

SEPTEMBER 1997/\$5

AIR FORCE

PUBLISHED BY THE AIR FORCE ASSOCIATION

MAGAZINE

Pieces of Fifty

The US Air Force 1947-1997





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MAGAZINE

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AIR FORCE Magazine (ISSN 0730-5784) September 1997 (Vol. 80, No. 9) is published monthly by the Air Force Association, 1501 Lee Highway, Arlington, VA 22209-1198. Phone (703) 247-5800. Second-class postage paid at Arlington, Va., and additional mailing offices. **Membership Rate:** \$30 per year; \$75 for three-year membership. **Life Membership (nonrefundable):** \$450 single payment, \$475 extended payments. **Subscription Rate:** \$30 per year; \$25 per year additional for postage to foreign addresses (except Canada and Mexico, which are \$9 per year additional). Regular issues \$3 each. Special issues (USAF Almanac issue and Anniversary issue) \$5 each. **Change of address** requires four weeks' notice. Please include mailing label. **POSTMASTER:** Send changes of address to Air Force Association, 1501 Lee Highway, Arlington, VA 22209-1198. Publisher assumes no responsibility for unsolicited material. Trademark registered by Air Force Association. Copyright 1997 by Air Force Association. All rights reserved. Pan-American Copyright Convention.

FINANCIAL NEWS

The Latest Daily Market and Financial Information

Vol. XXX VI

Accelerated V-22 program saves U.S. \$6 billion

WASHINGTON - The resident V-22 Osprey, which the Pentagon wanted to kill at the end of the decade because of cost concerns, may now get years of additional life.

purchase, adding that "it would be good news for the (Marine) Corps, too, because they need those planes.

Four Ospreys are scheduled for production this year, followed by five in 1998, six in 1999, and seven in 2000.

Despite the possibility of these savings, the V-22 program is still subject to budgetary constraints.

While the Marine and Army versions of the aircraft are being produced at a steady rate, the V-22 program is still subject to budgetary constraints.

the Pentagon would have a tough time adding another million in procurement this year, so the military is keeping the V-22 program at \$75 million a year, the same amount as the state.

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But despite all the obvious benefits of the V-22, deploying it will take over 20 years at the current production rate. That delay will deprive our quick-reaction forces of the aircraft with the speed, range, payload and survivability they need to execute their missions.

Accelerating production would put the V-22 fleet into the field sooner, providing several additional years of vital air transport. And a recent study proves accelerating the program would also save six billion dollars.

Consider all the facts in terms of what is best for the country now and for tomorrow. Because the future will be here sooner than we think.



By John T. Correll, Editor in Chief

Fallout From Khobar Towers

ON THE evening of June 25, 1996, sentries on the roof of the Khobar Towers compound saw two men pull a tanker truck into an adjacent lot and park it against a chain-link fence, 80 feet away. Khobar Towers was a high-rise apartment complex in a densely populated section of Dhahran, Saudi Arabia. Among those quartered there were airmen from the 4404th Wing (Provisional), which was flying Operation Southern Watch sorties over Iraq to enforce UN sanctions.

The sentries recognized the possibility of a truck bomb. They began knocking on doors to evacuate the building. Four minutes later, with only the top three floors vacated, the bomb went off. It exploded with the power of 20,000 pounds of TNT, completely blowing away the front of the nearest building and damaging five others.

Nineteen airmen were killed and hundreds were injured by flying glass. The bomb was 80 times larger than the next biggest device ever used by terrorists in Saudi Arabia. It left a crater 85 feet wide and 35 feet deep.

The questions were quick in coming. How did it happen? Who was to blame? The House National Security Committee had a fact-finding team in Dhahran in two weeks. The Department of Defense appointed a retired Army officer, Gen. Wayne Downing, to head an investigation.

Before the Khobar Towers case was settled, it had embroiled Congress, the news media, senior Administration officials, and Air Force leaders. It also figured in the decision of Gen. Ronald R. Fogleman to retire before completion of his tour as Air Force Chief of Staff.

Initial assessments pointed to the ambiguity of intelligence. Secretary of Defense William J. Perry said that "our commanders were trying to do right, but given the inconclusive nature of the intelligence, had a difficult task to know what to plan for." Rep. Floyd D. Spence (R-S.C.), House National Security Committee chairman, said there were "intelligence failures" at Khobar Towers.

Then came the Downing report in September 1996. It put the blame on Brig. Gen. Terry J. Schwalier, 4404th Wing commander. Downing said "it appears that the 'fly and fight' mission and 'quality of life' took precedence over force protection" and that Schwalier "did not adequately protect his forces." Thus Schwalier was nominated to meet the relentless demand that someone be punished.

The wing commander was nominated to meet the demand for a sacrifice.

The Air Force conducted two comprehensive inquiries. Both found that Schwalier had done all that could have been reasonably expected. Fogleman was fierce in his defense of Schwalier. He told the Senate Armed Services Committee that if sustaining casualties in an attack can lead to punitive action, it would have a "chilling effect" on field commanders. The decision by Secretary of Defense William S. Cohen to override the Air Force's judgment was a factor in Fogleman's early departure.

In July, declaring that Schwalier "could have and should have done more" to defend Khobar Towers, Cohen cancelled Schwalier's previously approved promotion to major general. It was not enough that Schwalier had taken 130 specific actions to improve security in the year before the explosion—or that he had implemented 36 of the 39 recommendations from the most recent vulnerability assessment.

The wing had operated on a "temporary" basis since 1992. Most personnel were assigned on 90-day rotation. In addition to the Southern Watch mission, Schwalier juggled numerous responsibilities. Among them was security against terrorist acts, including suicide bombers, satchel charges, sniper fire, kidnapping, assassination, hijacking, and

car bombs on the perimeter. Penetration of the compound by a car bomb was regarded as the leading threat.

Cohen told reporters there were several security deficiencies but that two stood out: the lack of an effective alarm system to warn of impending terrorist attack and inadequate evacuation plans. Schwalier inherited a standard speaker and siren system that the Cohen report said was "plainly inadequate." The siren had not been tested since 1994. Commanders were reluctant to set it off, lest the Dhahran community mistake it as the signal for a Scud missile attack, for which the siren had historically been used. For evacuations, the wing used the "water-fall" method, first alerting top-floor occupants who then helped alert lower floors on their way out. Previous evacuations were completed in 10 to 15 minutes. Cohen faulted Schwalier for not conducting evacuation drills. Six actual evacuations, triggered by suspicious packages, in the past year were deemed "an inadequate substitute for exercises."

(News reports have belabored the absence of Mylar protective window film. Schwalier had budgeted for it, and the Cohen report found it "unlikely that Mylar would have prevented the vast majority of the fatalities," although it might have reduced the injuries.)

Was security insufficient? Yes. Nineteen airmen died and many others were injured. Could more have been done? Again, yes. With the benefit of hindsight, it's an easy call to make. However, the solution ultimately chosen after the Khobar Towers attack—to move troop housing out of the congested urban area altogether—was not available to Schwalier.

Neither justice nor security was well served in the handling of the Khobar Towers case. Perhaps it was satisfying to those who wanted a sacrifice, but it did not help with the real needs of forces in the field for resources, support, and backing from the nation that sent them out. ■



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Rated Woes

I just finished reading your July article "Keeping Pilots in the Cockpits" [p. 66], and I must admit that your article and the Air Force have only addressed the tip of the iceberg. Not only are active-duty pilots leaving the Air Force but so are full- and part-time Air National Guard and Reserve pilots.

One reason is the higher expectations placed on part-time individuals by their units and active-duty counterparts to participate as if their only job was the Guard or Reserve. The training and deployment requirements for Guard and Reserve units are increasing as their force structure shrinks.

Why not create more Air Guard and Reserve units to try and keep the experienced pilots at least on a part-time basis? This would allow the Air Force to have more flexibility because it still has a large number of pilots to help defray the high operations tempo of active duty for less money. Second, the Air Guard and Reserve should not be subjected to the same treatment as their active-duty counterparts (long deployments, professional military education, etc.) because they are not active duty.

Many of the initiatives being considered for the retention of pilots are good; however, one can read between the lines. The Air Force hasn't figured out how to retain pilots for the last 50 years; why would anyone believe that these initiatives will have any more of an effect on pilots' quality of life with their families now than they have had in the past?

Dennis Smith
Mount Holly, N.J.

In 1961, my base and flight pay as a rated captain with 10 years of service was \$8,033. Using the consumer price index numbers from the May issue [p. 39], the math works out that \$42,058 is needed to produce the same purchasing power in 1997.

Consider then that the pay of a rated 10-year captain today is \$49,188, and he or she gets an addi-

tional \$6,494 in quarters and subsistence when appropriate. I draw these conclusions:

- A pilot with 10 years of service is worth more than a retired colonel.

- Inflation has been with us forever.

- Surprisingly, pilots get paid more in real terms than they did 36 years ago.

Maybe today's pilot has more expensive tastes than I, but I suspect that pay is but a small part of the retention problem. Could it be there's been so much emphasis on pay and benefits and promotions that many officers lose sight of the reason why they're in the military? That is a responsibility of senior officers. Relevant material can be found under the subject of leadership.

Ccl. Robert B. Downs,
USAF (Ret.)
Grass Valley, Calif.

"USAF, Navy Face Rated Problems" in the May issue [*Aerospace World*, p. 13] is certainly no surprise to any rated officer in the Air Force.

Gen. Ronald R. Fogleman stated that the problems are coming from the devaluation of the pilot bonus (by inflation) and avid hiring by airlines. It should be no surprise that the percentage of pilots signing up for the bonus has dropped from 76 percent two years ago to 43 percent this year. This proves what I already knew: The pilot bonus does not help retain pilots. Pilots who want to go to the airlines always will, and pilots who want to stay in the Air Force certainly

Do you have a comment about a current issue? Write to "Letters," Air Force Magazine, 1501 Lee Highway, Arlington, VA 22209-1198. (E-mail: letters@afa.org.) Letters should be concise, timely, and preferably typed. We cannot acknowledge receipt of letters. We reserve the right to condense letters. Unsigned letters are not acceptable. Include city/base and state. Photographs cannot be used or returned.—THE EDITORS

don't mind the extra money. The end result is a huge waste of money (\$30 million a year) and a bunch of ticked off navigators who are not offered a bonus even though the problem is greater with navigator shortages.

While I'm happy to see the House and Senate discussing how to correct the retention problems, here's a bit of information for them to consider. A pay increase and better educational benefits will not solve the problem. The following are some ideas from an instructor offensive systems officer with 12 years' experience who doesn't have a master's, didn't go to Squadron Officers School, but has an outstanding record and combat experience.

- Make the Air Force more like a civilian business. Don't force people to fly if they don't want to, and don't force out of the cockpit people who want to fly their entire career.

- Promote people based on job performance, not pilots first then the Ouija board technique for everyone who is left. Get rid of the limits on how many people can be promoted to the next grade.

- Get rid of the up-or-out system. This may be a shock, but everyone doesn't want to be a colonel.

- Restore the benefits that have eroded so badly over the last 10 years. A hospital should have an emergency room and should provide the same quality care that is available in civilian hospitals.

- Don't force a person to move after a few years if they can't want to.

- When in doubt as to which direction to go, think combat. It's amazing how all of a sudden no one gives a rip if you have a master's degree, they don't care if you were a distinguished graduate at SOS, the normal massive amounts of paperwork are drastically reduced, and everything becomes crystal clear. All that matters is if you can hop in the jet, go blow the hell out of something or someone, and return to do it again the next day. I think that's called "Job Performance."

Capt. Lang H. Martin,
USAF

Abilene, Texas



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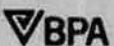
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 **BPA** Circulation audited by
Business Publication Audit

Letters

Aeronautical "Gotchas"

I know you'll get the usual batch of "You forgot this" letters regarding the 1947 year-in-review article, "The Year the Air Force Was Born," in the July 1997 issue [p. 56]. But I think you guys really dropped the ball when you failed to make any mention of the fact that on Jan. 13, 1947, legendary artist Milton Caniff started his famous Air Force-related "Steve Canyon" newspaper comic strip. During its 41-year run, Steve Canyon was one of the best recruiting tools the Air Force had. The strip showed the importance and drama of airpower to millions of average people, and it reflected the challenges and rewards of Air Force life more realistically than any popular culture medium before or since.

Caniff was also heavily involved in supporting Air Force Association activities since as early as 1951, when Caniff and AFA collaborated on a nationally distributed Steve Canyon comic book. And even though Caniff died in 1988, he is still doing his part to support AFA activities. An example? In the January 1997 issue of *Air Force Magazine*, you used nine Caniff illustrations of famous airmen to illustrate your Aviation Hall of Fame article.

MSgt. Russell C. Maheras,
USAF
Highwood, Ill.

Just received my July issue and found an error on p. 64, "Aeronautical Feats." In the first entry, the XB-45 was not the first USAAF multiengine jet bomber. The Douglas XB-43, with two J35s, first flew on May 17, 1946, nearly a year before the XB-45. The B-45 was America's first four-jet-engine design but not its first multi-engine jet bomber.

Col. Scott A. Willey,
USAF (Ret.)
Fairfax, Va.

■ *Reader Willey is correct.*—THE EDITORS

On p. 59 of the July issue, mention is made that the "P" for "Pursuit" designation was changed to "F" for "Fighter." Not so. This change did not occur until June 11, 1948, when AFR 65-60 was published. This regulation also changed helicopter designations from "R" to "H" and "F" for "Recon (Foto)" to an "R" prefix for "Recon," among others.

MSgt. David Menard,
USAF (Ret.)
Wright-Patterson AFB, Ohio

■ *Reader Menard is correct.*—THE EDITORS

In the July issue, p. 38 [*"Air Force Fifty"*], the list of aircraft used by the Thunderbirds omits the F-105. The team flew the "Thud" for a few months in 1964. To support my claim, here are a few books that mention this fact (most also show photos of Thunderbirds' paint jobs): *F-105 Thunderchief* by J.C. Scutts, *F-105 Thunderchief in Detail and Scale* by Bert Kinzey, *Thud* by Lou Drendel, and *The Republic F-105 Thunderchief* by Robert D. Archer.

MSgt. James B. Walker,
USAF (Ret.)
Dayton, Ohio

Missing Health Care

Regarding your article in the July issue on the loss of medical services for retirees and the need for FEHBP [*"The Push to Open FEHBP,"* p. 70]: Another reason we need FEHBP is for pharmaceutical requirements. The cost of my medication annually is over \$1,500. With FEHBP, this would be reduced considerably. So contrary to what headquarters personnel state or feel, many retirees are being shortchanged on medical services.

CWO4 Raymond C. Bottner,
USAF (Ret.)
Bellevue, Neb.

It was with particular sadness that I read "The Push to Open FEHBP" in the July issue. Your support of this policy is well-intentioned and reasoned. That is why reading it was so heartrending.

We take as faith that promises made to military retirees will now go unfulfilled, so we cut our losses by endorsing plans that cost more than they should have to pay but less than they might pay otherwise. We do this because we feel it's the best we can do in today's reality. But at what cost?

These people protected our nation during lean years, dangerous times, and stunning victories. Our national leaders made clear promises in writing, in deed, and in voice. We promised that in return for a career of military service the nation would give them and their immediate family a lifetime of military-sponsored health care—free. Now for reasons of budgetary expediency, we seek ways to renege on this promise. We must measure what we are to gain by what we are sure to lose.

Capt. Kenneth W. Stallings II,
USAF
Navarre, Fla.



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Letters

Scarlet Letters

The debacle of Kelly Flinn will live on as long as we have an Air Force [*The Departure of Kelly Flinn*, July 1997, p. 11]. My question to the Air Force is, "Why was it allowed to happen in the first place?" Obviously they can't remember what has happened in the past.

Fraternization between the ranks is as old as the hills. The Air Force can curtail fraternization, but it will not stop it today just as it couldn't stop it in the past. Any commander who thinks he can stop it with a direct order is dreaming. If said squadron commander or wing commander had transferred Flinn or her lover to another base, the problem would have gone away. I can't believe those in charge were so lax, especially at a base where there are six months of winter and six months of spring. What if some muckety-muck had ordered you and your spouse-to-be to stop seeing each other when you were 26?

I don't blame Flinn. I blame the commanders. And you wonder why you can't keep pilots in the Air Force.

Col. Floyd Peede,
USAF (Ret.)
Satellite Beach, Fla.

There must be a multitude of AFA members appalled by the resolution of "higher headquarters" in the sensational case of Lieutenant Flinn. Perhaps General Fogleman is one of those few (in my experience) Air Force officers who may be sincerely able to "cast stones." In my service, enlisted and officer, USN, ANG, and USAF, such incidents were common, disguised, disregarded, and generally understood as being beyond the control of regulations.

If punishment for intimacy prohibited by regulation was in order, a simple Article 15 would have sufficed and a transfer. No doubt, many of our members can cite numerous appropriate administrative responses to such common involvements.

Maj. G.T. Martin,
USAFR (Ret.)
Arvada, Colo.

Subsequent to Lt. Kelly J. Flinn being charged under the Uniform Code of Military Justice with a number of felonious violations—namely, fraternization, adultery, making false statements, and disobeying a lawful order—she appeared on every television network and talk show that would allow her to use their platform as a public forum. In this offensive

onslaught, Flinn consistently whined and complained that the Air Force had conducted a flawed investigation of the charges brought against her and that in general she had been treated unfairly simply because she was female. The record reflects that nothing could be further from the truth, and the available facts indicate that the Air Force has treated her with "kid gloves" because she is a female.

The lame excuse on the part of Flinn that she is the victim of gender bashing by the Air Force is, in my opinion, tommyrot.

Col. Edward H. Curtis,
USAF (Ret.)
Arlington, Texas

Your sidebar on p. 11 of the July issue concerning Kelly Flinn repeated General Fogleman's angry retort to Senator Harkin: "This is not an issue of adultery."

The general is to be congratulated for excellence in spin control. He managed with that statement to deflect much of the criticism being directed at the Air Force. Few looked below the surface of the statement to note that what Flinn lied about was committing adultery. As for the "officer who is entrusted to fly nuclear weapons" bit, do you suppose there might be some pilots in the Air Force and commanders of pilots at all levels who have on occasion lied to their wives about adultery?

The Air Force wanted to "get" Flinn. Maybe there is more to the story than what appears to be the kind of sexual indiscretion that has throughout history afflicted young fools and old fools alike. But why go for a court-martial? There were certainly so many less drastic ways to derail her career.

Lt. Col. Bernard H. Friedman,
USAFR (Ret.)
Olympia, Wash.

One More Book

I know a reading list cannot contain everyone's favorite title, but I was disappointed to see that "The Chief's Reading List" [July 1997, p. 74] did not contain *Taking Charge: A Practical Guide for Leaders* by Perry M. Smith.

My commander gave me a copy when I was promoted to master sergeant, and the book was a constant companion throughout the rest of my career. Even though I've been retired for several years, it still graces my bookshelf.

SMSGt. Noel A. Sivertson
USAF (Ret.)
Roswell, N.M.

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Aerospace World

By Peter Grier

Ryan Selected for Top Post

Gen. Michael E. Ryan, USAF's top commander in Europe, was tapped to become the Air Force's 17th Chief of Staff, the service's highest uniformed position. The plan called for Ryan to swiftly succeed Gen. Ronald R. Fogleman, who on July 28 abruptly announced his retirement, effective Sept. 1.

In his 32-year career, Ryan had flown combat missions in Vietnam, commanded at the squadron, wing, and numbered air force levels, built up extensive Pentagon experience, and played key roles in planning air operations.

When President Clinton announced the selection on July 31, the general was holding two posts—as the service's commander, US Air Forces in Europe, and as NATO's commander, Allied Air Forces Central Europe. The Pentagon expected that, barring unexpected troubles, Ryan would assume the duties of Chief of Staff early in the fall. The nomination required Senate confirmation.

For Ryan, 55, occupation of the Chief of Staff's office would be just carrying on a family tradition. A generation ago, in 1969–73, Ryan's father, Gen. John D. Ryan, served as the Air Force's top uniformed leader. Never has a son followed a father as chief of a US military service, the Pentagon said.

DoD Hails Ryan's Record

Secretary of Defense William S. Cohen told reporters that he recommended Ryan to the President for three reasons: "Number one, he has combat experience and he understands the risks and the pressure of warfare. ... Secondly, he served with distinction on the Joint Staff. ... Third, he has operational experience as an allied commander in Europe."

Ryan, a 1965 graduate of the Air Force Academy, is a former fighter pilot with 100 missions over North Vietnam to his credit. He had flown the F-4 Phantom during the war.

Ryan was prominent in two major Air Force combat operations of re-



USAF photo by Sue Sapp

Maj. Gen. Rondal H. Smith, Warner Robins Air Logistics Center commander (center), talks with a delegation from Washington after their arrival in Georgia. With them are Rodney Coleman (right), USAF's assistant secretary charged with installation oversight, and Maj. Gen. Eugene A. Lupia (left), the service's top civil engineer. The fate of some Air Force ALCs continues to be a hot topic after Congress' recent decision to nix a new round of base closures posed by the Pentagon to free up funds for modernization. The Robins ALC is bidding to conduct some of the work currently performed by two ALCs many members of Congress want to close outright rather than privatize.

cent years. As a brigadier in the early 1990s, he was chief of operations for Tactical Air Command and, as such, was the key figure in charge of providing Air Force aircraft, crews, and equipment to the Desert Storm effort.

In August and September 1995, as commander of Allied Air Forces Southern Europe, he directed Operation Deliberate Force, a highly successful month-long series of air strikes in Bosnia that forced the breakaway Bosnian Serbs to seek peace.

In between these two operations, Ryan served on the Joint Staff in Washington, as vice director for strategic plans and policy and then as an assistant to Gen. John Shalikashvili, Chairman of the Joint Chiefs of Staff. He became USAFE commander in April 1996.

