Only 376 of the positions are filled.

- **Battlefield and Special Operations Weather Teams.** Enlisted weather experts who operate in enemy territory are nearly at full strength, with 840 of the 843 authorized positions filled.

- **Battlefield and Special Operations Weather Officers.** This small specialty is at full strength, with all 80 positions assigned.

- **Tactical Air Control Party personnel.** The TACPs are the largest battlefield airman group. Airmen who control air strikes against targets near friendly forces have 1,415 authorizations, with 1,318 of them filled.

Last fall, ACC created the Joint Air-Ground Operations Office at Langley AFB, Va., to serve as the focal point for all Air Force efforts in support of



The Air Force's combat weathermen will receive better tactical training to enhance their effectiveness in hostile environments. Here, TSgt. Kurt Rohl collects weather data to pass to Army helicopter pilots in Iraq.

ALOs and Expeditionary Combat Airmen

In addition to the battlefield airmen, the Air Force also counts on "expeditionary combat airmen." Gen. John P. Jumper, USAF Chief of Staff, noted last October that these "other airmen on the ground" also require battlefield airman-like training. They will receive additional tactical training for their missions, which are typically performed outside of base gates, in war zones.

ECAs include air liaison officers (ALOs), combat convoy drivers, deployed Office of Special Investigations agents, and security forces routinely patrolling outside base fences. The Air Staff is "assessing what training gaps there are for the ... other deployed forces who require additional combat skills training to accomplish their assigned mission while deployed," said Maj. Gen. Teresa Marné Peterson, Air Force director of operations and training.

These airmen, who are differentiated from battlefield airmen in that they typically do not go as far into the field or for as long, will receive their own tailored training courses before heading to the war zone. Some of this training, such as for combat convoy personnel, is already in place and has been highly successful.

Air liaison officers are usually pilots who come out of the cockpit for two years to serve as terminal attack controllers for ground units—very similar to enlisted tactical air control party personnel. ALOs are not considered battlefield airmen, however, because they only perform this mission temporarily before returning to the cockpit. Also, they typically do not go as far forward into the field as TACPs, a planning official explained.

Brig. Gen. (sel.) Michael A. Longoria, director of the Joint Air-Ground Operations Office at Langley AFB, Va., said that ALOs must be carefully balanced. The increasing number of Army Stryker brigade combat teams is driving an increased need for ALOs, he said, but the Air Force cannot "drain the rated community" to provide them.

Extending the typical ALO tour beyond two years isn't really an option either, he said, because most are young captains that the Air Force needs as "full up rounds" as soon as they return to the cockpit. Pilots serving three-year staff assignments can be treated differently, Longoria told *Air Force Magazine*, because they are typically majors or lieutenant colonels who have already been flying for a decade.

Overall, Longoria said, ALOs have been "run right" since the 9/11 terror attacks. "There's a new kind of ALO out there," he said, one who has served well, bridged the gap between land and air forces, and provided "an important leadership core" for the Air Force to build on in the future.

ground forces. Past operations showed that USAF had "serious deficiencies in this air-ground domain that we can and must fix," noted Brig. Gen. (sel.) Michael A. Longoria, JAGO office chief. The office's two branches—a Battlefield Airmen Division and a Close Air Support Division—work closely with counterpart Army offices to improve operations where air warfare and land combat come together.

Baseline Skill Set

One area where improvement was clearly needed was in establishing a baseline skill set for all battlefield airmen. To that end, USAF is in the process of establishing a Common Battlefield Airman Training course, to be run by Air Education and Training Command. CBAT will serve as a starting point for all battlefield airmen training, smoothing out some inefficiencies—and deficiencies—in the old, stovepiped training set-up. CBAT will follow basic training and teach operational teamwork, weapons, and ground navigation skills.

Improving baseline training was most important for combat weathermen. The new training will be "additive," Longo-

ria said, to enhance their ability in the field.

Another airman said that, in the past, combat weathermen were often "thrown into the fire" without proper preparation and that they needed to be trained as "full up killers" if they were going to continue

to be used in forward areas.

However, USAF officials know that the service must take care not to damage proven battlefield airman training regimes "developed though hard experience," Longoria said.

After CBAT, battlefield airmen will progress to their individual specialty training, which is extensive. Schedules must be coordinated with "specialty schools" frequently run by other services. Combat controllers, for example, must go through air traffic control school, Army airborne training, survival school, and combat dive training—all before a first duty assignment.

USAF is picking up more and more of the training responsibility. "The Air Force is standing up its own Combat Dive School to handle the increased requirements," said Peterson. Also in the works is a battlefield airman-focused survival, evasion, resistance, and escape (SERE) course, to increase survival skills in the ground combat environment.

The PJ course, in particular, is "very tough," Longoria noted. About 60 percent of PJ candidates wash out; that is actually a good thing, because the washout rate used to be 90 percent. The improvement has come by spreading the pain of the demanding standards over the duration of the program—instead of having nearly all candidates immediately fail the water trials.

High Standards

There is now an emphasis on coaching PJ candidates to get through the program, something that can be done without



Air Force security forces (pictured), convoy drivers, and air liaison officers are expeditionary combat airmen. They too will receive additional training. Here, (l-r) SSgts. Daniel Harris, Paul Davignon, and Ross List undergo urban warfare training.

USAF photo by Ann Jeffrey Hall



A pararescue jumper with the 410th Air Expeditionary Wing jumps from a C-130 into Afghanistan. High standards for each battlefield airman make it difficult to enlarge the specialty.

sacrificing quality “The standards are the standards,” said AFSOC chief Lt. Gen. Michael W. Wooley. “We have not lowered anything” to increase staffing, he said in an interview. (See “The Air Commandos,” March, p. 32.)

Peterson added that attrition will be reduced by giving candidates more time to “meet the arduous physical and mental challenges associated” with the training.

The Air Force is also increasing its practical cooperation with the Army. Prominent Air Force officers addressed the issue of tactical air control in a 2003 article in the Army’s *Field Artillery Journal*. USAF must “make certain TACPs have the same level of agility and survivability that their Army counterparts have,” wrote Maj. Gen. David A. Deptula and Col. Sigfred J. Dahl.

This requires them to have the same equipment and vehicles as soldiers with the Army’s new Stryker brigade combat teams (SBCTs). “That means our TACPs need Stryker vehicles,” wrote Deptula (who ran the combined air operations center during the early days of Operation Enduring Freedom) and Dahl (who has twice served as an air liaison officer with the Army).

This vision became reality in June, when TACPs and battlefield weathermen at Eielson AFB, Alaska, became the first airmen with Strykers, which fall somewhere between Humvees and

Bradley Fighting Vehicles in terms of speed, size, and armor. Specially equipped Strykers will be staffed by joint USAF-Army teams, explained Col. Ronald L. Watkins, chief of the JAGO Battlefield Airmen Division.

The vehicles themselves are Army property, with the specialized equipment being provided by the Air Force. Watkins said that up to 35 Strykers will eventually be outfitted so that joint terminal attack controllers (JTACs) and battlefield weathermen can accompany

the SBCTs—with Army drivers and fire support personnel on board.

Up to Speed

Deptula and Dahl also argued for clear delineation between highly trained joint terminal attack controllers, which for the Air Force include TACPs and air liaison officers, and more generic fire support personnel, such as the Army’s new joint fires observers (JFOs). “Any terminal attack controller must have a level of training and currency equal to that of a TACP,” they wrote. “This is not an issue of merely filling out and reading a nine-line CAS briefing form. It takes advanced situational awareness and weapons systems knowledge.”

The Army’s transformation into a more agile force means that there will be a greater number of independent units, each with less “organic” firepower. As the federally funded think tank RAND noted in a recent report, a “newfound Army confidence in the accuracy and responsiveness of air-delivered fires will result in increased Army requests” for air support and interdiction.

There are limits to how large the JTAC community can become, RAND noted. Constraints include a “shortage of qualified candidates, a demanding job that takes years to master, a shortage of training facilities, ... and heavy demands on strike aircraft that make it difficult for them to generate the necessary training sorties” needed to enlarge the JTAC force.

The Air Force will therefore work with the Army to allow its joint fires observers



Common Battlefield Airman Training will ensure that members of all seven specialties have the tactical skills they need to survive austere environments. Here, a PJ and a combat rescue officer train for a rescue.



For battlefield airmen such as these PJs in Baghdad, it is critical to have the right gear. The Air Force is working to ensure all battlefield airmen get lighter, more effective equipment.

to handle less dangerous requests, while the more difficult air support missions will still be handled by JTACs.

JFOs will be trained—partially by the Air Force—to “provide timely info,” said the JAGO’s Watkins. Missions would include a joint fires observer with “eyes on target,” relaying targeting information to a certified JTAC, who would coordinate the use of a strike aircraft. Working together, the JFO could then lose the target. Watkins said.

Another JFO mission could be to call in area attacks against targets when friendly and enemy forces are clearly separated.

But the most risky calls for fire, in close quarters, would be reserved for JTACs.

The cooperative relationship works for the Air Force, Watkins said, because otherwise the proliferating Stryker brigade combat teams could create a demand for an “unaffordable and unsustainable number of JTACs.”

Longoria noted that the Army wants to train up to 3,000 new JFOs, a number that will dwarf the Air Force’s TACP community.

Iraq and Afghanistan “lessons learned” studies also identified areas where battlefield airman equipment needed to be improved. A Battlefield Airman Operations Kit is being developed with the stated goal of improving capability while cutting in half the weight that must be carried into battle. The kit includes a laptop so operators can link directly to distant planners and receive updates.

There was a wide range of equipment problems to resolve. Clothing, rifles, body armor, eyeglasses, and helmets were among the gear the Air Force took a close look at. For example, in the past, TACPs and battlefield weathermen borrowed their mission equipment—used—from the Army. Air Force planners decided they needed to be supplied in-house with equipment they would own from assignment to assignment, and all are now Air Force-equipped.

Rugged Is Best

“Equipment is positively critical,” say JAGO officials. “Rugged, reliable, and capable equipment are the tools we use to plan, target, communicate, and execute battlefield airman missions.” For these airmen, “the human is the platform,” noted Col. Tracey Goetz, AFSOC requirements director.

Though they operate on the ground, battlefield airmen make full use of aircraft, both manned and unmanned. In a recent article, AFSOC commander Wooley observed that combat controllers are using unmanned aerial vehicles as light as two pounds to increase their situational awareness. They are using these UAVs to call in “air strikes on terrorist concentrations along the SOF teams’ route of travel far enough in advance to remove the threat before a ground firefight occurs,” he wrote in *Air and Space Power Journal*.

The JAGO office, meanwhile, is keeping a close eye on manned aircraft priorities and acting as an advocate for

close air support capabilities. Longoria said he continues to hear untrue rumors that the Air Force wants to abandon the CAS mission and the A-10. “No, we’re not getting rid of the A-10,” he said. “This is our workhorse,” and the fleet is being upgraded, not retired.

Also encouraging is the increasing use of advanced targeting pods on fighters and the demonstrated ability of bombers to perform CAS by using satellite guided weapons. Bomber CAS was “absolutely critical” to winning the war in Afghanistan, Longoria said.

Effective close air support does not just happen, however. CAS is something the Air Force must continue to train for, said Col. John V. Allison, chief of the JAGO Close Attack Division. “I don’t just show up over the battlefield in my A-10,” he said.

Allison noted that the Air Force builds up skills, beginning with fixed targets and advancing to unknown and dynamic targets. CAS is “always unknown,” time-critical, and in the proximity of friendly forces on the ground, which makes it one of the most difficult missions to perform.

These skills remain in use today. On June 20, USAF announced that an Air Force JTAC, “whose unit on the ground was under mortar attack, saw imagery from a nearby Predator assigned to another mission” and took control of the aircraft. After identifying the mortar launch site, the Predator was ordered to “strike with its Hellfire missiles.”

The press release notes that “the controller was able to see the imagery via a remote video system, which ... allows battlefield airmen to watch live video feeds from various sensors, such as the Predator.” The system has been “extremely effective ... because it actually gives the ground commander an ‘eyes on’ view of the target,” said TSgt. Juan Rodriguez, an air support operations center spokesman.

Battlefield airman skills are definitely a growth industry—the Global War on Terror will require more of these airmen to enable airpower, when “a large ground force isn’t necessarily viable” said Peterson.

And as RAND noted, “As adversaries adapt and move away from massed motorized forces operating in the open to dispersed, smaller forces exploiting difficult terrain, a well-practiced and developed air-ground partnership will be increasingly valued.”

The Air Force agrees. ■



The struggle over UAVs bears a striking resemblance to service face-offs of bygone years.

The Clash of

With about 775 unmanned aerial vehicles—from miniature UAVs to the high-altitude Global Hawk—now in operation over Iraq and Afghanistan, the military services are once again confronting long-standing differences over roles and missions.

The latest debate about UAVs is not about career pilots feeling threatened by drones. It is about concepts of operations, ownership, service boundaries, and joint capabilities.

Sound familiar? If so, it may be because this unfolding debate has many of the same markings as historic face-offs over manned aircraft and helicopters.

Famous 20th century debates came about because of recurring differences over “organic” aviation missions in other services versus unique core functions of the Air Force. Today’s UAV debate is churning up familiar issues.

Recall how the success of airpower in World War II contributed to the creation of an independent Air Force in 1947. President Harry S. Truman the very next year had to summon the service chiefs and Pentagon officials to his haven at Key West, Fla., to broker a deal. There, the Air Force was assigned “primary interest” for operations in the air and became lead agent for air systems development.

However, the Key West agreements kept the door open for organic aviation functions in the other services. The Air Force had the lead in the air, but that did not stop the Army, Navy, and Marine Corps from developing their own separate fleets of aircraft for a range of support functions.

The attitude toward aviation was: organic until proven otherwise.

For example, the Navy retained the

SrA. David Tillery launches a Desert Hawk unmanned aerial vehicle. The services are at odds over how UAVs—now available in large Global Hawk-size systems all the way down to “micro” vehicles—should be managed and operated.

USAF photo by A. G. Eggman

the UAV Tribes

By Rebecca Grant

responsibility to use its own organic aviation to mount naval campaigns, win local air superiority over enemy naval forces, participate in joint campaigns, and conduct aerial reconnaissance. That left the Air Force and Navy to squabble over whether supercarriers or long-range bombers were the best means to wage strategic warfare. Only a few months after the March 1948 Key West deal, Secretary of Defense James V. Forrestal had to drag the service Chiefs of Staff up to Newport, R.I., for another conference to clarify arrangements.

Helicopters were the next big issue to challenge Air Force primacy. The background of the helicopter debate was similar to the UAV debate of today. Although some experimental helicopters saw service in World War II, they weren't commonplace on the battlefield until Korea. However, it was the Army's development of attack and utility helicopters that heated up the debate in the early 1960s.

To the Army, attack helicopters were something other than classic Key West airpower. An Army general laid it out as a commonsense argument in 1965: "Army aviation is part of landpower," he contended. "It provides us with the means to do what armies have always had to do since time immemorial—close with and destroy the enemy."

He went on to say that Army aviation "is not airpower in any sense of the word, since airpower involves air-to-air combat, the gaining of air superiority, air strikes deep in the enemy rear with strategic objectives, interdiction of the battle area, close air support by high-speed tactical aircraft, and strategic airlift of Army and other forces. Army aviation is not any of these."

The idea of Army aviation as a

separate entity was crystallized in the Johnson-McConnell Agreement of April 1966. In it, Army Chief of Staff Gen. Harold K. Johnson and USAF Chief of Staff Gen. John P. McConnell authorized the Army to develop attack aviation (which had been under way for a decade), but barred the Army from major fixed-wing roles. A 1975 amendment clarified that the attack helicopter did not provide close air support.

In 1986, a new Army-Air Force agreement reiterated a role for organic aviation. It tapped the Army to "normally be the executive service" for manned aircraft, "in units organic to a land force" and employed within the land component commander's area of operations. The Air Force remained the preferred executive agent "for manned aircraft systems that are designed to be most effective when organized under centralized control for theaterwide employment."

That was before unmanned systems in all shapes and sizes started to blur the boundaries of small-unit and theaterwide employment.

Like helicopters before them, it took time for UAV technology to bump up against service traditions. Drones such as the Ryan-modified Firebee, used in Vietnam for low-altitude reconnaissance, fit squarely into Air Force missions. High-altitude, long-endurance platforms with autonomous flight completed some successful test flights in the 1960s and 1970s but ultimately found no long-term buyers.

The US Army, Navy, and Marine Corps bought the Pioneer, which logged more than 500 sorties in Operation Desert Storm in 1991. The Air Force deployed drones to spoof Iraqi air defenses, and one group of Iraqi troops famously tried to surrender to a Navy

Pioneer UAV. But the Air Force lagged so far behind in UAV operations that many of the drones had to be borrowed from the Navy.

After Desert Storm, concepts changed. The Global Positioning System and more extensive satellite communications made remote-site control and in-flight rerouting of UAV missions easier. Commanders also wanted more real-time reconnaissance and surveillance. Increased bandwidth via satellite communications opened up new possibilities.

Enter the Predator

When you think about it, the Predator UAV is "an Austrian snowmobile engine, in a glider, with a camera," said James G. Clark, director of the Combat Support Office on the Air Staff and a longtime Predator guru.

The Defense Advanced Research Projects Agency developed Predator forerunners, and the Air Force deployed them to Tazsar, Hungary, in 1996. It was there that they flew surveillance missions for Army peacekeeping forces in Bosnia. With a permissive air defense environment guaranteed by no-fly zones, it was possible to operate the lightweight craft on longer missions.

The Army put in a bid for control of the Predator due to its surveillance capabilities. However, the Office of the Secretary of Defense turned the program over to the Air Force. (Some Predators remained in CIA hands.)

Then came the Global War on Terror. Burgeoning requirements for agile, long-dwell surveillance put a premium on unmanned systems of all types. Predators tracked and targeted high-value targets. Their area of coverage was limited, but the full-motion video that Predators piped back demolished the old concepts of roles and missions for UAVs.



Air Force operators still file a flight plan for this Desert Hawk as well as other small UAVs, despite their small size and seven-pound weight. Deconflicting airspace is one of the touchy issues in the UAV debate.

The same happened with the Global Hawk endurance UAV, which the Air Force rushed to war with great success. Global Hawk flew more than 22 hours on one Operation Enduring Freedom mission in Afghanistan and on its first night sent back more than 600 images. Global Hawk soon demonstrated that even a true “theaterwide” UAV had applications in small-unit tactics.

Operations in Afghanistan touched off a rush for additional, organic UAVs. “We don’t have enough organic UAVs,” asserted Army Lt. Gen. Robert W. Noonan Jr., who was head of Army intelligence, in April 2002. “When you have a scarcity of assets, if you only have one or two Predators, somebody has to make a call where this is flying and what is it locking at. We feel very strongly that all of our brigades [have] got to have UAVs.”

Enduring Freedom also showed the dark side of the technology. Those who saw Predator’s live video feeds found it seductive. “Full-motion video’s just a polite way of saying watching a TV camera with a UAV,” commented Clark. “You can go crazy staring at that, so you need to take a UAV with that capability and just use it smarter.”

That is exactly what the Air Force has done. Predators, for example, are now part of USAF’s information grid, with downlinks to command centers and Rover laptops in the field. They are also part of the battlespace air picture, with connectivity via the Link 16 data link.

Today, the popularity of UAV op-

erations cuts across traditional service domains. UAVs fall clearly under classic Air Force “Key West” functions such as air interdiction, but they also fit in with the organic functions of other services. “We field a whole series of UAVs in a combat environment, to provide information to those getting shot at,” said Clark.

The different types of UAVs also complicate matters. In the Air Force alone, the unmanned stable includes the seven-pound Desert Hawk (used for base perimeter force protection) and the Global Hawk (which flies for up to 30 hours at 65,000 feet with a

sensor swath sometimes wider than from a U-2).

Root of a Problem

In addition to the Air Force, the Army, Navy, and Marine Corps each employ several types of small UAVs. All have plans for more. And all of these unmanned vehicles operate in the same airspace.

To ground forces, UAVs represent a new means of conducting forward surveillance. They may replace helicopter scouts in some functions and add new organic capabilities for units from the platoon to the corps. “It’s a phenomenal way of looking at the other side of the ridge,” as Clark put it.

No one wants to deny ground forces the ability to see approaching threats. The real question is how to manage battlespace information.

A corps, division, or even a platoon UAV is not the only answer. Centralized control over most types of UAVs may be far more effective and efficient than organic ownership. The success of UAVs in Iraq and Afghanistan has come not from their inherent traits but from what they do when linked to joint forces.

Take the example of Global Hawk’s revisit tactics. The RQ-4A is a high-altitude system, but it can deliver tactical effects.

Lt. Col. Mark Corley, commander of the 12th Reconnaissance Squadron at Beale AFB, Calif., explained how the officials at a combined air operations center (CAOC) can divert Global Hawk



US Army photo

Ground commanders at the squad and company level are sold on UAVs such as this Army Raven. The services are loath to let a centralized agency or a single service set the direction for UAVs.

from ongoing imagery collection mission to high-priority targets. If Global Hawk "is going to be the only asset on station, we set up what we call a stop-sign pattern," he said. "We can snap a picture of seven or eight targets in a cluster every couple of minutes," creating a "constant stream of imagery" for that location.

For combat and stability operations in Iraq and Afghanistan, the Global Hawk has delivered real-time imagery to soldiers, marines, and "a host of black ops special forces," Corley said. That's a capability far beyond what smaller, organic UAVs do.

CAOC officers know how to get the most out of each platform. They take the theaterwide perspective of a high-altitude Global Hawk and hand off small areas of interest to the drill-down focus of Predator. Because the air component has the doctrine, training, and perspective for air and space operations, the employment of UAVs under CAOC control is harmonious and effective.

Rapid response also requires flexibility and orchestration that only the CAOC can provide.

One night in Afghanistan in fall 2004, a Global Hawk and Predator teamed up to provide emergency support. As Corley told it, "We actually had a platoon leader in a valley under fire, taking mortar fires on his platoon." Over the radio, the platoon leader was patched in directly to the Global Hawk operations center and pilots at Beale Air Force Base in California.

"We could hear their conversations live," Corley said. The platoon leader asked for an infrared image of a particular hilltop, "trying to narrow down where these insurgents ... were setting up their mortars" by picking up the heat signature. Global Hawk "set up a stop-sign pattern" and then passed the coordinates on to a B-1B bomber, which dropped six satellite-guided Joint Direct Attack Munitions on the target. The information was then relayed to a pair of A-10s.

Next, Predator arrived on scene and the Global Hawk returned to other collection tasks. "That was only one hour out of our mission," Corley said of the event.

Integrating UAVs in such hand-in-hand operations is just as taxing as integrating manned aircraft. While neither Predator nor Global Hawk had an aircrew aboard, the data they were providing was essential to the lives on the ground.



USN photo by Photographer's Mate 2nd Class Daniel J. McLain

A Navy RQ-2B Pioneer (readied here for a test mission) can launch from a ship. Pioneer provides indispensable data on enemy positions and movements. In such a role, UAVs of this size are low-cost and high-payoff.

Global Hawk has "incredible capacity," said Lt. Col. John Johanson, who spent a year as intelligence-surveillance-reconnaissance director at the CAOC for Central Command Air Forces. The RQ-4 can rapidly toggle between television, infrared, and radar imaging. Targets of interest are selected in coordination with ground forces engaged in operations.

On the CAOC floor and classified chat rooms, retasking happens fast. However, the broad responsibility for coordination on long missions is best handled by airmen who are in a position to coordinate emergency response, preplanned imagery collection, and the growing mission of cross-cuing.

Operators can find targets with the E-8 Joint Surveillance Target Attack Radar System aircraft and visually identify them with Global Hawk, said Gen. T. Michael Moseley, then USAF vice chief of staff. That mission requires an airman's view of the battlespace and skill in linking platform information. Without all airborne assets under CAOC control, key platforms might not be available at the right time.

Cross-cuing can assist with anything from watching insurgent nests to addressing immediate tactical needs of soldiers on the ground. Cross-cuing by Global Hawk is in so much demand that now cross-cue times are built in. Fencing off time works well because Global Hawk offers more time on station than Joint STARS aircraft. As Corley put it, the E-8s will "only be up in the area, let's say for six or eight

hours, and [UAVs] will have been in country for 10 hours already. We will just manage our scheme of maneuver so that we arrive in the same area as the JSTARS."

Hurdles Ahead

While unmanned air vehicles have been proved in combat, hurdles stand ahead.

The airspace is becoming increasingly crowded with unmanned systems of all sizes. The popular Pioneer UAV has only a few hours of endurance and its advertised ceiling is 15,000 feet. Higher up, Navy aircrews reported being startled by Predators near their targets in the early days of Enduring Freedom.

Already, there have been three collisions between small UAVs and helicopters.

Airspace control and deconfliction is emerging as a significant challenge. At the Joint Air-Ground Operations Office at Langley AFB, Va., Brig. Gen. (sel.) Michael A. Longoria lists airspace deconfliction as a key point in the Air Force's dialogue with the Army. "The ground is rising," said Longoria in a recent interview. The Air Force's Desert Hawk typically operates below 500 feet in part to avoid these problems.

But Army and Marine Corps concepts of operations for UAVs are testing the limits. "We are proliferating things that fly in low airspace. There are thousands of small UAVs, all ranges and types—not just helicopters but mini- and micro-UAVs. We're worried about the airspace that low," Longoria said.



Airmen check an RQ-1 Predator after a mission over Afghanistan. The debate over who operates and controls UAVs harkens back to the long-ago arguments over who should have charge of manned aircraft.

According to Longoria and his staff, Army UAVs in action today are typically operating with a 2,000- to 3,000-foot ceiling. JAGO officials say they have heard requests for a block of airspace up to 10,000 feet. Contrast that with Cold War standards, where the combat ceiling for Europe was 200 feet. "We'd like 500," concluded Longoria.

A related issue concerns positive vs. procedural control. Both are required. Trouble comes when a visual is needed, as vehicles work in the crowded airspace to provide close air support or pursue time-critical targets, for example—but other service air vehicles are operating in the same area only under procedural control.

The Air Force's Desert Hawk is treated just like any other aircraft—even though its wingspan is just four feet. "We basically file a flight plan with the air traffic control tower and work with base ops and air traffic control folks," explained SMSgt. Tim Poland, superintendent of tactical automated sensor systems at the Force Protection Battle Lab. The Desert Hawk is "not launched until the flight is deconflicted."

Then, the UAV's controller "is given parameters ... to stay at a certain altitude and [within] a certain box" for a particular mission," Poland said.

Longoria expects the negotiating to continue. The debate on "centralized control vs. organic will never go away," he said.

Airspace is a resource, just like airplanes. Future doctrine will have to

cover how to use these resources that are becoming ever more scarce.

Questioning Unity

As in the debate over helicopters in the 1960s, unmanned air vehicles raise the question: Does unity of airpower have to include everything in the sky?

Certainly it is easy to understand why ground forces want their own UAVs.

"When a company or battalion can't get the larger UAV," such as the Hunter or Shadow, the Raven works very well, Chief Warrant Officer 3rd Class Steve Schisler told *Army News Service* in February. "If you have guys doing a mounted or dismounted patrol in a city or a small town, you can have the Raven flying overhead providing far-sight security."

Added Maj. Chris Brown, with the Raven detachment in Kuwait: "We had one commander's team find an [improvised explosive device] on its first mission, and the commander has been sold ever since."

For the future, it all comes down to where to place the limits on organic UAVs and how to ensure that all UAV systems are netted into a central battlespace information architecture.

The Joint UAV Center of Excellence, at Creech Air Force Base (formerly In-

dian Springs Air Force Auxiliary Field) in Nevada, will help ensure the systems are coordinated. The joint center will build on the Air Force's decade-old UAV Battlelab and will be a test ground for harmonizing concepts of operations and streamlining future development.

"If there are tribal jealousies about this, we'll let some other service be in charge of it, be the command—I don't care," USAF Chief of Staff Gen. John P. Jumper said at the Heritage Foundation in Washington, D.C., in April. His goal: "Get everybody under the same roof, talking the same language, organizing ourselves toward a single purpose, and stop worrying about ownership issues."

Future success will depend on building relations across the joint components, to avoid squabbling over roles and missions and maximize combat utility. Clark and his Combat Systems Support Office have briefed the Army's operations staff on unmanned systems.

"It's kind of a two-edge sword," summarized Clark. "The problem now is like you trained a series of brilliant musicians, but the next challenge is to put these musicians [together] as part of a symphony. It isn't that every company commander, battalion commander, brigade commander has to have only his indigenous assets. But if he's got a Shadow, a Hunter, a Hawk—how do you choreograph that with Global Hawk?"

According to Clark, it all revolves around information flow between troops on the ground and the air component commander.

There the parallel with helicopters holds a telling lesson. Twice in Iraq, the air and land components ran into trouble over "organic" Apache helicopter maneuver. Both in 1991 and 2003, clearing airspace for deep Apache operations hindered fixed-wing sorties, and the combined force paid the price in effectiveness.

The lure of UAVs is their potential to become ever-more effective armed and unarmed tools. Desire for ownership must be put into perspective. UAVs are air vehicles, after all, and their development and employment will benefit from guidance from the masters of airpower. ■

Rebecca Grant is a contributing editor of Air Force Magazine. She is president of IRIS Independent Research in Washington, D.C., and has worked for RAND, the Secretary of the Air Force, and the Chief of Staff of the Air Force. Grant is a fellow of the Eaker Institute for Aerospace Concepts, the public policy and research arm of the Air Force Association's Aerospace Education Foundation. Her most recent article, "Bombs on Target," appeared in the August issue.

> 34 WORLD GOVERNMENTS. ONE CHOSEN LEADER.



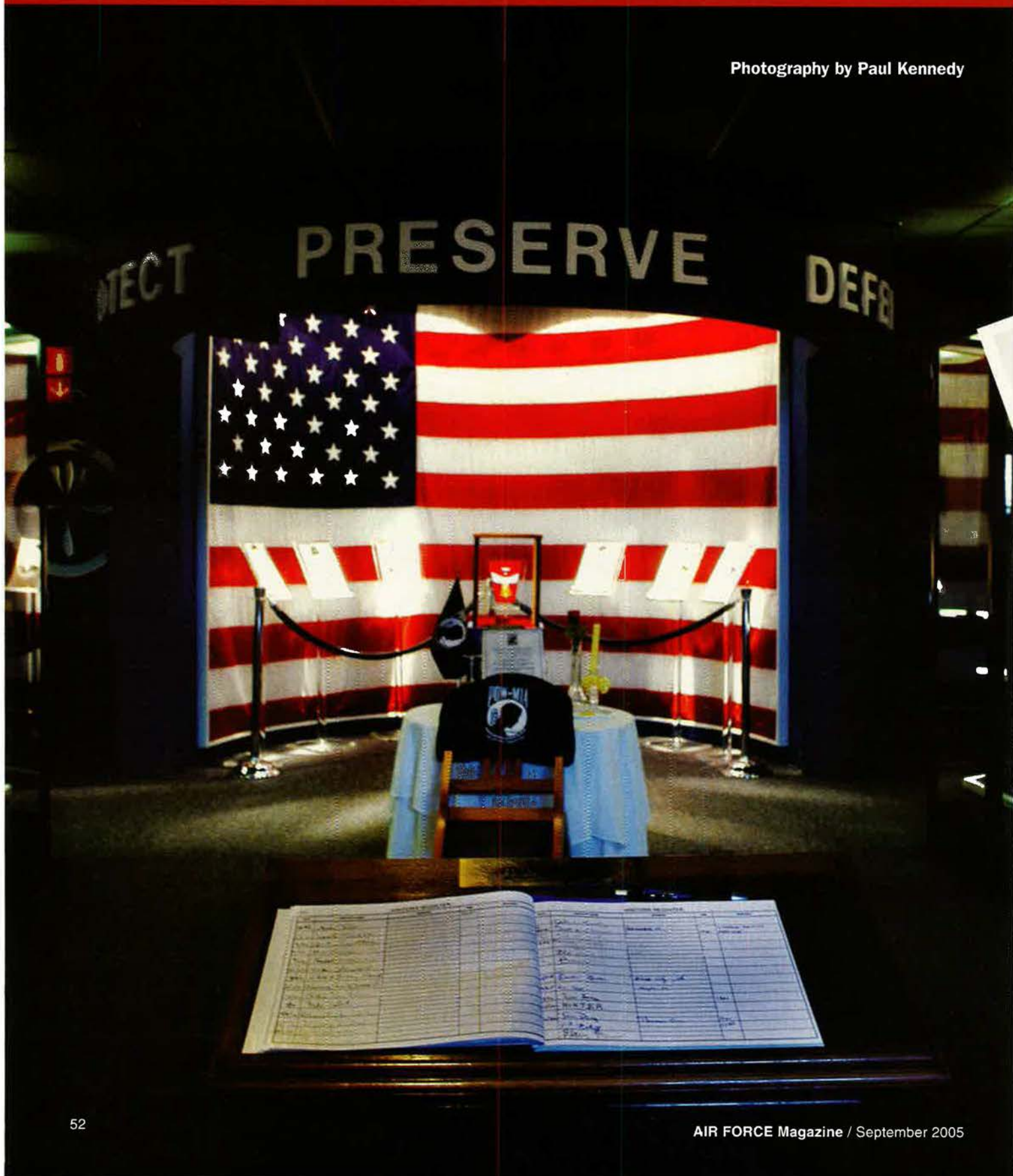
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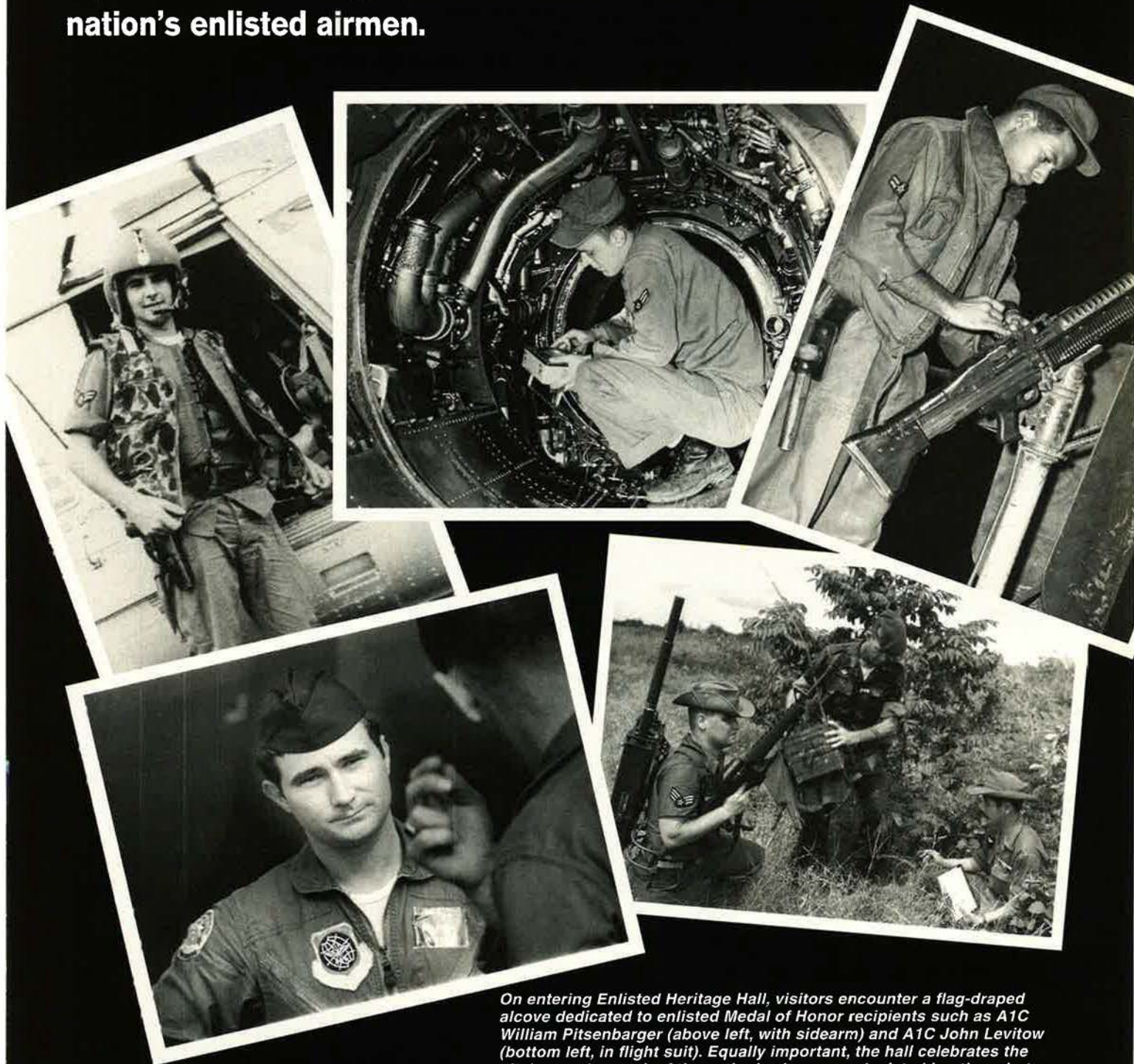
Enlisted Heritage

Photography by Paul Kennedy



Under Glass

With the opening of its new 3,700-square-foot wing, Enlisted Heritage Hall is stepping up its efforts to preserve the history of the nation's enlisted airmen.



On entering Enlisted Heritage Hall, visitors encounter a flag-draped alcove dedicated to enlisted Medal of Honor recipients such as A1C William Pitsenbarger (above left, with sidearm) and A1C John Levitow (bottom left, in flight suit). Equally important, the hall celebrates the vital everyday work of the nation's airmen, as depicted in other photos on this page.

The mission of the Enlisted Heritage Hall, part of the Air Force Enlisted Heritage Research Institute at Maxwell AFB-Gunter Annex, Ala., is to preserve the "rich and dramatic" story of airmen from the earliest days to the present. Its curatorial staff collects, preserves, and displays artifacts, papers, art collections, equipment, and other physical objects. In recent years, EHH outgrew its original space and launched construction (right) of a new, 3,700-square-foot wing.

The addition, which formally opened on June 2, is known as the "Berlin-to-Baghdad Wing" (signifying events from the 1948-49 Berlin Airlift through today's air operations over Iraq). Exhibits in the new space deal with the Cold War and post-Cold War periods. Its initial exhibit focused on airmen and the Berlin Airlift. The grand opening drew luminaries from around the Air Force.



In the photo at left, MSgt. Tony Brewer, an AFEHRI staff member, strikes up a conversation with retired Air Force Col. Charles McGee, a prominent member of the famed Tuskegee Airmen. McGee, a pilot in World War II, the Korean War, and the Vietnam War, made the journey to Maxwell-Gunter to attend the dedication of the new wing, which coincided with the 2005 Gathering of Eagles, an annual aviation event held at Maxwell-Gunter.

Among EHH's exhibits is a tribute to the all-African American ground crews of the 332nd Fighter Group in Europe. These enlisted airmen kept the World War II Tuskegee Airmen flying and fighting.

The opening of the new wing had special meaning for the only three men to have served as AFEHRI director. Shown in the photo at right, they are (l-r) CMSgt. David Hamel, retired CMSgt. Wayne Fisk, and CMSgt. Malcolm McVicar.

Fisk, the founder and first director of the hall, is the first enlisted Eagle to be honored at the Gathering of Eagles. Hamel, who served as director for more than four years, oversaw the renovation of Heritage Plaza, a major expansion of the museum's exhibits, and the ground-breaking for the new wing. McVicar, who took over from Hamel earlier this year, has continued a tradition of aggressive leadership.





Many varieties of the Air Force uniform are on display on mannequins throughout the facility. The Berlin Airlift exhibit features a flight suit (above left) of the same type worn by Lt. Gail Halvorsen, the famed "Candy Bomber" who dropped sweets to children in the city. Next comes tiger-stripe combat fatigues, a nonstandard issue made in Udorn, Thailand, with the name tag and chevrons produced by local manufacturers; the pattern was donated by a former security policeman. The mannequin at right displays the desert camouflage hat, trousers, and shirt worn by retired CMSAF Frederick "Jim" Finch.

Photo at right is of a GAU-2B/A, 7.62 mm machine gun with linkless ammo storage and feed system, which was transferred to the hall from the History and Traditions Museum at Lackland AFB, Tex. This type of gun has been used operationally in the AC-47, AC-119G, AC-119K, AC-130A, and AC-130E/H gunships. It can spit out up to 6,000 rounds per minute. Enlisted crew members would maintain and reload the gun in flight.



At left, retired Col. Gail Halvorsen, the Candy Bomber, autographs a crate in the Berlin Airlift exhibit. At his side, retired Col. Guy Dunn awaits his turn to do the same. The crates are replicas of the kinds of cargo boxes carried into Berlin.

The main mission of AFEHRI is to enhance enlisted professional military education, thereby helping produce top enlisted leaders. Enlisted personnel attending courses at Maxwell-Gunter use the institute's research facilities and top-flight Web site, introduced in 1997, which provides ready access to numerous historical documents, information, and images.



Artifacts, from simple utensils to photos and diaries, tell the story of enlisted troops. As visitors spread the word about the EHH's existence, more and more enlisted and formerly enlisted members

contact the curators to donate their own memorabilia. Shown (l-r) in the photos above are a pair of leather flying gloves of the World War II era; Fisk's Vietnam-era belt with canteens, knife, and other useful

tools; and a World War II bomber crew member's leather face mask and leather cap with headset.



As photos at left show, EHH has collected an array of head gear. Clockwise from upper left: a woman's blue wool beret, which appeared in 1977; red headgear of para-rescue jumpers, issued in 1966 and still worn today; a security police beret with distinctive pin of Strategic Air Command; and a security police beret emblazoned with the K-9 dog handler emblem.

The photo below shows the glass case housing the SSgt. Henry "Red" Erwin Sr. Medal of Honor exhibit. It features a lifelike mannequin portraying Erwin as he was before he was disfigured in a World War II act of heroism that saved his aircraft and crew but left him with burns requiring 52 reconstructive surgeries. The model wears a flight suit and Mae West vest similar to the one worn by Erwin. A retired master sergeant, Erwin died in January 2002. His funeral flag adorns the wall to the rear.



Within EHH, artifacts cover all eras. Shown in the photo above is an authentic "blood chit," issued to a World War II airman deployed to the China-Burma-India Theater. Blood chits are handed out to aid downed airmen in escape and evasion.





The hall pays tribute to the contributions of all enlisted members, men and women alike, because all have played their part in the development of the Air Force. The photos above depict three clothing types:

(l-r) a woman's wool tropical blue 1084 uniform; a blue shade #33 polycotton corded uniform, a favorite in the 1960s and 1970s; and a woman's blue wool J-442.

The photo of the EHH display at right, with its teletype machine and fallout shelter sign, captures part of the museum's treatment of the story of airmen in the Cold War. The era is getting increased attention.

The hall also presents displays of technology from World War I, with artifacts ranging from early flying gear and uniforms to primitive telephones and other memorabilia. In another section, the curators present part of the history of Army ballooning and the career of Cpl. Vernon Burge, who in August 1912 became the Army's first enlisted pilot.



Benefiting from the donations of airmen, the EHH has become a repository of historical documents and memorabilia, large and small. Photo at left shows pages from a facsimile of a Soviet armed forces ID booklet. The Russian-language booklet, used in training courses, carried English translations to help airmen recognize what they were reading.

With its World War II exhibit, the EHH has expended much effort to make a record of the everyday life of an airman. The photo at right shows an authentic World War II footlocker containing period clothing, utensils, and other personal items. There are many World War II displays; one, for example, honors the Army Air Forces' enlisted pilots and other flying airmen.



At EHH, the life of airmen during the Vietnam War is portrayed in numerous artifacts, some of them mundane but well-remembered by those who fought in Southeast Asia. Photo at left shows some of the items donated over the years: printed communist propaganda leaflets, which were distributed around the South Vietnamese countryside, and a commemorative lighter.

The photos below show that communist propaganda wasn't always crude and blood-curdling. Nor, however, was it ever subtle. Shown here is an example, back and front, of a North Vietnamese "Christmas card," meant to intensify the loneliness and unhappiness of US troops far from home.



The artifacts above were used in the Philippines in the 1960s: a Security Police riot helmet and a poster for an anti-crime awareness program.





This desert boonie hat, now on display in the EHH, belonged to A1C Joseph Rimkus of Madison, Ill. Rimkus, a member of a weapons load crew deployed to Saudi Arabia, perished in the June 25, 1996, terrorist attack on Khobar Towers, which killed 19 US airmen. Rimkus' hat was donated by his parents, who considered it their most prized possession.



At left is a leaflet from a Vietnam War program called "Chieu Hoi," translated as "Open Arms." The program sought to encourage communist fighters to defect to the South. Possession of a leaflet guaranteed safe passage for anyone wishing to switch sides. This one reads, "Safe conduct pass to be honored by all Vietnamese government agencies and allied forces."

CHIEU HOI



Pictured above are variations on the ubiquitous Vietnam War party suit. It was an off-duty outfit that was similar to a flight suit, except that it came in colors and with assorted patches and designs. The party suit originated in fighter squadrons but soon spread widely. They were often worn to farewell parties and special events. The one at top belonged to CMSgt. Dan France, the other to CMSgt. Wayne Fisk.



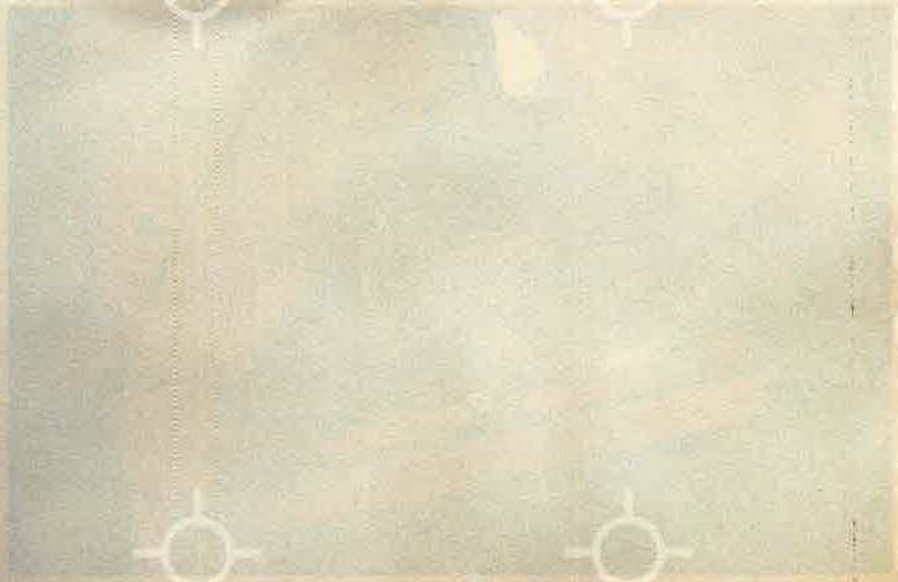
At left is an airman's World War I footlocker and clothing, typical of the Enlisted Heritage Hall displays that give visitors a unique glimpse of an important part of aviation history. ■

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on the network.
We're going to be able to
use that network to
do things we've never
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It's a fiesta of finger-pointing, but one should note well that the lease "was initiated in the Congress"—not the Air Force.

The Tanker Blame Game



The Pentagon inspector general's report on how the Air Force's tanker lease went wrong is likely to have a chilling effect on Defense Department leaders, discouraging them from trying innovative methods of acquiring new equipment at a time when funds sufficient to the task are simply not available.

The report, seven months in the making, was delivered to the Senate Armed Services Committee in May and released to the public in June. It blamed four top Pentagon leaders—two in the Office of the Secretary of Defense and two in the Air Force—for failing to go through normal acquisition routines for a tanker replacement, even though they had been specifically ordered by Congress to lease Boeing KC-767s.

The officials, according to the IG, should have conducted the usual analysis of alternatives (AOA), even though the "solution" had already been specified in the legislation. Furthermore, no other boom-type tanker was available.

In short, the defense officials were in a bind—either follow existing regulations as specified by law, or pursue the lease, also specified by law. The officials proceeded toward the lease, assuming the

new law ordering it superseded the need to follow the previous regulations.

They assumed wrong, Pentagon IG Joseph E. Schmitz told the Senate Armed Services Committee.

"A number of senior DOD and Air Force officials acted as if Section 8159 of the Fiscal Year 2002 appropriations act had waived various legal requirements—statutory checks and balances—[which] that section had not waived," he said. "We identified five specific statutes that would be violated were the contract to be signed."

Back to Basics

The IG's conclusion—endorsed by the Senate panel—was that the Pentagon should get back to basics and re-emphasize strict compliance with federal acquisition regulations and the "5000 series" of acquisition rules.

Air Force officials agreed, as well. Gen. T. Michael Moseley, at a June 29 SASC hearing on his nomination to be USAF Chief of Staff, allowed that the service "made some mistakes" in pursuit of the tanker lease.

"The traditional process has served us well," Moseley said. "We should have conducted an AOA. Out of an

analysis of alternatives would have come a wider range of discussions about opportunities on existing airplanes and new airplanes."

He also said the Air Force has unwisely pulled people out of the acquisition career field over the years and pledged to start "putting people back into the acquisition process" to afford more oversight.

Moseley also pledged to see that, in the words of Sen. John McCain (R-Ariz.), the lease's leading opponent, "this doesn't happen again."

The four officials deemed by the IG to be "accountable" for the lease situation were Edward C. Aldridge Jr., former undersecretary of defense for acquisition, technology, and logistics; Aldridge's deputy, Michael W. Wynne; former Air Force Secretary James G. Roche; and Marvin R. Sambur, former USAF assistant secretary for acquisition.

Aldridge left the Pentagon shortly after approving the lease. Wynne, who became the acting undersecretary after Aldridge's departure, left his job this past spring. Roche and Sambur both resigned last November. At the time, Sambur warned there would be a "long line" of acquisition profession-

By John A. Tirpak, Executive Editor



als leaving military service because of the witch-hunt to assign blame for the tanker mess.

The tanker lease exploded in 2004, when Darleen A. Druyun, the senior civilian acquisition official for the Air Force, admitted to unfairly favoring the Boeing company for USAF contracts. Druyun had negotiated an early version of the lease agreement with Boeing. She left the Air Force well before the conclusion of the final deal, whose terms were much more advantageous to the Air Force. Druyun had retired and gone to work for Boeing at twice her government salary.