Air Force Secretary Sheila Widnall called Ryan "a remarkable officer" who "has my absolute trust and confidence."

B-2 Stages Longest-Ever Mission

One of USAF's newest combat aircraft, the B-2 *Spirit of Nebraska*, flew 15,000 miles nonstop on July 6–7. The 37.6-hour-long sortie marked the longest-ever Air Force global power projection mission, according to service officials.

Hot dogs, pudding, and bottled water helped the two crew members, Maj. Chris Inman and Maj. Steve Moulton, make it through the flight—along with five in-flight refuelings. Their route took them from Whiteman AFB, Mo., to San Francisco, Honolulu, Wake Island, and Guam, where they practiced a night global positioning system-aided munitions drop.

Moulton, the mission commander, prepared himself for the ordeal by putting himself through a 44.4-hour-long training "flight" in a B-2 flight simulator. "Much learning can take place when you have a lot of time in the jet," he said.

The Chief Steps Down

Declaring that he may have been "out of step with the times and thinking of some of the establishment," Gen. Ronald R. Fogleman cut short by more than a year his tour as Air Force Chief of Staff and retired from active duty on Sept. 1.

He requested early retirement in a hand-written note to Air Force Secretary Sheila Widnall on July 28. Three days later, Secretary of Defense William S. Cohen announced the nomination of Gen. Michael E. Ryan, commander of US Air Forces in Europe, to replace Fogleman. Cohen had begun interviewing candidates on the basis of press reports that Fogleman might be about to leave.

The reports centered on the disagreement between Fogleman and top defense officials on what punitive action, if any, should be taken as a result of the bombing of the Khobar Towers housing complex in Dhahran, Saudi Arabia, in June 1996, in which 19 US airmen were killed. Fogleman emphatically took the view that it would be wrong to hold the Air Force wing commander in Dhahran at fault. Two Air Force inquiries found that the casualties were attributable to an act of war and not inattention to security by wing officials.

However, that conclusion differed with the judgment of an investigation headed by a retired Army general and with the outspoken position of several members of Congress that someone ought to be held accountable for failure of security at Khobar Towers. Secretary Cohen took that view as well. On July 31, he stripped Brig. Gen. Terry J. Schwalier, who had been wing commander in Dhahran, of a previously approved promotion to major general. Schwalier announced his retirement the same day.

Fogleman declined any public comment beyond a brief written statement. In fact, he played down disagreement on Khobar Towers as a factor in his decision to go, saying that "the timing of my announcement was driven by a desire to defuse the perceived confrontation between myself and the Secretary of Defense over his impending decision on the Khobar Towers terrorist attack."

In a letter to the men and women of the Air Force, Fogleman said: "My stock in trade after 34 years of service is my military judgment and advice. After serving as Chief of Staff for almost three years, my values and sense of loyalty to our soldiers, sailors, Marines, and especially our airmen, led me to the conclusion that I may be out of step with the times and thinking of some of the establishment. This puts me in an awkward position. If I were to continue to serve as Chief of Staff of the Air Force and speak out, I would be seen as a divisive force and not a team



player. I do not want the Air Force to suffer for my judgment and convictions."

Also, he told the troops, "I've always said that my serving as the Chief of Staff was a 'tour,' not a 'sentence,' and that I would leave when I made all the contributions that I could. After I accepted this position in 1994, I met with other senior leaders of the Air Force to discuss our goals for my tenure. We wanted to take care of the troops and their families, to stabilize the force, to set a course for modernization, and to develop a new strategic vision."

On Fogleman's watch, the force did begin to achieve stability after a period of intense change. He launched a comprehensive reevaluation of future requirements and options. That effort became the basis for two landmark reports, "New World Vistas," which explored the technological possibilities, and "Air Force 2025," which examined the threats and missions the future force might confront. Among the outcomes was a recognition that the emphasis in Air Force operations is gradually moving from air and space to space and air. These studies were also instrumental in the development of "Global Engagement," the Air Force's long-range plan for the 21st century.

The plainspoken Fogleman was popular with the force and was highly respected by his peers, but his relationship with senior Defense Department leaders was not always smooth. The Khobar Towers controversy was definitely part of it.

In September 1996, Gen. Wayne Downing, the retired Army officer who led the initial investigation, announced

his opinion that Schwalier "did not take all measures possible to protect the forces at Khobar Towers." That finding was published by the Pentagon and got major notice by Congress and the news media.

The Air Force conducted its own inquiry, which came to far different conclusions. Publication of that report, however, was postponed by the Defense Department, which subsequently sent it back to the Air Force to recheck certain parts. The second Air Force report was similarly withheld and was not released until after the decision in July 1997 to fix blame on Schwalier.

Fogleman told the Senate Armed Services Committee in February that it would have a "chilling effect" on commanders if they are liable for punitive action when "despite their absolute best efforts [they] are targeted by somebody in an act of war and somebody is killed."

The Quadrennial Defense Review, completed in May, was another source of apparent tension. While the review was in progress, the Air Force was often at odds with Joint force planners who tended to undervalue airpower, especially in the first critical stages of conflict. The final QDR report praised the contributions and potential of airpower, but in the implementing actions, airpower took the deepest cuts of all. The Air Force agreed to the reductions allocated, including a reduction in F-22 fighters. That, however, was not enough for topside staffers in Secretary Cohen's office. Taking their advice rather than Fogleman's, Cohen further decided to cut back the F-22 production rate.

Fogleman had been Air Force Chief of Staff since October 1994. Before that, he had commanded an Air Force wing, an air division, a numbered air force, a major command, and a unified command. He had amassed more than 6,500 flying hours in fighters, transports, tankers, and helicopters and had flown 315 combat missions in the Vietnam War. Early in his career, he was a history instructor at the Air Force Academy. He liked to draw on historical examples in his speeches, and he published a list of books strongly suggested for reading by Air Force leaders.

Among the prominent Fogleman themes were integrity and personal responsibility. In August 1995, Air Force officers, senior NCOs, and executive-level civilian employees were required to watch a videotape, "Air Force Standards and Accountability," in which he said that Air Force standards must be "uniformly known, consistently applied, and nonselectively enforced."

He and his wife, Miss Jane, will make their retirement home in Durango, Colo. ■



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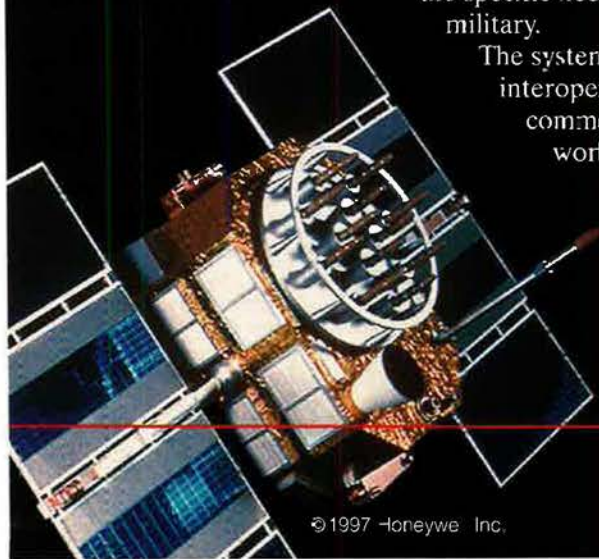
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Shelton Picked to Head JCS

President Clinton on July 17 announced that his choice for the next Chairman of the Joint Chiefs of Staff is Army Gen. Henry Hugh Shelton. The President's plan called for Shelton to replace the current Chairman, Army Gen. John Shalikashvili, following the latter's retirement this month.

Shelton, head of US Special Operations Command, won the nomination for the nation's top military post after Air Force Gen. Joseph W. Ralston withdrew from consideration following reports that he had an adulterous affair a decade ago.

Shelton was born in Tarboro, N.C., and graduated from North Carolina State University. He served two active-duty tours in Vietnam during the war and earned a Purple Heart after he was wounded stepping on a sharpened punji stick.

Shelton's previous commands include the Army's XVIII Airborne Corps and one of its major elements, the 82d Airborne Division, both at Ft. Bragg, N.C. Colleagues described the general as a courtly, soft-spoken man with a passion for jogging and Corvettes.

JCS Move Departs From Norm

In selecting Shelton to be JCS Chairman, President Clinton and Defense Secretary Cohen departed from standard practice in that politically sensitive appointment.

Political leaders traditionally have selected officers with extensive Washington experience.

50 Years Ago in Air Force Magazine



September 1947

On the cover: "The Day Billy Mitchell Dreamed Of." The reference is not to the date the Air Force became a separate service but to July 26, 1947, when President Truman signed the National Security Act, giving the Air Force equal status with the Army and Navy. He signed the bill in the cabin of the Presidential aircraft, just before taking off for the bedside of his dying mother.

■ On the best information available when this issue went to press, *Air Force Magazine* reported that enlisted grades in the new Air Force would begin with "airman sixth class" (the equivalent of a private in the Army) and go up to chief airman and senior airman, comparable to Army warrant officer grades.

As for a distinctive Air Force uniform, the magazine said that was still "a latrineogram."

■ As of June 1, there were 5,074 US airports in operation, including 660 military airports. Scheduled air carrier aircraft totaled 888, compared to 687 the previous year.

■ Thirty-three national and international air records have been established by members of the AAF since the end of World War II.

■ AAF announces that it has ordered 32 P-80Bs for Air National Guard units. This will bring to 86 the total jet aircraft assigned to ANG, since 54 of the previously ordered 134 jet fighters went to such units.

AFA news: As of Aug. 1, on the eve of its first National Convention, AFA had 139 squadrons, 125,000 members, and a wing headquarters in each of the 48 states.

The cost of life membership in AFA was set by the board of directors at \$100 (making the 1997 life membership cost, \$450, seem most reasonable by comparison).



Air Force Reserve Command's 302d Fighter Squadron, Luke AFB, Ariz., traces its history to the Tuskegee Airmen's famous 332d Fighter Group. Along with USAF 50th-anniversary markings, the unit painted its commander's F-16 with the distinctive "red tail" of the 332d FG.

Shelton, a career paratrooper and special operations officer, has spent little time in Washington—far less than any of his immediate predecessors in the JCS post. His only previous high-level Pentagon post was that of deputy director for operations, Joint Staff, in the period 1988–89.

However, the extent of Shelton's command experience more than made up for this, according to Administration officials.

As leader of the peaceful US invasion of Haiti in 1994, Shelton helped negotiate the departure of Haitian military leaders without violence. At Special Operations Command, he was in charge of units from all the military services that specialize in small-scale operations, counterinsurgencies, and antiterrorism.

ACC Launches No-Notice AEF

Air Combat Command on July 9 conducted the first no-notice exercise of its new Air Expeditionary

Photo by Nate Leong

For Allies, Cost Issue Looms

In the United States, key lawmakers warned that NATO expansion could be thrown into doubt if it appears that the US is being asked to pay a disproportionate share of the funds needed to bring the militaries of new members up to NATO standards.

Ratification of the revised treaty requires the consent of two-thirds of the United States Senate.

"Europeans are always saying to me, ... 'You [the US] can afford it,'" said Sen. Joseph Biden Jr. (D-Del.), ranking Democratic member of the Senate Foreign Relations Committee. "I turn around and say, 'It's hard to convince the American people that having the Polish and Czech army defending them is going to materially affect their security.'"

According to the Clinton Administration, the US share of expansion costs will be about \$2 billion, spread over 10 years. Much of this money would go to upgrade communications links and other command systems to include new Alliance members.

Poland, Hungary, and the Czech Republic would ante up a total of some \$13 billion to modernize their land forces and air defenses, according to US estimates. Current members (excluding the US) would chip in a further \$10 billion.

Independent analysts—such as the RAND Corp. and the Congressional Budget Office—warn that the official US estimate may understate both the total cost of NATO expansion and the potential US share.

The NATO bureaucracy is now carrying out a detailed cost analysis of expansion, which will be completed in December before the next meeting of the NATO foreign ministers and before the Senate votes on the issue.

Force capabilities. Thirty aircraft, with their crews and support, deployed to Alaska to support Cope Thunder 1997.

Five previous AEF deployments were all launched with ample warning and time to prepare. The cold-start nature of the July exercise was intended to validate the Air Force's capability to rapidly reinforce in-place forces.

The July AEF also was the first that was Joint-service in nature, as participants included Navy EA-6B jammer aircraft, which are now flown by Navy and Air Force crews. Other aircraft in the AEF included F-15s from the 33d Fighter Wing, Eglin AFB, Fla.; B-52s from the 2d Bomb Wing, Barksdale AFB, La.; and F-16s from the 35th Fighter Wing, Misawa AB, Japan.

NATO Takes in Three More

NATO took a historic step on July 8 and invited Poland, Hungary, and the Czech Republic to join the US-led Alliance. Now US officials will begin a protracted battle for Senate approval of the move, while arguing with allies about how the costs of expansion should be shared.

Cost-sharing has long been a sensitive issue within NATO, as was apparent before the end of the Madrid summit, where expansion was approved. [See related box, above.]

French President Jacques Chirac

emitted his view that France would not raise its Alliance contribution by a single cent to pay for expansion. France, a second-rank power, took this position despite its frequent complaints that the US should permit NATO to invite even more nations to become new members.

President Clinton will submit NATO expansion to a Senate vote next year.

Administration officials admit that expansion is free of neither costs nor

risks, but they argue that extending the allied defense perimeter eastward to the gates of Ukraine and Belarus would stabilize a historically unstable area of the world.

President Clinton said in Madrid, "For the American people, clearly the cost will be far less in lives and money to expand the bounds of democracy and security than it would be if we had to involve our people in another conflict in Europe."

B-1s Engage in Biggest Deployment

When 10 Air Force B-1Bs were gathered in June at RAF Fairford, UK, it marked the largest deployment of the bombers yet in their relatively young operational life. It represented the first time that aircraft from two B-1 wings had deployed as a single unit.

Aircraft and crews from the 28th Bomb Wing, Ellsworth AFB, S.D., and the 7th Bomb Wing, Dyess AFB, Texas, flew to the British base to take part in NATO's Central Enterprise 1997 during the period June 9–27.

While in the UK, the B-1s combined with other NATO units to practice the defense of Central Europe with live-fire exercises.

Col. Tony Przybyslawski, commander for the consolidated bomb group, said the expedition's mission was to educate NATO forces about the nature of a B-1 deployment, what the big bomber brings to the theater, and what the warfighting commander can do with the B-1 in his area of responsibility.

End of the Frenzy?

The proposed merger of the two aerospace giants could mark the end of seven years of fast-paced consolidation in the defense industry. The reason: At the prime contractor level, there is hardly anyone left with which to merge.

If the Lockheed Martin purchase wins approval of federal authorities, three big companies will dominate American aerospace and military electronics—Lockheed Martin, Boeing, and Raytheon.

These behemoths have emerged since 1990 as the result of consolidation of 21 smaller firms. What is now Lockheed Martin resulted from uniting 10 companies over the past decade—from Martin Marietta to General Dynamics Space Systems and LTV Missiles.

However, the planned marriage of Lockheed and Grumman also would be emblematic of the reduced number of producers for whole categories of weapons. It would leave only two US firms capable of building fighters, leading some critics to worry that reduced competition will drive up prices.

Over the next two decades, the Lockheed conglomerate and Boeing may well share some \$150 billion in predicted contracts for three airplanes: the Air Force's F-22 Raptor, the JSF, and the Navy's F/A-18E/F Super Hornet.

"We'd also look at the impact of the proposed merger on the Pentagon's ability to find competitive markets for its products at all levels, not just at the final [air]plane level," said Defense Department spokesman Kenneth Bacon.

Aerospace Giants Merge—Again

Lockheed Martin, in a surprise July 3 statement, announced that it intends to buy Northrop Grumman for \$8.3 billion.

Lockheed Martin already cuts a gigantic figure in defense contracting. Adding Northrop Grumman to its current lineup would create the largest defense company in the world. Taken together, the two entities posted \$24.3 billion in defense revenues in 1996, the last year for which full figures are available.

The latest merger proposal may be one of the last. [See box, bottom left.] It comes on top of another recent shocker—the combination of Boeing and McDonnell Douglas.

"We're ... at the stage of building for the future," said Norman R. Augustine, chief executive of Lockheed Martin, when announcing his proposed purchase.

Analysts said that the proposed merger generally appeared to be a good fit for both companies.

Lockheed Martin and Northrop Grumman already work together on the F-22 fighter and are partners on a proposal to develop the forthcoming Joint Strike Fighter.

Combined, said analysts, they would likely have enough aircraft manufacturing expertise to compete with one major rival, Boeing, and enough electronics expertise to compete with the other, Raytheon, on many projects.

UAVs to Protect Bases?

The Air Force wants to see if it can use unmanned aerial vehicles to bolster security at its military installations.

A request-for-information notice published in *Commerce Business Daily* on July 18 said USAF officials plan to start a UAV security demonstration this month. The experiment will run for almost two years and is intended to test existing UAV models in all weather conditions.

The notice said that candidate UAVs should be able to spot almost any threat to troops in barracks, from small arms to missiles and truck-carried bombs.

The project is a joint venture between the Air Force's new UAV Battlelab located at Eglin AFB, Fla., and the Force Protection Battlelab located at Lackland AFB, Texas.

At the activation ceremony of the Force Protection lab on June 23, commander Lt. Col. Donald Collins said the UAV test is just the sort of innovative concept that his organization was formed to identify.

"If we can detect a vehicle laden with explosives a long way out—and



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Requirements include at least 5 years in the safety field with at least 2 years in a supervisory role. Some of this experience should be in support of the C-130 or similar weapon system. Ex-USAF officer with staff experience is preferred.

Must have MANDATORY knowledge of management techniques, program planning, methods and procedures that apply to safety studies and analysis and evaluation of accident statistics, training principles, operation of teaching systems and operator maintenance of multimedia equipment. Knowledge of performance characteristics of C-130's and completion of an advanced safety and/or accident investigation course is desirable.

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can stop it—we stand a better chance of preventing another Khobar Towers," said Collins. He was referring to the June 1996 terrorist truck bombing of USAF's installation in Saudi Arabia—an attack that killed 19 airmen and wounded hundreds.

Recruiting Starts Strong

The Air Force met its main recruiting goal for the first half of Fiscal 1997, enrolling 14,300 new enlisted

personnel in the service from Oct. 1, 1996, through March 31, 1997.

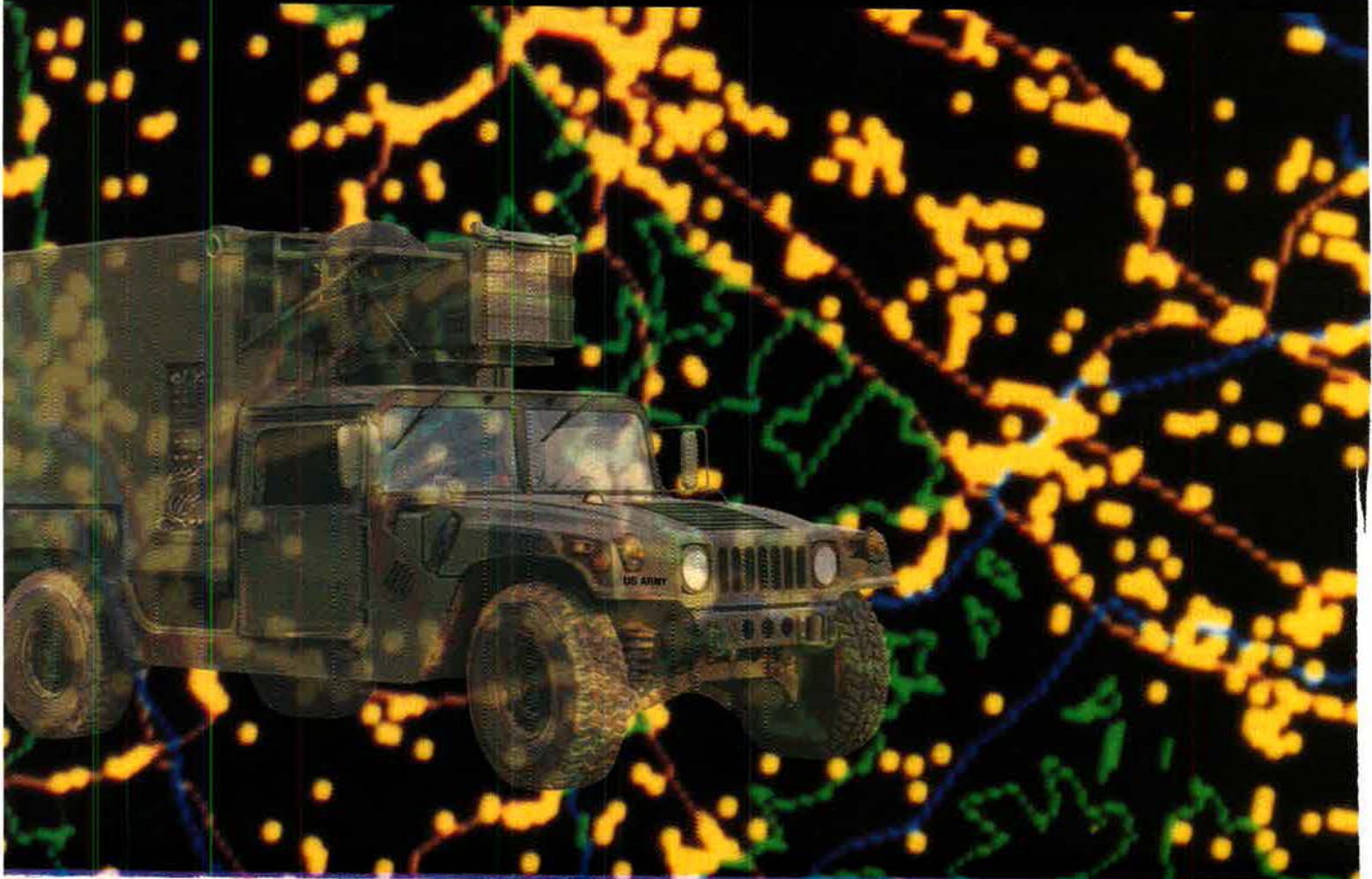
The Navy and Marine Corps also met their recruitment goals, but the Army brought in only 91 percent of its numerical objective.