After the Druyun revelations, McCain said he refused to believe that the kind of corruption perpetrated by her could be the work of an individual, "acting alone." McCain persuaded Sen. John W. Warner (R-Va.), the Senate Armed Services Committee chairman, and Sen. Carl Levin (D-Mich.), the ranking Democrat, to join him in demanding the IG inquiry on who in the Pentagon was "accountable" for the unraveling of the tanker lease.

McCain Complains

McCain also complained that the

lease was unnecessary because the KC-135s, despite being 40 years old, could, according to various reports, last decades longer, and because the lease would have cost up to \$7 billion more than an outright purchase of the aircraft.

The IG reported that Aldridge, Wynne, Roche, Sambur, and of course Druyun were accountable for the "inappropriate" lease, but that, given the confusion over which laws to follow, they were not "culpable" for their actions. (See "Washington Watch: IG Calls Four 'Accountable' for Tanker Deal," August, p. 8.) Also weighing in the officials' favor was the fact that the lease had the express support and backing of three of the four Congressional committees overseeing defense spending, as well as the White House.

The lease agreement would have been signed, and Boeing would have built and supplied 100 of the tankers, but Druyun's revelations in court caused Defense Secretary Donald H. Rumsfeld to order a "pause" in the awarding of the contract until various investigations could assess the propriety of the deal. The June IG

report was the last of several inquiries launched by Rumsfeld and the Air Force itself.

The delivery of the IG report seemed to mark a turning point in the debate over tankers. McCain, who long maintained that no new tankers were needed, or that merely upgrading the oldest ones with new engines would satisfy requirements, asserted in the June hearing that mistakes were made "in zeal to acquire this new tanker, which I think all of us agree is necessary." The comment seemed to indicate that McCain will no longer oppose the pursuit of a replacement for the KC-135.

Indeed, McCain had, by the time of the hearing, begun lifting "blocks" on promotions of various Air Force flag officers, a tactic available to members of the Senate panel.

He used the power to coerce the Air Force and DOD to turn over e-mails and other documents related to the tanker lease. The service and the department had resisted turning over some of the documents on the basis of executive privilege, a concept by which private communications must remain private if advisors to the Secretary of Defense and the President are to feel free in offering honest opinions on policies.

Acting Air Force Secretary Michael L. Dominguez said in June that he expected it would take until Fiscal Year 2008 to get funding in the budget to begin an outright purchase of tankers and that it would most likely be a competitive program. If the plan is approved, the first tanker money would begin to flow in 2009. By then, the Air Force would have had more than 70 new tankers under the leasing plan.

Three Issues

According to the IG report, the senior acquisition officials failed in a number of respects.

The report argued that the officials declined to order the analysis of alternatives to determine what other methods of obtaining tanking capability might exist. This was done, in part, because, at the time, Boeing was the sole company offering a boom-type aerial tanker aircraft, the type used by the Air Force.

The officials were also faulted for treating the aircraft as a commercial, off-the-shelf item, when in fact the KC-767 was so heavily modified from its civilian configuration that it should



Italy has begun taking delivery of KC-767 tankers, such as the one pictured here. Foreign sales of the aircraft, already designed and engineered, helped persuade DOD leaders that the tanker was a commercial product which could be leased.

have been deemed a military product. As such, it should have been subjected to a raft of tests, evaluations, and oversight of its construction—procedures the officials hoped to skip because they were expensive, time consuming, and, they believed, unnecessary. The 767, they reasoned, was a proven design, and even the tanker version was being acquired by foreign countries.

Finally, the IG said, the Air Force had not identified any “urgent need” to acquire the tankers prior to the 9/11 terrorist attacks and thereafter actually found, in an initial evaluation of its KC-135s, that these aircraft could last for several decades longer, so long as they had assiduous care. USAF subsequently determined that corrosion was causing far more damage to the oldest KC-135E aircraft than had previously been judged and that they could not safely continue without a massive re-manufacturing effort.

Since then, 37 KC-135Es have been taken out of service due to age-related problems, including corrosion.

Schmitz added that a lease was an inappropriate vehicle for financing what was essentially a procurement, especially since the Air Force hadn’t made its case that time was of the essence.

The IG noted another controversial aspect of the deal, one that McCain found particularly objectionable. While the lease arrangement certainly was intended to address a piece of the force structure that had reached geriatric status, it also was aimed in part at rescuing Boeing from a long decline

in aircraft orders followed by a steep plunge after the 9/11 attacks. Roche believed that the deal was comparable to the Air Force buy of about 60 KC-10 tanker versions of the DC-10 during an earlier airline slump. That purchase had provided a useful capability with the added benefit of offsetting the risk of a problem that might ground the whole KC-135 fleet. It also had helped the domestic airline industry through a tough economic time, thus preserving part of the defense industrial base.

McCain consistently attacked the KC-767 lease as a government “bailout” for Boeing. However, the IG merely

noted the motive to assist the industry as a factor in the genesis of the lease and didn’t comment on whether that motive was appropriate.

In requesting the report, the SASC specified that it wanted to know who was accountable for the abortive lease deal within the Defense Department. It did not ask for an analysis of involvement from elsewhere in the government.

The IG report included hundreds of e-mails and other communications involving the White House, Office of Management and Budget, and other federal agencies. Many of these communications were redacted in the version sent to the Senate, which received sections that were blacked out in part or whole. This irked Levin, who said the redactions were “critical gaps in this report” that have “placed a cloud over it.”

Levin Wants More

Deleting or ignoring the role played by other agencies “omits critical material,” Levin continued, and raised questions over whether the IG was allowed to take an independent view of the affair. He read out loud a section of regulations that requires inspectors to avoid “external interference or influence that could improperly or imprudently limit or modify the scope of OIG work or threaten to do so.”

Levin quoted a letter from Roche to the IG, in which Roche said, “Limiting any review to the Air Force and not OSD ... only contributes to the myth that this was exclusively an Air Force



James Roche, then Air Force Secretary, noted that the service took no action on a tanker lease until ordered to do so by Congress. He also complained that the IG’s investigation neglected to examine the White House’s role in the deal.



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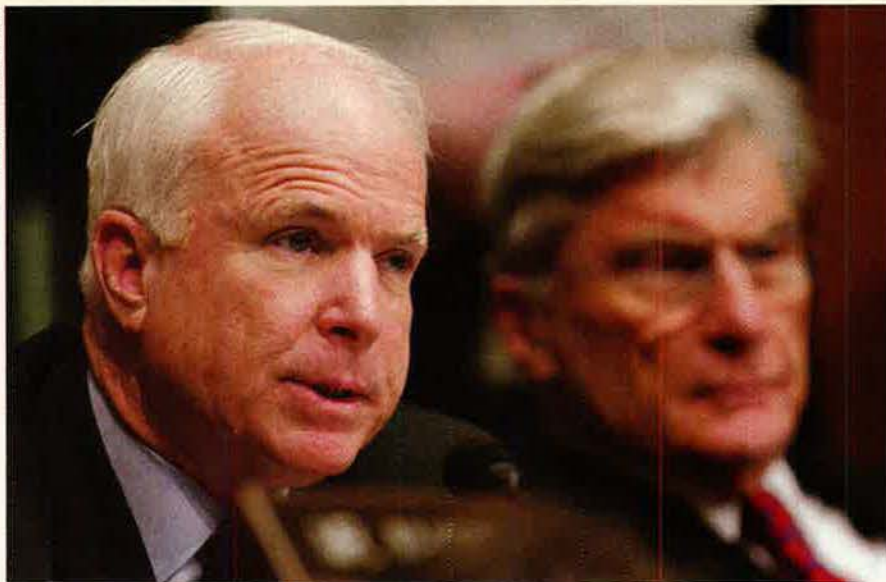
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Sen. John McCain (R-Ariz.) (left) seems to have relaxed his opposition to tanker modernization, now that blame has been assigned in the lease fiasco. Sen. John Warner (R-Va.) (right) acknowledged Congress' complicity in the affair.

proposal. It was not. It was a proposal of the Department of Defense and the Administration. And it consistently was supported by three of the four Congressional defense committees."

Roche added that arbitrarily omitting the role of other agencies, especially the White House, would make it "difficult to preserve the credibility of the inspector general process." Such omissions, Roche said, prevent the IG from presenting "a proper perspective of how good and decent people tried to do the right thing by our warfighters and the American taxpayer."

The IG faulted Roche, too, for encouraging Boeing officials to put pressure on Wynne's office to stifle dissent about the propriety of the tanker lease, specifically, the program analysis and evaluation shop, led by Kenneth J. Krieg. Krieg has since been confirmed to replace Aldridge as the USD/ATL.

Warner admitted that Congress was complicit in the matter.

"It is true that this issue was initiated in the Congress, ... not by the Pentagon. ... There was a very close relationship here." The law requiring the lease "was added as a line item in the appropriations bill without a hearing, without scrutiny, without any Congressional oversight and was approved by three of the four oversight committees. So there is a failure of oversight" on the part of the Congress, Warner said.

In his official response to the IG's report, Wynne said it is an "imperative" that the Pentagon develop methods to "shorten acquisition time in order to get

the right equipment to the warfighter more quickly." He went on, "Meeting this demand requires innovation and the improvement of business practices. Flexibility is absolutely necessary if we are ever to be capable of responding appropriately to an immediate requirement for a major end item."

Second-Guessing

Wynne said the IG's report, in seeking to assign blame for what went wrong with the tanker lease, "implies that the mere consideration of an alternative to standard major systems acquisition practices is somehow wrongful—even if Congressionally permitted. That is not the right conclusion."

Wynne said he worries that the loud and clear message to the acquisition community is that it "should not seek to innovate, improve, and change." The Pentagon, Wynne asserted, must be willing to consider "bold alternatives, even if they are ultimately rejected."

He noted that "critics and supporters of leasing never saw the same risks and benefits to the Air Force" and that a "lesson" learned from the whole affair might be that there should be "more effort in the early stages of an innovative acquisition to ensuring a common appreciation of the transaction." In other words, Wynne thinks all the players should have the same set of data on which to make their judgments. In the case of the tanker lease, they clearly did not.

In his written response to the report, Dominguez said it bears noting that,

throughout the debate over the tanker lease, the Air Force was "sustaining a continuous global air bridge, refueling countless hundreds of combat sorties" in Southwest Asia, while also sustaining Noble Eagle alerts across the US.

"Operational leaders were—and are—legitimately concerned about the future viability of the entire KC-135 fleet and understandably anxious about a number of age-related problems," Dominguez wrote.

He went on to say that, even though these leaders did not "successfully make the case for urgency" in replacing the KC-135Es, "it is their job to raise the alarm, and, under different circumstances, one could imagine finding fault with them for NOT raising the alarm."

Did the release of the report clear the decks, finally, for a program to replace the KC-135s?

By late summer, all interested parties were awaiting the results of the Joint Staff's Mobility Capabilities Study, as well as the Air Force's own tanker analysis of alternatives study, both due, after long delay, in August. The studies were to assess the tanker needs of what will be a smaller Air Force in the future, as well as how tankers fit in with national strategy and the true age and condition of the existing fleet.

At a Senate Armed Services Committee hearing, the Air Force Chief of Staff, Gen. John P. Jumper, said, "If I lose sleep over anything, it's the condition of our aging fleet in general and of the KC-135Es in particular. That does worry me."

As Dominguez reported, with another year of analysis, a tanker program might get launched in Fiscal 2008. (See "Washington Watch: New Tanker Plan Could Appear in 2008 Budget," August, p. 8.) McCain seems to have relaxed his opposition to a new tanker, and while Levin seems likely to press for more light on the role of the White House and other players in the lease, he has not expressed any intention to block the purchase of the aircraft.

Nevertheless, having absorbed \$16 billion worth of procurement cuts late in the last budget cycle, the Air Force is back to square one, with no clear funding source identified as the bill-payer for new tankers.

Jumper noted that, at a replacement rate of 15 aircraft a year—at a cost of up to \$3 billion a year—"we're going to be flying some of these KC-135s when they're 70 years old." ■



What fog?

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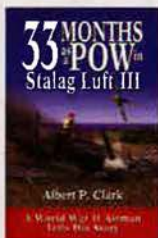
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Books

Compiled by Chequita Wood, Editorial Associate

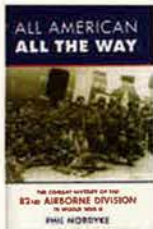
33 Months as a POW in Stalag Luft III: A World War II Airman Tells His Story. Albert P. Clark. Fulcrum Publishing, Golden, CO (800-992-2908). 207 pages. \$17.95.



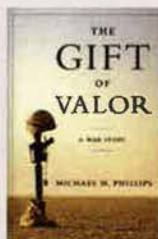
Defense Strategy for the Post-Saddam Era. Michael E. O'Hanlon. Brookings Institution Press, Washington (800-275-1447). 148 pages. \$18.95.



Secret Weapons & World War II: Japan in the Shadow of Big Science. Walter E. Grunden. University Press of Kansas, Lawrence, KS (785-864-4155). 335 pages. \$39.95.



All American All the Way: The Combat History of the 82nd Airborne Division in World War II. Phil Nordyke. Zenith Press, St. Paul, MN (800-766-2388). 868 pages. \$35.00.

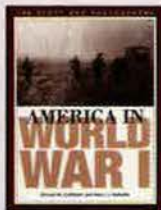


The Gift of Valor: A War Story. Michael M. Phillips. Doubleday-Broadway Publishing, New York (800-733-3000). 241 pages. \$19.95.



The Spectacle of Flight: Aviation and the Western Imagination, 1920-1950. Robert Wohl. Yale University Press, New Haven, CT (800-405-1619). 364 pages. \$39.95.

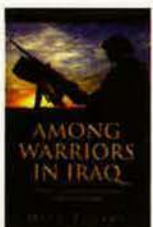
America in World War I: The Story and Photographs. Donald M. Goldstein and Harry J. Maihafer. Potomac Books, Dulles, VA (800-775-2518). 173 pages. \$19.95.



History of Rocketry and Astronautics: AAS History Series, Vol. 26. Donald C. Elder and George S. James, vol. eds. Univelt Inc., San Diego (760-746-4005). 412 pages. \$70.00.



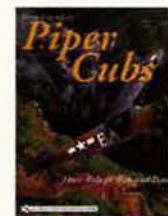
Then There Were Six: The True Story of the 1944 Rangoon Disaster. Karnig Thomasian. Order from: Karnig Thomasian, 300 Continental Ave., River Edge, NJ 07661 (201-262-2984). 160 pages. \$20.00.



Among Warriors in Iraq: True Grit, Special Ops, and Raids in Mosul and Fallujah. Mike Tucker. The Lyons Press, Guilford, CT (800-962-0973). 234 pages. \$16.95.



Information Assurance: Trends in Vulnerabilities, Threats, and Technologies. Jacques S. Gansler and Hans Binnendijk, eds. Center for Technology and National Security Policy, Washington. 146 pages. (Download at http://www.ndu.edu/cnsp/information_assurance_book.htm).



Those Legendary Piper Cubs: Their Role in War and Peace. Carroll V. Glines. Schiffer Publishing, Ltd., Atglen, PA (610-593-1777). 200 pages. \$45.00.

Chopper: A History of American Military Helicopter Operations From WWII to the War on Terror. Robert F. Dorr. Berkley Caliber, New York (800-526-0275). 328 pages. \$24.95.



MiG-21 Fishbed, Part 2: Walk Around No. 39. Hans-Heiri Stapfer. Squadron/Signal Publications, Carrollton, TX (800-527-7427). 79 pages. \$14.95.



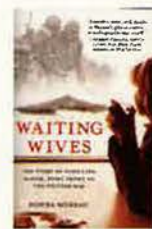
Vietnam Diary: From Inside Air Force Headquarters. Herman L. Gilster. Rose-dog Books, Pittsburgh (800-834-1803). 361 pages. \$30.00.



Company C: An American's Life as a Citizen-Soldier in Israel. Haim Watzman, Farrar, Straus, and Giroux, New York (888-330-8477). 387 pages. \$26.00.



Racing the Enemy: Stalin, Truman, and the Surrender of Japan. Tsuyoshi Hasegawa. Harvard University Press, Cambridge, MA (800-405-1619). 382 pages. \$29.95.



Waiting Wives: The Story of Schilling Manor, Home Front to the Vietnam War. Donna Moreau. Atria Books, New York (800-323-7445). 309 pages. \$14.00.

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U.S. General Services Administration

Here are the key events of a world conflict that shaped, and was shaped by, the Air Force.

The Air Force and the Cold War: A Chronology, 1945-91

By John T. Correll



Allied aircraft hauled food, fuel, and other necessities during the 15-month-long Berlin Airlift, until the blockade ended. Here, USAF C-54s deliver coal. Even the coal dust from the unloading operation was saved—swept into piles for the Berliners to take away and use.

The independent US Air Force and the Cold War both began in the 1940s. Over the next 40 years, they had a strong influence on each other. The Air Force was shaped by Cold War requirements. Cold War strategy evolved in considerable part on the basis of what airpower made possible.

Various dates are given for the beginning and end of the Cold War. By some accounts, it started in 1939, when the Soviet Union annexed the Baltic states. NATO, in its "London Declaration," proclaimed the Cold War over in July 1990, but nobody paid any attention. For its part, the Department of Defense awards its Cold War recognition certificate to veterans who served between Sept. 2, 1945 (the date of the Japanese surrender that formally ended World War II), through Dec. 26, 1991 (when the Soviet Union ceased to exist).

The atomic bomb was central to military power in the Cold War. It was essentially an air weapon, and the Air Force, the newest of the military services, was thrust into a position as the nation's first line of defense. Later on, strategic nuclear deterrence was vested in a triad of forces:

Air Force bombers, Air Force ICBMs, and Navy submarine launched ballistic missiles.

In addition to the balance of strategic nuclear power, the Cold War also encompassed other situations and events, including the Berlin Airlift, the Cuban Missile Crisis, and two regional wars—in Korea and Vietnam—that occurred in the shadow of the US-Soviet nuclear confrontation. The closest the Cold War came to having a front line was in Europe, where NATO was squared off against an in-place force of 132 Soviet-Warsaw Pact divisions, 32,000 tanks, and about 6,000 combat aircraft.

The Soviet Union was a mighty force, but it was spending up to 30 percent of its gross national product for military purposes and it held its allies only by force of arms. The Warsaw Pact collapsed in July 1991 and the Soviet Union's own demise was not far behind.

US veterans who took part in the long struggle—airmen from all specialties and members of the other services as well—are fond of saying, "The Cold War is over, and we won it." And so they did. They held Soviet power in check until it collapsed of decay and its own dead weight. ■



1945-49: Challenge and Containment

May 8, 1945. Nazi Germany surrenders. Soviet Red Army holds Eastern Europe, Balkans, and eastern Germany.

March 5, 1946. Churchill says an "Iron Curtain" has descended in Europe.

March 12, 1947. "Truman Doctrine" declares US support for Greece and Turkey to fight communist insurgency.

June 5, 1947. Marshall Plan for recovery of Europe announced.

July 1947. "Containment" concept elaborated by George Kennan in *Foreign Affairs* "X" article.

Sept. 18, 1947. The US Air Force becomes a separate service.

1947-48. Soviet Union converts East European nations into subservient communist states.

June 26, 1948. Berlin Airlift begins; it ends on Sept. 30, 1949.

June 26, 1948. Air Force receives first operational B-36 bombers.

Feb. 26-March 2, 1949. B-50 *Lucky Lady II* makes first nonstop flight around the world.

April 4, 1949. North Atlantic Treaty Organization created.

May 23, 1949. Federal Republic of Germany (West Germany) established.

Aug. 29, 1949. The Soviet Union explodes its first atomic bomb.

Oct. 1, 1949. Mao Zedong takes power, establishing the People's Republic of China.

Oct. 7, 1949. Communist-ruled German Democratic Republic (East Germany) established.



Staff map by Zaur Elyanbekov

In 1948, when the Soviets blockaded the ground routes into Berlin, three air corridors, each 20 miles wide, remained open. The flags indicate the American, British, French, and Soviet occupied sectors.

1950s: At the Brink

Jan. 31, 1950. Truman orders development of the hydrogen bomb.

Feb. 14, 1950. Soviet Union and China sign treaty of alliance and mutual assistance.



The US responded quickly to the invasion of South Korea in 1950, believing it was the beginning of a global communist offensive. USAF F-86 Sabres performed with special distinction.

March 15, 1950. Joint Chiefs of Staff give the Air Force formal responsibility for development of strategic guided missiles.

April 14, 1950. NSC-68, "blueprint for the Cold War," prescribes US rearmament and containment of Soviet expansionism.

June 25, 1950. Korean War begins with communist invasion of South Korea.

Oct. 25, 1950. Red Chinese forces enter the Korean War.

Jan. 1, 1951. Air Defense Command, previously abolished, is restored to full status as a major air command.

July 14, 1952. The Ground Observer Corps begins its round-the-clock skywatch.

Oct. 3, 1952. Britain tests its first atomic bomb.

Oct. 31, 1952. The United States tests its first thermonuclear device.

Dec. 9, 1952. NATO adopts strategy 14/1, which bases the defense of Europe on use of US nuclear weapons.

June 5, 1953. B-47 bomber achieves initial operational capability.

July 27, 1953. UN and North Korea sign armistice agreement, producing cease-fire in Korea.

Aug. 12, 1953. Soviet Union explodes a thermonuclear device.

Oct. 30, 1953. NSC 162-2 inaugurates the "New Look" strategy.

1950s: At the Brink (cont.)

Jan. 12, 1954. Secretary of State John Foster Dulles makes “massive retaliation” speech.

April 7, 1954. Eisenhower formulates the “Domino Theory.”

May 1, 1955. Warsaw Pact created.

May 5, 1955. West Germany joins NATO.

June 19, 1955. B-52 bomber achieves initial operational capability.

July 21, 1955. Eisenhower proposes “Open Skies.” Soviet Union refuses.

Nov. 26, 1955. Pentagon gives Air Force operational control of ICBMs and all land-based missiles with range greater than 200 miles.

Jan. 17, 1956. DOD reveals the existence of SAGE, an electronic air defense system.

July 4, 1956. CIA U-2 reconnaissance aircraft makes first overflight of Soviet Union.

Oct. 23-Nov. 10, 1956. Hungarian Revolution crushed by Soviet troops.

Nov. 18, 1956. Khrushchev tells West, “We will bury you.”

May 23, 1957. NATO adopts strategy 14/2, “Massive Retaliation.”

June 11, 1957. SAC receives first Air Force U-2 reconnaissance aircraft.

June 28, 1957. SAC receives first KC-135 jet-powered tankers.

July 31, 1957. The Distant Early Warning (DEW) Line is reported to be fully operational.

Aug. 1, 1957. US and Canada form North American Air Defense Command.

Aug. 21, 1957. Soviet Union test-launches world’s first ICBM.

Oct. 4, 1957. Soviet Union puts Sputnik, the world’s first artificial satellite, into Earth orbit.

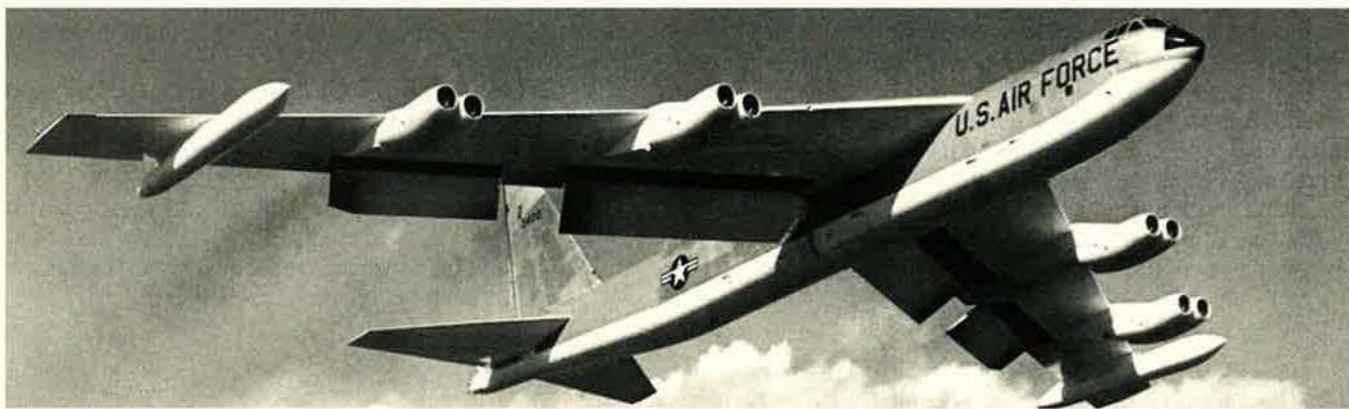
Dec. 6, 1957. The first US attempt to orbit a satellite fails when a Vanguard rocket loses thrust and explodes.

Dec. 17, 1957. First successful US launch and test flight of an ICBM, an Air Force Atlas.

Jan. 31, 1958. US finally places a satellite in orbit with Explorer I.

July 15, 1958. First major deployment (to Lebanon) of Composite Air Strike Force.

Sept. 9, 1959. Atlas missile declared operational by CinCSAC.



The B-52 became Strategic Air Command’s iconic bomber.

1960s: Superpower Standoff

Feb. 3, 1960. France tests its first atomic bomb.

May 1, 1960. CIA U-2 reconnaissance aircraft is shot down over the Soviet Union.

July 20, 1960. First flight of Polaris, the first US submarine launched ballistic missile.

Aug. 10, 1960. First successful flight of Air Force/CIA Corona, the first US photoreconnaissance satellite.

Aug. 17, 1960. Joint Strategic Target Planning Staff created to coordinate targeting of Air Force ICBMs and Navy SLBMs.

Jan. 6, 1961. Khrushchev declares support for “wars of national liberation.”

Feb. 1, 1961. Ballistic Missile Early Warning System operational.

Feb. 3, 1961. SAC’s EC-135 Airborne Command Post “Looking Glass” begins operations.

April 12, 1961. Soviet cosmonaut Yuri Gagarin makes the first manned spaceflight.

April 17, 1961. CIA-supported Bay of Pigs invasion of Cuba fails.

July 1961. Fifty percent of SAC’s bombers and tankers maintain 15-minute ground alert.

Aug. 13, 1961. Construction of Berlin Wall begins.

Sept. 6, 1961. National Reconnaissance Office created to operate intelligence satellites.

Oct. 26, 1961. US and Soviet tanks confront each other at Checkpoint Charlie in Berlin.

Nov. 16, 1961. Air Force’s Operation Farm Gate commandos arrive in Vietnam.

June 16, 1962. Secretary of Defense Robert S. McNamara publicly announces “No Cities/Counterforce” nuclear targeting doctrine.

1960s: Superpower Standoff (cont.)

Oct. 14, 1962. Air Force U-2 obtains photographic evidence of Soviet ballistic missile sites in Cuba.

Oct. 27, 1962. First 10 Air Force Minuteman ICBMs go on alert.

Oct. 28, 1962. USSR agrees to remove missiles from Cuba, ending Cuban Missile Crisis.

Aug. 5, 1963. Limited Test Ban Treaty signed by US, Great Britain, and Soviet Union.

Aug. 30, 1963. US and Soviet Union install round-the-clock teletype hotline between the Pentagon and the Kremlin.

April 21, 1964. The number of US ICBMs on alert pulls even with the number of bombers on alert.

Oct. 15, 1964. Khrushchev deposed, succeeded by Leonid Brezhnev.

Oct. 16, 1964. Chinese explode a nuclear device.

Dec. 22, 1964. First flight of the SR-71 Blackbird strategic reconnaissance aircraft.

Jan. 1, 1965. Air Force activates first SR-71 wing.

Feb. 18, 1965. McNamara announces change of strategy from "No Cities" to "Assured Destruction."

March 2, 1965. Sustained air operations against North Vietnam begin.

May 1965. C-141A Starlifter, USAF's first jet-powered transport, reaches initial operational capability.

March 10, 1966. France withdraws its armed forces from NATO.

Jan. 12, 1968. The Air Force announces a system for tactical units to carry with them everything they need to operate at "bare" bases equipped only with runways, taxiways, parking areas, and a water supply.

Jan. 16, 1968. NATO adopts strategy 14/3, "Flexible Response," replacing Massive Retaliation.



After the Cuban Missile Crisis ended in 1962, President Kennedy met at the White House with the Air Force team responsible for discovering the missiles. Nearest the President is Gen. Curtis LeMay, Air Force Chief of Staff. Maj. Richard Heyser, the U-2 pilot who found the missiles, is next to LeMay. At left are Col. Ralph Steakley and Lt. Col. Joe O'Brady. Standing in the background is Brig. Gen. Godfrey McHugh, the President's Air Force aide.

Aug. 20, 1968. Soviet and Warsaw Pact armed forces stamp out "Prague Spring" political liberalization movement in Czechoslovakia.

Nov. 12, 1968. Brezhnev Doctrine: Soviet satellites must conform to Soviet direction.

March 2-Aug. 13, 1969. Soviet and Chinese forces clash along border in Asia.

June 24, 1969. NSDM-16 calls for "Strategic Sufficiency."

July 20, 1969. US astronauts make first lunar landing.

1970s: Detente in a Dangerous Decade

July 30, 1970. Israeli Air Force shoots down five MiGs flown by Soviet pilots in Middle East "War of Attrition."



An F-4 lands at a base in South Vietnam under the watchful eyes of a security policeman and his dog. The theory was that if Vietnam fell to the communists, the other nations of Southeast Asia would also fall "like a row of dominoes."

September 1970. C-5 airlifter achieves initial operational capability.

Dec. 16, 1970. SAC receives first FB-111s.

Dec. 30, 1970. First squadron of Minuteman III missiles (with multiple warheads) becomes operational.

Feb. 21-28, 1972. President Nixon visits China.

May 26, 1972. SALT I and ABM treaties signed.

Aug. 15, 1973. Air Force aircraft fly their last combat missions of Vietnam War.

Oct. 12-Nov. 14, 1973. US Nickel Grass airlift resupplies Israel in the Yom Kippur War.

March 4, 1974. Secretary of Defense James R. Schlesinger announces "Limited Nuclear Options" strategy.

April 30, 1975. Saigon falls to North Vietnamese forces.

June 30, 1977. President Carter cancels B-1 bomber program.

Dec. 16, 1978. US and China establish diplomatic relations. US transfers recognition from Taipei to Beijing.

June 18, 1979. SALT II treaty signed.

Dec. 27, 1979. Soviet forces invade Afghanistan and overthrow the government.

1980s: Confronting the Evil Empire

Jan. 3, 1980. Carter withdraws SALT II treaty from Senate consideration because of Soviet invasion of Afghanistan.

March 31, 1980. Air Defense Command inactivated.

July 25, 1980. Presidential Directive 59 establishes "Countervailing" strategy.

Aug. 22, 1980. Department of Defense reveals existence of stealth technology.

June 18, 1981. First (and secret) flight of the F-117A stealth fighter.

Oct. 2, 1981. President Reagan reinstates the B-1 bomber program.

July 1, 1982. US Air Force activates first ground launched cruise missile (GLCM) wing at RAF Greenham Common in England.

Sept. 1, 1982. Air Force Space Command is established.

December 1982. Air launched cruise missile reaches initial operational capability.

Jan. 17, 1983. NSDD-75 calls for rollback of Soviet power and expansionism.

March 8, 1983. Reagan delivers "Evil Empire" speech.

March 23, 1983. Reagan delivers "Star Wars" speech.

Sept. 1, 1983. Soviet Union shoots down Korean Airlines flight 007.

Oct. 10, 1985. The Peacekeeper ICBM reaches initial operational capability.

April 15, 1986. In Operation El Dorado Canyon, US Air Force F-111s take off in England, refuel in air six times, strike targets in Libya, return to base in England.

October 1986. Reagan holds to Strategic Defense Initiative at Reykjavik summit.

Oct. 1, 1986. B-1B bomber achieves initial operational capability.

May 5, 1987. The last Titan II ICBM is taken off strategic alert.

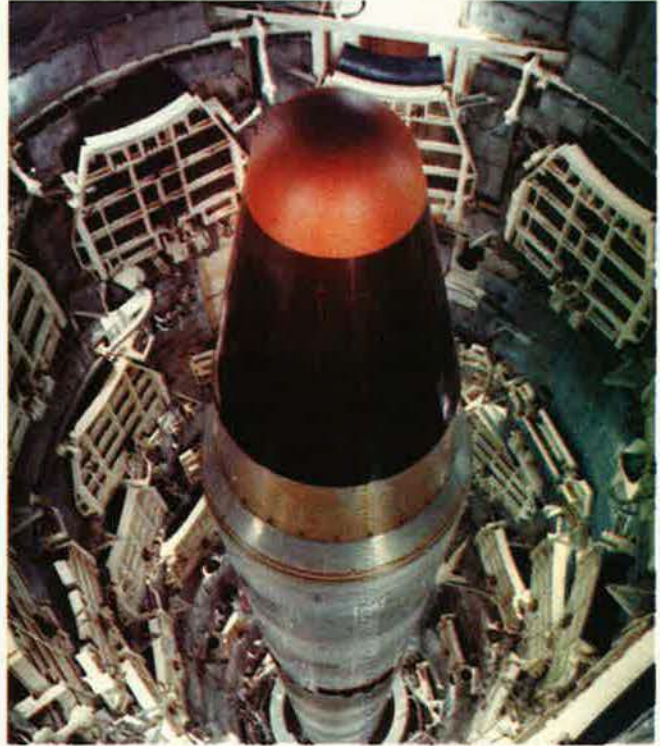
June 12, 1987. Reagan delivers "Tear down this wall" speech in Berlin.

Dec. 8, 1987. US and USSR sign Intermediate-Range Nuclear Forces (INF) treaty.

Dec. 7, 1988. Gorbachev reverses Brezhnev Doctrine.

July 17, 1989. First flight of the B-2A bomber.

Nov. 10, 1989. Fall of the Berlin Wall.



A Titan II sits in its silo. The last of this second generation version of Air Force ICBMs was removed from alert in 1987.

1990-91: Fall of the Soviet Union

July 24, 1990. SAC ends more than 29 years of continuous Looking Glass airborne alert missions.

Aug. 2, 1990. Iraq invades Kuwait.

Oct. 3, 1990. East and West Germany reunify.

Nov. 17, 1990. Conventional Forces in Europe (CFE) treaty signed.

Jan. 17, 1991. Operation Desert Storm begins; ends with Iraqi surrender Feb. 28.

July 1, 1991. Warsaw Pact formally disbands.

July 31, 1991. US and USSR sign START agreement.

Aug. 19, 1991. Communist hardliners attempt coup in Moscow. It fails Aug. 21.

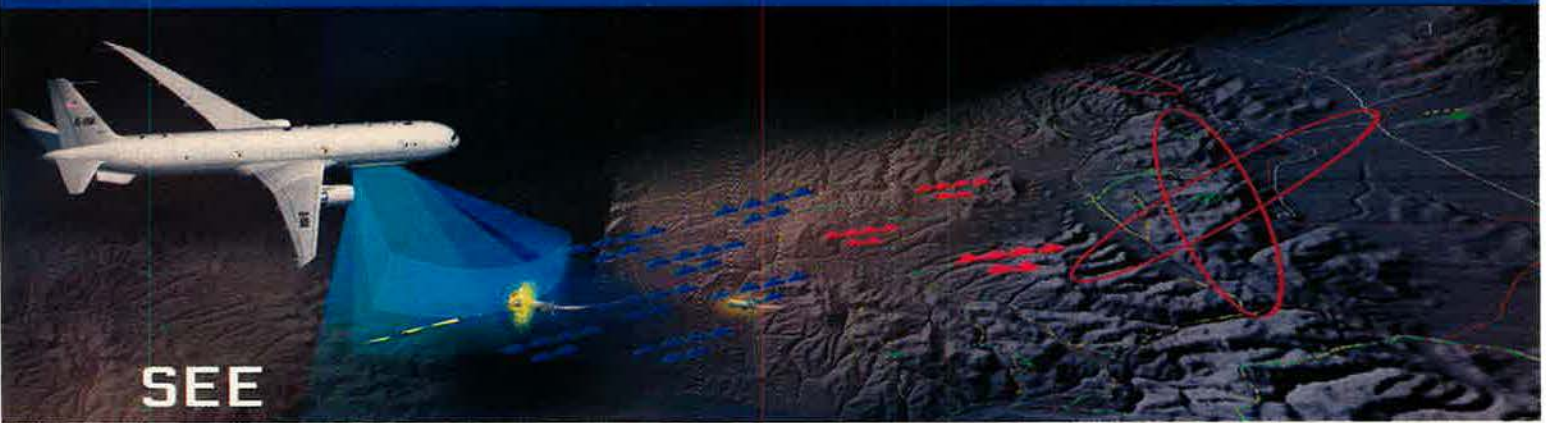
Sept. 27, 1991. US strategic bomber crews stand down from round-the-clock alert.

Dec. 26, 1991. The Soviet Union ceases to exist.



The fall of the Berlin Wall in November 1989 was a visible symbol of the fall of the Soviet Union, which formally ceased to exist two years later.

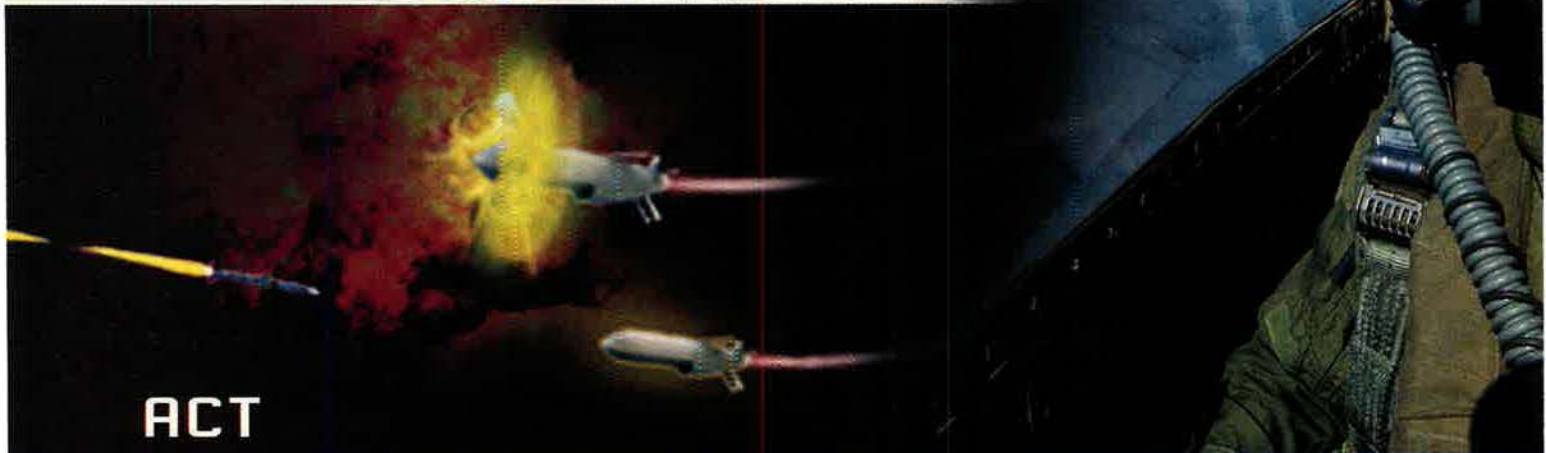
John T. Correll was editor in chief of Air Force Magazine for 18 years and is now a contributing editor. His most recent article, "Airpower and the Cuban Missile Crisis," appeared in the August issue.



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The Outstanding Airmen

By Tamar A. Mehuron, Associate Editor

SSgt. Sean D. Belding. Aircraft Structural Maintenance Journeyman, 653rd Combat Logistics Support Squadron (Air Force Materiel Command), Robins AFB, Ga.—Responsible for structural maintenance on C-5, C-17, C-130, and F-15 aircraft. ... Repair and manufacturing skills played a major role in achieving squadron's best assessment pass rate of 93 percent. ... Manufactured C-5 skin panels, rebuilt F-15 wing assemblies. ... Completed inspection and repairs of high-priority C-130s ahead of schedule.



SMSgt. James E. Davis. Security Forces Manager, 1st Security Forces Squadron (Air Combat Command), Langley AFB, Va.—Served as operations director for Joint Iraqi Military Police Academy. ... Trained the academy's first class of Iraqi soldiers. ... Continued training Iraqi soldiers while the school endured 18 consecutive days of mortar attacks. ... Received Bronze Star for his work while deployed to Iraq and Afghanistan. ... Directed physical security at Langley for F/A-22 beddown. ... Created plan to steer unit through period of high operating tempo and deployments.

TSgt. (now MSgt.) Michael E. Harris. Dispatch Support Supervisor, 18th Logistics Readiness Squadron (Pacific Air Forces), Kadena AB, Japan.—Led USAF's first gun truck convoy to augment Army mission wartime shortfalls. ... Derailed night ambush by terrorists on convoy in Fallujah. ... Warded off dozens of heavily armed insurgents; his troops suffered no injuries. ... Awarded the Bronze Star, Meritorious Unit Award with Valor, and Army's 13th Corps Support Command's combat patch for heroism. ... Asked to teach new Air Education and Training Command combat convoy course.



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The 12 selectees are awarded the Outstanding Airman ribbon with the bronze service star device and wear the Outstanding Airman badge for one year.



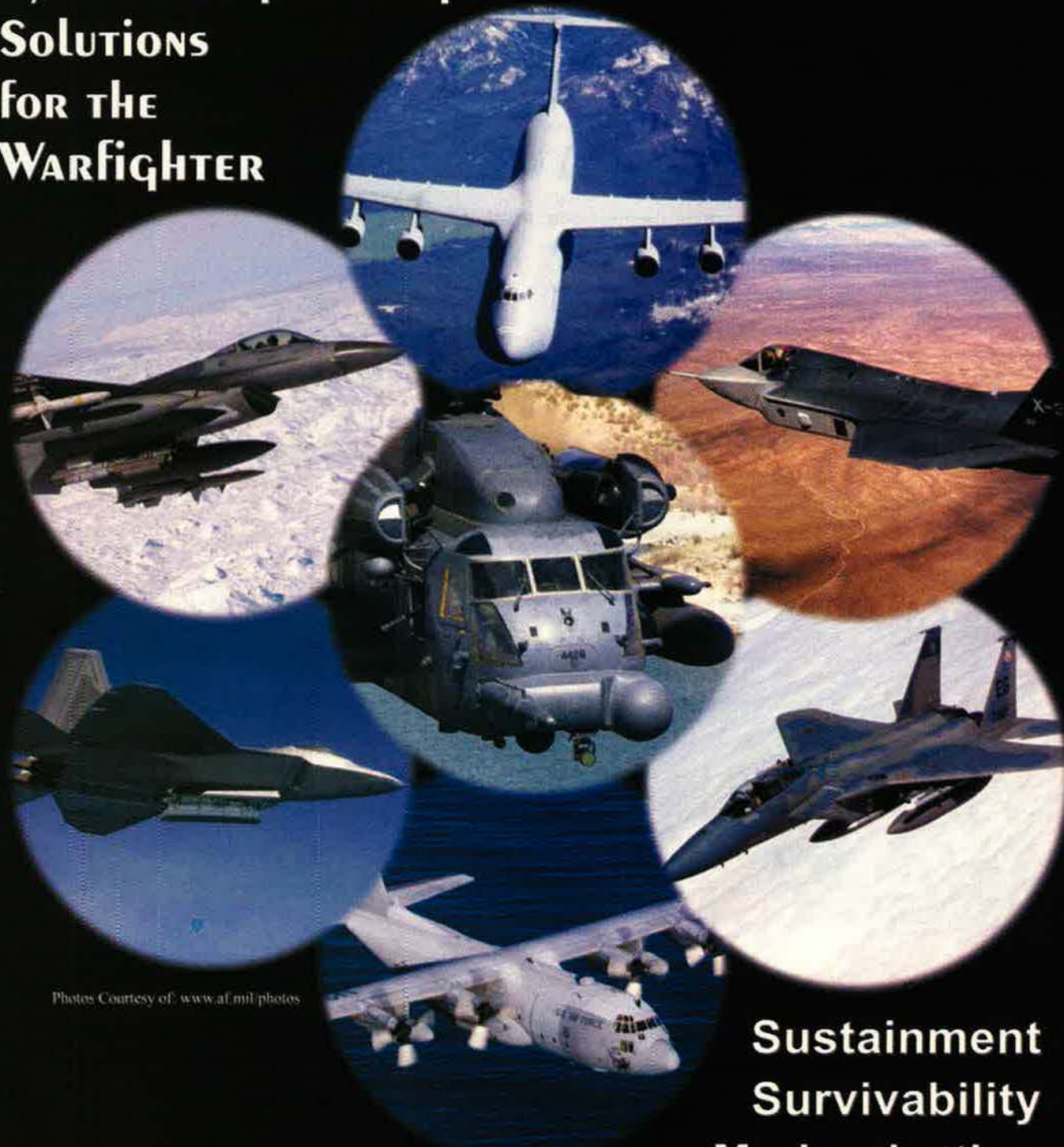
MSgt. Douglas C. Isaacks. Pararescue Superintendent, 56th Rescue Squadron (US Air Forces in Europe), NAS Keflavik, Iceland.—USAFE Senior Noncommissioned Officer of the Year. ... Co-authored rescue jumpmaster plan of instruction. ... Led and trained Czech, Polish, and British forces in search and rescue tactics. ... Directed HH-60G static line personnel parachute jumps, producing proficient jumpers with no mishaps. ... Devised combined MEDEVAC procedures aboard Danish frigate. ... Enhanced pararescue jumper expertise for USAFE and Air Force Special Operations Command.

MSgt. Robert N. Liles. Superintendent, Operations Element, 342nd Training Squadron (Air Education and Training Command), Lackland AFB, Tex.—Received base Large Unit Safety Award for safety program. ... Led flight to highest explosive/ground safety rating in 20 years. ... Created convoy weapons safety guide. ... Oversaw combat convoy firearms training for 980 personnel preparing for deployment. ... Validated new tactical rifle qualification course. ... Directed creation of range improvement team.



SrA. John A. Lockheed. Air Traffic Control Journeyman, 270th Air Traffic Control Squadron (Air National Guard), Klamath Falls, Ore.—Controlled aircraft three days after arrival in Iraq. ... Selected to train new personnel. ... Secured airspace into Turkey for MEDEVAC aircraft transporting wounded troops. ... Assumed control of half of Iraq's airspace when Balad ATC Center lost radios and radar. ... Coordinated F-16s and Apache gunships protecting Army convoy. ... Relayed coordinates of oil pipeline under attack to AWACS and fighter aircraft. The warplanes stopped the attack, saving the pipeline.

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SSgt. (now TSgt.) Amber B. Mitchell. Senior Aerospace Control Officer Evaluator, 45th Operations Group (Air Force Space Command), Patrick AFB, Fla.—Received 14th Air Force’s Gen. Charles A. Horner leadership award. ... Named Enlisted Space Operator of the Year. ... Attained perfect score during Guardian Challenge. ... Helped 45th Space Wing win the 2004 Schriever Trophy. ... Identified deficient operations trends, preventing potential launch hazards. ... Chosen for inaugural AFSPC Guardian Path leadership course.



SSgt. Terrence A. Raybon. Medical Laboratory Journeyman, 60th Medical Diagnostics and Therapeutics Squadron (Air Mobility Command), Travis AFB, Calif.—Managed clinic and bedside point of care testing sites. ... Spearheaded equipment upgrade. ... Revamped training for lab tasks. ... Implemented one-on-one instruction. ... Improved staff training. ... Ensured patient privacy with revision to file format. ... Attention to detail garnered “best practices” acclaim for unit in Air Force blood program audit. ... Received John L. Levitow Award.

SMSgt. Anthony J. Rittwager. Accessories Flight Chief, 514th Maintenance Squadron (Air Force Reserve Command), McGuire AFB, N.J.—Supervised Reserve maintenance support for airlifters in the 514th Air Mobility Wing. ... Drafted and implemented reconstitution plan for KC-10s returning from Iraq. ... Organized volunteer and mobilization deployments to offset deployed maintenance crew shortfalls. ... Drew up C-17 training plan for Reserve maintainers. ... Earned 22nd Air Force’s Lt. Gen. Leo Marquez Aircraft Maintenance Supervisor/Manager Award.





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TSgt. (now MSgt. sel.) Paul J. Schaaf II. Kennel Master and Military Working Dog Handler, 823rd Security Forces Squadron (Air Combat Command), Moody AFB, Ga.—Deployed for 225 days to Ali, Kirkuk, and Balad Air Bases, Iraq. ... Selected as interim kennel master to direct 31 troops and 27 dogs. ... Developed first-ever deployed military working dog training course for handlers. ... Primary jumpmaster for security forces airborne element, overseeing 20 jumps with 160 paratroopers. ... Prepared airmen to complete Army Basic Airborne Course.

SSgt. Scott V. Tamayo. Contract Administrator, 15th Contracting Squadron (Pacific Air Forces), Hickam AFB, Hawaii.—Named top contracting airman in PACAF. ... Devised new procedures to gather contractor performance data, halving assessment time. ... Engineered replacement of dorm air-conditioning system, solved mold problem affecting 124 residents. ... Expeditiously prepared airfield pavement contracts. ... Managed repair of Hickam's seawall. ... Received John L. Levitow Award.



SrA. Amber J. Turek. Firefighter, Fire Dept. Emergency Services Flight (Air Force Special Operations Command), Hurlburt Field, Fla.—Provided emergency services for base personnel and special operations aircraft. ... Personally responded to 100 fire calls while protecting assets worth billions. ... Conducted fire-fighting operations during a major gas leak, evacuating personnel, preventing explosion. ... Responded to numerous aircraft, facility, and medical emergencies with zero combat assets lost while forward deployed to Southwest Asia.



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By Chequita Wood, Editorial Associate

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(as of Sept. 2)



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CMSAF Gerald R. Murray



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Clarence R. Anderegg



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Mark J. Lewis



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Barksdale AFB, La.

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Lt. Gen. Walter E.L. Buchanan III
Shaw AFB, S.C.

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Air Warfare Center
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Nellis AFB, Nev.

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Air Force Recruiting Service
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Air University
Lt. Gen. John F. Regni
Maxwell AFB, Ala.