The quality of Air Force enlistees remained strong. Ninety-nine percent of enrollees thus far hold high school diplomas. Nearly 80 percent scored in the top half of the Armed Forces Qualification Test.

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Aerospace World

Total Enlisted Accessions October 1996–March 1997

(Nonprior Service Only)

Service	Objective	Achieved	Percent
USAF	14,400	14,300	100
Army	34,600	31,500	91
Navy	22,100	22,100	100
USMC	14,900	15,000	101
Total	86,000	82,900	97

Female Accessions

(Nonprior Service Only)

Service	Total	Female	Percent
USAF	14,300	4,100	29
Army	31,500	6,900	22
Navy	22,100	2,900	13
USMC	15,000	1,200	1
Total	82,900	15,100	18

High School Graduates

(Nonprior Service Only)

Service	Total	HS Degree	Percent
USAF	14,300	14,200	99
Army	31,500	27,400	87
Navy	22,100	20,200	92
USMC	15,000	14,200	95
Total	82,900	76,000	92

AFQT Categories I-III

(Nonprior Service Only)

Service	Total	Cats I-III	Percent
USAF	14,300	11,300	79
Army	31,500	21,700	69
Navy	22,100	15,200	69
USMC	15,000	9,500	63
Total	82,900	57,700	70

Among the services, the Air Force also enrolled the highest percentage of female recruits. Twenty-nine percent of the new Air Force members are women, far higher than the DoD-wide figure of 18 percent.

EU Backs Down on Boeing Deal

The European Union gave a tentative OK to the Boeing–McDonnell Douglas merger on July 23, averting a possible trade war with the US and removing the last major obstacle to the combination of the two big aircraft manufacturers.

The EU could not have prevented the merger of the two companies, both of which are American and come under jurisdiction of US laws. However, it could have barred the new and expanded Boeing Corp. from the European market or imposed heavy

financial penalties on its operations there.

In the end, it backed down. Boeing made a number of concessions to placate the EU, which expressed concern that Boeing's growth would allow it to crush its European rival, Airbus.

It agreed to strike provisions in existing contracts with American, Continental, and Delta airlines that call for the three carriers to purchase only Boeing airplanes for the next 20 years. In addition, it agreed to license any technology developed under McDonnell Douglas military research contracts, if Boeing's commercial airline business decides to make use of that know-how.

The merger had won the blessing of both the Pentagon and the Federal Trade Commission earlier in the

month. Defense Department officials said that they did not believe it would make the price of weapon systems increase. In fact, they noted that the combination may be a good fit, blending McDonnell's C-17 program with Boeing's burgeoning Joint Strike Fighter contracts.

The Pentagon examined the markets where these two companies are likely to be defense suppliers and

determined that the transaction would not create excessive market concentration, said Deputy Secretary of Defense John P. White.

A-10 Recovery Effort Resumes

Air Force mountaineers on July 7 resumed the search for pieces of an A-10 aircraft that crashed into Colorado's Gold Dust Peak last April, killing its pilot, Capt. Craig Button.

Lingering snowpack and the site's remote location made the work a difficult business.

Most of the aircraft was scattered on a grassy slope about 500 feet below the point where Air Force officials believe it impacted the mountain after veering off course on an Arizona training mission. The particular target of the search team: 30 mm cannon shells, bombs or bomb fragments, and other pyrotechnics that could endanger hikers in the area for years if left behind.

Pease's Run Finally Ends

The Air Force on June 27 turned over its last remaining portion of Pease AFB, N.H., to local officials. The move formally ended the installation's 35-year military history and marked the official beginning of its new life as an active international trade port.

According to the Air Force, the \$141 million trade port already provides 1,400 jobs, 200 more than Pease supported in its operational days. The former noncommissioned officers' club is a restaurant; the commissary is a visa center; passports are now processed at what used to be the base exchange.

Pease was the first base to be shut down under the Base Realignment and Closure process.

"The local communities and the state stepped right up to the challenge and began the arduous process of base conversion," said Rodney Coleman, the Air Force's assistant secretary for manpower, reserve affairs, installations, and environment. "You did it right."

USAF Completes 1997 Drawdown

On July 15, three months earlier than planned, the Air Force reached Fiscal 1997 force reduction goals and closed its drawdown program, USAF officials announced.

For officers, the target end strength was 74,458 by the end of the fiscal year on Sept. 30. For enlisted, the figure was 302,629.

All departures from the service were voluntary. Approximately 650 officers took advantage of early retirement. Seven hundred officer candidates received waivers from active-duty service commitments. Enlisted drawdown goals were met through normal attrition.

New Dental Plan Covers Military Retirees

The Department of Defense will begin offering low-cost dental insurance to military retirees and their

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PHOTOGRAPH BY STEVEN MCKINLEY

families, DoD announced, but probably not in October, as initially released.

The new plan will cover basic dental care and restoration services, as well as surgery and emergency exams. "The plan is quite simple, ... so it shouldn't be too difficult to start up," said Air Force Col. (Dr.) Marvin Bennett, senior Pentagon dental consultant.

However, responding to the dental care industry concerns, the Pentagon may now go with a local or regional rate schedule, rather than one national premium.

The plan will offer different rates for family, couple, and single members. Spouses of deceased retirees will be eligible if they haven't remarried.

Premiums will provide one free basic exam and one free cleaning per year. Beyond that, the plan will pay 80 percent of the cost of restorative care and 40 percent of many other dental services, subject to a \$50 annual deductible.

The plan may offer a network of participating dentists, though enrollees will be able to visit any dentist they wish. Officials warn that retirees should examine what the plan does and does not pay for before joining.

"It may not be as desirable for some older folks, who tend to need crown and bridge work that the plan doesn't cover," said Bennett.

DoD officials said they will announce a new start up date, once the contract is awarded.

Compensation and Benefits Improve

The 1997 USAF budget is paying for a number of improvements in Air Force compensation and benefits. Among them:

- The dislocation allowance has been increased from two to two-and-a-half times the basic allowance for quarters.

- The Pentagon will now provide free storage of vehicles for service members going to vehicle-restricted areas or traveling on extended deployments.

- Military personnel are eligible for reimbursement of round-trip expenses incurred in transporting their vehicles to and from a port in connection with an overseas assignment.

In addition, the Air Force has committed over \$100 million to build 420 new temporary lodging facilities and renovate 305 others. The move is meant to ease a quarters crunch for Air Force members and their families who are in the midst of permanent change of station transitions.



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In addition, the U.S. Navy is using it in P-3 patrol aircraft. The Belgian Air Force has chosen it for the C-130 cargo plane and Sea King Helicopter. The U.S. Army, Kuwait Army and Saudi Arabian National Guard are using it in armored vehicles.

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Hamre Is New DoD No. 2

On July 24 the Senate confirmed John J. Hamre as deputy secretary of defense.

Hamre was a former aide to Sam Nunn, the powerful Georgia Democrat who retired from the Senate this year, and a longtime Congressional defense staffer before serving as DoD comptroller. He has vowed to attempt further reforms in DoD's financial practices and to increase funds for weap-

ons modernization in coming years.

Congressional reluctance to approve further base closings has made finding the money for modernization more difficult, Hamre said in a written response to senators' questions. The absence of this authority will make it more difficult to attain the modernization levels we all agree should happen, he wrote.

Hamre replaces the retiring John White in the No. 2 Pentagon post.

Benken Looks to Future

The Air Force's top enlisted man sees the service's future depending more on its people than equipment and argues that the service needs to start the task of shaping its enlisted force for the next century.

CMSAF Eric Benken and other senior Air Force leaders gathered at Scott AFB, Ill., in June for a Corona Conference, where they held a series of briefings and discussions about the future of the Air Force.

During an open discussion June 13 at the Scott enlisted club, the Chief Master Sergeant of the Air Force said that shaping the service's future enlisted force would fall to the functional managers within the various Air Force career fields to ensure the best utilization of their people—a necessity driven by the reality of a leaner force.

The Air Force will need to be somewhat "more tactical" in its thinking of what a career field does, "more operational in the way that we think," said Benken. "I think reshaping the Air Force to set us up for what it's going to look like in 2010 or 2015 is the most important thing. That's what [then-Air Force Chief of Staff] Gen. [Ronald] Fogleman's vision of global engagement is all about."

Everyone in the Air Force, from the lowest level up, needs to understand what global engagement is and understand at the lowest level the Air Force's vision going into the next century, said Benken. He said rapid global mobility—what will be the primary core competency of Air Mobility Command—is something that needs to be understood not only at the level of AMC Commander Gen. Walter Kross but all the way down to the troops. Supervisors must ensure their troops understand that and that the Air Force is transitioning to an air and space force for the next century, and they need to articulate that to the lowest level, said Benken.

Air Force structure in the future depends largely on Congress, he said. It determines how much money is spent on force improvements such as the F-22 and the Joint Surveillance and Target Attack Radar System.

In general, though, Benken said that the Air Force will downsize more and look again at its contingency plans in order to develop a "leaner, meaner force."

Attack on the JASSM

The Joint Air-to-Surface Standoff Missile faced an uncertain future in late summer following huge Congressional cuts.

In late July the House Appropriations Committee eliminated all money for the JASSM from its 1998 defense spending legislation. The Senate Appropriations panel reduced JASSM funds from the \$213 million requested by the Administration to \$96 million.

Air Force officials know that, whatever the final budget figure, the service will need to reduce the scope of the program. The Air Force opposes purchasing an upgraded Standoff Land-Attack Missile—Expanded Response to fulfill the stand-off mission, as the Navy has proposed.

The Air Force told the Senate that the SLAM-ER does not fit in the B-1 or F-117, among other deficiencies.

China's Fielding New Missiles

China is replacing many of its older liquid-fuel, medium-range mobile missiles with modern solid-fuel models, the *Washington Times* reported.

The older CSS-2 liquid-fuel missiles have a range of about 1,900 miles, according to the *Times* report.



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The newer CSS-5 solid-fuel weapons have a shorter range, about 1,300 miles, but are likely to be far more accurate and easier to launch.

An expected Mod 2 version will eventually increase the CSS-5's range. By 2000, the *Times* reported, China may deploy a mobile intercontinental ballistic missile, the DF-31, which could reach US forces in the Pacific and the western US.

CFE Treaty Revisions

The United States, Russia, and 28 European nations agreed to a revised Conventional Forces in Europe treaty on July 23.

The old CFE treaty, struck in 1990, limited NATO and the Warsaw Pact to roughly equal numbers of important weapons in Europe. Dissolution of the Soviet Union, the evaporation of the Warsaw Pact, and the assimilation of some Pact nations into NATO made revision necessary.

The new accord replaces the old Alliance-wide caps with weapons limits for each European country and for US forces in Europe. Numbers for

the limits will be set in further negotiations over the coming year.

CFE has already resulted in the destruction of over 50,000 tanks, artillery pieces, and other heavy weapons, said Robert Bell, senior director of the National Security Council. He said that the 30 signatories have agreed that the new totals will be well below what had been permitted in the 1990 treaty.

USAF Celebrates 50

■ Amateur radio operators, or "hams," have an opportunity to celebrate the Air Force's golden anniversary with a worldwide "QSO" party starting at 12:01 a.m. on Sept. 20 and ending at 11:59 p.m. on Sept. 21. A QSO in ham radio shorthand stands for "radio contact." The event features a point system based on the number of contacts a radio operator makes and the year those contacts entered the Air Force. Three top three winners in each state will receive certificates. The Razorback Radio Club of Honolulu will manage the event, according to Col. Bernie Skoch (call sign K5XS), Pacific Air Force's director of communications and information.

■ The Gathering of Eagles is dedicating its annual meeting on Oct. 17, 1997, at Edwards AFB, Calif., to USAF's 50th anniversary. The event precedes Edwards' 50 Years of Supersonic Flight open house and air show, slated for Oct. 18-19.

News Notes

■ Lt. Gen. John W. Handy on July 11 took command of 21st Air Force during a flight line ceremony at McGuire AFB, N.J. Handy now oversees six active-duty flying wings and 40 Reserve and Guard wings, among other units, with his command covering 50 locations in eight countries, 61,000 personnel, and 556 aircraft. Handy had been director of programs

Congressional News

Bomber, Fighter Conflicts

The possible continuation of the Air Force's B-2 bomber procurement and a proposal to cap the cost of USAF's F-22 fighter program were among the key aerospace issues that faced Congress after its summer recess. Lawmakers moved to hammer out these and other issues at a House-Senate conference.

B-2 Debate. The House defense authorization bill, passed on June 25, contained \$331 million for a down payment on the purchase of nine B-2 bombers beyond the 21 already funded.

Rep. Floyd D. Spence (R-S.C.), chairman of the House National Security Committee, and other proponents of the airplane argued that DoD opposition to its continuation results largely from political pressure from the White House. The B-2's price tag is justified by its unique combination of deep-strike capability and large payload, Spence argued.

The Senate, however, appeared adamantly opposed to any continuation of the B-2 line. The upper chamber's version of the defense authorization bill, passed July 11, contained no funds for further purchases. Furthermore, Secretary of Defense William Cohen was a committed foe of expanding the program.

Trouble for F-22? The Senate legislation contained a provision cap-

ping the cost of the F-22 production program at \$43 billion.

The prime author of the provision, Sen. Dale Bumpers (D-Ark.), argued that the \$43 billion figure simply reflected most recent Air Force estimates of the cost of procuring a planned fleet of 339 aircraft.

Air Force officials opposed capping the F-22 program. The move, they said, would limit the service's management flexibility, especially if Congress ordered changes in the program in future years.

In addition, the \$43 billion price tag was only an estimate, according to Brig. Gen. Bruce Carlson, Air Force director of the F-22 program.

Congress Focuses on UAVs

Members of the Senate Appropriations Committee used their annual military spending bill to express their displeasure with the Defense Department's track record on unmanned aerial vehicles. The Fiscal 1998 Senate defense appropriations bill called for imposing a one-year moratorium on new starts for UAV programs or any UAV-related advanced concept technology development.

According to a report that accompanied the appropriations measure, Congress has over the last 18 years allocated \$3 billion to UAVs, and the US has little to show for the money.

To date, no system has reached full operational capability, it said.

It's Not a Done Deal

On the subject of NATO expansion, don't take Congress for granted. That was the message as the House went on record against the US picking up a large share of the cost of bringing Poland, Hungary, and the Czech Republic into the Western Alliance.

The House action stemmed from its work on the Fiscal 1998 defense authorization bill. By a margin of 414-to-0, lawmakers voted on July 25 in favor of a provision to cap Washington's share of NATO expansion costs to 10 percent of the total outlay, about \$2 billion over 12 years.

The measure was contained in instructions to House conferees negotiating a compromise defense bill with the Senate.

NATO last July formally invited the three East European nations to begin talks on joining the Alliance. The Alliance also initiated a formal study on the costs of enlargement, completion of which is due in December.

The Senate would have to ratify the addition of new members to the North Atlantic Treaty Organization. Moreover, Congress as a whole would have to authorize and appropriate money to finance enlargement. ■



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One of the world's largest telescopes—the Advanced Electro-Optical System—built by USAF's Phillips Lab atop a 10,000-foot mountain in Hawaii, will achieve "first light" in September when it collects its first pictures of satellites in space.

and evaluations for the Air Force at the Pentagon.

- The Senate confirmed George J. Tenet as Director of Central Intelligence on July 10. No opposition was voiced to Tenet, a former staff director of the Senate Intelligence Committee.

- Model-maker Testor Corp. released a kit version of what it said is a space alien transport that UFO buffs claim crashed in 1947 in Roswell, N.M. The Air Force has long said that the "alien" spacecraft was actually a weather balloon.

- Maj. Peter Woodbury, an F-16 pilot in the Minnesota ANG, was suffering from spatial disorientation when he died following the crash of his F-16 into a swamp during a Jan. 7 training mission, according to results of an Air Force investigation. The condition can occur when a pilot loses sight of the horizon and aircraft g-forces mask the direction of gravity's pull.

- The fitness center at Spangdahlem AB, Germany, won an Air Force Services Agency drawing held June 30 in San Francisco. Its prize in the fitness month promotion: an eight-piece StairMaster exercise equipment package worth \$26,000.

- The Air Force awarded the 1996 General Doolittle Trophy for best flight crew in US mobility forces to a team from Travis AFB, Calif. It said Capt. Don Topp, Capt. Paul Koch, and the rest of the crew gave virtually all the available fuel from their KC-10 tanker to other aircraft to ensure the success of the Desert Strike bombing of

Baghdad in September 1996. The KC-10 had to land at an air base in Thailand during bad weather.

- An F-15 from Seymour Johnson AFB, N.C., crashed in a wooded area along the North Carolina coast on

July 11. Both crew members ejected safely. The Air Force launched an investigation.

- Capt. Glen A. Comeaux and Cadet 1C Pace Weber were killed June 25 when their T-3A crashed during a training mission in Colorado Springs, Colo. The crash occurred in an open field about two miles east of the Air Force Academy flight line.

- The 437th Airlift Wing took delivery of the Air Force's 32d C-17 on July 1 at Charleston AFB, S.C.

- Air Force members at Grand Forks AFB, N.D., rescued the prom for more than 1,200 area high schoolers this spring. After flooding destroyed \$7,000 worth of decorations at Red River and Central high schools, base officials stepped in, coordinated sound systems and lights, and hosted a prom inside their "3-Bay" maintenance hanger. The 170,000-square-foot facility normally houses three KC-135R aerial refuelers.

- Six Air Force firefighters based at Laughlin AFB, Texas, saved the lives of a drowning man and woman who had been boating June 12 on Amistad Reservoir. The couple had been thrashing in the water after drifting away from a houseboat while

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swimming. The Air Force members came by in their boat and pulled them aboard.

■ The American Air Museum in Britain opened Aug. 1 in Cambridge, UK. The museum, based at an airfield that was home to the American 78th Fighter Group during World War II, will feature more than 20 vintage and contemporary US combat aircraft.

■ The venerable Worldwide Military Command and Control System, known as "Wimmix" because of its acronym, WWMCCS, was shut down for good on June 30. In its place, the Joint Staff declared the new Global Command and Control System-T (GCCS-T), a flexible communications system based on client-server computers, as the US military's system of record for top secret operations.

■ Maj. Brad Webb, an MH-53J Pave Low helicopter pilot with the 21st Special Operations Squadron, won the 1996 Air Force Cheney Award for extreme fortitude in a humanitarian situation. Webb, based at RAF Mildenhall, UK, won the honor for his actions during rescue efforts following the crash of Commerce Secretary Ron Brown's aircraft in Croatia and for his efforts to rescue Ameri-



USAF photo by SSgt. Angela Stafford

Once a scout—A1C Andrew Shaffer, a scoutmaster in his hometown of Elmore, Ohio, talks with Boy Scouts at the 1997 Boy Scout Jamboree, held near Fredericksburg, Va. He currently works as a networking technician at Phillips Lab, Kirtland AFB, N.M.

cans from Liberia's bloody civil war.

■ McDonnell Douglas launched a five-year program to design and demonstrate an advanced flight control system that will allow a single missile

to perform both close-in and beyond-visual-range air-to-air missions. USAF's Air Superiority Missile Technology program is footing the \$22 million cost of the work.

■ USAF Security Police units were officially redesignated Security Forces on July 1. The name change is meant to reflect their new emphasis on the mission of force protection.


■ The Joint Strike Fighter program office, in conjunction with 3M Corp., has developed technology to replace exterior paint on military aircraft. The lightweight decal-type protective film could save millions in fuel and maintenance costs while eliminating pollution.

■ In a July report, the General Accounting Office, a Congressional watchdog agency, concluded that the Department of Defense has improved security for US forces in the Middle East, but it added that DoD should still establish common security procedures for military facilities overseas.

■ The three prospective NATO members—Hungary, Poland, and the Czech Republic—are planning to coordinate future purchases of fighter aircraft. All three nations need to upgrade their air forces as they ready for NATO membership, and they feel Joint action could lower procurement and operation and maintenance costs. They are considering the Lockheed Martin F-16, McDonnell Douglas F/A-18, and the Dassault Mirage 2000-5.

■ USAF launched the first class IIR model Global Positioning System satellite on July 22. Lockheed Martin

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■ European NATO members may have difficulty coming up with money

for the planned purchase of an airborne ground surveillance system, warned Brig. Gen. Robert Osterthaler, deputy assistant secretary of defense for European and NATO affairs. NATO

is set to select a system in November. The US is pushing its E-8 Joint STARS, but Osterthaler said chances are slim that the Europeans will come up with their share of the purchase price.

Senior Staff Changes

RETIREMENTS: Brig. Gen. Robert P. Belihar, Lt. Gen. Patrick P. Caruana, Maj. Gen. Stephen P. Condon, Gen. Ronald R. Fogleman, Brig. Gen. Robert E. Gatliff, Brig. Gen. William M. Guth, Gen. James A. Jaeger, Maj. Gen. Eldon W. Joersz, Maj. Gen. Donald B. Smith, Brig. Gen. Terry J. Schwalier, Lt. Gen. Paul E. Stein, Maj. Gen. Walter T. Worthington.

PROMOTIONS: To be Lieutenant General: Robert H. Foglesong, Lance W. Lord.