Wilford Hall USAF Medical Center (59th Medical Wing)
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Electronic Systems Center
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Ogden Air Logistics Center
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22nd Air Force
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21st Expeditionary Mobility Task Force
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Kadena AB, Japan

720th Special Tactics Group
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USAF Special Operations School
Col. John D. Jogerst
Hurlburt Field, Fla.

Pacific Air Forces

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Vice Commander
Lt. Gen. David A. Deptula
(confirmed)



Command Chief Master Sergeant
CMSgt. Rodney J. McKinley

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Yokota AB, Japan

7th Air Force
Lt. Gen. Garry R. Trexler
Osan AB, South Korea

11th Air Force
Lt. Gen. Carrol H. Chandler
Elmendorf AFB, Alaska

13th Air Force
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Hickam AFB, Hawaii

Air Force Space Command

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Vice Commander
Lt. Gen. Daniel P. Leaf



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Air Force District of Washington

Bolling AFB, D.C.



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Arlington, Va.

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Director, Defense Security Cooperation Agency
Arlington, Va.

Lt. Gen. Henry A. Obering III
Director, Missile Defense Agency
Arlington, Va.

Maj. Gen. Trudy H. Clark
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Ft. Belvoir, Va.

Maj. Gen. Robert H. Latiff
Deputy Director, System Engineering
Chantilly, Va.

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Vice Director, Defense Logistics Agency
Ft. Belvoir, Va.

Maj. Gen. Darryl A. Scott
Director, Defense Contract Management Agency, USD Acquisition, Technology, & Logistics
Alexandria, Va.

Maj. Gen. Robin E. Scott
Director, National Assessment Group, USD, Acquisition, Technology, & Logistics

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Director, Nuclear Policy & Arms Control, National Security Council

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Chantilly, Va.

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Director, Signals Intelligence Systems Acquisition & Operations Directorate, NRO
Chantilly, Va.

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Ft. Meade, Md.

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Military Executive and Director, Military Support & Operations, National Geospatial-Intelligence Agency
Bethesda, Md.

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Chief of Staff, United States Air Force (as of Sept. 2)

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Director, Strategic Plans & Policy

Maj. Gen. Thomas A. Dyches
Asst. to Chairman, JCS, Reserve Matters

Maj. Gen. Joseph E. Kelley
Joint Staff Surgeon

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Deputy Director, Operations, Team 1, National Military Command Center

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Deputy Director, National Systems Operations

Brig. Gen. Paul A. Deltmer
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Deputy Director, Anti-terrorism/Homeland Defense

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MacDill AFB, Fla.

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US Security Coordinator & Chief, Office of Military Cooperation
Kabul, Afghanistan

Maj. Gen. Vern M. Findley II
DCS, Strategy, Plans, & Assessment, Multinational Force-Iraq
Baghdad, Iraq

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Baghdad Iraq

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MacDill AFB, Fla.

Brig. Gen. Albert F. Riggie
Director, Joint Security
MacDill AFB, Fla.

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Ramstein AB, Germany

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Deputy Commander
Stuttgart-Vaihingen, Germany

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Director, Plans & Policy
Stuttgart-Vaihingen, Germany

Maj. Gen. Edward L. LaFountaine
Director, Logistics & Security Assistance
Stuttgart-Vaihingen, Germany

Maj. Gen. Craig R. McKinley
Director, Mobilization & Reserve Component Affairs
Stuttgart-Vaihingen, Germany

Maj. Gen. Peter U. Sutton
Chief, Office of Defense Cooperation Turkey
Ankara, Turkey

Brig. Gen. Thomas J. Verbeck
Director, C3 Systems & Warfighting Integration; and Deputy Director, EUCOM
Plans & Operations Center
Stuttgart-Vaihingen, Germany

US Joint Forces Command

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Director, Strategic Requirements & Integration
Norfolk, Va.

Maj. Gen. James N. Solgan
Chief of Staff
Norfolk, Va.

US Northern Command

Maj. Gen. Dale W. Meyerrose
Director, Architectures & Integration
Peterson AFB, Colo.

Maj. Gen. Mark A. Volchhoff
Director, Policy & Planning
Peterson AFB, Colo.

Brig. Gen. Rosanne Bailey
Commander, Cheyenne Mountain Operations Center
Cheyenne Mountain AFS, Wyo.

Brig. Gen. Harold W. Moulton II
Director, Standing Joint Force Headquarters-North
Peterson AFB, Colo.

US Pacific Command

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Hickam AFB, Hawaii

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Commander, Alaskan Command
Elmendorf AFB, Alaska

Lt. Gen. Bruce A. Wright
Commander, US Forces Japan
Yokota AB, Japan

Maj. Gen. Gary L. North
Director, Operations
Camp H.M. Smith, Hawaii

Brig. Gen. Ralph J. Jodice II
US Defense Attache, China
Beijing

Brig. Gen. David M. Snyder
Deputy Director, Strategic Planning & Policy
Camp H.M. Smith, Hawaii

US Southern Command

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Commander, US Southern Command Air Forces
Davis-Monthan AFB, Ariz.

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Deputy Commander
Miami

Brig. Gen. Thomas K. Andersen
Vice Commander, US SOUTHCOM Air Forces
Davis-Monthan AFB, Ariz.

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Director, Standing Joint Force Headquarters
Miami

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Director, Strategy, Policy, & Plans
Miami

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Vice Commander, Air Force Component Command
Hurlburt Field, Fla.

Maj. Gen. Donald C. Wurster
Director, Special Operations Center for Networks and Communications
MacDill AFB, Fla.

Maj. Gen. (sel.) David J. Scott
Deputy Commanding General, Joint Special Operations Command
Ft. Bragg, N.C.

Brig. Gen. Alfred K. Flowers
Director, Center for Force Structure, Resources, & Strategic Assessments
MacDill AFB, Fla.

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Deputy Commander, US STRATCOM Global Network Operations and Defense
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Commander, Joint Functional Component Command, Space & Global Strike
Barksdale AFB, La.

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Offutt AFB, Neb.

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Commander, Task Force 214
F.E. Warren AFB, Wyo.

Maj. Gen. Paul J. Lebras
Director, Joint Information Operations Center
Lackland AFB, Tex.

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Offutt AFB, Neb.

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Vandenberg AFB, Calif.

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Bolling AFB, D.C.

Maj. Gen. (sel.) Richard Y. Newton III
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Offutt AFB, Neb.

Brig. Gen. Frederick D.J. Van Valkenburg Jr.
Director, Combat and Information Operations
Offutt AFB, Neb.

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Director, C4 Systems
Scott AFB, Ill.

Brig. Gen. Thomas J. Loftus
Command Surgeon
Scott AFB, Ill.

Brig. Gen. Jarisse J. Sanborn
Chief Counsel
Scott AFB, Ill.

Brig. Gen. Paul J. Selva
Director, Operations & Logistics
Scott AFB, Ill.

North American Aerospace Defense Command

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Commander, Alaskan NORAD Region
Elmendorf AFB, Alaska

Maj. Gen. William F. Hodgkins
Director, Plans
Peterson AFB, Colo.

Maj. Gen. Marvin S. Mayes
Commander, CONUS NORAD Region
Tyndall AFB, Fla.

Maj. Gen. Dale W. Meyerrose
Director, Command Control Systems
Peterson AFB, Colo.

Brig. Gen. Donald J. Quenneville
Deputy Commander, Canadian NORAD Region
Winnipeg, Manitoba, Canada

North Atlantic Treaty Organization

Gen. Robert H. Foglesong
Commander, Allied Air Component Command Ramstein
Ramstein AB, Germany

Lt. Gen. Thomas L. Baptiste
Asst. Chief of Staff, NATO Military Committee
Brussels, Belgium

Lt. Gen. Glen W. Moorhead III
Commander, Allied Air Component Command Izmir
Izmir, Turkey

Maj. Gen. Joseph P. Stein
Asst. Chief of Staff, Operations, SHAPE
Casteau, Belgium

Maj. Gen. Gary A. Winterberger
Commander, NATO Airborne Early Warning & Control Force Command
Casteau, Belgium

Maj. Gen. (sel.) David E. Clary
Assistant Chief of Staff, Operations, Allied Air Component Command Izmir
Izmir, Turkey

Maj. Gen. (sel.) Larry D. New
Deputy Commander, Combined Air Operations Center 7
Larissa, Greece

Brig. Gen. Stephen P. Moutier
Chief of Staff, Joint Warfare Center
Stavanger, Norway

Brig. Gen. Michael F. Planert
Deputy Commander, CAOC 6
Eskisehir, Turkey

Brig. Gen. Stephen D. Schmidt
Commander, E-3A Component
Gellenkirchen, Germany

United Nations Command

Lt. Gen. Barry R. Trexler
Deputy Commander, UN Command and US Forces Korea; and Commander, Air
Component Command, ROK/US Combined Forces Command
Osan AB, South Korea

Maj. Gen. Stephen T. Sargeant
Deputy Chief of Staff, UN Command and US Forces Korea
Yongsan Army Garrison, South Korea

Maj. Gen. (sel.) Dana T. Atkins
Chief of Staff, Air Component Command, ROK/US Combined Forces Command;
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The Rumsfeld Pentagon wants to overhaul the concept and use a very different yardstick for sizing the armed forces.

The Two-War Strategy Begins To Fade Away

By Jason Sherman

When the Pentagon released its new “National Defense Strategy” last March, it dropped a big hint that the armed forces might soon face major and painful force structure changes.

“To date,” the paper pointedly noted, US forces have been shaped and sized to defend the homeland, deter aggressors in four theaters, defeat two major regional enemies at more or less the same time, and occupy one of them, if necessary.

Then came the punch line. “This framework and these standards,” the paper declared, “will be reviewed” in the 2005 Quadrennial Defense Review.

And so they have been—with potentially major effect. Pentagon officials have decided to overhaul the so-called “1-4-2-1” standard and, from now on, use a different yardstick to work out how many forces—and even what kind of forces—the country needs.

The move takes dead aim at the core principle that the United States must have conventional military forces large enough and powerful enough to fight and win two major regional wars more

or less simultaneously. This bedrock requirement is the reason Washington still maintains a relatively large and well-equipped and expensive conventional force of some 1.4 million active troops and 861,000 organized Guardsmen and Reservists.

The decision to change things was made this summer, according to Defense Department officials. They suggested that the move could set the stage for wide-ranging revisions to war plans, weapons system investments, and military organization.

Ever since the early 1990s, the Pentagon’s standard for force planning has been based on the “two-war” formula, with emphasis on fighters, warships, armor, and other “traditional” combat systems.

Search for Flexibility

The new construct—being developed by the Office of the Undersecretary of Defense for Policy and the Joint Staff—aims to introduce more suppleness to US war planning, allowing decision-makers to consider a wider array of global engagements than can

be contemplated in the traditional two-major-war construct.

"What we're trying to do with this construct is to bring greater flexibility to the leadership," said a high-level defense official engaged in the process.

Clark A. Murdock, a senior advisor at the Center for Strategic and International Studies in Washington, D.C., and a consultant to the Office of the Secretary of Defense on QDR matters, said, "The force planning construct is at the heart of defense planning."

Lt. Col. Chris Conway, a Pentagon spokesman, confirmed that the Defense Department "is exploring options to adjust the current force planning construct." However, few will talk about the matter for the record.

Ever since the early 1990s, the services have prepared for two major regional wars, in the expectation that a force capable enough to handle that demanding scenario would be strong enough to handle all other lesser contingencies—from humanitarian relief to peacekeeping and counterterrorism.

To meet this standard, the Pentagon has funded 20 active, Reserve, and Air National Guard fighter wings for the Air Force, 12 big-deck Navy aircraft carriers, 10 active Army divisions, and three Marine Corps expeditionary forces.

The two-war formula was altered somewhat by Secretary of Defense Donald H. Rumsfeld in summer 2001, at the end of a previous QDR. At that time, he broadened the strategy by adding a requirement to provide homeland defense and deterrence in four theaters. However, the Pentagon had rushed into making the determination, and Rumsfeld never was truly happy with it.

Momentum to dispense with the two-war standard built this spring during several high-level QDR "roundtable" discussions hosted by Marine Corps Gen. Peter Pace, the vice chairman of the Joint Chiefs of Staff, and Paul D. Wolfowitz, who was then the deputy secretary of defense.

These meetings focused on four so-called "challenge areas" held by Rumsfeld to be critically important. These were building coalitions to defeat terrorism; defending the US homeland; countering the proliferation of weapons of mass destruction; and shaping the choices of countries at a strategic crossroads, the most important example of which was China.

During these deliberations, it became clear the framework did not account for the long-endurance missions such as

Two-War Standard Through the Years

1990: President George H.W. Bush

"The size of our forces will increasingly be shaped by the needs of regional contingencies." [Gen. Colin Powell, the Chairman of the Joint Chiefs of Staff at that time, later elaborated: "We knew then (in 1990) ... that prudent planning requires that we be able to deal simultaneously with two major crises of this type."]

1992: National Military Strategy

"When the United States is responding to one substantial regional crisis, potential aggressors in other areas may be tempted to take advantage of our preoccupation. Thus we cannot reduce forces to a level which would leave us or our allies vulnerable elsewhere."

1993: Bottom-Up Review

"It is prudent for the United States to maintain sufficient military power to be able to win two major regional conflicts that occur nearly simultaneously."

1995: National Military Strategy

"The core requirement of our strategy ... is a force capable of fighting and winning two major regional conflicts nearly simultaneously."

1997: Quadrennial Defense Review

"As a global power with worldwide interests, it is imperative that the United States now and for the foreseeable future be able to deter and defeat large-scale, cross-border aggression in two distant theaters in overlapping time frames."

2001: Quadrennial Defense Review

"US forces will remain capable of swiftly defeating attacks against US allies and friends in any two theaters of operation in overlapping time frames."

2004: National Military Strategy

"Even when committed to a limited number of lesser contingencies, the armed forces must retain the capability to swiftly defeat adversaries in two overlapping military campaigns."

2005: National Defense Strategy

"We maintain a total force that is balanced and postured for rapid deployment and employment worldwide. It is capable of surging forces into two separate theaters to 'swiftly defeat' adversaries in military campaigns that overlap in time."

the war in Iraq. The Defense Department wants to talk about new missions such as stability operations and "active partnering," a term now used to describe what was once called "security cooperation."

This summer, Pentagon officials produced a new, three-part force planning construct. It gave roughly equal attention to the demands of homeland defense, the global war on terrorism, and conventional campaigns. The standard was tested with computer tools collectively known as "Operational Availability-06."

One, One, One

Plans called for the Pentagon in August to produce preliminary versions of this new construct—which unofficially is called "1-1-1" by some in the Pentagon. These versions were to give detailed alternative concepts about how much US military force would be needed to deal with each of these three problem areas.

Officials say that this new construct, when it is put in final form, will be the prism through which senior decision-makers will view force structure, weapons systems investment, and, possibly, service roles and missions.

It should be noted, said officials, that the Defense Department might actually wind up with armed forces sufficient to fight two major combat operations. However, it would not necessarily configure a conventional force for more than one major regional war at a time. The remainder of the force would be configured to take on a wider variety of duties and would offer a broader group of options.

The key point was put this way by a uniformed military official engaged in the planning process: "What we are trying to do is build a different structure so there are other ways you could think about it [the second regional war]. You could think about doing two major events. ... You could do one major event

and many smaller events. We don't know what those numbers of smaller ones are yet. That's what we're hoping to get from the analysis."

In more detail:

■ **Homeland Defense.** The first area of focus in the new construct is homeland defense. Forces would support the nation's civil authorities dealing with the aftermath of a massive terrorist attack on US cities; assist in controlling the air, land, and sea approaches to US borders; and defend against enemy attacks with ballistic and cruise missiles.

In June, the Pentagon issued a long-awaited "Strategy for Homeland Defense and Civil Support," crafted by the Office of the Assistant Secretary of Defense for Homeland Defense, Paul McHale, setting forth the most detailed blueprint yet for how US armed forces will contribute to protecting American soil.

"The core element of that strategy is a call for the creation of an active, layered defense in depth," said McHale.

This entails military defense of the "global commons" of space and cyberspace, military intelligence and combat operations abroad, and armed protection of air, land, and sea approaches to the nation. Should these defenses fail, US forces would help mitigate the consequences of an attack.

James Jay Carafano, a retired Army officer and homeland security expert at the Heritage Foundation in Washington, said of the new strategy, "I think it's the first real clear sign—even more important than establishing Northern Command—that the Defense Department is serious about being a partner" with other federal agencies in protecting the nation.

Now, DOD must decide how much of the force to assign to homeland defense.

■ **Global War on Terrorism.** Dealing with this second strategic requirement could bring big changes to the US military. Said one service official, "This category is going to be the major area for justifying or refuting systems and forces across all services. So this is [what] you should keep your eye on."

This category accounts for the demands of increased force rotation. Planners hope to identify capabilities required to improve the US military's proficiency against irregular warfare—terrorists, insurgents, guerrillas, and so forth.

Rumsfeld for more than a year has been pushing the services to think anew

about capabilities needed to handle irregular challenges, those that aim to erode US power rather than take it on in a direct way. The services are taking steps to better prepare for irregular warfare.

The Navy in July established a bundle of new capabilities in a bid to recalibrate part of the fleet to better support ground operations in the global war on terrorism. The new capabilities include new units to operate on rivers, others to fight on land, and new career tracks for foreign area specialists.

"The Navy has been working hard to determine how it should align itself to support the global war on terrorism," said Robert Work, a naval analyst with the Center for Strategic and Budgetary Assessments in Washington. "This is the first set of decisions based on all of the deliberations."

This spring, the Air Force and Navy convened a classified conference to examine how best to employ airpower against insurgencies and in the global war on terrorism. The Air Force's Checkmate division—a staff that focuses on optimizing airpower to support operational units—teamed with counterparts on the Navy's Deep Blue staff and the wider Navy fleet.

"What we want to do is focus on how best to use airpower in the counterinsurgency fight we face in Iraq as well as the global war on terrorism," said Air Force Col. William MacLure, chief of the Checkmate division.

The Army has crafted a new agenda to improve counterinsurgency skills, better define its homeland defense role and enhance capabilities to deal with post-conflict operations. The focus on these capabilities are among 10 "strategic imperatives" detailed in the "Army Strategic Planning Guidance" for 2005 issued in January by Army Secretary Francis J. Harvey and Gen. Peter J. Schoomaker, the service Chief of Staff.

Similarly, Marine Corps Commandant Gen. Michael W. Hagee, in an April message to all marines, emphasized the need to improve proficiency against these kinds of threats.

■ **Conventional Campaigns.** The third category focuses on the "traditional" preparation for fighting and winning conventional campaigns. It includes all potential adversaries with

conventional armed forces, including those with "disruptive" capabilities.

"We want to bring 'campaign' into the lexicon to convey the notion that there is more than just the kinetic phase of an operation," said a uniformed planner. "We're also talking about active partnering and deterrence tailored to the kind of threats we face."

Recent QDR deliberations about the nature of conventional campaigns have included discussions on how best to manage future relations with China, which will likely play a key role in determining how to size US forces for major combat operations.

The introduction in recent years of precision weapons and force networking appears to have changed the calculation of how much conventional power is enough. "It's clear [that today] there's a lot more capability resident in a unit of US military force structure," said Murdock. "It's clear we can do more with less when it comes to major combat operations."

Rumsfeld served notice last year that he aims to use the 2005 QDR to scale back investments in traditional areas—such as tactical airpower—where the US enjoys significant advantages over potential adversaries. He wants to redirect some of that money to investments that would improve US military capabilities to deal with a range of new challenges.

Rumsfeld wants to be able to deal better with "irregular" threats, "catastrophic" threats aimed at paralyzing the United States with surprise hits on symbolic and high-value targets, and "disruptive threats" that could end-run US military technical superiority in areas such as space. It appears that Rumsfeld aims to make good on that promise.

"What you will see is funding and emphasis ... migrating out of traditional warfare areas," said a defense analyst engaged in QDR work.

The new force standard could touch off an interservice debate about roles of missions. One proposal along these lines has already been advanced by RAND. It calls for the Air Force and Navy to focus on conventional campaigns and for the Army and Marine Corps to focus on irregular threats.

Whatever its final form, the new force planning construct is sure to have an impact in the months just ahead. ■

Jason Sherman is senior correspondent for InsideDefense.com, part of the Inside the Pentagon family of newsletters, based in Arlington, Va. His most recent article for Air Force Magazine, "On Rumsfeld's 'Terms,'" appeared in the June issue.



U.S. Air Force photo by Tech. Sgt. Sandra Niedzwiecki

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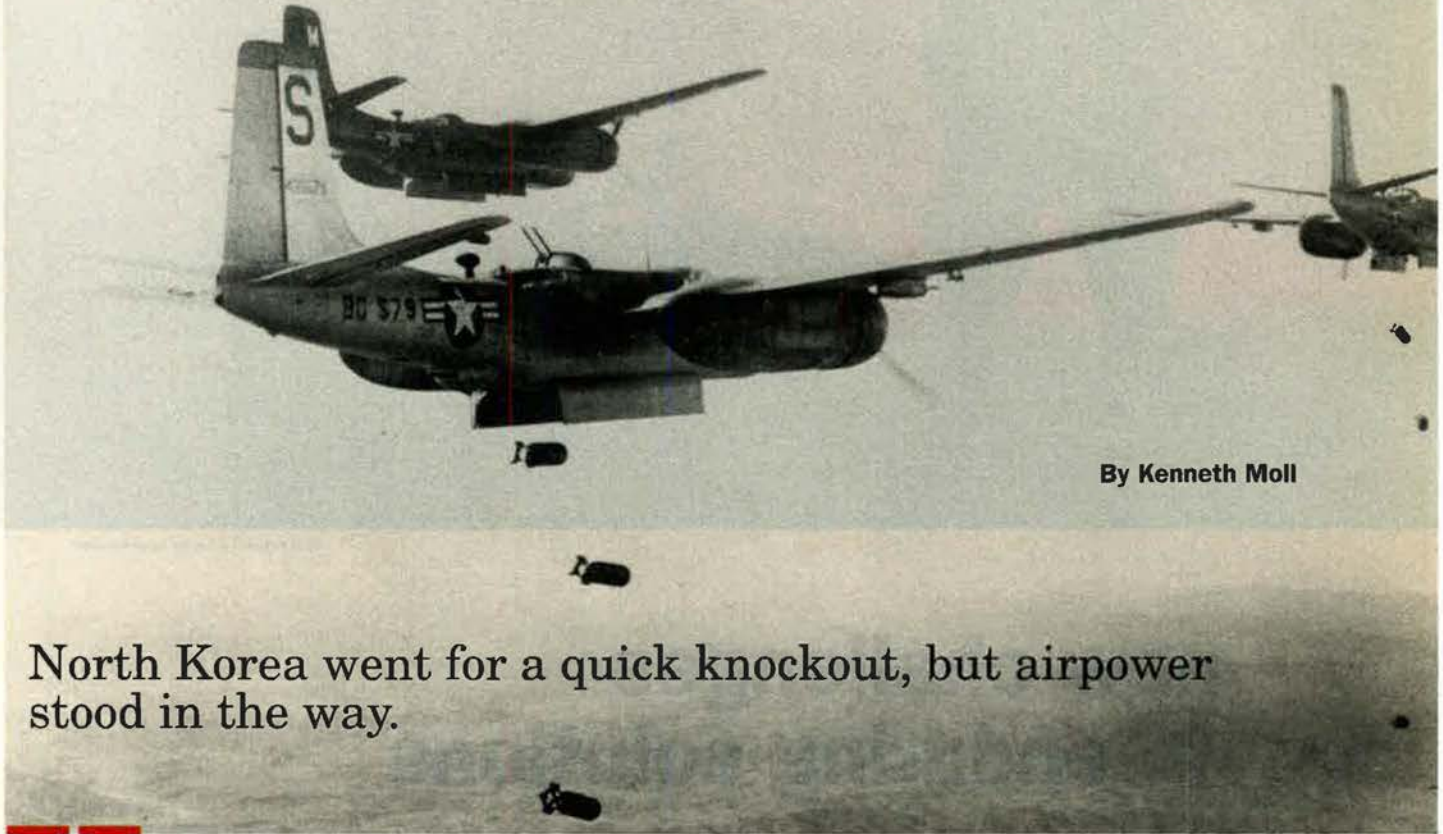
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The Guns of July



By Kenneth Moll

North Korea went for a quick knockout, but airpower stood in the way.

Historians say it takes 50 years to fully understand any conflict, and yet, even after a full half-century, Korean War accounts still are marred by a huge gap. They generally do not explain the July 1950 collapse of North Korea's invasion.

Communist North Korea launched its offensive south from the 38th parallel on June 25, 1950. Seoul, South Korea's capital, fell in a mere four days, on June 28. Trying to slow down the communist advance, South Korea prematurely destroyed bridges over the Han River, trapping most of the 95,000 retreating South Korean soldiers. By July 1, only 22,000 South Korean troops were still in action.

Thus, after Week 1 of the war, the Republic of Korea's situation seemed hopeless. North Korean forces had crossed the Han and were poised for the knockout. Three depleted ROK

divisions faced nine crack communist divisions—about 90,000 troops led by 150 T-34 tanks. The T-34s were impervious to ROK antitank weapons.

From the Han, it is only 250 miles to the town of Pusan, the capture of which would have sealed off the peninsula, forcing the United States to contemplate a bloody, D-Day type amphibious invasion. Seemingly, fast-charging communist forces had a clear path to reach it in a few weeks or even days.

North Korea, of course, didn't get to Pusan in July—or ever. It is a failure that has never been adequately explained in any public way. North Korea has refused to release authentic historical data. Western reporters weren't on the scene to provide firsthand accounts.

Some Month

However, USAF operational records

and a few other sources are available, so at least a one-sided outline of the events of July 1950 can be presented. What these accounts show is what may well have been the Air Force's greatest one-month achievement of the entire Cold War period.

Simply put, they suggest that the Air Force saved South Korea by harassing and greatly slowing the North's advance. Roy E. Appleman, an Army Korean War historian, concluded that North Korea's July failure to conquer the peninsula gave UN ground forces time to arrive and hold the Pusan Perimeter. With that, the tide turned.

USAF's Far East Air Forces went into action within days of the surprise attack. By July 1, the end of the first week, FEAF was the most effective resisting force, and this continued throughout the month. The importance of airpower in the outcome of the war

1950

NORTH KOREA

SEA OF JAPAN

Staff map by Zaur Eylanbekov

Front, July 1
Week One

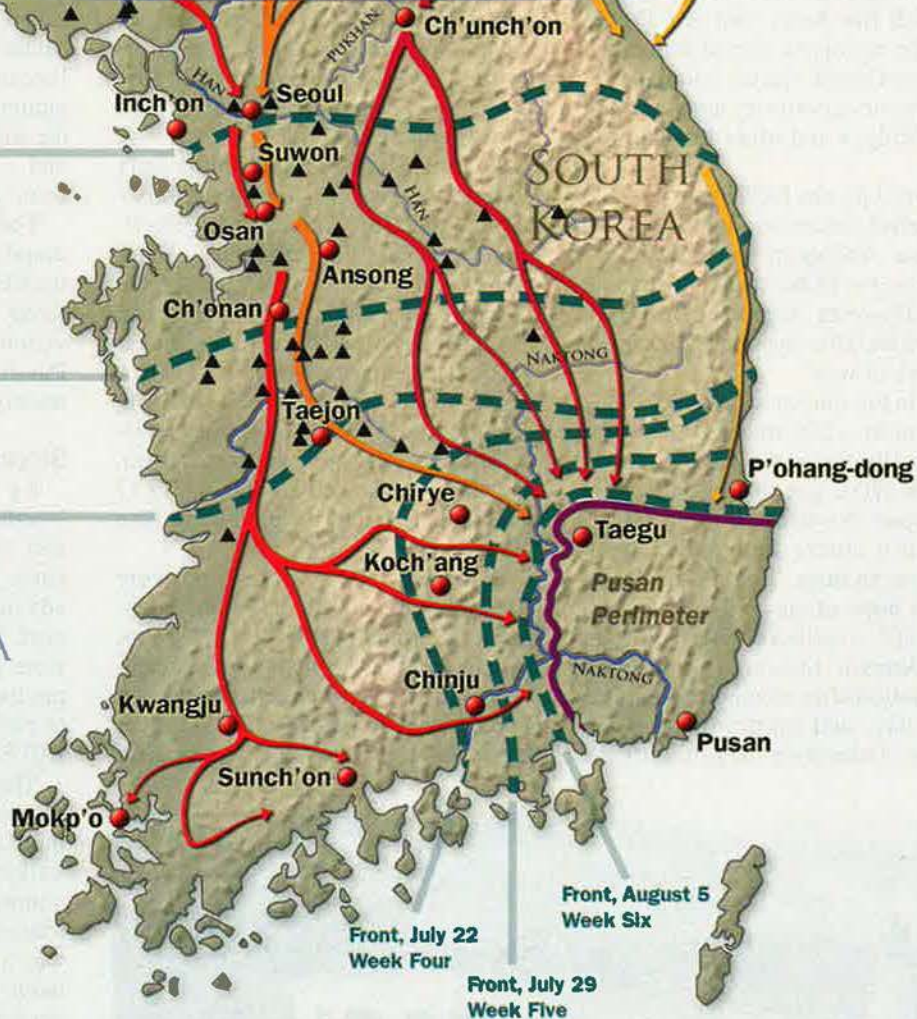
Front, July 8
Week Two

Front, July 15
Week Three

YELLOW SEA

Key

- Main advance routes (indicated by red and orange arrows)
- Bridges (indicated by black triangles)



North Korean invaders initially routed the forces defending South Korea and appeared poised to sweep over the entire peninsula. USAF aircraft such as the B-26s (left) helped slow the advance and eventually halt the invasion at the Pusan Perimeter.

can be seen in FEAF's week-by-week action.

July 2-8: On July 4, communist forces headed south toward Osan, Taejon, and Taegu on the main route to Pusan (see map). Other North Korean penetrations swept over South Korea's mountain passes and down Korea's east coast with little resistance.

USAF B-26s flew close air support

for ROK forces. F-80s and F-51s, flying at maximum range from Japan, provided air cover and struck ground targets. Fighters spotted huge North Korean vehicle convoys stopped behind a destroyed bridge 15 miles south of Osan. For three days, B-26s and F-80s hammered the columns, claiming 197 trucks and 44 tanks destroyed. Some thought these claims were exaggerated,

but one Army veteran said, "There were considerable losses."

Communist forces evidently had not been trained to meet the hazards of opposing air strikes. Noted one air commander, "We would time and time again find convoys of trucks that were bumper to bumper against a bridge that had been knocked out, and we'd go in to strafe them, and every man in the

truck would stand up where he was and start firing his rifle at us.”

The US Navy contributed to the air war and controlled the seas for transporting troops and supplies to South Korea. On July 2, a Navy cruiser and two British ships sank two North Korean torpedo boats and some small freighters. The next day, Task Force 77, with the carriers USS *Valley Forge* and Royal Navy *Triumph*, began interdiction and counterair strikes against Pyongyang and other targets in North Korea.

Navy forces, unable to communicate well with the Army and Air Force, asked for exclusive use of their own airspace in North Korea. Alone there, they flew air superiority missions and struck bridges and other interdiction targets.

In early July, the ROK Army located two relatively intact divisions and many stragglers. Adding these to its surviving forces, the ROK Army now totaled 54,000. However, Appleman observed, “This left 44,000 completely gone in the first week of war.”

Also in the war’s second week, Task Force Smith, a 500-man advance contingent of the US Army’s 24th Infantry Division (ID), got to the battlefield from Japan. North of Osan on July 5, communist forces battered them in little over an hour. Task Force Smith “had no hope of stopping the [North Koreans],” concluded one historian. For unknown reasons, communist forces halted after advancing 70 miles in four days and capturing Osan and Ch’onan. Otherwise they might have

smashed the entire 24th ID and opened the route straight to Pusan.

July 9-15: Committing small 24th ID units piecemeal against the North Korean juggernaut was disastrous, but USAF air strikes intensified, and, on July 12, long-range B-29 bombers began pounding targets far from the battlefield.

Gen. O.P. Weyland, a later FEAF commander, wrote that communist forces soon began to move supplies and troops by night, so FEAF adopted an intensive and very effective B-26 night interdiction campaign. Though small in relation to overall air efforts, this helped greatly to reduce North Korea’s daily supply flow “from a 206-ton average in early July to a mere 21.5 tons during the ... Pusan Perimeter defense.”

Communist forces advanced only 30 miles in Week 3. They mysteriously divided their forces for a double envelopment around the main route. A left probe swung over to the east coast. On the right, unseen for almost two weeks, a “Ghost Division” headed into the far southwest center of Korea.

July 16-22: The North Korean Army shattered the 24th ID and captured its commander, Maj. Gen. William F. Dean, as well as the key city of Taejon. In 17 days, the 24th had suffered more than 30 percent casualties.

However, ROK divisions were strengthening, and the US 25th Infantry Division entered the fight. US troops began receiving 3.5-inch rocket launchers to kill T-34s. And North Korea’s Air Force stopped combat flying. “The air battle was short and sweet,” observed Lt.

Gen. George E. Stratemeyer, FEAF commander. Communist forces advanced only 25 miles in Week 4.

July 23-29: The ROK Army, regrowing rapidly from vigorous recruiting and returning stragglers, now had five divisions. America’s third division in Korea, 1st Cavalry, began fighting in this fifth week.

It was clear, however, that air attack was taking a toll against northern forces. North Korea again advanced a mere 25 miles. Prisoners from one North Korean division complained: “Air attacks alone killed 600 North Korean soldiers. ... Much of the artillery had been sent back [because] ... NK supply could not get ammunition to the guns. ... Eleven of the division’s 30 tanks had been lost, and ... the division commander had been killed.”

The eastern probe of North Korea’s double envelopment was checked by the ROK Army at the northern Naktong River. In the southwest, the “Ghost Division” moved ahead stealthily toward Pusan. Finally detected, it was stopped mainly by the reconstituted 24th ID.

Stopped Short

By Aug. 1, it was clear that the North Korean advance had stalled and would fall short of its goal. In some 32 days, the North Koreans had advanced 165 miles but at increasing cost. In week two, communist forces were advancing at a rate of 17 miles per day. By week six, they were down to two miles per day. And there were still 85 miles to go.

Through July, FEAF flew 4,300 close support and 2,550 interdiction missions. It was clear that these air strikes were taking a vicious toll on communist forces. The main invasion route was littered with destroyed highway and railway bridges. Communist troop losses, it was learned later, had been 58,000—almost twice what Gen. Douglas MacArthur’s headquarters estimated at the time. T-34 tank losses were well over 100; despite reinforcements, only 40 were left.

On Aug. 3, in the war’s sixth week, US-led allied forces established the Pusan Perimeter along the Naktong River. By then, UN forces totaled 92,000, with five ROK and the three US divisions plus varied allied units and the newly arrived 2nd ID and 1st Provisional Marine Brigade. Though believed to be superior at the time, North Korea’s 11 divisions totaled only 72,000.

As recounted often by historians,

Photo via Robert F. Dorr



Far East Air Forces poured everything it had into South Korea’s defense. New jet-powered F-80C Shooting Stars, such as the one pictured, flew to the limits of their range from Japan to provide air cover and attack enemy ground targets.



At the start of the war, communist forces were advancing 17 miles per day. By Aug. 3, 1950, the Pusan Perimeter was formed. The perimeter was stable enough by Aug. 22 for Gen. J. Lawton Collins, Army Chief of Staff (foreground), to visit the front lines.

Eighth Army held that line through six weeks of ferocious ground battles until, on Sept. 15, MacArthur's Inch'on landing broke North Korea's back.

The Eighth Army commander, Gen. Walton H. Walker, deemed airpower a critical factor. "I will gladly lay my cards right on the table and state that, if it had not been for the air support that we received from the Fifth Air Force, we would not have been able to stay in Korea," said Walker.

Walker was echoed by Gen. Matthew B. Ridgway, Eighth Army commander after Walker's death in December 1950. He wrote: "As for the airmen, without them, the war would have been over in 60 days, with all Korea in Communist hands."

Even more impressive was what American troops saw when they broke out after the Inch'on landing. Leaving the Pusan Perimeter and traveling north more than 100 miles toward Seoul, one soldier wrote home: "I have never seen so many wrecked vehicles and tanks. The sides of the roads were littered with them. ... Counted 65 knocked-out North Korean tanks. The Air Corps did just about all of it. Outside Taejon, I saw 13 tanks on one hill, all dug in and concealed, that had been knocked out. The Air Corps uses napalm (gasoline) on all and just burns them out. ... The Air Corps has been the key figure."

Ground-oriented historians had divergent views. One Korean War Army veteran felt that "while FEAF could quickly wipe out the small [North Korean] air forces, it immediately became

obvious that American airpower alone could not seriously affect the outcome on the ground. The [North Koreans] took their losses and came on." However, he later added that without air and sea superiority "during the dark days of midsummer 1950, the United Nations presence on the Korean Peninsula would have ended."

One critical Army study of air interdiction in the Korean War looked only at what happened after July, after the US Army had arrived in force. Noting that while air interdiction "made a worthwhile contribution" and "was particularly helpful during the early months," the study concluded it "was not a decisive factor in shaping the course of the war."

Out of Sight ...

A USAF historian remarked that "interdiction efforts in Korea were never fully appreciated by the ground forces, who seemed to believe that air attacks they could not see were of little value in containing or stopping the enemy."

After the demise of the Soviet Union, fresh facts from Moscow's files shed new light on USAF's July 1950 achievements. Former Soviet Foreign Ministry and Chinese archives became available. Among records of diplomatic meetings and correspon-

dence are references to a "Pre-emptive Strike Operational Plan" for the attack on South Korea. Prepared by the Soviets, it was translated and used by communist forces.

The strike plan called for North Korea to advance nine to 12 miles (15 to 20 kilometers) per day and end the war in 22 to 27 days. Thus, North Korea intended to defeat South Korea by the fourth week. Clearly, July 1950 was the Korean War's critical month.

Certainly communist forces felt extreme pressure to act urgently after capturing Seoul, especially when America responded so quickly. Only USAF air strikes can explain North Korea's five-day halt before starting south from the Han.

Also, to knock out South Korea in four weeks, communist forces had to get within striking distance of Pusan by the end of Week 3. Instead, they were only halfway there, visibly slowing, and moving only by night.

Unforeseen in North Korea's strike plan, FEAF interrupted their logistics and caused massive casualties. The invaders' "double envelopment" maneuver now can be seen as a desperate attempt to divide, spread out, and maybe even hide to avoid constant USAF air attack.

Allied ground forces still were too weak to slow North Korea without air support. FEAF's singular, sometimes almost solitary role in July is obvious. By Week 4, when North Korea had intended to end the war, America had only two divisions in combat, amounting to half the ROK's size and a third of North Korea's. And the ROK Army itself was staggered by retraining, re-equipping, and reorganizing tasks. Despite Eighth Army's reinforcements by week six, it's a marvel they could establish the Pusan Perimeter and hold it for six bloody weeks until the Inch'on landing.

Indisputably, those ground forces accomplished heroic and magnificent deeds.

Still, timing is all-important in warfare. North Korea knew that, so they prepared a one-shot, quick-results attack plan. Such a plan existed and was used. Fortunately, in July 1950, USAF was on hand to thwart that plan, thereby saving South Korea. ■

Kenneth Moll graduated from West Point 18 days before the Korean War began. A fighter pilot, he flew F-80s in Korea and T-39s in Vietnam. Later a Pentagon planner and think tank president, he's now a Cold War historian. This is his fourth article for Air Force Magazine.



AFA/AEF Almanac

By Frances McKenney, Assistant Managing Editor

Chapters of the Year

Year	Recipient(s)
1953	San Francisco Chapter
1954	Santa Monica Area Chapter (Calif.)
1955	San Fernando Valley Chapter (Calif.)
1956	Utah State AFA
1957	H.H. Arnold Chapter (N.Y.)
1958	San Diego Chapter
1959	Cleveland Chapter
1960	San Diego Chapter
1961	Chico Chapter (Calif.)
1962	Fort Worth Chapter (Tex.)
1963	Colin P. Kelly Chapter (N.Y.)
1964	Utah State AFA
1965	Idaho State AFA
1966	New York State AFA
1967	Utah State AFA
1968	Utah State AFA
1969	(no presentation)
1970	Georgia State AFA
1971	Middle Georgia Chapter
1972	Utah State AFA
1973	Langley Chapter (Va.)
1974	Texas State AFA
1975	Alamo Chapter (Tex.) and San Bernardino Area Chapter (Calif.)
1976	Scott Memorial Chapter (Ill.)
1977	Thomas B. McGuire Jr. Chapter (N.J.)
1978	Thomas B. McGuire Jr. Chapter (N.J.)
1979	Brig. Gen. Robert F. Travis Chapter (Calif.)
1980	Central Oklahoma (Gerrity) Chapter
1981	Alamo Chapter (Tex.)
1982	Chicagoland-O'Hare Chapter (Ill.)
1983	Charles A. Lindbergh Chapter (Conn.)
1984	Scott Memorial Chapter (Ill.) and Colorado Springs/Lance Sijan Chapter (Colo.)
1985	Cape Canaveral Chapter (Fla.)
1986	Charles A. Lindbergh Chapter (Conn.)
1987	Carl Vinson Memorial Chapter (Ga.)
1988	Gen. David C. Jones Chapter (N.D.)
1989	Thomas B. McGuire Jr. Chapter (N.J.)
1990	Gen. E.W. Rawlings Chapter (Minn.)
1991	Paul Revere Chapter (Mass.)
1992	Central Florida Chapter and Langley Chapter (Va.)
1993	Green Valley Chapter (Ariz.)
1994	Langley Chapter (Va.)
1995	Baton Rouge Chapter (La.)
1996	Montgomery Chapter (Ala.)
1997	Central Florida Chapter
1998	Ark-La-Tex Chapter (La.)
1999	Hurlburt Chapter (Fla.)
2000	Wright Memorial Chapter (Ohio)
2001	Lance P. Sijan Chapter (Colo.)
2002	Eglin Chapter (Fla.)
2003	Hurlburt Chapter (Fla.)
2004	Carl Vinson Memorial Chapter (Ga.)
2005	Central Florida Chapter

Profiles of AFA Membership

As of June 2005 (Total 131,481)

55%	One-year members	Of AFA's service members (who account for about six percent of USAF total strength):
12%	Three-year members	70% are officers
33%	Life members	30% are enlisted
16%	Active duty military	Of AFA's retired military members:
50%	Retired military	83% are retired officers
17%	Former service	17% are retired enlisted
6%	Guard and Reserve	
7%	Patron	
3%	Cadet	
2%	Spouse/widow(er)	

AFA "Member of the Year" Award Recipients

State names refer to recipient's home state at the time of the award.

Year	Recipient(s)	Year	Recipient(s)
1953	Julian B. Rosenthal (N.Y.)	1979	Alexander C. Field Jr. (Ill.)
1954	George A. Anderl (Ill.)	1980	David C. Noerr (Calif.)
1955	Arthur C. Storz (Neb.)	1981	Daniel F. Callahan (Fla.)
1956	Thos. F. Stack (Calif.)	1982	Thomas W. Anthony (Md.)
1957	George D. Hardy (Md.)	1983	Richard H. Becker (Ill.)
1958	Jack B. Gross (Pa.)	1984	Earl D. Clark Jr. (Kan.)
1959	Carl J. Long (Pa.)	1985	George H. Chabbot (Del.) and Hugh L. Enyart (Ill.)
1960	O. Donald Olson (Colo.)	1986	John P.E. Kruse (N.J.)
1961	Robert P. Stewart (Utah)	1987	Jack K. Westbrook (Tenn.)
1962	(no presentation)	1988	Charles G. Durazo (Va.)
1963	N.W. DeBerardinis (La.) and Joe L. Shosid (Tex.)	1989	Oliver R. Crawford (Tex.)
1964	Maxwell A. Kriendler (N.Y.)	1990	Cecil H. Hopper (Ohio)
1965	Milton Caniff (N.Y.)	1991	George M. Douglas (Colo.)
1966	William W. Spruance (Del.)	1992	Jack C. Price (Utah)
1967	Sam E. Keith Jr. (Tex.)	1993	Lt. Col. James G. Clark (D.C.)
1968	Marjorie O. Hunt (Mich.)	1994	William A. Lafferty (Ariz.)
1969	(no presentation)	1995	William N. Webb (Okla.)
1970	Lester C. Curl (Fla.)	1996	Tommy G. Harrison (Fla.)
1971	Paul W. Gaillard (Neb.)	1997	James M. McCoy (Neb.)
1972	J. Raymond Bell (N.Y.) and Martin H. Harris (Fla.)	1998	Ivan L. McKinney (La.)
1973	Joe Higgins (Calif.)	1999	Jack H. Steed (Ga.)
1974	Howard T. Markey (D.C.)	2000	Mary Anne Thompson (Va.)
1975	Martin M. Ostrow (Calif.)	2001	Charles H. Church Jr. (Kan.)
1976	Victor R. Kregel (Tex.)	2002	Thomas J. Kemp (Tex.)
1977	Edward A. Stearn (Calif.)	2003	W. Ron Goerges (Ohio)
1978	William J. Demas (N.J.)	2004	Doyle E. Larson (Minn.)
		2005	Charles A. Nelson (S.D.)

Air Force Association Chairmen of the Board



Edward P. Curtis
1946-47



Jimmy Doolittle
1947-49



C.R. Smith
1949-50



Carl A. Spaatz
1950-51



Thomas G. Lanphier Jr.
1951-52



Harold C. Stuart
1952-53



Arthur F. Kelly
1953-54



George C. Kenney
1954-55



John R. Alison
1955-56



Gill Robb Wilson
1956-57



John P. Henebry
1957-58



James M. Trail
1958-59



Julian B. Rosenthal
1959-60



Howard T. Markey
1960-61



Thos. F. Stack
1961-62



Joe Foss
1962-63



Jack B. Gross
1963-64



W. Randolph Lovelace II
1964-65



George D. Hardy
1966-67



Jess Larson
1967-71



George D. Hardy
1971-72



Joe L. Shosid
1972-73



Martin M. Ostrow
1973-75



Joe L. Shosid
1975-76



Gerald V. Hasler
1976-77



George M. Douglas
1977-79



Daniel F. Callahan
1979-81



Victor R. Kregel
1981-82



John G. Brosky
1982-84



David L. Blankenship
1984-85



Edward A. Stearn
1985-86



Martin H. Harris
1986-88



Sam E. Keith Jr.
1988-90



Jack C. Price
1990-92



Oliver R. Crawford
1992-94



James M. McCoy
1994-96



Gene Smith
1996-98



Doyle E. Larson
1998-2000



Thomas J. McKee
2000-02



John J. Politi
2002-04



Stephen P. Condon
2004-

Air Force Association National Presidents



Jimmy Doolittle
1946-47



Thomas G. Lanphier Jr.
1947-48



C.R. Smith
1948-49



Robert S. Johnson
1949-51



Harold C. Stuart
1951-52



Arthur F. Kelly
1952-53



George C. Kenney
1953-54



John R. Alison
1954-55



Gill Robb Wilson
1955-56



John P. Henebry
1956-57



Peter J. Schenk
1957-59



Howard T. Markey
1959-60



Thos. F. Stack
1960-61



Joe Foss
1961-62



John B. Montgomery
1962-63



W. Randolph Lovelace II
1963-64



Jess Larson
1964-67



Robert W. Smart
1967-69



George D. Hardy
1969-71



Martin M. Ostrow
1971-73



Joe L. Shosid
1973-75



George M. Douglas
1975-77



Gerald V. Hasler
1977-79



Victor R. Kregel
1979-81



John G. Brosky
1981-82



David L. Blankenship
1982-84



Martin H. Harris
1984-86



Sam E. Keith Jr.
1986-88



Jack C. Price
1988-90



Oliver R. Crawford
1990-92



James M. McCoy
1992-94



Gene Smith
1994-96



Doyle E. Larson
1996-98



Thomas J. McKee
1998-2000



John J. Politi
2000-02



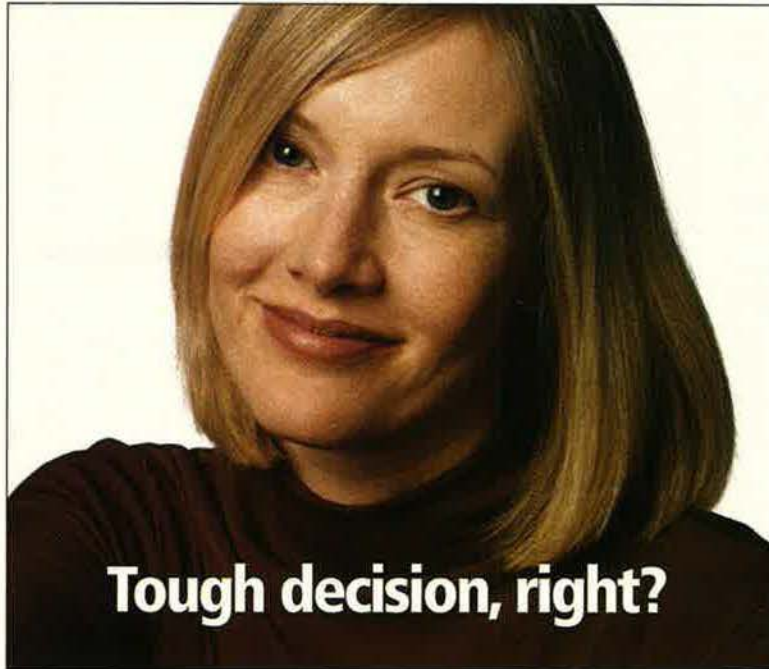
Stephen P. Condon
2002-04



Robert E. Largent
2004-

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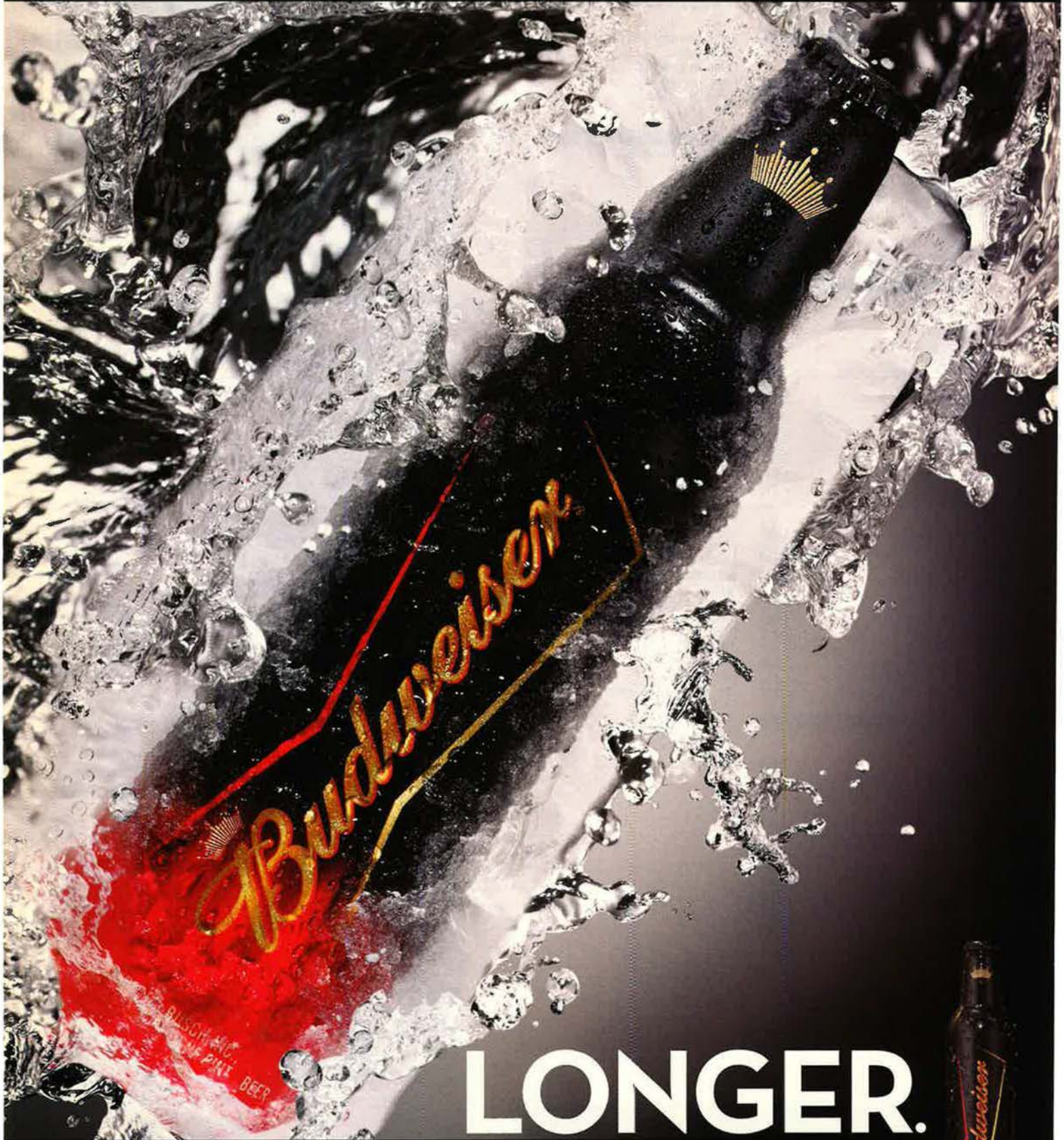
AFA's Regions, States, and Chapters

These figures indicate the number of affiliated members as of June 30, 2005. Listed below the name of each region is the region president.