CHANGES: Brig. Gen. James E. Andrews, from IG, AMC, Scott AFB, Ill., to DASD for Reserve Affairs (Readiness, Training, and Mobilization), Pentagon, replacing Maj. Gen. Jeffrey G. Cliver ... Brig. Gen. Brian A. Arnold, from Cmt., AFOATS, AU, AETC, Maxwell AFB, Ala., to Dir., Rqmts., AFSPC, Peterson AFB, Colo., replacing Brig. Gen. Herbert M. Ward ... Brig. Gen. (sel.) Carol C. Elliott, from Dir., Intel., PACAF, Hickam AFB, Hawaii, to Dep. Dir., Intel., Surv., and Recon., DCS/Air and Space Ops., USAF, Pentagon, replacing Brig. Gen. Arthur D. Sikes Jr. ... Lt. Gen. Robert H. Foglesong, from Dep. Dir., Politico-Military Affairs, Jt. Staff, Pentagon, to Asst. to CJCS, Pentagon, replacing Gen. Richard B. Myers.

Maj. Gen. John W. Hawley, from Dir., Rqmts., ACC, Langley AFB, Va., to Cmt., Air and Space Cmd. and Control Agency, ACC, Langley AFB, Va. ... Lt. Gen. Lance W. Lord, from Cmt., 2d AF, AETC, Keesler

AFB, Miss., to Vice Cmt., AFSPC, Peterson AFB, Colo., replacing retiring Lt. Gen. Patrick P. Caruana ... Brig. Gen. Ralph Pasini, from Dep. Dir., Allied Command Europe Reaction Force Air Staff, NATO, Kalkar, Germany, to Vice Dir., Operational Plans and Interoperability, Jt. Staff, Pentagon ... Maj. Gen. Andrew J. Pelak Jr., from Cmt., 81st Tng. Wg., AETC, Keesler AFB, Miss., to Cmt., 2d AF, AETC, Keesler AFB, Miss., replacing Lt. Gen. Lance W. Lord.

Brig. Gen. John W. Rutledge, from Dir., Customer Support Office, NIMA, Fairfax, Va., to Asst. C/S, Ops., Allied Air Forces Northwest Europe, NATO, and Dep. Cmt., 3d AF for NATO Affairs, USAF, RAF High Wycombe, UK, replacing retiring Brig. Gen. William M. Guth ... Brig. Gen. Arthur D. Sikes Jr., from Dep. Dir., Intel., Surv., and Recon., DCS/Air and Space Ops., USAF, Pentagon, to Dir., Customer Support Office, NIMA, Fairfax, Va., replacing Brig. Gen. John W. Rutledge ... Brig. Gen. (sel.) John M. Spiegel, from Chief, AF General Officer Matters Office, USAF, Pentagon, to Cmt., 81st Tng. Wg., AETC, Keesler AFB, Miss., replacing Maj. Gen. Andrew J. Pelak Jr. ... Brig. Gen. Herbert M. Ward, from Dir., Rqmts., AFSPC, Peterson AFB, Colo., to Dep. Dir., Ops. and Tng., DCS/Air and Space Ops., USAF, Pentagon, replacing retired Brig. Gen. Richard T. Banholzer.

SENIOR EXECUTIVE SERVICE CHANGE: Garry B. Richey, to Dir., Commodities Mgmt., Oklahoma City ALC, Tinker AFB, Okla.

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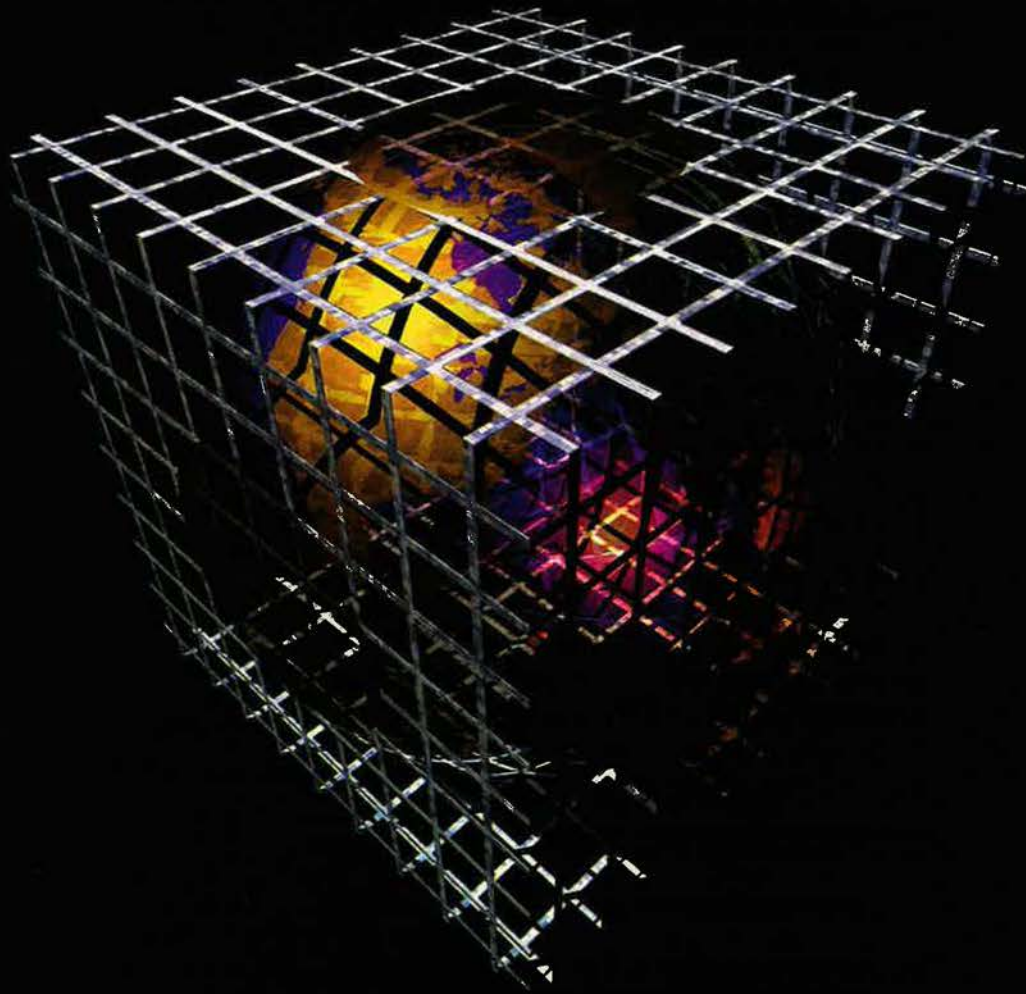
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■ Gen. Ronald Fogleman, then-Chief of Staff of the Air Force, said on July 17 that he had told the Air Staff to prepare a plan for saving money via consolidation of service infrastructure. Congress appears unlikely to approve further base closings, and Fogleman

said combining some squadrons could save money for modernization.

■ On July 21 President Clinton announced his intent to nominate Air Force Lt. Gen. John A. Gordon to be deputy director of the Central Intelligence Agency. Currently, Gordon is

CIA associate director of central intelligence for military support. In the past he has served as special assistant to the USAF chief of staff for long-range planning and director of operations for Air Force Space Command. ■

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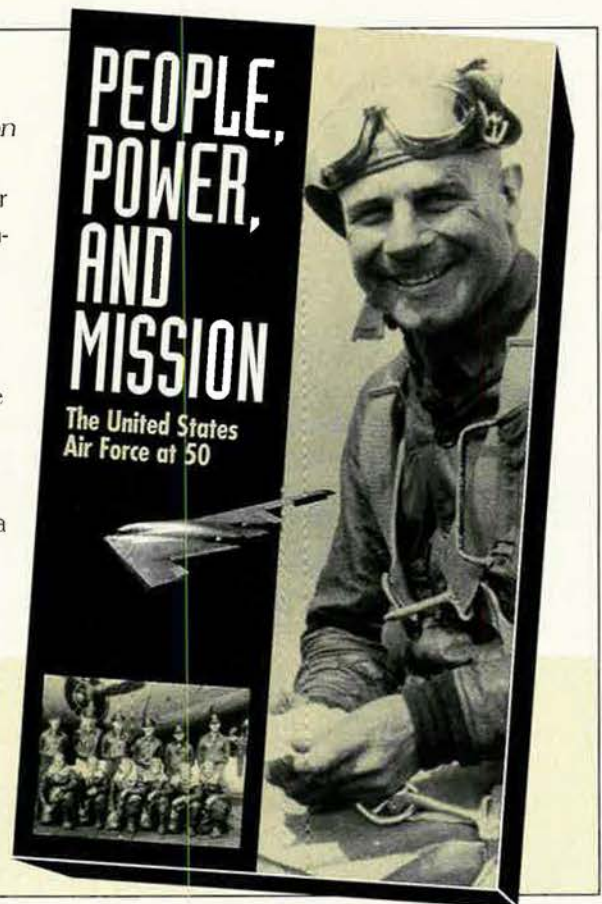
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The history of the Air Force is short but vivid—rich in color, tradition, and personality. The rare items portrayed on these pages came from the US Air Force Museum, Wright-Patterson AFB, Ohio; National Air and Space Museum, Washington, D.C.; and 8th Air Force Museum, Barksdale AFB, La. The museums gave Air Force Magazine unusual access to their treasures and knowledge, helping provide glimpses of some of the significant people, places, and moments—as well as everyday artifacts—in the 50-year life of the nation's youngest and most vibrant armed service.

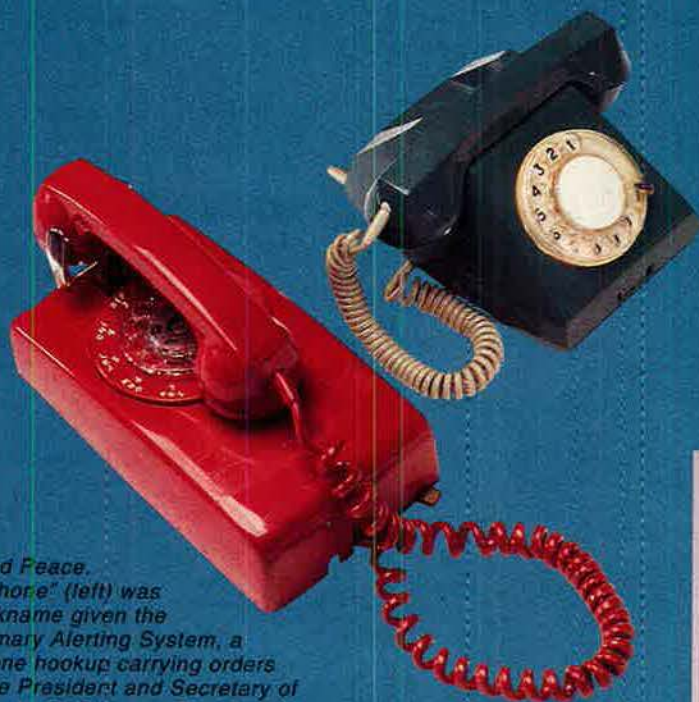


Gen. Curtis E. LeMay, the most famous of postwar airmen, left his mark as the legendary, hard-charging commander of Strategic Air Command. Items at left are classic LeMay—flight jacket, service cap, and trademark cigar. Always a man of action, then-Vice Chief of Staff LeMay on Nov. 12, 1957, completed a record-setting three-day flight from Westover AFB, Mass., to Argentina to Washington, D.C., flying the new KC-135. On Nov. 13, Chief of Staff Gen. Thomas D. White pinned the Distinguished Flying Cross on LeMay's jacket (above).



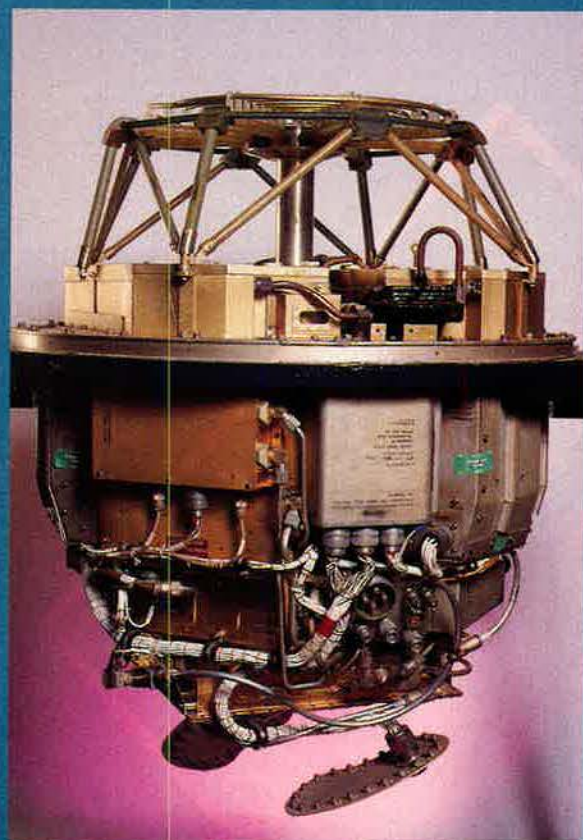
Memorabilia photographed by Paul Kennedy

Sometimes, you didn't want camouflage at all but something bold and conspicuous. Looking like jockeys at the Kentucky Derby, ground crews in the 1950s sometimes wore jackets like this one when they needed to stand out on busy flight lines, where large numbers of aircraft marshaled for taxiing.



War and Peace. "Red Phone" (left) was the nickname given the US Primary Alerting System, a telephone hookup carrying orders from the President and Secretary of Defense to SAC bases. The Soviet-era aqua phone was used by Russian officers to set up a March 1992 B-52 bomber visit, symbolizing the end of the Cold War.

Cold War tensions are embodied in this newly declassified communications package that contained two radio transmitters as part of the Emergency Rocket Communication System, the ultimate US nuclear backup system. ERCS payloads, fitted in the nose cones of special Minuteman III missiles, were designed to be sent aloft in wartime and, at the right moment, transmit emergency messages to nuclear weapon sites. The idea was to convince Moscow that US communications—and the power to strike back—would always survive a Soviet attack. The 510th Missile Squadron at Whiteman AFB, Mo., operated ERCS until 1991. This ERCS transmitter can be found in the US Air Force Museum.





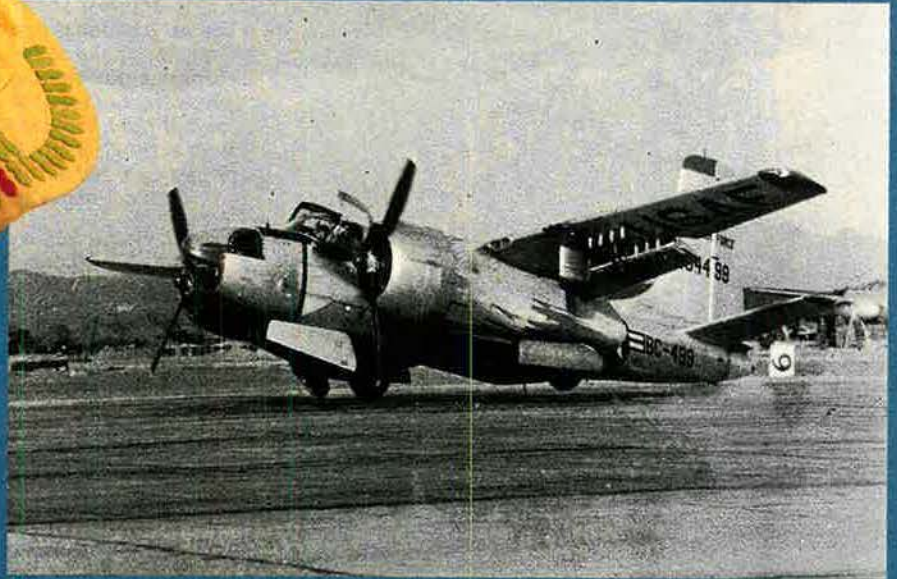
As USAF reached ever higher altitudes with aircraft like the U-2, sustaining life in a high-altitude, low-pressure, no-oxygen environment became vital. In the long-ago test shown at left, liquid in a beaker explodes, demonstrating what might happen to the human subject were he not wearing a MC-2 partial pressure suit and MA-2 helmet. The suit at right, looking like something from a 1950s B movie, is housed at Wright Lab, but its original purpose can no longer be determined.

Blast arf. Below left, a pressure suit for a four-legged R&D pioneer shows features similar to suits for a human counterpart.





The 1951 photo at right was snapped an instant before this 5th Air Force B-26 Invader belled in for an emergency landing after a low-level bomb run in North Korea. Enemy fire had disabled its landing gear. Air crews took care to display mission counts on their caps. The one shown above suggests its wearer had to have skill, training, and luck to have flown so many missions.



After USAF came into its own, it launched countless experiments with service clothing, striving to establish its new identity as a separate and independent service. It designed and redesigned, changing everything from dress uniforms to specialized clothing for specific jobs. At left one can see a tiny portion of the mountain of reports and samples contained in the collection of the US Air Force Museum. It continues to grow.

After WW II, USAF realized a growing need to provide its aircrews with more protection than the soft leather headgear (immediate right, from National Air and Space Museum) of postwar vintage. An early transitional "hard-hat" style helmet (far right), with padding and wire bracing, was developed primarily for bomber crews. It is in the 8th Air Force Museum.

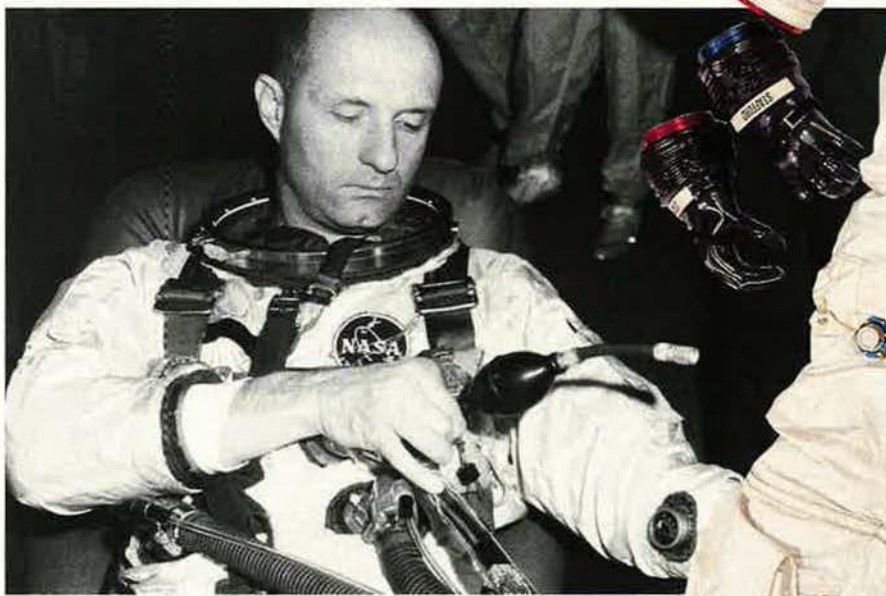


Memorabilia photographed by Paul Kennedy



At left are prepared foods from various eras. In the beginning, there were K rations. During the Korean War airmen ate C-rations. The space program brought new packaged meals, which were the forerunners of today's Meal, Ready-to-Eat. Early astronaut fare can be seen in the clear packages.

From the beginning, USAF has been at the forefront of the space program. Thomas P. Stafford, then an Air Force brigadier general, wore the suit at right as commander of Apollo 18 during the July 1975 Apollo-Soyuz mission, which culminated in the first meeting in space of US astronauts and Soviet cosmonauts.



In March 1965, when the photo above was taken, Stafford was a backup pilot undergoing a pressure suit preflight checkout in the crew's ready room at Cape Kennedy, Fla. Nine months later, he piloted Gemini VI for the first-ever rendezvous in space, a harbinger of the historic US-Soviet linkup 10 years later.





Nomex jackets, nav bags, and maps. In 1961, USAF began flying Vietnam War combat missions on a limited scale. During 1964-73, a time of full-scale war, some 1.7 million Air Force members served in Southeast Asia. More than 3,500 died. This jacket and navigation kit belonged to Capt. Ben Allen, who flew F-105s like the one above during Vietnam. Allen kept his Vietnam-era gear and donated it to the NASM for its collection.



Highly individualized and custom-tailored clothing—known as “party suits”—became popular in Vietnam. The one displayed in the center of this photo belonged to Maj. Robert A. Lodge, F-4D pilot of the 555th Tactical Fighter Squadron. Lodge and his backseater, 1st Lt. Roger C. Locher, downed three MiG-21s in early 1972.



At the US Air Force Museum, technicians restore some of the larger pieces of service history. Above, David Robb works on a one-of-a-kind XF-92, which paved the way for the delta-winged F-102 and F-106 fighters. Delivered in 1949, it exceeded Mach 1 once—in October 1953. That was its last flight, and Maj. Chuck Yeager was in the cockpit. In the early 1960s, when Yeager donned the flight suit and helmet at right, he was a colonel and director of flight testing at Edwards AFB, Calif., and wore the Air Force Flight Test Center patch.

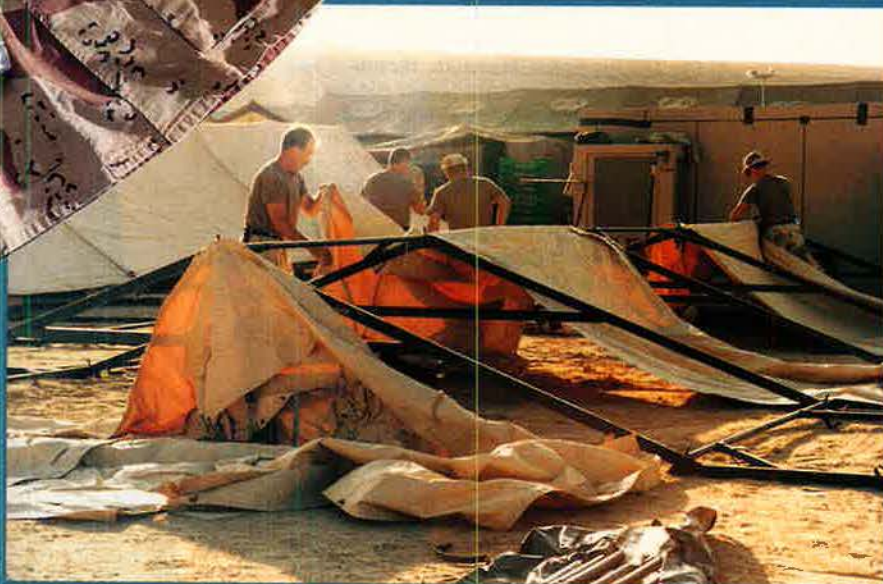


Even the smallest artifacts can tell powerful stories. The tiny metal spoon pictured at right was used—and brought back to the United States—by a Vietnam War POW. The clothing, worn by brave men once held long years in Communist prisons, are an important part of the Air Force story and are held with care at the US Air Force Museum.





Though a mere seven years have gone by since the first desert deployments, the Persian Gulf War already is history. For airmen who wore "Chocolate Chips" fatigues on deployments to the Gulf region, a bottled-water container evokes memories of time spent in blazing desert heat that could average more than 100 degrees. Things that evoke strong memories don't always seem important at the time. Case in point: Frisbees that the troops used to pass the time in Desert Shield and Desert Storm.



The US Air Force Museum collects some of the largest artifacts, such as the Cessna LC-126A in the foreground and F-15A fighter in the background. In 1948, USAF bought 15 of the Cessnas, equipped with interchangeable wheel, float, and ski landing gear, for Arctic rescue work. The museum restored this one to its condition during service with the 10th Rescue Squadron based at Elmendorf AFB, Alaska. The F-15 first flew in July 1972. Though it is still the top operational fighter in the world, the F-15 has already become a classic.



In his Presidential office aboard the C-54 Sacred Cow, President Harry Truman on July 12, 1947, signed the National Security Act of 1947 officially establishing the US Air Force as a separate service. Soon after, the Douglas DC-6 Independence replaced it in Presidential service. Sacred Cow is often considered the first "Air Force One" and is now displayed at the US Air Force Museum.

At right is the flight suit and jacket of then-Lt. Col. Kathy LaSauce. She was a member of the first cadre of USAF female pilots in 1977, the first female C-141 pilot in USAF, the first woman to fly Presidential support for the 89th Airlift Wing, Andrews AFB, Md., and the first woman to command an aerial port squadron.



It has gone by many names: B-4 Bag, "Air Force luggage," and so forth. Whatever it may be called, the humble sage-green suitcase provides a perfect symbol for the on-call, go-anywhere-needed nature of service in the United States Air Force during its first 50 years. ■

**Combat Electronic Systems
and Combat Support Systems**



AH-64D APACHE
Longbow
fire control radar
and Hellfire missiles



F-22
AN/APG-77
radar



F-16
AN/APG-66
AN/APG-68
radars



B-1B
AN/APQ-164
radar



RAH-66 COMANCHE
Mission computer
cluster and automatic
target recognition;
Longbow system



C-130
AN/APN-241
radar



**JOINT
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Integrated multifunction sensor
for radar and electronic warfare
(DoD funded contract for
concept development phase)



**BRILLIANT
ANTIARMOR
SUBMUNITION**
Prime contractor



**GPS-AIDED
MUNITIONS**
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FIREFINDER
System upgrades



**VEHICULAR INTER-
COMMUNICATIONS
SYSTEM**
Prime contractor

Information Warfare

Electronic Warfare Systems



EA-6B
Prime contractor



EF-111
Prime contractor

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Countermeasures Subsystems**



C-130
AN/ALQ-131
AN/AAQ-24V



F-15
AN/ALQ-135



F-14D
AN/ALQ-165



F/A-18
AN/ALQ-162
AN/ALQ-165



F-16
AN/ALQ-131
AN/ALQ-165



A-10
AN/ALQ-131

**Surveillance, Battle Management,
and Airspace Management Systems**



E-8C
JOINT STARS
Prime contractor
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radar provider



E-3 AWACS
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**SPACE-BASED
INFRARED
SYSTEM**
Infrared sensors



**PREDATOR
UNMANNED
AERIAL VEHICLE**
Synthetic aperture
radar and ground
station processing



*Air defense/air traffic
control systems*



**DARKSTAR
UNMANNED
AERIAL VEHICLE**
Synthetic aperture
radar and ground
station processing




























**DEFENSE
METEOROLOGICAL
SATELLITE
PROGRAM**
Operational line
scan sensor



GROUND STATIONS
Including enhanced
tactical radar correlator;
common imagery
processor,
Prime contractor

The right technologies. Right now. It's what makes us a world-class leader in the design and integration of

Marine and Underseas Systems	Strategic, Tactical, and Transport Aircraft, and Aerial Target Systems
 ADVANCED SEAL DELIVERY SYSTEM <i>Prime contractor</i>	 F/A-18 <i>Center/aft fuselage, vertical tails and associated subsystems</i>
 PROPULSION <i>Intercooled recuperated gas turbine, Prime contractor</i>	 B-2 <i>Prime contractor</i>
 MK 48, MK 50 <i>Advanced torpedoes and modifications</i>	 F-14 <i>Prime contractor</i>
 ATTACK SUBMARINES <i>Propulsion and power generation</i>	 C-17 <i>Horizontal and vertical stabilizers, nacelle systems, aerostructural components</i>
 TRIDENT SUBMARINE <i>Missile launch systems</i>	 A-10 <i>Prime contractor</i>
 Mine countermeasures <i>(land and sea)</i>	 C-2 <i>Prime contractor</i>
 ARSENAL SHIP <i>Prime contractor (functional design stage)</i>	 BQM-74E & CHUKAR III <i>Prime contractor</i>
 Power generation	 JOINT STRIKE FIGHTER <i>Teamed with Lockheed Martin</i>
 Shipboard radars	

Commercial Aerostructures	
 737 <i>Doors</i>	 747 <i>Fuselage panels and doors, aft body section, vertical and horizontal stabilizers</i>
 757 <i>Aft body section, vertical and horizontal stabilizers, wing spoilers, doors</i>	 767 <i>Center wing box, horizontal stabilizers, doors</i>
 777 <i>Spoilers and inboard flaps</i>	 GULFSTREAM IV <i>Nacelle systems</i>
 GULFSTREAM V <i>Integrated wings</i>	 HAWKER 800 <i>Nacelle systems</i>

H.H. Arnold, one of the nation's first military aviators, went on to become the founding father of the US Air Force.

Hap

By Walter J. Boyne

ON July 27, 1903, 17-year-old Henry Harley Arnold entered the US Military Academy at West Point and became a cadet. That he did so was a small miracle. Virtually from the day he was born on June 25, 1886, everyone had expected him to become a minister. His father had won the West Point appointment for his eldest son, but when he refused to take the exam, Henry went instead.

Cadet Arnold always ranked between 62d and 66th in a class of 110. He never became a class officer. He was large for the time, packing about 185 pounds on a frame just short of 6 feet tall. Still, he was only a fair athlete. In his last year at West Point, he was confined to quarters for some time for a sensational senior prank with fireworks.

When he graduated in 1907, Arnold wanted to join the cavalry, which was the glamour arm of the Army in those days, and he complained vigorously when assigned to the infantry. His

protests failed, however, and that was the break of his life. Had he gone to the cavalry, he probably would never have taken up flying. Then, H.H. "Hap" Arnold might well have wound up commanding an obscure tank division instead of achieving world fame and the five stars of the first and only General of the Air Force.

It was his destiny to become a dominant figure in American airpower. In the 1920s and 1930s, his was one of few but highly significant voices speaking up for development of military aviation. He was a powerhouse in World War II, breaking through the barriers of conservatism and vested interest to mold the various elements of airpower into a powerful striking force. "In General Arnold's story," the *New York Times* editorialized at the war's end, "can be found the key to that fierce loyalty, that close identification of men and weapons, which has had so much to do with bringing the air arm to its



H.H. Arnold, shown here during his flight training with the Wright brothers in Dayton, Ohio, had less than four hours in the air when he flew his first solo. Just six weeks later, on June 5, 1911, he and 2d Lt. Thomas Milling were certified as US Army aviators.



present stage of terrifying efficiency." Then, as World War II drew to a close, Arnold saw that a new, powerful, and independent Air Force would have to be forged in the face of public apathy and took the lead in organizing public support for the task.

Next Stop: Wright Brothers

In his first assignment after West Point, the young Arnold served an uneventful two-year tour in the Philippines with the 29th Infantry before sailing west to return to the US. On this long journey home, he passed through Paris, where he observed Louis Blériot's famous aircraft. On his return to US soil, with the 29th at Governor's Island, N.Y., he made a second attempt to get out of the infantry, asking the Signal Corps to put him in "aeronautical work." This time he succeeded. On April 21, 1911, Arnold and 2d Lt. Thomas DeWitt Milling were ordered to report to Dayton, Ohio, to learn to fly under the supervision of the Wright brothers themselves.

The Wrights' machines were extremely difficult to fly, but Arnold's instructor, Al Welsh, sent him solo with less than four hours of actual flying time. On June 5, 1911, after another six weeks of flying, Milling

and Arnold were certified as US Army Aviators No. 1 and No. 2, respectively, and were told to report to College Park, Md., where they became instructor pilots.

Flying was extremely dangerous in those days, generating names for Army airfields (Selfridge, Kelly, Scott, Hazelhurst, and Rockwell) faster than the airfields could be built. Between 1909 and 1913, the Army produced only 24 officers it deemed qualified to fly. Eighteen were killed in air mishaps—11 in training accidents and seven in later crashes. In Milling's words, "Everybody expected to be killed."

Despite the dangers, Arnold flew with a flair that broke both records and precedents. On Aug. 18, 1911, he set a military altitude record of 4,167 feet. He pioneered the use of goggles, won the first Mackay Trophy for a long reconnaissance flight, and directed artillery fire from the air, first by dropping notes and then by using a primitive radio. The press eagerly reported on the exploits of the young pilot. Adding to his growing fame were his appearances in two 1911 movies, *The Military Scout* and *The Elopement*, in which he played the role of aircraft pilot.

In his next assignment, Arnold be-

gan flying in the more powerful Wright C aircraft. All six of the Army's Wright Cs would eventually be lost in crashes, killing six men. This early aircraft had an inherent flaw: When gliding at low speeds, sudden application of power would cause the nose to pitch down—exactly the opposite of what a pilot would expect. In a pusher-type aircraft, moreover, the engine was perfectly placed to crush the pilot upon impact with the ground.

In November 1912, Arnold was flying a Wright C at Ft. Riley, Kan., conducting radio experiments. Then, at about 400 feet altitude, the aircraft suddenly spun in a 360-degree turn and plunged toward the earth. Arnold was sure he was going to die, but by some miracle, his frantic, random manipulation of the controls managed to pull him out of the dive just a few feet above the ground so that he could land.

The experience left Arnold badly shaken, and he finally acknowledged that flying in Army aircraft virtually qualified as an act of suicide. He waited 20 days to regain his composure, swallowed his pride, and formally requested release from flying duty. The Army granted his wish.

"No Preliminaries"

Arnold was reassigned to a desk job with the Signal Corps in Washington. There, he experienced two thrilling events. The first came in 1913 when, after serving six years of active duty, he finally was promoted to first lieutenant. Second, he married an aristocratic hometown girl, Eleanor Pool, proposing before he ever had kissed her or told her he loved her. As Mrs. Arnold laughingly recalled in a 1969 interview: "That was Hap. No preliminaries."

On a second tour in the Philippines, Arnold met and began developing an admiration for another Army officer, George C. Marshall, a man who would shape his career and the fate of the US Air Force to an inordinate degree. Upon returning to the US, he also encountered, for the second time, a newly emerging force in military aviation, then-Maj. Billy Mitchell. Mitchell invited the young lieutenant to "volunteer" to return to flying duties and dangled before him the rank of captain as a part of the bargain. Arnold accepted and resumed flying.

Not long after the US entered World War I in April 1917, Arnold was promoted to major and then was jumped to a colonel's rank. Despite efforts to get overseas and take part in combat, he did his best work in the new Office of Military Aeronautics, meeting many top figures in the fledgling industry and gaining knowledge that, 25 years later in another war, would prove invaluable. He also got the bug for aviation research and development, which was to become a hallmark of his leadership.

When World War I ended, Arnold was dropped back to captain for one day and then promoted to major, whereupon he promptly embarked on a decade of activity that, at the time, seemed to inflict irreparable damage on his career.

Arnold's major sin, in the view of Army leaders, was to openly back Mitchell's cause during the latter's infamous 1925 court-martial. Then, already under the gun as a result of the Mitchell affair, Arnold in 1926 was discovered to be a ringleader in highly unauthorized political activity; he and others had covertly been using Army paper, equipment, and information to spread and popularize pro-airpower views.

The second offense was the last straw. Maj. Gen. Mason Patrick, Chief of the Air Service, was furious. He offered Arnold a choice: resignation or court-martial. Arnold called Patrick's bluff, asking for the court-martial with all of its atten-



In 1934 at age 48, Arnold (standing, center) led a flight of B-10 bombers on an 18,000-mile trip from Washington, D.C., to Alaska and, in the process, won his second Mackay Trophy. This photo includes the Alaskan flight members, as well as Lt. Nate Twining (kneeling, third from right), a future USAF Chief of Staff.

dant publicity. Patrick folded, but he "exiled" Arnold to Ft. Riley with a disastrous efficiency report intended to be the ultimate career killer.

However, what was supposed to be the end of the line for Arnold's career proved instead to be the launching pad from which he rocketed to the top, for it was at Ft. Riley that he began formulating ways to make more effective use of airpower. Even before his exile to Kansas, Arnold had become alarmed about the German airline operations in the South American nation of

Colombia. With Carl Spaatz, he laid the framework for an American airline to counter German influence. Plans devised by these two airmen eventually became a blueprint for creation of Pan American Airways. While at Ft. Riley, he was offered a top job at Pan Am, with a salary twice that of his Army pay, but he refused, despite knowing that the looming college expenses of his three sons and a daughter would more than strain a junior Army officer's salary.

Hap Delivers

During the early 1930s, Arnold continued to attract considerable notice in Army circles. He handled tough logistic jobs in several huge (for the time) Air Corps maneuvers, built Civilian Conservation Corps camps, and competently managed the Western Zone when, in 1934, the Army carried the nation's air mail. He cemented public relations with various interest groups by using military assets intelligently in fighting forest fires, dropping food to snow-bound Indian reservations, and—quite illegally but sensibly—delivering military supplies to victims of earthquakes.

He also had established good relations with the small American aviation industry, learning upon whom he could depend, and willingly helped Hollywood producers to make positive films about military aviation.



Despite the hazards of early flying, Arnold pushed the envelope, setting records and proving aerial concepts, such as directing artillery fire. Here in 1912 Arnold and Lt. Follett Bradley (left) experiment with a primitive radio.

Similarly, he assisted the experiments of Dr. Robert Millikan, head of the California Institute of Technology, and thus gained entry to a community that would help win World War II and then set the essential frame of research and development reference for an independent Air Force.

Arnold's outwardly sunny countenance now earned him the nickname that he would carry for life: "Hap." However, the name belied serious health concerns, which he kept to himself. Arnold had been troubled by ulcers during the 1920s and, during the trauma of the air mail experience, suffered what was probably a mild heart attack. During this time, Arnold pulled off a number of flying achievements, the greatest of which came in 1934, when, at 48 and white-haired, he won his second Mackay Trophy and a Distinguished Flying Cross by leading 10 Martin B-10s on an 18,000-mile trip from Washington, D.C., to Alaska and back.

From this point on, Arnold's career was marked by unusual events. A long series of apparently random incidents—incidents which nevertheless fitted together like tiles carefully placed in a mosaic—would allow Arnold's innate abilities to raise him to five-star rank.

On March 1, 1935, the General Headquarters Air Force was formed. The new GHQ Air Force had an autonomy which pleased those who saw it as a step toward an independent Air Force. Still, GHQ Air Force reported directly to the Army General Staff, a reality perceived by traditionalists as a means of exercising greater control over the airmen. Frank Andrews, Arnold's friend and long-time rival, was promoted to major general and given command of the GHQ Air Force. Arnold was promoted to brigadier general and given command of 1st Wing, with three bomb groups at March Field, Calif., and three fighter units at March, Rockwell, and Hamilton fields in California.

Backward, Forward

In 1935, Gen. Malin Craig became Chief of Staff of the Army, replacing Gen. Douglas MacArthur. After a few early dustups, Craig and Arnold had become close friends, for the Chief of Staff admired what the younger man accomplished at March Field. Craig was influential in Ar-



Arnold was a brigadier general by the time he actually received his second Mackay in 1935. With him are Jimmy Doolittle (left), then an Air Corps Reserve major, and then-Brig. Gen. Oscar Westover, whom Arnold would replace as Chief of the Air Corps in 1938.

nold's promotion to assistant chief of the Air Corps under Maj. Gen. Oscar Westover. However, because GHQ Air Force did not report to the Chief of the Army Air Corps, Arnold viewed the new assignment as a step backward. He tried to refuse but was overruled. This caused some to think Arnold had strayed from the pro-independent Air Force camp, and it deepened the rivalry with Andrews and his supporters.

Craig, as Chief of Staff, was able to alter the balance in Arnold's favor in 1938 by instituting measures that reduced GHQ Air Force's influence and again in 1939 by requiring the GHQ Air Force to report to the Chief of the Air Corps. The confusion in the command structure had been eliminated, but the hard feelings were not.

On Sept. 21, 1938, Westover, generally conceded not to be the most proficient pilot, crashed in flames in a Northrop A-17 attack plane on an approach to Burbank Airport in California. Arnold became acting Chief of the Air Corps. This was a breakout event. Arnold would be serving at the very top, under the knowing and demanding eyes of the country's leaders.

These included his old friend Marshall, soon to be Chief of Staff; the reserved but acute Secretary of War, Henry Stimson; the brilliant assistant secretary for air, Robert A. Lovett; the extremely influential "minister without portfolio," Harry

Hopkins; and, not least, President Franklin D. Roosevelt himself. Roosevelt was at first dubious of Arnold, having heard erroneous rumors that he had a drinking problem. Over time, he came to enjoy Arnold's personality, so different from that of the starchy Marshall or the grumpy, cantankerous Adm. Ernest King.

Arnold had not yet been confirmed as Chief of Staff when, on Sept. 28, 1938, he was called to a critical meeting that he ever afterward termed the "Magna Carta" event of the Air Force. The President had assembled his principal advisers, including Craig, Marshall, Arnold, and the Chief of Naval Operations, Adm. Harold R. Stark. The world situation was turning dark; Hitler was on the loose in Europe, issuing territorial demands on parts of Czechoslovakia, and cowering Allied governments. Roosevelt's message to his advisers was this: The only thing that would influence the German dictator was airpower. The President wanted the 1940 aviation budget expanded, and not just a little. He wanted the US in the next year to procure not 178 aircraft, as planned, but 10,000 aircraft! He wanted factories enlarged to produce 20,000 aircraft per year. It marked the beginning of an unprecedented expansion.

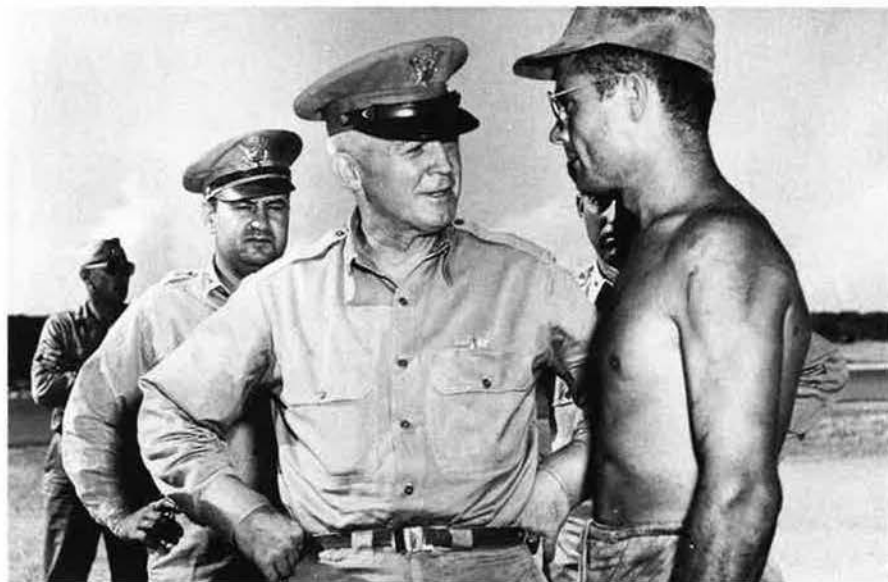
Not everyone liked Roosevelt's message, but they all understood it, Arnold most of all. For besides building 10,000 aircraft in a year, there loomed the extraordinary tasks of

building the bases, training the pilots and mechanics, setting up all the support services, and in general creating not an inventory of airplanes but an Air Force. Within days, he was promoted to major general as his formal appointment as Chief of the Air Corps was confirmed.

Top Speed

Circumstances conspired to help Arnold by allowing his whirlwind personality to operate at top speed. His performance in the job confirmed Marshall's belief in him, for the new Army Chief of Staff said later: "I tried to give him all the power I could." Arnold functioned almost autonomously, buttressed in time by the complementary skills of Lovett, a good administrator who had a deep knowledge of aviation as well as clear insight into Arnold's personality. Arnold himself was a poor administrator, delegating tasks on an almost random basis, sometimes giving the same job to more than one person, but he brought a titanic energy to his office, one that inspired others to work hard for him and get the results he demanded.