<p>CENTRAL EAST REGION 12,213 James Hannam</p> <p>Delaware 635 Delaware Galaxy 460 Diamond State 175</p> <p>District of Columbia 577 Nation's Capital 577</p> <p>Maryland 2,442 Baltimore* 747 Central Maryland 437 Thomas W. Anthony 1,258</p> <p>Virginia 8,202 Danville 56 Donald W. Steele Sr. Memorial 3,344 Gen. Charles A. Gabriel 1,259 Langley 1,572 Leigh Wade 149 Northern Shenandoah Valley 242 Richmond 631 Roanoke 336 Tidewater 372 William A. Jones III 241</p> <p>West Virginia 357 Brig. Gen. Pete Everest 73 Chuck Yeager 284</p> <p>FAR WEST REGION 13,213 John F. Wickman</p> <p>California 12,387 Bob Hope 876 Brig. Gen. Robert F. Travis 899 C. Farinha Gold Rush 1,505 Charles Hudson 136 David J. Price/Beale 482 Fresno* 373 Gen. B.A. Schriever Los Angeles 646 General Doolittle Los Angeles Area* 1,395 Golden Gate* 700 High Desert 252 Maj. Gen. Charles I. Bennett Jr. 318 Monterey Bay Area 293 Orange County/Gen. Curtis E. LeMay 841 Palm Springs 444 Pasadena Area 358 Robert H. Goddard 708 San Diego 920 Tennessee Ernie Ford 805 William J. "Pete" Knight 436</p> <p>Hawaii 846 Hawaii* 846</p>	<p>FLORIDA REGION 11,128 Raymond Turczynski Jr.</p> <p>Florida 11,128 Brig. Gen. James R. McCarthy 392 Cape Canaveral 1,136 Central Florida 1,445 Col. H.M. "Bud" West 317 Col. Loren D. Evenson 554 Eglin 1,584 Falcon 484 Florida Highlands 349 Gen. Nathan F. Twining 478 Gold Coast 729 Huriburt 741 Jerry Waterman 1,223 John C. Meyer 337 John W. DeMilly Jr. 306 Miami 350 Pensacola 182 Red Tail Memorial 309 Treasure Coast 212</p> <p>GREAT LAKES REGION 8,748 Joseph R. Lesniok</p> <p>Indiana 1,604 Central Indiana 431 Columbus-Bakalar 112 Fort Wayne 248 Grissom Memorial 311 Lawrence D. Bell Museum 244 Southern Indiana 258</p> <p>Kentucky 725 Gen. Russell E. Dougherty 448 Lexington 277</p> <p>Michigan 1,984 Battle Creek 135 Kalamazoo 449 Lake Superior Northland 147 Lloyd R. Leavitt Jr. 172 Mount Clemens 981 PE-TO-SE-GA 100</p> <p>Ohio 4,435 Capt. Eddie Rickenbacker Memorial* 689 Frank P. Lahm 517 Gen. Joseph W. Ralston 295 North Coast* 320 Steel Valley 208 Wright Memorial* 2,406</p> <p>MIDWEST REGION 7,997 Judy K. Church</p> <p>Illinois 3,041 Chicagoland-O'Hare 1,244 Heart of Illinois 216 Land of Lincoln 359 Scott Memorial 1,222</p> <p>Iowa 757 Fort Dodge 89 Gen. Charles A. Horner 270</p>	<p>Northeast Iowa 220 Richard D. Kisling 178</p> <p>Kansas 828 Contraills 65 Lt. Erwin R. Bleckley 496 Maj. Gen. Edward R. Fry 267</p> <p>Missouri 1,757 Earl D. Clark Jr. 312 Harry S. Truman 642 Spirit of St. Louis 803</p> <p>Nebraska 1,614 Ak-Sar-Ben 1,356 Lincoln 258</p> <p>NEW ENGLAND REGION 4,053 Eric P. Taylor</p> <p>Connecticut 823 Flying Yankees/Gen. George C. Ken- ney 308 Gen. Bennie L. Davis 172 Lindbergh/Sikorsky 173 Sgt. Charlton Heston 170</p> <p>Massachusetts 1,920 Boston 110 Maj. John S. Southrey* 159 Minuteman 309 Otis 174 Paul Revere 652 Pioneer Valley 175 Taunton 170 Worcester* 171</p> <p>New Hampshire 808 Brig. Gen. Harrison R. Thyng 411 Pease 397</p> <p>Rhode Island 279 Metro Rhode Island 235 Newport Blue & Gold 44</p> <p>Vermont 223 Green Mountain 223</p> <p>NORTH CENTRAL REGION 3,850 Coleman Rader Jr.</p> <p>Minnesota 1,292 Gen. E.W. Rawlings 1,070 Richard I. Bong 222</p> <p>Montana 304 Big Sky 304</p> <p>North Dakota 516 Gen. David C. Jones 238 Happy Hooligan 132 Red River Valley 146</p> <p>South Dakota 523 Dacotah 282 Rushmore 241</p> <p>Wisconsin 1,215 Billy Mitchell 544 Capt. William J. Henderson 367 Madison 304</p> <p>NORTHEAST REGION 7,954 William G. Stratemeier Jr.</p> <p>New Jersey 2,132 Brig. Gen. E. Wade Hampton 173 Brig. Gen. Frederick W. Castle 176 Hangar One 162 Highpoint 133 John Currie Memorial 78 Mercer County 195 Sal Capriglione 317 Thomas B. McGuire Jr. 652 Shooting Star 246</p> <p>New York 2,982 Albany-Hudson Valley* 403 Chautauqua 72 Forrest L. Vosler 494 Gen. Carl A. "Tooe" Spaatz 233 Gen. Daniel "Chappie" James Jr. Memorial 106 Genesee Valley 255 Iron Gate 160 L.D. Bell-Niagara Frontier 371 Long Island 888</p> <p>Pennsylvania 2,840 Altoona 61 Brandywine 159 Eagle 73 Greater Pittsburgh* 366 Joe Walker-Mon Valley 127 Lehigh Valley 266 Liberty Bell 588 Lt. Col. B.D. "Buzz" Wagner 108 Mifflin County* 101 Olmsted 330 Pocono Northeast 210 Total Force 161 York-Lancaster 290</p> <p>NORTHWEST REGION 5,233 O. Thomas Hansen</p> <p>Alaska 908 Edward J. Monaghan 671 Fairbanks Midnight Sun 237</p> <p>Idaho 114 Snake River Valley 114</p> <p>Oregon 1,176 Bill Harris 340 Columbia Gorge* 836</p> <p>Washington 3,035 Greater Seattle 1,058 Inland Empire 696 McChord 1,281</p>
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*These chapters were chartered prior to Dec. 31, 1948, and are considered original charter chapters; the Maj. John S. Southrey Chapter of Massachusetts was formerly the Chicopee Chapter; the North Coast Chapter of Ohio was formerly the Cleveland Chapter; and the Columbia Gorge Chapter of Oregon was formerly the Portland Chapter.

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ROCKY MOUNTAIN REGION 6,658
Charles P. Zimkas Jr.

Colorado	4,728
Gen. Robert E. Huyser	180
Lance P. Sijan	2,724
Mel Harmon	159
Mile High	1,665

Utah	1,539
Northern Utah	630
Salt Lake	423
Ute-Rocky Mountain	486

Wyoming	391
Cheyenne Cowboy	391

SOUTH CENTRAL REGION 7,180
George P. Cole Jr.

Alabama	2,026
Birmingham	384
Montgomery	1,280
Tennessee Valley	362

Arkansas	1,127
David D. Terry Jr.	759
Ouachita	138
Razorback	230

Louisiana	1,117
Ark-La-Tex	710
Maj. Gen. Oris B. Johnson	407

Mississippi	1,086
Golden Triangle	350
Jackson	162
John C. Stennis	519
Meridian	55

Tennessee	1,824
Chattanooga	132
Everett R. Cook	451
Gen. Bruce K. Holloway	585
H.H. Arnold Memorial	153
Maj. Gen. Dan F. Callahan	503

SOUTHEAST REGION 8,454
Jack Steed

Georgia	4,109
Carl Vinson Memorial	1,771
Dobbins	1,692
Savannah	348
South Georgia	298

North Carolina	2,248
Blue Ridge	389
Cape Fear	270
Kitty Hawk	75
Pope	448
Scott Berkeley	470
Tarheel	596

South Carolina	2,097
Charleston	557
Columbia Palmetto	445
Ladewig-Shine Memorial	192
Strom Thurmond	407
Swamp Fox	496

SOUTHWEST REGION 7,145
Peter D. Robinson

Arizona	4,086
Barry Goldwater	154
Cochise	119
Frank Luke	2,172
Prescott	214
Richard S. Reid	148
Tucson	1,279

Nevada	1,447
Thunderbird	1,447

New Mexico	1,612
Albuquerque	1,123
Fran Parker	331
Llano Estacado	158

TEXOMA REGION 13,847
Clarence N. Horlen

Oklahoma	2,649
Altus	275
Central Oklahoma (Gerrity)	1,395
Enid	513
Tulsa	466

Texas	11,198
Abilene	309
AggieLand	212
Alamo	3,736
Austin	835
Concho	329
Dallas	924
Del Rio	142
Denton	416
Fort Worth	1,796
Gen. Charles L. Donnelly Jr.	415
Ghost Squadron	118
Heart of the Hills	147
Northeast Texas	416
Panhandle AFA	282
San Jacinto	1,121

AFA's Overseas Chapters

CHAPTER	LOCATION
United States Air Forces in Europe (USAFE)	
Charlemagne	Geilenkirchen, Germany
Dolomiti	Aviano AB, Italy
Lufbery-Campbell	Ramstein AB, Germany
Spangdahlem	Spangdahlem AB, Germany
United Kingdom	Lakenheath, UK
Pacific Air Forces (PACAF)	
Keystone	Kadena AB, Japan
MiG Alley	Osan AB, South Korea
Tokyo	Tokyo, Japan
Supreme Headquarters Allied Powers Europe (SHAPE)	
Gen. Lauris G.	Mons, Belgium
Norstad	

AFA's First National Officers and Board of Directors

This panel of officers and directors acted temporarily until a representative group was democratically elected by membership at the first national convention, in September 1947.

OFFICERS

- President** Jimmy Doolittle
- First Vice President** Edward P. Curtis
- Second Vice President** Meryll Frost
- Third Vice President** Thomas G. Lanphier Jr.
- Secretary** Sol A. Rosenblatt
- Assistant Secretary** Julian B. Rosenthal
- Treasurer** W. Deering Howe
- Executive Director** Willis S. Fitch

BOARD OF DIRECTORS

John S. Allard	Rufus Rand
H.M. Baldrige	Earl Sneed
William H. Carter	James M. Stewart
Everett R. Cook	Forrest Vosler
Burton E. Donaghy	Benjamin F. Warmer
James H. Douglas Jr.	Lowell P. Weicker
G. Stuart Kenney	Cornelius Vanderbilt Whitney
Reiland Quinn	John Hay Whitney

The Twelve Founders

- John S. Allard**, Bronxville, N.Y.
- Everett R. Cook**, Memphis, Tenn.
- Edward P. Curtis**, Rochester, N.Y.
- Jimmy Doolittle**, Los Angeles
- W. Deering Howe**, New York
- Rufus Rand**, Sarasota, Fla.
- Sol A. Rosenblatt**, New York
- Julian B. Rosenthal**, New York
- James M. Stewart**, Beverly Hills, Calif.
- Lowell P. Weicker**, New York
- Cornelius Vanderbilt Whitney**, New York
- John Hay Whitney**, New York

H.H. Arnold Award Recipients

Until 1986, AFA's highest aerospace award was the H.H. Arnold Award. Named for the World War II leader of the Army Air Forces, it was presented annually in recognition of the most outstanding contributions in the field of aerospace activity. In 1986, the Arnold Award was redesignated AFA's highest honor to a member of the armed forces in the field of national security. It continues to be presented annually.

Year	Recipient(s)
1948	W. Stuart Symington, Secretary of the Air Force
1949	Maj. Gen. William H. Tunner and the men of the Berlin Airlift
1950	Airmen of the United Nations in the Far East
1951	Gen. Curtis E. LeMay and the personnel of Strategic Air Command
1952	Sens. Lyndon B. Johnson and Joseph C. O'Mahoney
1953	Gen. Hoyt S. Vandenberg, former Chief of Staff, USAF
1954	John Foster Dulles, Secretary of State
1955	Gen. Nathan F. Twining, Chief of Staff, USAF
1956	Sen. W. Stuart Symington
1957	Edward P. Curtis, special assistant to the President
1958	Maj. Gen. Bernard A. Schriever, Cmdr., Ballistic Missile Div., ARDC
1959	Gen. Thomas S. Power, CINC, SAC
1960	Gen. Thomas D. White, Chief of Staff, USAF
1961	Lyle S. Garlock, Assistant Secretary of the Air Force
1962	A.C. Dickieson and John R. Pierce, Bell Telephone Laboratories
1963	The 363rd Tactical Recon. Wing and the 4080th Strategic Wing
1964	Gen. Curtis E. LeMay, Chief of Staff, USAF
1965	The 2nd Air Division, PACAF
1966	The 8th, 12th, 355th, 366th, and 388th Tactical Fighter Wings and the 432nd and 460th TRWs
1967	Gen. William W. Momyer, Cmdr., 7th Air Force, PACAF
1968	Col. Frank Borman, USAF; Capt. James Lovell, USN; and Lt. Col. William Anders, USAF, Apollo 8 crew
1969	(No presentation)
1970	Apollo 11 team (J.L. Atwood; Lt. Gen. S.C. Phillips, USAF; and astronauts Neil Armstrong and USAF Cols. Buzz Aldrin and Michael Collins)
1971	John S. Foster Jr., Dir. of Defense Research and Engineering
1972	Air units of the Allied Forces in Southeast Asia (Air Force, Navy, Army, Marine Corps, and the Vietnamese Air Force)
1973	Gen. John D. Ryan (Ret.), former Chief of Staff, USAF
1974	Gen. George S. Brown, USAF, Chm., Joint Chiefs of Staff
1975	James R. Schlesinger, Secretary of Defense
1976	Sen. Barry M. Goldwater
1977	Sen. Howard W. Cannon
1978	Gen. Alexander M. Haig Jr., USA, Supreme Allied Commander, Europe
1979	Sen. John C. Stennis
1980	Gen. Richard H. Ellis, USAF, CINC, SAC
1981	Gen. David C. Jones, USAF, Chm., Joint Chiefs of Staff
1982	Gen. Lew Allen Jr. (Ret.), former Chief of Staff, USAF
1983	Ronald W. Reagan, President of the United States
1984	The President's Commission on Strategic Forces (the Scowcroft Commission)
1985	Gen. Bernard W. Rogers, USA, SACEUR
1986	Gen. Charles A. Gabriel (Ret.), former Chief of Staff, USAF
1987	Adm. William J. Crowe Jr., USN, Chm., Joint Chiefs of Staff
1988	Men and women of the Ground-Launched Cruise Missile team
1989	Gen. Larry D. Welch, Chief of Staff, USAF
1990	Gen. John T. Chain, CINC, SAC
1991	Lt. Gen. Charles A. Horner, Cmdr., CENTCOM Air Forces and 9th Air Force
1992	Gen. Colin L. Powell, USA, Chm., Joint Chiefs of Staff
1993	Gen. Merrill A. McPeak, Chief of Staff, USAF
1994	Gen. John Michael Loh, Cmdr., Air Combat Command
1995	World War II Army Air Forces veterans
1996	Gen. Ronald R. Fogleman, Chief of Staff, USAF
1997	Men and women of the United States Air Force
1998	Gen. Richard E. Hawley, Cmdr., ACC
1999	Lt. Gen. Michael C. Short, Cmdr., Allied Air Forces Southern Europe
2000	Gen. Michael E. Ryan, Chief of Staff, USAF
2001	Gen. Joseph W. Ralston, CINC, EUCOM
2002	Gen. Richard B. Myers, USAF, Chm., Joint Chiefs of Staff
2003	Lt. Gen. T. Michael Moseley, Cmdr., air component, CENTCOM, and 9th Air Force
2004	Gen. John P. Jumper, Chief of Staff, USAF
2005	Gen. Gregory S. Martin, Cmdr., AFMC

John R. Alison Award Recipients

Established in 1992, the John R. Alison Award is AFA's highest honor for industrial leadership.

1992	Norman R. Augustine, Chairman, Martin Marietta
1993	Daniel M. Tellep, Chm. and CEO, Lockheed
1994	Kent Kresa, CEO, Northrop Grumman
1995	C. Michael Armstrong, Chm. and CEO, Hughes Aircraft
1996	Harry Stonecipher, Pres. and CEO, McDonnell Douglas
1997	Dennis J. Picard, Chm. and CEO, Raytheon
1998	Philip M. Condit, Chm. and CEO, Boeing
1999	Sam B. Williams, Chm. and CEO, Williams International
2000	Simon Ramo and Dean E. Wooldridge, missile pioneers
2001	George David, Chm. and CEO, United Technologies
2002	Sydney Gillibrand, Chm., AMEC; and Jerry Morgensen, Pres. and CEO, Hensel Phelps Construction
2003	Joint Direct Attack Munition Industry Team, Boeing
2004	Thomas J. Cassidy Jr., Pres. and CEO, General Atomics Aeronautical Systems
2005	Richard Branson, Chm., Virgin Atlantic Airways and Virgin Galactic

W. Stuart Symington Award Recipients

Since 1986, AFA's highest honor to a civilian in the field of national security has been the W. Stuart Symington Award. The award, presented annually, is named for the first Secretary of the Air Force.

Year	Recipient(s)
1986	Caspar W. Weinberger, Secretary of Defense
1987	Edward C. Aldridge Jr., Secretary of the Air Force
1988	George P. Schultz, Secretary of State
1989	Ronald W. Reagan, former President of the United States
1990	John J. Welch, Asst. SECAF (Acquisition)
1991	George Bush, President of the United States
1992	Donald B. Rice, Secretary of the Air Force
1993	Sen. John McCain (R-Ariz.)
1994	Rep. Ike Skelton (D-Mo.)
1995	Sheila E. Widnall, Secretary of the Air Force
1996	Sen. Ted Stevens (R-Alaska)
1997	William Perry, former Secretary of Defense
1998	Rep. Saxby Chambliss (R-Ga.) and Rep. Norman D. Dicks (D-Wash.)
1999	F. Whitten Peters, Secretary of the Air Force
2000	Rep. Floyd Spence (R-S.C.)
2001	Sen. Michael Enzi (R-Wyo.) and Rep. Cliff Stearns (R-Fla.)
2002	Rep. James V. Hansen (R-Utah)
2003	James G. Roche, Secretary of the Air Force
2004	Peter B. Teets, Undersecretary of the Air Force
2005	Rep. Duncan Hunter (R-Calif.)

Gold Life Member Card Recipients

Awarded to members whose AFA record, production, and accomplishment on a national level have been outstanding over a period of years.