All of Arnold's past experiences were brought into play and put to good use. He cajoled aircraft manufacturers into expanding their efforts by dangling the prospects of contracts before them, creating the aviation industry that would win World War II on the basis of promises of future contracts. Most of the managers of the nation's



Near the end of WW II, Arnold was still checking the state of the force firsthand, here talking with SSgt Leo F. Fliess, a B-29 crew chief on Guam, as he developed the groundwork for an independent Air Force. Over Arnold's shoulder, is then-Maj. Gen. Curtis E. LeMay.

fixed-base operations had never made a dime at the business, but Arnold induced them to expand their facilities to accommodate the greatly increased training requirements that he knew were coming.

Marshall reorganized the War Department in June 1941. Arnold became his deputy chief of staff for air and Commanding General of the Army Air Forces. Marshall's sponsorship and Hopkins' approval had given Arnold entrée into Roosevelt's inner circle. The independence given him by Marshall was enhanced by

the protocol required at meetings with British military officers. The Royal Air Force was an independent service, headed by Air Chief Marshal (later Marshal of the Air Force) Sir Charles Portal. As Portal's counterpart, Arnold received recognition, prestige, and rank, being promoted to lieutenant general in December 1941 and to general in March 1943. For a man who had remained a second lieutenant for six years, it must have been a bewildering ascent. It came about solely because he delivered before the most demanding taskmasters in the nation—Marshall, Lovett, Hopkins, and Roosevelt.

The swift rise and numerous responsibilities that came with it exacted a toll on Arnold's health. Despite four known heart attacks—he may have concealed others—Arnold never relieved the pressure on himself or the pressure he put on others to do everything necessary to win the war as quickly and forcefully as possible. He traveled incessantly, seeing conditions for himself, driving himself harder than he drove his subordinates.

Declaration of Independence

In these circumstances, a lesser man might have seized the opportunity to press openly for an independent Air Force, but Hap Arnold did just the opposite. He deliberately suppressed all open agitation for the immediate creation of an indepen-



George Marshall (left, at one of many wartime conferences), who had known Arnold (right) since before WW I, gave the new Chief of the Air Corps "all the power I could." He was a critical factor in Arnold's postwar plans.



Arnold retired in 1946 but not before he helped set up the Air Force Association. The next year, the US Air Force was established. Here, in 1949, Harry Truman presents Arnold a proclamation naming him General of the Air Force.

dent Air Force. At the same time, he laid the groundwork for it with publication, in July 1943, of War Department Field Manual 100-20, *Command and Employment of Air Power*. The manual was immediately viewed by some members of the Army as the "Declaration of Independence" of the Army Air Forces—and they were correct. From this point on Arnold labored to make sure that Marshall supported the concept of a postwar independent Air Force. With Marshall on his side, Arnold was confident that the drive for independence was essentially won. In December 1944, Arnold was promoted to five-star rank as General of the Army, as were Dwight D. Eisenhower, Marshall, and MacArthur.

There was more to do, however. The nature of the independent Air Force had to be shaped to meet Arnold's vision of advanced technological capability. He tasked Professor Theodore von Karman to head a Scientific Advisory Group (later called the Scientific Advisory Board) composed of the top scientists in the country. They were to forget about the weapons of World War II and instead cast their eyes to the future. One of many results was publication of the multivolume epic *Toward New Horizons* that, exactly as Arnold intended, charted the future of research and development for the air arm.

In the war years, Arnold maintained tight control of his commanders, sacking them ruthlessly on occasion, as

when he relieved his old friend Ira Eaker from command of 8th Air Force. Later, Arnold retained personal command of 20th Air Force because he disapproved of the split in command in the Pacific Theater. He antagonized friends and enemies alike when he conformed to Marshall's desire to bring new leaders to the top, men like Lauris Norstad, Laurence Kuter, and Hoyt Vandenberg.

In the summer of 1945, Arnold was focused on the three million AAF veterans who would be returning to civilian life and began laying the groundwork for an organization that would not only "keep the gang together," as he put it, but also work effectively on behalf of airpower. Arnold was the founding father of the new organization—which would be known as the Air Force Association—and the energy that he imparted to get AFA going was prodigious.

He retired on June 30, 1946. He was confident that soon there would be a separate, independent US Air Force, and he was happy to see his old friend General Spaatz take over as Commanding General of the Army Air Forces. When the Air Force was born on Sept. 18, 1947, Spaatz became its first Chief of Staff and, on

May 7, 1949, Arnold was named the first and, to this date the only, General of the Air Force. He died on Jan. 15, 1950.

Six to Ponder

Hap Arnold was a giant, the right man for the time, and it is worth pondering the lasting implications of six of his many achievements:

- During World War II, he guided the swift creation of the most powerful military air arm in history, beginning with a paltry force and expanding it to more than 70,000 aircraft and 2.4 million personnel.

- He helped shape and oversaw military air operations that played a major role in defeating the Axis powers in Europe, drove Japan to surrender in the Pacific, and, with long-range aircraft and the nuclear weapon, defined a new form of airpower.

- He fathered the independent Air Force by inducing George Marshall (and hence the Army) to back the concept—the essential factor, for the Navy was unequivocally opposed to the idea. Only Marshall's prestige made the separation possible.

- He played the critical role in selecting a new cadre of leaders, one suitable for the difficult times he knew lay ahead, and one which set a course of innovation for the future.

- His advocacy of research and development established a culture that the newly established USAF adopted, enabling it to prevail in the Cold War and, when it was permitted to exercise its full might, in the hot wars as well.

- By using both stick and carrot, he compelled the creation of the aerospace industry which helped to win World War II and was decisive in establishing the United States in the postwar era as the first superpower.

These are monumental achievements, to which could be added dozens more that stemmed from Arnold's World War II leadership. Hap Arnold, West Point Class of 1907, father of the Air Force in 1947, continues to exert a major influence on the nature and course of the Air Force in 1997. ■

Walter J. Boyne, former director of the National Air and Space Museum in Washington, is a retired Air Force colonel and author. He has written more than 400 articles about aviation topics and 28 books, the most recent of which is Beyond the Wild Blue: A History of the United States Air Force, 1947-1997. His most recent article for Air Force Magazine, "The Chief's Reading List," appeared in the July 1997 issue.

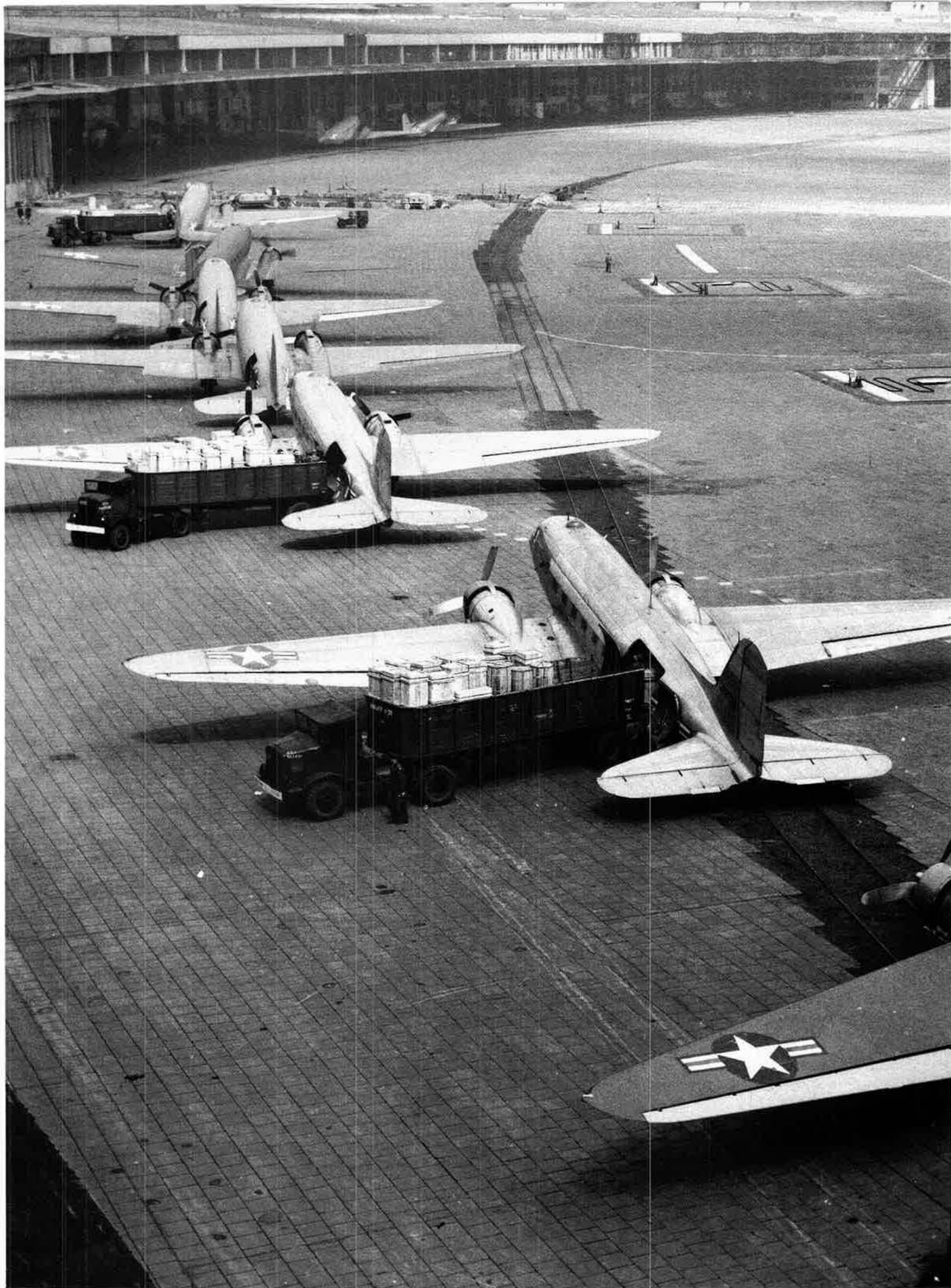


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The Air Force gained its independence on Sept. 18, 1947. Then the crises started popping, one after another.

The First Five Years of the First 50

By Herman S. Wolk

THE situation sounded like something dreamed up by a novelist, not reality. A service finally gains its independence. Then, almost immediately, it confronts an urgent requirement to handle multiple foreign crises, carry out racial desegregation of the force, mount a massive airlift in Europe, fend off dangerous roles and missions challenges, survive major budget battles, take its bomber and fighter forces into the jet age, and then fight a prolonged war in Asia.



Within its first year, the new independent air arm was mounting a historic airlift to Berlin (left) and had broken the sound barrier in the experimental Bell X-1 (above).



Gen. Carl "Tooney" Spaatz (left) passed the daunting task of attaining 70 air groups, the "bedrock minimum" he and Secretary Stuart Symington (center) had proposed, to his successor, Gen. Hoyt S. Vandenberg, on April 30, 1948.

All this and more happened to the Air Force. It would be difficult to imagine a more unsettling and precarious situation for USAF than that which existed during its first five years.

Emerging from the triumph of World War II and born as a separate armed service on Sept. 18, 1947, the Air Force had to build new organizational structures, develop and deploy atomic forces, create an independent culture, and fend off die-hard enemies. That the fledgling service was able to accomplish these tasks and also deploy first-rate fighting forces to the Korean peninsula is nothing short of astonishing.

Gen. Hoyt S. Vandenberg, following the establishment of the Air Force, noted, "We are now the masters of our own destiny," but the reality was that the Air Force was a long way from being on equal footing with the Army and Navy. Even the formal transfer of functions from the Army to the Air Force would not be complete until late 1949. Maj. Gen. Hugh J. Knerr, the secretary-general of the Air Board, remarked: "As with any vigorous organization freed from onerous restraint, there is danger of its feeling its oats and lashing out at all obstacles at the very beginning. Such action would be a great mistake, for we simply do not have the muscle on our bones to carry through with such desires."

Stuart Symington, the first Secretary of the Air Force, maintained a

clear vision during the early years. The passage of the National Security Act of 1947, and with it the birth of the Air Force, presented an opportunity. To Symington this amounted to a "green light" for further action, rather than an excuse for "resting on our laurels." September 1947 marked "a first chapter, not a book." USAF needed to build a record of accomplishment. It looked as if, during a period of austerity, building a strong Air Force would be difficult.

Front and Center

Symington wanted the Air Force to step out in front on a range of important issues. Coming from a wartime business background at Emerson Electric, he wanted first to plant the service on an absolutely sound fiscal basis according to the tenets of American business. The Air Force had to demonstrate to the taxpayer that it could efficiently run its business.

Symington's job would be made more difficult by the Truman Administration's postwar budgets and ominous events overseas. The Soviet Union posed an ever-increasing threat. The Czechoslovakian coup in February 1948 brought the Communists to power in that country. Alarmed, President Truman publicly branded Moscow as the major threat to world peace, yet the Administration continued to adhere to its austerity program, seriously affecting the military budget. Truman

himself admonished Vandenberg, then the new Air Force Chief of Staff, warning, "There are still some of you who are thinking more of representing interests and objectives of your individual service than of interpreting the broad national program and its requirements to your subordinates and to the Congress."

Gen. Carl A. Spaatz, first Air Force Chief of Staff, and Symington sought 70 air groups—approved by the Joint Chiefs of Staff—as the "bedrock minimum" in force structure. However, the Administration's 1949 budget estimate made it doubtful that the Air Force could mount even 55 operational groups. Symington vehemently protested to the Administration: "We are more shocked at this decision of the Bureau of the Budget than at anything that has happened since we came into government."

The USAF leadership, desperately attempting to attain 70 groups, especially in light of increasing international tensions, fought to gain more than a one-third share of the defense budget. The service did not succeed. Secretary of Defense James V. Forrestal continued to advocate splitting the defense budget into three roughly equal parts. By early 1948, the Air Force had managed to man and equip 47 groups, not all of which were operationally ready. It would not be possible even to reach the interim, 55-group level.

Administration officials, including influential Truman adviser Clark Clifford, believed war in Europe might be imminent, and under the circumstances Symington thought that Forrestal had not given the Air Force's requirements a fair hearing. "Spaatz and myself never had a chance to present our position to you or even your staff," Symington complained to the DoD chief, "and this is especially unfortunate in that nobody who ever served a day in the Air Force was a member of your permanent top staff."

The Big Chill

In the spring and summer of 1948, each of the two sides displayed a distinct lack of confidence in the other. A chilly, even contentious, relationship developed between top Air Force leaders and the Forrestal side.

Meanwhile, Symington's desire for

USAF to step out in front of the other services was realized in mid-1948 when the Air Force decided to end racial segregation in its units. In early 1948, Lt. Gen. Idwal H. Edwards, USAF deputy chief of staff, personnel, began an inquiry into the impact of segregation upon force effectiveness. Edwards' view that segregation in the Air Force was not an efficient use of manpower found an important advocate in Secretary Symington. A pragmatist at heart and in action, Symington had come to the view that it was time to integrate, and he announced his decision well before July 26, 1948, the day that Truman promulgated Executive Order 9981 directing the military to integrate.

Elsewhere, the independent Air Force and the Navy almost immediately began to clash over roles and missions. Forrestal convened conferences that not only failed to resolve issues but actually caused the controversy to escalate. The battle raged over who would have responsibility for carrying out the strategic nuclear mission. The Joint Chiefs of Staff had assigned this mission to Strategic Air Command. The Navy, however, insisted on sharing with SAC the all-important strategic mission, promoting the building of large aircraft carriers.

The issue eventually blew up publicly in 1949 with the "Revolt of the Admirals," with the Navy calling into question the effectiveness of



The Air Force quickly clashed with the Navy over who would conduct the strategic nuclear mission. The Navy wanted it for its large aircraft carriers and tried to stop procurement of USAF's new B-36.

the B-36 bomber and also anonymously charging that Symington himself was guilty of procurement fraud and malfeasance. Symington and the Air Force were totally cleared by Congress, and the Navy lost the battle in public. Its leadership emerged from the fray looking like a bunch of chastised complainers.

While the Air Force fought bitter budget battles and attempted to build up and establish itself on an equal basis with the Army and Navy, tension in Europe evolved into a direct—and potentially hot—confrontation in June 1948. The Soviet

Union, seeking to expand its influence in Europe at the expense of the United States, cut off all road, rail, and barge traffic into the American, British, and French zones of Berlin, leaving the city isolated. Army Gen. Lucius D. Clay, US military governor in Germany, had communicated to Washington in early March that war could come "with dramatic suddenness." Now he ordered a resupply operation that became world-famous as the Berlin Airlift.

Lt. Gen. Curtis E. LeMay, commander of US Air Forces in Europe, organized the initial airlift using C-47 transports. It transported 80 tons of milk, medicine, and flour from Wiesbaden AB near Frankfurt to Tempelhof in Berlin. C-54s soon joined the operation, and by late July the Air Force had organized Airlift Task Force (Provisional). Maj. Gen. William H. Tunner, who gained fame as commander of the US air forces "flying the Hump" over the Himalayas in World War II, took command of a redesignated 1st Airlift Task Force. The Americans termed it Operation Vittles; the British called it Operation Plainfare. The overwhelming amount of tonnage was lifted by USAF airplanes.

Heavy Commitment

By the end of September, C-47s had been replaced by rugged C-54s, which could carry three times the amount of cargo that could be hauled in a C-47. At the height of the airlift,



Symington, Vandenberg, and then-Lt. Gen. Curtis E. LeMay, USAFE commander, gathered to discuss the air resupply of Berlin, known as Operation Vittles. At the height of the airlift, the Air Force was using 300 of its 400 C-54s.



Twenty beacons—providing 200,000 watts—on each side of the 3,000-foot runway at Tempelhof Airport in Berlin assisted transport pilots during poor weather. Some landed with daylight visibility at only one-sixteenth of a mile.

the Air Force had committed to action well more than 300 of its total of 400 C-54s. By early 1949, the Berlin Airlift had become highly efficient because of the professionalism of the air- and ground crews and the traffic controllers. The use of ground-controlled approach meant that aircraft could be brought in at three-minute intervals. During marginal and instrument conditions, all landing aircraft used GCA equipment. An incoming airplane made one approach; if it failed, the pilot returned home. The stacking of aircraft over Berlin was eliminated.

Tonnage airlifted into Berlin climbed steadily until the daily minimum requirement leveled off at 5,620 tons in October 1948. Coal shipments accounted for two-thirds of all the tonnage and food nearly all the rest. Of other items flown to Berlin the most publicized was candy dropped to German children near Tempelhof, in Operation Little Vittles, started in July 1948 by Air Force Lt. Gail S. Halvorsen. The airlift reached a spectacular peak in mid-April 1949 when almost 1,400 airplanes dropped 13,000 tons in a day. Less than one month later, Moscow announced the end of the blockade.

The Berlin Airlift was a spectacular triumph for the West, and it demonstrated the potency of round-the-clock air transport. It also constituted a warning to American leaders; the danger of war with the USSR was

real. During the crisis, Truman even had authorized an open show of force—the movement of some of SAC's conventionally equipped B-29 bombers to England and West Germany. Moscow was expected to draw the appropriate conclusion. The USAF Chief of Staff, Vandenberg, was under great pressure to deploy all of the Air Force's C-54s to Germany, but he resisted. In the event of general war with the Soviet Union, the Air Force would need to have these aircraft to support SAC's deployment overseas under JCS war plans.



A Douglas C-54 loads at Wiesbaden AB, Germany, to support the round-the-clock Berlin airlift. Throughout the operation, war in Europe remained a possibility, and it wasn't long before the Cold War actually turned "hot"—in Korea.

On a Shoestring

The threat of war hanging over Europe during the Berlin Airlift energized the Air Force. Shortcomings—some severe—became evident in what Vandenberg subsequently termed "the shoestring Air Force." In October 1948, Symington and Vandenberg, concerned that SAC was not war-ready, named no-nonsense LeMay to take immediate charge. In December, the Air Force leadership called a major commanders' conference at Maxwell Field, Ala., to set its priorities. The Air Force authorized SAC to rapidly build up its intercontinental nuclear capability. At the same time, USAF and the Administration stepped up their efforts to make certain that bases in Europe would be ready to support SAC's atomic units.

In March 1949, one month before the western allies signed the North Atlantic Treaty founding a defensive alliance, Winston Churchill, in Boston, remarked, "It is certain that Europe would have been communized like Czechoslovakia ... some time ago but for the atomic bomb in the hands of the United States."

The US was alarmed by the Soviet threat, concerned about inadequacies in its own military forces, and stung by the USSR's detonation in August 1949 of an atomic device. Truman ordered rearmament planning and directed the State and Defense departments to conduct a long-range planning study. The result,

written for the most part by a young National Security Council expert named Paul Nitze, was called NSC-68. It was the principal blueprint for a proposed rearmament program. Moreover, in January 1950, Truman authorized development of the hydrogen bomb. However, Truman did not propose major new funding for NSC-68. That would come later.

The next challenge did not come in Europe but in the Far East. On the Korean peninsula, the Cold War suddenly turned hot. Early on June 25, 1950, Communist North Korean troops attacked South Korea across an improvised boundary separating the nations. The Truman Administration had little choice but to intervene and did so under the banner of the United Nations. At the same time, the Administration, as well as the Air Force, remained gravely con-



The Air Force quickly established air superiority in Korea. B-26 Invader crews, such as this one, and F-80 crews initially attacked North Korean ground forces. B-29 crews followed, striking deep interdiction targets and industries.



USAF used its first operational jet fighter, the F-80 Shooting Star, as a fighter-bomber in Korea, primarily for low-level rocket, bomb, and napalm attacks. F-80C pilots flew more than 15,000 sorties in the first four months of the war.

cerned about the ever-present Soviet threat in Europe. These pressures finally blew the lid off Truman's "austerity" program. Within a year, Congress had tripled the defense budget, finally providing the wherewithal to carry out Nitze's plans.

The Air Force would have to play "catch-up." Washington called upon USAF during this war to win and hold air superiority, strike strategic North Korean targets, mount air interdiction attacks, support ground forces, and keep in high readiness

(and even build up) its atomic striking force, not to mention carrying out numerous critical airlift missions.

On June 27, Gen. Douglas MacArthur, head of US Far East Command, directed Far East Air Forces, then commanded by Lt. Gen. George E. Stratemeyer, to attack the North Korean ground forces, which it did with F-80s and B-26s. Vandenberg, meanwhile, sent two groups of B-29s—the 22d and 92d—to the Far East to join the war effort. In early July, Stratemeyer organized FEAF

Bomber Command (Provisional), to be led by Maj. Gen. Emmett O'Donnell Jr. Stratemeyer directed O'Donnell to strike deep interdiction targets and North Korean industries.

On the Attack

USAF quickly achieved air superiority over the North Koreans, destroying more than 100 enemy airplanes, leaving the North Koreans with almost no air force at all. FEAF Bomber Command destroyed bridges and railways, and 5th Air Force, headed by Maj. Gen. Earle Partridge, employed its fighters on interdiction missions. Early in the war, however, the majority of FEAF's sorties were dedicated to close battlefield support of American and allied troops, which had reversed the course of the war on the ground. The Air Force played a major role in stopping the enemy offensive, and, by mid-September, Stratemeyer was able to report that the B-29s had taken a heavy toll on North Korean industrial targets. By the end of September, UN forces had driven the enemy out of South Korea and were pushing Communist forces northward.

MacArthur then ordered an amphibious landing at Inchon, on Korea's west coast, which cut off enemy forces and paved the way for UN troops to move into the North. However, in late October and November 1950, Chinese forces inter-

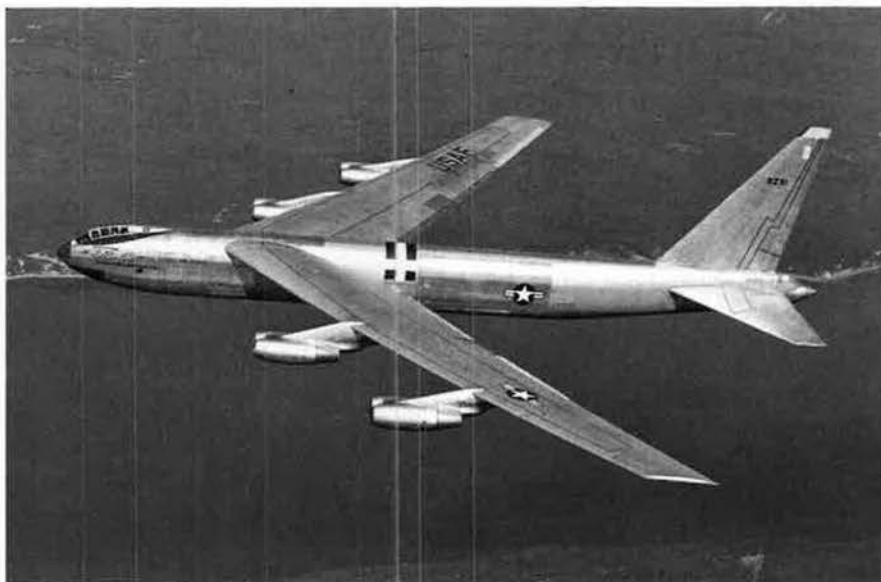
vened and a new phase of the war began. US 8th Army was driven back, then recovered, and the war settled into a stalemate which would last until 1953. During the war, 5th Air Force employed the F-86 Sabre, which more than offset the enemy's Soviet-produced MiG-15. The F-86 proved to be an outstanding fighter, but its great success in the war clearly resulted from the skill of USAF's pilots, many of them World War II veterans. Led by aces Capt. Joseph McConnell Jr., Col. Francis Gabreski, Col. John Meyer, and Maj. James Jabara, F-86 pilots destroyed 792 MiGs and 18 other enemy airplanes. Of 218 Sabres lost in the war, 76 were downed by MiGs, 19 by ground fire, 15 to unknown enemy action, 13 to operational causes, and the rest to accidents.

By mid-1952, it was clear that the war held many lessons for the Air Force.

In 1948, the Air Force had combined Air Defense Command and Tactical Air Command under an entity called Continental Air Command. Under pressure of the war in December 1950, they were again separated and resumed their previous existences as major commands. This step, said one air historian, "swept the cobwebs" from the tactical and air defense functions, permitting the two major commands once again to report to the Chief of Staff of the Air Force.

The conventional war in Korea, fought for limited objectives, had by 1952 become increasingly unpopular. It spawned a "never again" school in the United States and ultimately accelerated, on the part of the Eisenhower Administration and the Air Force, a drive for an even stronger nuclear force, aimed at deterring the Soviet Union from fomenting such wars in the first place.

With the Cold War having turned hot, the Air Force made every effort to build a truly intercontinental force. USAF's push to acquire overseas bases continued, along with plans to bring the B-47 medium bomber and the B-52 heavy bomber into the operational force.



As a result of the Korean War, the Air Force grew to 95 wings with plans for a 143-wing service. Here the YB-52 takes its first flight in April 1952, ushering in a new chapter in heavy bombardment.

At the same time, and of great importance, SAC developed its air refueling capability as a vital range extender. The B-47 test program began in June 1950 but throughout 1951 encountered difficulties and delays. It would not be until late 1952 that SAC could claim to own an operational B-47 unit.

Appointment in Bar Harbor

In July 1952, with the Korean War at a stalemate and USAF nearing the five-year mark, the leadership of the Air Force flew to Bar Harbor, Maine, where the then-Secretary of the Air Force, Thomas K. Finletter, maintained a summer home. They set out to refine the Air Concept, an airpower strategy developed by the Air Staff in the war years. Finletter, Roswell Gilpatric, Gen. Nathan Twining, and Gen. Laurence Kuter (Vandenberg was convalescing from cancer surgery) noted that the war had busted the Administration's austerity budget, enabling the Air Force to build up to 95 wings and to prepare to then push toward 143 wings. Military appropriations increased rapidly, going beyond specific Korean War requirements to take into account the growing direct threat from the

Soviet Union. The principal result of this meeting, called the Bar Harbor Memorandum, recommended that the United States rely on a standing intercontinental-range USAF nuclear deterrent force ready immediately to retaliate against any aggressor. The Air Force in 1952 stood positioned to fulfill this national mission, with LeMay's SAC to lead it. In April 1952, the first YB-52 test flight occurred. The 143-wing program called for at least one heavy bombardment wing to be equipped with B-52s.

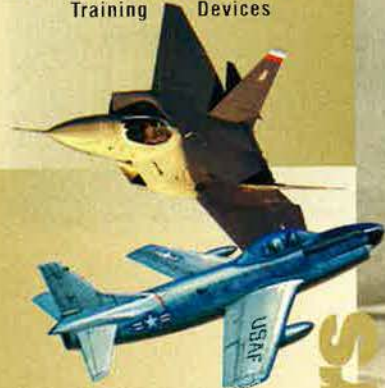
The Air Force, as it embarked on the creation of a long-range nuclear deterrent in 1952, stood poised and ready to accept the role as the principal military arm of American foreign and defense policy. Behind it lay five years of budget battles, bitter interservice squabbles, international crises requiring herculean efforts, and two years of war. Through this dangerous, contentious, and turbulent period, the Air Force learned a great deal about itself and where it was headed.

The accomplishments of the first five years of USAF stand as a tribute to its leadership and its fighting forces. Even prior to the end of the Korean War, the Air Force was on the verge of the kind of maturity that in the decade to come would distinguish it as the major military arm of US foreign policy. It faced many complex challenges and suffered some setbacks, but all the while it pressed ahead. ■

*Herman S. Wolk is senior historian in the Air Force History Support Office. He is the author of *The Struggle for Air Force Independence, 1943-1947* (1997) and a coauthor of *Winged Shield, Winged Sword: A History of the United States Air Force* (1997). His most recent article for *Air Force Magazine*, "The Founding of the Force," appeared in the September 1996 issue.*



- 1947 Blue Box Trainer
- 1949 C-11 Jet Instrument Trainer
- 1968 F-4 Weapon System Trainer
- 1982 F-16 Tactical Flight Simulator
- 1986 F-117 Weapons System Trainer
- 1987 C-130 Aircrew Training System
- 1989 B-2 Aircrew Training Devices
- 1997 F-22 Pilot/Maintenance Training Devices



- 1951 F-86D E-4 Fire Control System
- 1960 F-101, F-102, & F-106 IRST
- 1960 F-106 MA-1 Fire Control System
- 1974 B-52 Infrared System
- 1983 US ASARS-2 Radar
- 1987 F-15E APG-70
- 1989 B-2 AN/APQ-181
- 1990 F-22 CIP
- 1991 MH-60G Infrared System



- 1952 Falcon
- 1972 Maverick
- 1973 Sparrow
- 1987 ACM
- 1988 AMRAAM
- 1994 AIM-9X



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B-52



F-16

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Chief Airey

By CMSgt. Charles Lucas, USAF (Ret.)

IN 1966, the Air Force launched a search for “the best qualified and most impressive individual” in the service to fill a new position, that of Chief Master Sergeant of the Air Force. It said that candidates had to have at least 22 years of active-duty service and two years as a chief master sergeant. Each had to have “the highest standards of integrity and performance.”

At the time, the Air Force had more than 5,900 chiefs on active duty. Fewer than half had the required time in service. Only 26 could be nominated. Only three were chosen as finalists, and the job went to tough, up-from-the-ranks Paul Wesley Airey. In the Air Force’s 50 years, the selection of Airey must surely rate as one of its golden moments.

In Airey’s selection, the system worked. Today’s Air Force continues to benefit from that decision. Airey was a man who did not complete high school but gained a diploma through off-duty study, even acquiring a college associate degree. He was captured and imprisoned by the Nazis during World War II, but he came back and reenlisted because he liked the Air Force life.

Airey helped define the role of the Chief Master Sergeant of the Air Force and, as such, was instrumental in the success over the years of USAF’s most visible symbol of the enlisted force. Establishing the position of Chief Master Sergeant of the Air Force had been opposed by some in the Air Force hierarchy, but in the end Airey won their respect and cooperation.

Airey brought many benefits to the force, but he is reluctant to claim

credit for anything accomplished on his watch. “I will never be convinced that I was the most qualified or the best,” Chief Airey said. “I ended up with the job, so you go out and do the best you can.”

Paul Airey, who will be 74 in December and lives in Panama City, Fla., grew up in a Navy town, Quincy, Mass., with its seaport and shipyards. Joining the Navy was his first choice when he left high school in 1942, but it was not to be.

The Navy Way

Airey recalled that the chief petty officer in the Navy recruiting office was “a belligerent type that really turned me off.” The CPO seemed completely uninterested in the young man before him and told him to come back later. Instead, Airey went down the street and joined the Army Air Forces.

“I owe that petty officer much for changing my mind,” Airey remarked.

After Airey completed basic training at Atlantic City, N.J., the AAF sent him to Scott Field, Ill., to train as an airborne radio operator. “I wanted to be an aerial gunner,” Airey noted, adding, “I got some consolation when I learned that crews on B-17s and B-24s had the radio operator double as a waist gunner.”

He completed radio school at Scott, received his gunnery training at Tyndall Field, Fla., and moved on to Salt Lake City and Boise, Idaho, for crew assignment and transition training for the B-24 aircraft. He was assigned to the 485th Bomb Group, and the crew was ordered to North Africa in March 1944. They took the southern route—West Palm Beach,



As the first Chief Master Sergeant of the Air Force, he paved the way for those who came after him.

Fla., Puerto Rico, British Guiana, and Brazil. From there, the crew crossed the Atlantic to Dakar in West Africa and flew on to Tunisia for a month until an airfield was completed at Foggia, Italy.

Newly promoted Technical Sergeant Airey was on his 28th combat mission in July 1944, flying over oil refineries on the outskirts of Vienna, Austria, when his B-24 was hit by flak.

"We got as far as Hungary when the pilot ordered us to get out," Airey recalled. "There was no hesitation on my part. Right out the camera hatch I went at 18,000 feet. I remember getting the 'psycho card' [radio code] out of my pocket, tearing it up, and scattering it to the wind." Reaching into another pocket, he found his cigarettes, lit one, and waited for the inevitable. It didn't take long arriving.

"As I got closer to the ground," said Airey, "I could see a group of farmers coming after me. I never got out of my harness. I got the hell beat out of me."

German soldiers and police arrived and took him to a local jail for the night. Eventually, he ended up at Stalag Luft IV, a German POW camp near the Baltic Sea. In February 1945, as the Allied armies pushed farther into the Reich, he and 6,000 fellow POWs began a forced march of roughly 400 miles to another camp near Berlin. That's where he ended his POW days; he was liberated by British forces on May 2, 1945.

After a 90-day recuperation leave, and weighing less than 100 pounds, Airey was returned to the United States. There was no question in his mind that he would be going back on duty. "Even as a POW, I was giving much consideration to staying in," he said. "I liked it. There was something about it I wanted. I came off leave and reenlisted."

He was assigned as an instructor at the radio school at Scott Field, where he spent the next six years. In 1951 he was sent to Naha AB, Okinawa, as NCOIC of communications. Responsible for radio repair, the young Airey soon found the tropical moisture and fungi of the place were playing havoc with the radio and radar equipment. He developed a corrosion control assembly line to correct the problem. "I didn't invent anything," Airey said. "The process was there. All you had to do was read it. I dug it out and set it up."

Others thought he deserved high praise. At a ceremony in which he was awarded the Legion of Merit for his initiative, he was credited with saving millions of dollars in electronic equipment that would have otherwise deteriorated.

"First Shirt"

On his return from Okinawa in 1953, Airey made a career change that would set him up as a candidate for the post of Chief Master Sergeant of the Air Force when it was created. He became a first sergeant

at Scott, and over the next 14 years he held "first shirt" assignments at five bases. "Of all the jobs I had in the Air Force, next to being Chief Master Sergeant of the Air Force, I think first sergeant was probably the best," said Airey. "I liked it. I liked the discipline part of it. I liked being able to counsel and lead. You never knew what was going to happen, day or night."

In March 1964, the Air Force Association's Enlisted Council asked USAF to appoint a "Sergeant Major of the Air Force" through whom "enlisted personnel can freely express their opinions and recommendations on matters ranging from mission effectiveness to personal problems." The proposal was turned down but resurfaced in 1965 when the Army created its first Sergeant Major of the Army position.

By 1966, the time was right. At that point, Airey was at Tyndall AFB, the same base at which he had completed gunnery training 23 years earlier. There, he first heard about the proposed CMSAF position. "I thought, whoever gets that job is really going to have to go through a lot," said Airey. "What a great honor it would be, but I didn't think I had any chance of being selected."

Airey was unaware of the Washington political controversy over the proposed position. Principal personalities involved were Gen. John P. McConnell, Air Force Chief of Staff, and Rep. Mendel Rivers (D-S.C.), the powerful chairman of the House Armed Services Committee. Noting that the Army and Marine Corps each had senior enlisted positions, Rivers introduced a bill to establish such a position in each of the armed forces. "The top NCO would advise the leadership on the morale, welfare, and career opportunities of the enlisted men and women of their respective service," the bill read.

Support for the idea grew on Capitol Hill and at the Pentagon. However, resistance to the position by senior officers in some of the services was evident.

McConnell weighed his options and asked for a recommendation from his Air Council. In August 1966, McConnell adopted the Rivers recommendation, with minor changes, and directed that steps be taken to establish the position administratively. Two months later, even though



Newly sworn in, CMSAF Paul W. Airey accepts congratulations from his boss, Gen. John P. McConnell, USAF Chief of Staff, after the April 3, 1967, ceremony installing Airey as the first Chief Master Sergeant of the Air Force.



Visiting the troops became a hallmark of Airey's tenure. Here, he talks with A1C Frederick J. Simmons, 31st Tactical Fighter Wing, in Vietnam in October 1967, while Chief Master Sergeant Hair looks on.

it was clear that the Rivers bill lacked sufficient votes for passage, the Air Force announced the creation of the position of "Chief Master Sergeant of the Air Force," which it said "was to be filled by an individual who will become the highest ranking enlisted member of the Air Force."

"In the field, we knew little about the job," Airey said. "Very little came down through military channels."

The Final Three

Airey, who was by then assigned to Air Defense Command, was one of three finalists interviewed by McConnell and Gen. Bruce K. Holloway, vice chief of staff, at the Pentagon. (The other two were CMSgt. Jefferson F. Marsh of PACAF and CMSgt. Conrad F. Stevens of MAC.) Shortly after their individual interviews with McConnell in January 1967, it was announced that Chief Airey had been selected as the first Chief Master Sergeant of the Air Force.

The installation ceremony for the first CMSAF was held on April 3, 1967, in the filled-to-capacity conference room of the Secretary of the Air Force. In attendance were Chief of Staff McConnell, the deputy chiefs of staff, the Master Chief Petty Officer of the Navy, and the Sergeant Major of the Marine Corps.

Noting that the year 1967 marked the Air Force's 20th anniversary as a separate service, Chief Airey said the changes and progress facilitated

by the enlisted force were hallmarks of those two decades. He also said continued progress was assured because: "It is pride and dedication that keep enlisted men at their posts, not the lure of an easy life and a secure future. For the dedicated airman, it is not only money or the job to be done. It is the desire to serve our country that motivates today's Air Force."

At the ceremony, McConnell told him, "OK, you've got the job. Run with it. You know being Chief Master Sergeant of the Air Force is 90 percent common sense and 10 percent knowledge. You have to try to get along with the Air Staff. There are people who will make a patsy out of you, both officer and enlisted. Others will try to use you. Many will have axes to grind."

The Pentagon was buzzing with reports that McConnell, in fact, wanted no part of the new addition to his staff. Many believed Rivers had forced the position down his throat. For his part, Airey said he was never certain how strong McConnell was for or against the position. "I do know this," said Airey. "After a few months in office, I could not have asked for a better supporter."

Of more concern to Airey was the need to determine his precise duties. There was, obviously, no Air Force precedent. He read and reread the job description. It was his first Pentagon assignment. In fact, until his interview for the job two months

earlier, he had never been in the building.

"I think you have to remember that 1967 was a period of turmoil for many in the United States," he noted. "The leadership recognized the need for improved communications. Maybe that's why the job was established."

Chief Airey spent his first few weeks in a tiny fifth-floor office of the Pentagon as he awaited preparation of his permanent office. From the beginning, Chief Airey made it clear that his office was not going to become a clearinghouse for complaints. At the time, he declared, "This is not an office of the Inspector General, and it is not an assignments office."

It Wasn't Just Vietnam

A solid month of briefings by the Air Staff drove home one point very quickly. Retention was a serious problem. The first-term reenlistment rate was at a 12-year low. The Vietnam War was blamed by most, but Airey believed that equal blame had to be put on the enlisted promotion system.

He recalled, "We had people who were in grade 10 years or more, in frozen career fields, with no opportunity for promotion."

His work with a team of Air Force specialists helped to produce the Weighted Airman Promotion System, which he said is his most important contribution as CMSAF. According to Airey, "The end result was a promotion system which today is still in effect and is by far the fairest, best, most equitable enlisted promotion system of any of the armed forces."

In his second month in office, Airey traveled to Olmsted AFB, Pa., on his first field trip. "The base was scheduled to close, morale was low, and they were looking for a shot in the arm," Airey said. Soon, traveling to visit with the troops in distant locations became a hallmark of his tenure.

He didn't only visit with the enlisted force. On one trip to Maxwell AFB, Ala., he met with Lt. Gen. John W. Carpenter, commander of Air University, about establishing a senior NCO academy for Air Force people. "I felt our senior and chief master sergeants needed more advanced management training than



Airey continues to serve the enlisted force—often working through the Air Force Sergeants Association and AFA and by speaking at enlisted events, such as this occasion last year at the Senior NCO Academy at Maxwell.

was available at the major command academies.” Carpenter favored the idea and said the academy should be at Air University. “I had no strong feelings about where it was located,” Airey said. “I just wanted one.”

Two years after he left office, the academy was approved and then activated in 1972 at Maxwell AFB. Airey is proud of the fact that he is a regular speaker at the school.

Airey sees the academy as the top level of professional military education for an NCO. “I look at it as an inducement, something to strive for,” said Airey. “It should be a prerequisite for promotion to chief. I have heard of senior NCOs who retired rather than go to the academy. My reaction is: Good. Get rid of them. We don’t need them.”

Airey lauds today’s professional military education opportunities, which he believes have caused a transformation of the service.

“The educational level of the enlisted force today is comparable to the officer force that I knew in World War II,” he said. “The majority of the officers in World War II did not have a degree, which would be unthinkable today. If I had to pick 100 chief master sergeants off the ramp today, compared with 100 from the time that I made it, the difference wouldn’t be in guts and ability. It would be in training.”

Waiting, Watching

Still, in the early days, he was not

always welcomed with open arms. He recalled encountering open resistance from various senior officers who had opposed the creation of the CMSAF office on principle. Airey was always conscious that, in such occasions, he had a very high-level audience. “I think the Chief of Staff was watching me and waiting for reports on me,” he recalled. “It took about six months. From then on, things began to look up.”

Airey at times came in contact with Capitol Hill, mostly regarding constituent complaints. Rep. Wright Patman (D-Tex.), the chairman of the House Banking Committee, once asked him to come along on a tour of US military bases in Europe. Patman had received reports that servicemen there were paying usurious rates for loans, and he had sought out Airey upon learning that he had experience working with credit unions. The trip resulted in the establishment of credit unions at US bases in Europe.

Airey learned early that a knack for diplomacy and a tough skin are required equipment for CMSAF. “You are fair game for criticism from people who might not like you just [as a result of] petty jealousies. There are always people who will disagree with

you. I find no fault with that. I’m not going to be liked by everyone.” Airey frequently equates CMSAF duties to that of the first sergeant role that he knew so well. “There are the midnight calls and some unpleasant tasks, but I still think it’s a lot better than running a shop or an office.”