Name	Year	Card No.
Gill Robb Wilson	1957	1
Jimmy Doolittle	1959	2
Arthur C. Storz Sr.	1961	3
Julian B. Rosenthal	1962	4
Jack B. Gross	1964	5
George D. Hardy	1965	6
Jess Larson	1967	7
Robert W. Smart	1968	8
Martin M. Ostrow	1973	9
James H. Straubel	1980	10
Martin H. Harris	1988	11
Sam E. Keith Jr.	1990	12
Edward A. Stearn	1992	13
Dorothy L. Flanagan	1994	14
John O. Gray	1996	15
Jack C. Price	1997	16
Nathan H. Mazer	2002	17
John R. Alison	2004	18

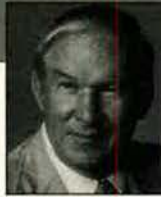
Aerospace Education Foundation Chairmen of the Board



W. Randolph Lovelace II
1963-64



Laurence S. Kuter
1964-66



Walter J. Hesse
1966-69



J. Gilbert Nettleton Jr.
1969-73



George D. Hardy
1973-75



Barry M. Goldwater
1975-86



George D. Hardy
1986-89



James M. Keck
1989-94



Walter E. Scott
1994-96



Thomas J. McKee
1996-98



Michael J. Dugan
1998-2000



Jack C. Price
2000-02



Richard B. Goetze Jr.
2002-03



L. Boyd Anderson
2003-

Aerospace Education Foundation Presidents



John B. Montgomery
1963-64



Lindley J. Stiles
1964-66



B. Frank Brown
1966-67



Leon M. Lessinger
1967-68



L.V. Rasmussen
1968-71



Leon M. Lessinger
1971-73



Wayne O. Reed
1973-74



William L. Ramsey
1975-81



Don C. Garrison
1981-84



George D. Hardy
1984-86



Eleanor P. Wynne
1986-87



James M. Keck
1988-89



Gerald V. Hasler
1989-94



Thomas J. McKee
1994-96



Walter E. Scott
1996-98



Jack C. Price
1998-2000



Richard B. Goetze Jr.
2000-02



L. Boyd Anderson
2002-03



Mary Anne Thompson
2003-

AFA Executive Directors



Willis S. Fitch
1946-47



James H. Straubel
1948-80



Russell E. Dougherty
1980-86



David L. Gray
1986-87



John D. Gray
1987-88



Charles L. Donnelly Jr.
1988-89



John O. Gray
1989-90



Monroe W. Hatch Jr.
1990-95



John A. Shaud
1995-2002



Donald L. Peterson
2002-

AFA National Secretaries

Sol A. Rosenblatt	1946-47
Julian B. Rosenthal	1947-59
George D. Hardy	1959-66
Joseph L. Hodges	1966-68
Glenn D. Mishler	1968-70
Nathan H. Mazer	1970-72
Martin H. Harris	1972-76
Jack C. Price	1976-79
Earl D. Clark Jr.	1979-82
Sherman W. Wilkins	1982-85
A.A. "Bud" West	1985-87
Thomas J. McKee	1987-90
Thomas W. Henderson	1990-91
Mary Ann Seibel	1991-94
Mary Anne Thompson	1994-97
William D. Croom Jr.	1997-2000
Daniel C. Hendrickson	2000-03
Thomas J. Kemp	2003-

AFA National Treasurers

W. Deering Howe	1946-47
G. Warfield Hobbs	1947-49
Benjamin Brinton	1949-52
George H. Haddock	1952-53
Samuel M. Hecht	1953-57
Jack B. Gross	1957-62
Paul S. Zuckerman	1962-66
Jack B. Gross	1966-81
George H. Chabbott	1981-87
William N. Webb	1987-95
Charles H. Church Jr.	1995-2000
Charles A. Nelson	2000-

AFA Membership

Year	Total	Life Members	Year	Total	Life Members
1946	51,243	32	1976	148,202	975
1947	104,750	55	1977	155,850	1,218
1948	56,464	68	1978	148,711	1,541
1949	43,801	70	1979	147,136	1,869
1950	38,948	79	1980	156,394	2,477
1951	34,393	81	1981	170,240	3,515
1952	30,716	356	1982	179,149	7,381
1953	30,392	431	1983	198,563	13,763
1954	34,486	435	1984	218,512	18,012
1955	40,812	442	1985	228,621	23,234
1956	46,250	446	1986	232,722	27,985
1957	51,328	453	1987	237,279	30,099
1958	48,026	456	1988	219,195	32,234
1959	50,538	458	1989	204,309	34,182
1960	54,923	464	1990	199,851	35,952
1961	60,506	466	1991	194,312	37,561
1962	64,336	485	1992	191,588	37,869
1963	78,034	488	1993	181,624	38,604
1964	80,295	504	1994	175,122	39,593
1965	82,464	514	1995	170,881	39,286
1966	85,013	523	1996	161,384	39,896
1967	88,995	548	1997	157,862	41,179
1968	97,959	583	1998	152,330	41,673
1969	104,886	604	1999	148,534	42,237
1970	104,878	636	2000	147,336	42,434
1971	97,639	674	2001	143,407	42,865
1972	109,776	765	2002	141,117	43,389
1973	114,894	804	2003	137,035	42,730
1974	128,995	837	2004	133,812	42,767
1975	139,168	898	2005	131,481	43,094

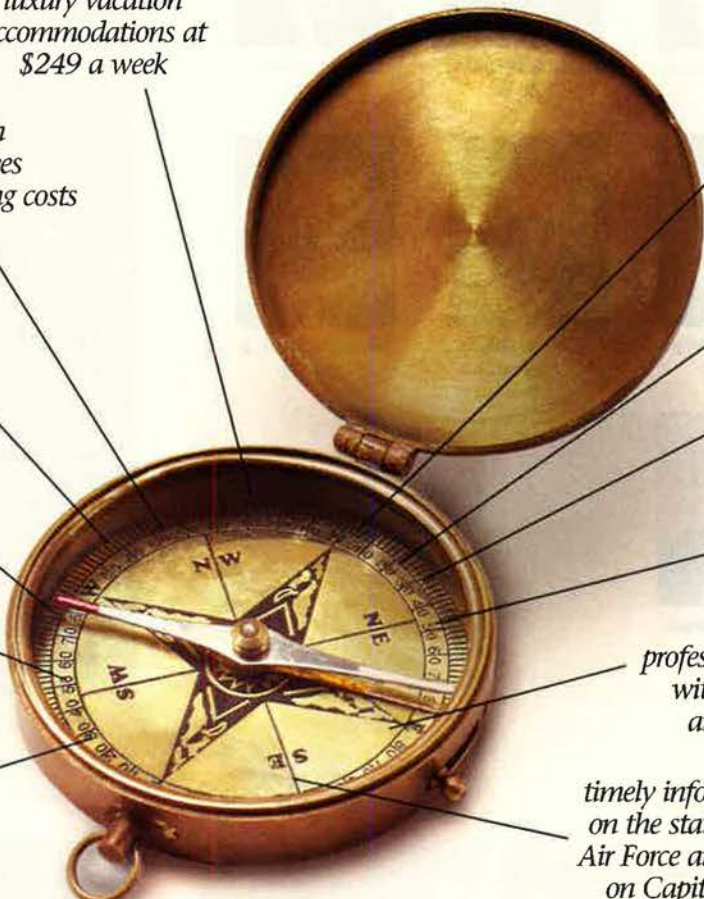
Dottie Flanagan

Staff Award of the Year

A donation from Jack B. Gross, national director emeritus, enables AFA to honor staff members each quarter. Those members become eligible for the staff award of the year.

1992	Doreatha Major
1993	Jancy Bell
1994	Gilbert Burgess
1995	David Huynh
1996	Sherry Coombs
1997	Katherine DuGarm
1998	Suzann Chapman
1999	Frances McKenney
2000	Ed Cook
2001	Katie Doyle
2002	Jeneathia Wright
2003	Jim Brown
2004	Pearlie Draughn

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By Frances McKenney, Assistant Managing Editor

USAF photo by Ron Heil



The Nation's Capital Chapter honored Air Force Gen. Richard Myers, Chairman of the Joint Chiefs of Staff, with its International Achievement Award in July at a chapter dinner in Washington, D.C. Myers is only the eighth recipient of the award, which was established more than 30 years ago.

The general, who served during a tumultuous period in American affairs, was set to retire this month.

Pictured at the presentation ceremony are (l-r): AFA National President Bob Largent, AFA Board Chairman Pat Condon, Chapter President Tom Coney, and Air Commodore Graham Bentley, the assistant defense air attache from Australia.

Utah Focuses on Defense

USAF Chief of Staff Gen. John P. Jumper spoke about an expanded definition for C2 during the "Focus on Defense" symposium, held in Layton, Utah, in June.

The Utah Air Force Association's **Northern Utah, Salt Lake, and Ute-Rocky Mountain Chapters** organized the 26th annual conference, bringing together DOD and defense industry leaders to discuss combat support for expeditionary forces in Southwest Asia.

Local newspaper reports on the symposium said that Jumper told the audience how the traditional command and control (C2) function is giving way to collaboration and connectivity and a focus on the mission. The Hill Air Force Base newspaper said Jumper used convoy operations as an example. In Iraq, moving more cargo by USAF airlifters has reduced the number of US Army truck convoys on the road.

"That's where collaboration and connectivity come into play," Jumper

said. He added, "It's up to the leaders in this room to facilitate C2."

Gen. Gregory S. Martin, the head of Air Force Materiel Command; Gen. John W. Handy, commander of US Transportation Command and Air Mobility Command; and Utah Governor Jon Huntsman Jr. (R) were other featured speakers at the symposium.

Convention in California

The **David J. Price/Beale Chapter** hosted the Golden State's convention in June, centering activities at Beale Air Force Base and simultaneously conducting a membership drive.

Convention planners offered a one-year association membership to non-AFAers who volunteered at any event during the three-day gathering. Maj. Dennis A. Davoren, the California state president, estimated that about a dozen people signed on. AFA National Secretary Thomas J. Kemp—who spoke at the AFA awards luncheon during the business session—said that combining the two events was a model approach.

As home to the 9th Reconnaissance Wing, led by chapter member Col. Lawrence Wells, Beale offered conventioners a look at USAF's high-flying U-2 spyplane.

Frederic Levien, chapter aerospace education VP, and chapter member TSgt. James J. Warrick escorted guests as they also viewed a Global Hawk unmanned aerial vehicle, a Pave PAWS (phased-array warning system) radar facility, and the base's historical sites, such as the prison where German POWs were held during World War II.

A golf tournament, organized by Chapter President MSgt. Aundre S. Gibson and AFA National Director Richard C. Taubinger, raised \$8,000 for the California Education Foundation for Aerospace. Three thousand of that went immediately to three ROTC cadets at the convention. More than 40 awards were presented to active duty, Guard, and Reserve members at a Saturday night military awards banquet, in recognition of outstanding achievements.

Along with support from 9th RW volunteers, the convention was backed by contributions from Community Partners, local businesses, and members of the state's AFA chapters, including the **C. Farinha Gold Rush Chapter**.

Davoren said he received many compliments for the state's best convention.

Tribute to Veterans

The **Gen. Bruce K. Holloway Chapter** in Tennessee named its chapter and state Teacher of the Year, recently, calling attention to a creative way of paying tribute to veterans.

Diane Rutherford, an 11th-grade English teacher at Maryville High School, received the awards for guiding her students in preserving the

personal stories of area veterans. Every year, each of Rutherford's students chooses a veteran, interviews the person, does research, and then creates a tribute book for him or her. They have been doing this for 10 years and have completed some 900 books. The students also read novels on related topics and hold a Veterans Day program and reception for the veterans.

It's a hands-on activity that motivates her students to learn more, Rutherford told a local newspaper, which ran a feature article and photo about the AFA award. Chapter President Merlyn S. Tidemann and Chapter Treasurer Pauline P. Morrissey presented the state and chapter Teacher of the Year awards to Rutherford.

Antiques Air Show

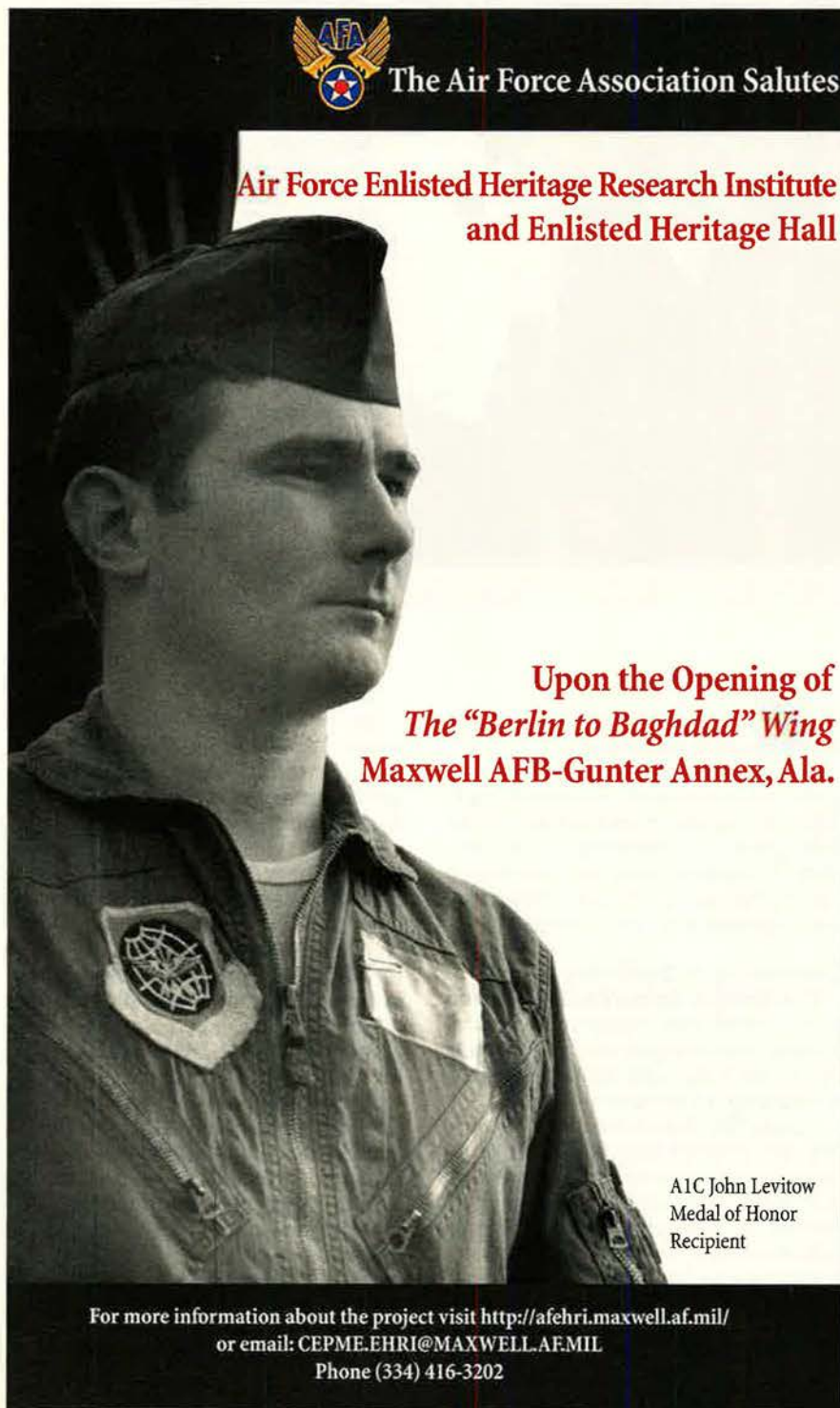
When antique aircraft flew in to the municipal airport in Merced, Calif., in June, two members of the **Maj. Gen. Charles I. Bennett Jr. Chapter** had a tricky task: picking the winners from among 300 or so vintage airplanes.


Donald H. Hirschaut, past chapter president, and Richard K. Chisholm, chapter treasurer, judged the 48th annual Merced West Coast Antique Fly-In, described as the oldest continuous fly-in on the West Coast. More than 40 trophies were up for grabs. The categories included Golden Age (1929-34), Classic Age (1935-41), and Neoclassic Age (1946-73). Hirschaut has been chief judge for this fly-in for 18 years.

A Curtiss-Wright CW-19R, built in 1938, was selected for the AFA Best Warbird Trophy, presented by Chapter President Frank Walterscheid. The perpetual Warbird Trophy is kept on display at the Castle Air Museum in Atwater, Calif.

More AFA/AEF News

■ Ten students from seven universities received \$23,000 in scholarships at the **C. Farinha Gold Rush Chapter's** awards banquet, held in Sacramento, Calif., in April. The scholarship program was made possible by generous Community Partners, explained Philip Barger, chapter aerospace education VP. Other awards went to Jeffrey R. Smith, from California State University Sacramento, who was selected as Outstanding ROTC Cadet; Kenneth M. Fears, named state Teacher of the Year; and Robert J. Sully, chapter Teacher of the Year. Lee V. Greer, immediate past chapter president, received the Leadership Award. In keeping with the emphasis on education that evening, Alexander



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AFA In Action

The Air Force Association works closely with lawmakers on Capitol Hill, bringing to their attention issues of importance to the Air Force and its people.

AFA National Officers Express Concern About VA Funding

AFA Chairman of the Board Stephen P. "Pat" Condon and AFA National President Robert E. Largent recently met with senior professional staff members on Capitol Hill to express the association's concern about ensuring adequate funding for the Department of Veterans Affairs health care delivery system. (See "Action in Congress: VA Shortfall Addressed," August, p. 26.) Chief among the concerns expressed by Condon and Largent was that those returning from Afghanistan and Iraq with war-related injuries receive rehabilitation or get fitted for prosthetic devices within a reasonable period.

Among the Capitol Hill staffers visited were: Burns **Strider**, advisor to House Democratic Leader Nancy Pelosi (D-Calif.); James M. **Lariviere**, majority staff director, House Veterans' Affairs Committee; David M. **Tucker**, minority counsel, House Veterans Affairs' Committee; Douglas R. **Bush**, military legislative assistant to Rep. Neil **Abercrombie** (D-Hawaii); Lupe **Wissel**, majority staff director, Senate Committee on Veterans' Affairs; Alexandra **Sardegna**, professional staff member, minority staff, Senate Committee on Veterans' Affairs; Andrew **Shapiro**, senior defense and foreign policy advisor to Sen. Hillary Rodham **Clinton** (D-N.Y.); and Tucker **Shumack**, military and veterans' affairs legislative assistant to Sen. Johnny **Isakson** (R-Ga.).

Gonzalez, president of CSUS, was guest speaker for the banquet.

■ USAF's aerial demonstration team—the Thunderbirds—were in the Long Island, N.Y., area for Memorial Day weekend, and AFA members had an active role in a reception held for "America's



In May, Lt. Gen. John Rosa (far left), superintendent of the Air Force Academy, and AFA Board Chairman Pat Condon (far right) presented the Outstanding Squadron Trophy to USAFA's Squadron 33—"The Ratz"—at an academy banquet. Cadets Daniel Scott (left) and Michael Coleman accepted the trophy. AFA, the Lance P. Sijan Chapter, and the academy's Association of Graduates helped sponsor the banquet.

Photo courtesy Charlie Star, Roman Joint Ventures

Ambassadors in Blue." Led by Fred Di Fabio, state president, members set up an AFA display and distributed information about the Thunderbirds to guests at the reception held at the American Airpower Museum in Farmingdale. Assisting the guests in meeting the team and getting autographs were **Long Island Chapter** members Alphonse Parise, Christopher Patti, and Jeff Clyman and Gary Lewi, who are also museum officials. Other AFAers on hand were Maxine Donnelly from the **Iron Gate Chapter** (N.Y.) and Capt. Scott A. Clyman, from the **Columbia Palmetto Chapter** (S.C.).

■ The vice president of the **Gen. Charles A. Gabriel Chapter** (Va.) attended a pass in review ceremony conducted by AFJROTC cadets at Chantilly Academy High School in June. Terrence A. Young presented the ceremony's highest honor—the Air Force Association Award issued by AFJROTC headquarters—to Luis A. Contreras. The cadet begins his freshman year at George Mason University in Fairfax, Va., this fall on a partial AFROTC scholarship. Young said he was asked to present the award because of his chapter's close ties to the Chantilly AFJROTC unit. Retired



AFA Chairman of the Board Pat Condon congratulates MSgt. George Owen after a promotion ceremony at Columbus AFB, Miss. Condon visited Mississippi for the state convention in June and received an orientation tour of the base. In the background, former AFA Board Chairman Gene Smith congratulates TSgt. Shawn Naus.

USAF photo by 1st Lt. Ryan Hardy

Maj. Sheila F. Allen of the **Donald W. Steele Sr. Memorial Chapter** leads the unit.

■ An AEF Chapter Matching Grant allowed the **Danville Chapter (Va.)** to support a solar cells project by students at Galileo Magnet High School. Funds from the chapter helped the students at the science and technology school make nanocrystalline solar

cells to create an electrical current flow that can be used like a battery. They told Gerald L. Hovatter, chapter president, that the three-day project taught them about solar cell manufacturing, the photoelectric effect, and electric circuits.

■ At their June chapter meeting, **Pasadena Area Chapter** members listened to a guest speaker's take on

military base realignment in California. Bill Hackett, a field representative from the office of State Assembly Member Carol Liu (D), spoke about the impact of the Base Realignment and Closure proposals and the state legislator's efforts on behalf of the Guard and Reserve. In July, chapter officers presented the California state AFA's Congressional Award to US Rep. Adam Schiff (D-Calif.) at his Pasadena office. The award recognized his support for legislation that benefits military personnel.

■ In June, Jack H. Steed, Southeast Region president and a member of the **Carl Vinson Memorial Chapter (Ga.)**, represented AFA at the dedication of the Berlin to Baghdad Memorial Wing. The wing is a 3,700 square foot addition to the Enlisted Heritage Hall at Maxwell AFB-Gunter Annex, Ala. The **Montgomery Chapter (Ala.)**, headed by Mark J. Dierlam, and AEF were among the construction project's significant donors.

■ The Civil Air Patrol's Florida Wing invited Richard A. Ortega, aerospace education VP for Florida and the **Central Florida Chapter**, to speak at its annual conference in Orlando in June. Ortega described AEF and its programs, focusing on the CAP Squadron Cadet of the Year and CAP unit and aerospace educator grants.

Sherman W. Wilkins (1920-2005)


Former AFA National Secretary Col. Sherman W. Wilkins, USAF (Ret.), died July 30 at his home in Washington state. He was 84. Colonel Wilkins joined AFA as a charter member and served as president of the Seattle Chapter; vice president of the Pacific Northwest Region; a national director; and AEF trustee. He was an AFA national director emeritus at the time of his death.

Born Aug. 2, 1920, in Sherman, Conn., he received his pilot's wings and a commission in 1941 and flew B-29s in the China-Burma-India Theater during World War II. He had been assigned to Strategic Air Command when the Korean War began. During the Vietnam War, he analyzed USAF operations in Southeast Asia.

Colonel Wilkins earned a bachelor's degree from the University of Connecticut and a master's degree from George Washington University.

He retired from the Air Force in 1968 and spent 13 years with Boeing. "I was able to observe and participate firsthand in the exploding technology of aerospace," he wrote in his 2003 memoir, *Without Hesitation: A Life of Service*. ■

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13th FIS, Sioux City, IA, and Glasgow, MT. Oct. 12-16 at the Sahara Hotel in Las Vegas. **Contact:** Don and Donna Girard, 2399 Cascade St., Las Vegas, NV 89142-1718 (702-431-9204) (dgirards@cox.net).

20th FW/FG Assn (1930-present), all hands. Oct. 26-30 in Tucson, AZ. **Contacts:** 20th FW Assn, PO Box 69554, Tucson, AZ 85737 or Mick Doty (mddoty@earthlink.net).

49th FG Assn. Oct. 12-15 in Biloxi, MS. **Contact:** Ed Traweek, 576 Highway 448, Indianola, MS 38751-2784 (662-887-1128).

96th Security Police and 7th Security Forces, Dyess AFB, TX. Oct. 8 at Circus Circus in Las Vegas. **Contact:** 96SPS/7SFS Reunion, 1250 Peach St., Abilene, TX 79602 or Ni Harris (325-696-3362) (copreunion@aol.com).

100th ARS. Oct. 20-23 in Warner Robins, GA. **Contact:** John Seigal, PO Box 1131, Sloughhouse, CA 95683 (916-354-1703) (jwseigal@sbcglobal.net).

303rd BW (SAC). Oct. 3-6 at the Marriott Pyramid Hotel in Albuquerque, NM. **Contact:** Bill Dettmer (505-294-0564) (dettmer_jw@compuserve.com).

306th BG Assn. Oct. 19-23 at the Doubletree Hotel in San Antonio. **Contact:** Albert McMahon, 273 N. Peachtree St., Norcross, GA 30071 (770-448-8513).

308th SMW, Jacksonville, AR. Oct. 6-9. **Contact:** William Leslie, 7097 Bellefontaine Rd., Huber Heights, Ohio 45424 (937-255-2783) (william.leslie2@wpafb.af.mil).

363rd Mustang Gp and 161st Tactical Recon Sq (WWII). Oct. 6-8 in Houston. **Contact:** Art Mimler (209-966-2713).

384th ARS. Oct. 13-16 at the Navy Outdoor Recreation Area in Moncks Corner, S.C. **Contact:** Ken Godstrey, 12018 Maycheck Ln., Bowie, MD 20715 (301-464-1150) (kengodstrey@comcast.net).

416th NFS/TFS (WWII-1993). Oct. 6-9 in Scotts-

dale, AZ. **Contact:** Ron Green, 6303 E. Mesquite Rd., Cave Creek, AZ 85331 (480-595-8693) (bargranch@aol.com).

433rd Troop Carrier Gp (WWII). Oct. 11-17 at the Wyndham Harbour Island Hotel in Tampa, FL. **Contact:** Frank Nash (251-660-2921).

445th FIS. Oct. 11-13 at the Hope Hotel at Wright-Patterson AFB, Ohio. **Contacts:** Al Bruder, 652 Ramblewood Pl., Fairborn, OH (937-879-3800) (abruder@woh.rr.com) or Mary and Bob Stamm (acorngroup@adelphia.net).

455th BG, Italy (WWII). Oct. 19-23 at the Westin Crown Center in Kansas City, MO. **Contact:** Greg Riggs, PO Box 93095, Austin, TX 78709-3095 (512-288-5672).

486th BG, Eighth AF (WWII). Oct. 12-16 at the Sheraton National Hotel in Arlington, VA. **Contact:** Bill Phelps (812-867-2991).

815th Troop Carrier Sq, Ashiya AB, Japan. Oct. 13-16 at the Radisson Hotel in Branson, MO. **Contact:** Sam Gaskill, 5227 Route U, Washburn, MO 65772 (phone: 417-435-2304 or fax: 417-435-2164) (sgaskill@leru.net).

Air Force Postal & Courier Assn. Oct. 16-19 at the Lodge of the Ozarks in Branson, MO. **Contacts:** Dan Neff, 413 Hartzell Ave., Redlands, CA 92374 (909-792-5424) (afpcadneff@cyberhotline.com) or Jim Foshee, 3509 Deer Trl., Temple, TX 96504 (254-774-7303) (jimfoshee@sbcglobal.net).

National WWII Glider Pilots Assn. Sept. 29-Oct. 2 at the Doubletree Crystal City Hotel in Arlington, VA. **Contact:** Virginia Randolph, 21 Phyllis Rd., Freehold, NJ 07728.

Pacific Air Weather Sqs. Oct. 20-23 in Tucson, AZ. **Contact:** Frank Whitmire (817-283-8038) (frankb29@sbcglobal.net).

Spangdahlem and Bitburg ABs, Germany, including DOD and German civilians. Sept. 16-18 at Spangdahlem AB, Germany. **Contact:** Capt. Thomas Crosson (49 6565616012) (thomas.crosson@spangdahlem.af.mil).

U-Tapao Alumni Assn (1965-76). Oct. 15-31 at the Nova Lodge in Pattaya, Thailand. **Contact:** Jim Gilmore (707-280-2518) (pointman@utapao.org).

Webb AFB, TX, all pilot classes, permanent party, and support personnel. Sept. 30-Oct. 2 at Hangar 25 Air Museum in Big Spring, TX. **Contact:** Rhonda Campbell (432-264-1999) (hangar25@crcom.net).

Seeking members of the **First Flight Det. MACV-SOG**, Nha Trang AB, Vietnam (1962-72), for a reunion in 2006. **Contact:** Frank White (509-464-2772) (whitefc1@comcast.net).

AFA Conventions

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