Airey hasn’t seen much change in the job of Chief Master Sergeant of the Air Force since he initiated it in 1967. He has, however, become concerned that, in recent years, nominations for the CMSAF job have become focused on those serving as senior enlisted advisers to the commanders making the nominations. “I am a great believer that the CMSAF does not have to be an SEA. We have a lot of great candidates who hold high-level or visible positions.”

Because he was a pioneer, few at the time noticed that at the end of his term on July 31, 1969, Airey did not retire from the Air Force. He accepted an assignment to Tyndall AFB for one year out of a desire to complete 30 years of service. However, since then, every CMSAF has ended his tour in the top job with a retirement ceremony. Should the CMSAF return to regular Air Force duty following his term of office? Airey, in retrospect, believes not. “To return to the mainstream of the Air Force is a mistake,” he said. “There is no room for two Chief Master Sergeants of the Air Force at any one time.”

In a sense, however, Airey has never left the Air Force. In retirement, he has served as a regional director of the Air Force Sergeants Association and continues to support AFSA programs. He has served as a chapter president of AFA. He makes numerous speaking engagements, usually at leadership schools, NCO academies, dedications, and anniversaries. He is a member of the Board of Trustees for the Airmen Memorial Museum and a member of the Air Force Memorial Foundation and the Air University Foundation.

“I’m as close to the Air Force today as I could possibly be,” said Airey. “I just don’t put the uniform on every morning.” ■

CMSgt. Charles Lucas, USAF (Ret.), was an editor with the Air Force News Service and is a member of AFA’s Veterans/Retiree Council. His most recent article for Air Force Magazine was “Chief Benken,” which appeared in the February 1997 issue.

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"We distributed the first news release on May 6 to 125 targeted media, including wire services and top daily newspapers. The news release focused on the Flinn family's appeal to military authorities to reconsider her court-martial and succinctly outlined how her situation had been mishandled from the beginning. ...

"All along, we downplayed the fact that the Flinn family had hired PR [public relations] counsel. We positioned our role to the media as such: We were assisting with calls because the family was absolutely overwhelmed and unprepared to handle them on their own. Only two news organizations—*Newsweek* and the *Los Angeles Times*—even reported during the crisis that a PR firm had been hired."

From "Bombs Away: Piloting Kelly Flinn's PR Campaign," by Jenny Duffey and Judith Webb, in the August 1997 issue of *Tactics*, journal of the Public Relations Society of America. The authors were hired to handle PR for USAF 1st Lt. Kelly Flinn, who accepted a general discharge in lieu of court-martial for adultery, lying under oath, disobeying a direct order, and fraternization.

Skunk at the Garden Party

"Whenever Clinton Administration officials talk about enlargement, the whole issue is framed as if NATO is a nice club of democratic nations. Some of us recall, however, that NATO is a military alliance based on the willingness of its members to send soldiers to die to protect one another."

Edward Luttwak, a senior analyst with the Center for Strategic and International Studies, as quoted by James Kitfield in the July 1997 issue of *National Journal*.

This Comes Next

"Terrorists can also alter their mode of attack. For instance, some commanders in the Middle East are concerned that terrorists will switch to weapons that can be fired over pe-

rimeter defenses from hidden locations. One US commander was concerned that terrorists could launch indirect fire attacks from several sectors of the surrounding city. Such attacks are difficult to defend against because these weapons can be set up, fired, and moved from concealed areas very quickly. US security officials at a base in Europe said because the host nation-controlled base perimeter is easily penetrated, they believe themselves to be more vulnerable to suitcase bombs than to truck bombs."

From the July 1997 GAO report "Combating Terrorism."

Selective Starvation

"The combination of self-imposed defense spending limits, the spiraling cost of overseas contingency operations, and the need to maintain forces subject to deployment at high rates of readiness has resulted once again in major funding shortfalls throughout other portions of the defense budget.

The committee notes that subsequent to transmittal of the President's budget, the military services identified high-priority, unfunded shortfalls for Fiscal Year 1998 totaling nearly \$11 billion. In addition, the Secretary of Defense has called to the committee's attention nearly \$1.5 billion in additional unbudgeted Fiscal Year 1998 requirements involving defense health care, missile defense and chemical/biological defenses, and a sizable shortage in funding for flying-hour support and related spare parts. Running the gamut from quality of life programs, medical care, training and operating budgets, and weapons modernization and research programs, the Fiscal Year 1998 defense budget submission demonstrably falls short of meeting both the immediate and long-term requirements of the US armed forces."

House Appropriations Committee, in its July 22, 1997, report on Fiscal 1998 defense appropriations.

Now You Know

"In November 1954, CIA had en-

tered into the world of high technology with its U-2 overhead reconnaissance project. ... The agency by August 1955 was testing a high-altitude experimental aircraft—the U-2. It could fly at 60,000 feet; in the mid-1950s, most commercial airliners flew between 10,000 feet and 20,000 feet. Consequently, once the U-2 started test flights, commercial pilots and air traffic controllers began reporting a large increase in UFO sightings.

"The early U-2s were silver (they were later painted black) and reflected the rays from the sun, especially at sunrise and sunset. They often appeared as fiery objects to observers below. Air Force Blue Book investigators, aware of the secret U-2 flights, tried to explain away such sightings by linking them to natural phenomena such as ice crystals and temperature inversions. By checking with the agency's U-2 Project Staff in Washington, Blue Book investigators were able to attribute many UFO sightings to U-2 flights. ...

"According to later estimates from CIA officials who worked on the U-2 project and the Oxcart (SR-71, or Blackbird) project, over half of all UFO reports from the late 1950s through the 1960s were accounted for by manned reconnaissance flights (namely the U-2) over the United States."

From "CIA's Role in the Study of UFOs, 1947-90," an article published in the spring 1997 issue of *Studies in Intelligence*, the CIA's historical journal.

Post Cold War Blues

"We're looking at the full collapse of the armed forces and the liquidation of the country's defense capabilities. They [Russian military units] don't fly; they don't sail; they don't train. ... There are a lot of problems, but the main problem is [a lack of] money."

Retired Russian Gen. Igor Rodionov, a former minister of defense, at an Aug. 5, 1997, Moscow news conference called by a group of former generals opposed to planned military reforms. ■



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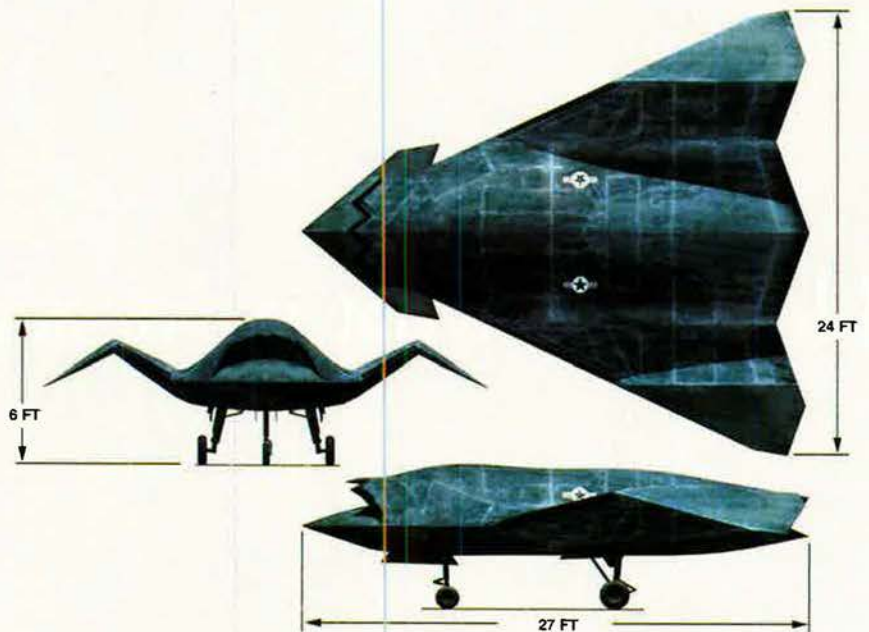
The Robotic Air Force

By John A. Tirpak, Senior Editor

AT Indian Springs, Nev., an odd-looking Air Force airplane rolled “off the perch” and made its final approach. Its bulbous nose, spindly wings, and overall “upside-down” appearance were striking, though the stenciled names of the pilot and crew chief and its unit markings and other insignia gave the gray aircraft an air of familiarity. The pilot flared the landing, brakes were applied, and another 12-hour mission had come to an end. Yet no one jumped out of the aircraft. No one was aboard.

This was no ghost airplane. It was the RQ-1 Predator, operated by the 11th Reconnaissance Squadron. It is the Air Force’s first operational example of a new breed of unmanned aerial vehicles. Smarter, and expected to be cheaper and more reliable than the drones of decades past, Predator and its new-wave UAV kin are paving the way for what could be extensive use of “robot” airplanes. Designed and built for jobs too boring, hazardous, or expensive for aircrews to fly, UAVs may become a prominent feature of early 21st century air warfare.

“UAVs are going to be a big, high leverage, [high] payoff capability for us,” said Air Force Maj. Gen. Kenneth R. Israel, who heads the Defense Airborne Reconnaissance Office (DARO). “UAVs not only save lives, but they also really are very inexpensive to operate.” Israel added that, in a force structure characterized by a “high-low mix” of aircraft, UAVs could have an important niche. “They make a difference in the way you fight, in the way you think,” he asserted, noting that, in ground war



“Robot” planes, like this Northrop Grumman concept for an Uninhabited Combat Aerial Vehicle, could add an entirely new dimension to 21st century warfare. Above right, the present-day Predator UAV operated by the 11th Reconnaissance Squadron already conducts reconnaissance and surveillance missions—providing real-time images in all weather.



games where UAVs play a role, “everybody ... is watching the sky” for the snooping robotic airplanes.

UAVs Outside the Box

Gen. Ronald R. Fogleman, then-Air Force Chief of Staff, said that in the long-range planning process that led to the creation of the Air Force’s new “Global Engagement” doctrine, RAND Corp. produced a study asserting that the Air Force “can no longer ... spend money the way we have been.” Fogleman said he wanted Air Force planners to think “outside the box,” and part of that mandate was to explore emerging technologies “such as UAVs.”

UAVs can be cheap because, without the need to carry life support, instruments, and escape systems for a pilot, they can be any size and can stay aloft or violently maneuver far beyond the limits of human endurance. The absence of aircrew cuts significantly into life-cycle costs.

Missions already being flown by UAVs include point reconnaissance, long-duration surveillance of platoon-size units and headquarters, and real-time imagery of forces on the move, in all weather. UAVs are expected to

adopt soon many of the missions now flown by the SR-71 and U-2 in the realm of fast-response, long-range observation of wide areas.

In addition, the Defense Department now has on the drawing board or is testing new types of UAVs that can laser-designate targets, conduct Suppression of Enemy Air Defense missions, and attack heavily fortified, high-value targets with enough speed and stealth to survive and fight again another day. These lethal types are known as UCAVs, for Uninhabited Combat Aerial Vehicles, or UTAs, for Unmanned Tactical Aircraft. Some said that the US is spending almost as much on these classified, combat UAVs as on unclassified reconnaissance models.

Robot airplanes will also take on increased importance in light of the prospect that future battlespaces will be irradiated or contaminated with chemical or biological agents, situations in which human pilots could not survive.

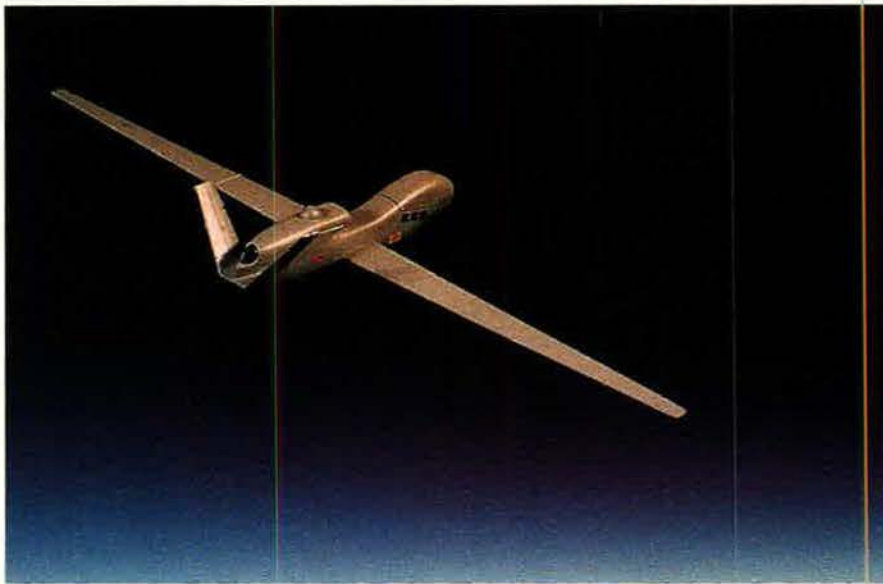
Since the early 1980s, dozens of unclassified types of UAVs have been developed, evaluated, or operated by US armed services, NASA, and other government agencies at a cost of more

than \$7 billion. Results have been mixed. While some of these systems have shown high promise and practical success—Predator racked up intelligence coups in Bosnia and the Navy/Marine Corps Pioneer system proved to be a winner in the Gulf War—others have turned out to be expensive flops.

Despite what Israel acknowledged is a “dotted” past for UAVs, the armed services continue to have faith that they will indeed prove out as force multipliers, and they anticipate developing a significant dependence on unmanned systems in the future.

The UAVs will feed live information to other sensor platforms and to ground stations where the data will be collated and forwarded to headquarters. They can provide uninterpreted imagery directly to troops on the ground or pilots in the cockpit for a real-time update on enemy activity. They will look over hills, observe staging areas, and serve as radio relays and target designators, providing unprecedented visibility of the battlefield or areas of interest.

In a recent interview, Israel displayed a chart describing two dozen



The Teledyne Ryan Global Hawk Tier II Plus, shown here in an artist rendering, is similar to the U-2 in size. Although it and the DarkStar may eventually substitute for the U-2 and SR-71, a Senate panel is concerned that UAV progress has been too slow and has come at the expense of upgrades for proven manned systems.

showing what was happening." While that was dramatic, "I've realized ... our job is to ignore that, go over the horizon, and find out what's not happening yet. ... We were showing the warfighters what they wanted to see, rather than what they needed to see."

The business of exploring the future of UAVs—in an operational sense—falls on the UAV Battlelab at Eglin AFB, Fla. Its commander is Col. Joseph D. Grasso.

A number of battlelabs were created earlier this year to look at innovative ideas that could, without much expense, improve the effectiveness of the USAF. Not intended as system development organizations, the battlelabs look most closely at operational changes or "off-the-shelf" hardware that could benefit their areas of concern.

The UAV Battlelab was located at Eglin AFB because "we wanted to tap into the good ideas" that arise from the testing and training that goes on there, Grasso said. Before the battlelab, "there was no conduit" for such ideas to go up the chain of command. The test infrastructure already at Eglin also played a role in the selection.

In addition, the Air Force wanted to separate the battlelab from the UAV squadron so that the squadron was "not distracted" doing experi-

ments for the battlelab. "We can't task them to do anything," Grasso said. The battlelab will have 25 people, in order to stay "small and focused," he added.

The battlelab will "demonstrate a new capability, report what we found, and make a recommendation to the corporate Air Force" on whether the idea should be implemented.

Grasso said his organization has been "looking around for opportunities" to do UAV experiments with "surrogates: ... you don't have to have a UAV for some concepts."

He may be able to use Hunter vehicles for a demonstration, or he may turn to some of the target drones at Eglin—like the QF-4s, QF-106s, and BQM-34s—or he may simply use manned aircraft based at Eglin, like F-15s, to "fly around and act like you're unmanned."

Among the first experiments the battlelab will conduct will be the use of UAVs to conduct surveillance around the perimeter of an Air Expeditionary Force base. "Force protection is hot right now," Grasso said. The experiment will be conducted jointly with the Force Protection Battlelab.

Some of the first things to be looked at for greater use of UAVs will be "basic enabling" technologies—such as collision avoidance equipment so

UAVs can work on more ranges. Later on, it may be possible to use UAVs in a "hunter-killer" role in the Suppression of Enemy Air Defense role.

"You would use the UAV as the hunter with a precision locator ... and hand off the target to an F-16 with the HARM Targeting System," Grasso said.

The Air Force Requirements Office has said it plans to begin development of a SEAD-capable UAV in 2001, with a deployment as early as 2004.

Industry Interest

Industry has been working hard to develop concepts for UCAVs. Various companies have shown off artists' concepts of UCAVs performing in all manner of roles but mainly in the stealth/precision strike role. Unfettered by the need to stay within the physical limits of a human being, such aircraft could pull 20-g turns, fly upside down for extended periods, and take on missions no human pilot could endure.

After reconnaissance, "I think the next area that starts to make sense for UAVs is some sort of unmanned attack airplane," Fogleman said. "Something that can carry a load of ordnance over a distance, to go ... precisely attack a target."

He envisions "a truck-like vehicle, whether it's stealthy or unstealthy ... that can leverage the tens of thousands of cheap Joint Direct Attack Munitions that we're going to have in the inventory" over the next 20 years.

Grasso sees the UCAV as "off in the distance." He said, "We could go demo next year, ... dropping precision munitions off a UAV. But a lot of people have to be convinced" that it would be safe to put bombs in the "hands" of robots.

"There are a lot of command and control things to work through," Grasso said, to give war planners the confidence that a robot airplane would have the same caution about dropping ordnance in the right place as a human being, and that may be "some time off, yet." Some, like Hampton, argue that day is not that far off.

However, Fogleman noted that for UCAVs to become a reality, "You've got to put a surrogate brain in that airplane. And that's not going to come cheaply or easily." ■

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HISAR imagery courtesy of Hughes Aircraft Company



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China is engaged in a major buildup of conventional and nuclear military forces.



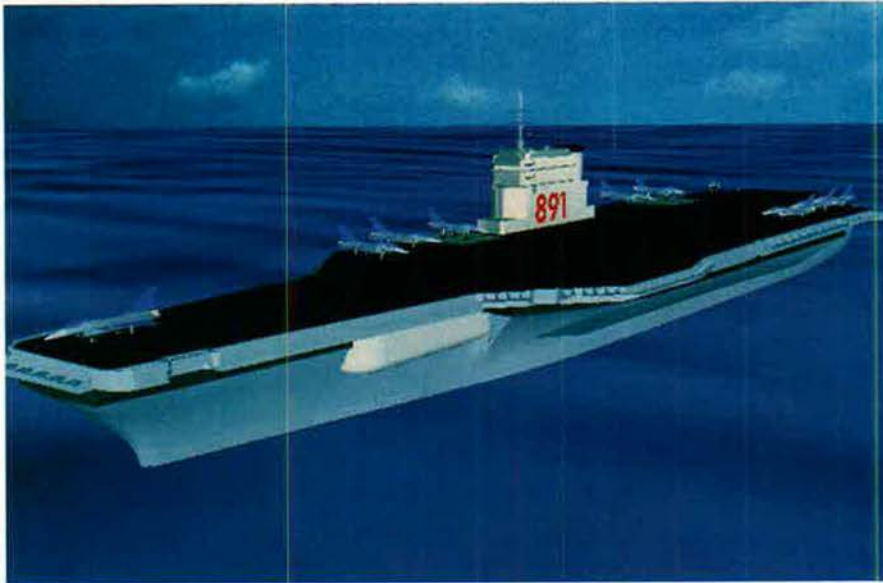
The Chinese Buildup Rolls On



By Bill Gertz

CHINA has embarked on a major military buildup that the Pentagon views as a potential threat to regional stability in the Far East and to US influence in the Pacific and the world. This threat could become reality in 10 to 15 years, DoD officials maintain.

The People's Liberation Army, as the Communist Chinese military is called, is developing six distinct types of fighters—more than any nation—and a new mobile strategic missile that Air Force Intelligence calls a "significant threat" to US forces in the Pacific and portions of the continental United States.



According to the Office of Naval Intelligence, China plans to launch its first aircraft carrier by 2010. The 40,000-ton-class carrier's premier fighter would probably be a navalized version of its indigenous F-10, due out in 2005.

China's recent weapons purchases from Russia comprise advanced warplanes, two guided-missile destroyers, and top-of-the-line artillery. The Office of Naval Intelligence reported that Beijing's leaders are committed to deploying a 40,000-ton-class aircraft carrier by 2010.

US defense officials are reluctant to openly characterize China as a threat, or even potential threat, but China's march to acquire sophisticated weapons, combined with a raft of troubling statements issued by Chinese military officials, has raised new concerns about the world's most populous nation.

The head of US Pacific Command, Adm. Joseph W. Prueher, maintained that US forces are far superior to anything fielded by the Chinese PLA. However, he said he is under no illusions about the potential dangers that a rearmed China could pose in another decade or so. "Our overall strategy is to deal with China from a position of strength," said Prueher, "but we also are focusing on ... China's interests ... and respecting those interests."

China's strategic intentions "are part of every discussion we have with every nation in the theater," he added.

Prueher maintained that Beijing is not now a threat but could well become one through vigorous weapons development and military modernization programs. He said, "In my estimation, China is about a decade

and a half away with its training and equipment before they can put it all together."

New Truculence

The buildup coincides with disturbing instances of truculence in Beijing, especially toward the breakaway nation of Taiwan. In July 1995, following the visit of Taiwan's President to the United States, an angry China carried out a series of ballistic missile test firings whose aim points were only 85 miles off the coast of Taiwan. All the missiles were modern, mobile, and nuclear-capable. These exercises resumed in August 1995 and continued for several months.

The latest in a series of intimidation moves took place in early 1996, just before Taiwan's first Presidential election was held on March 23. Beijing massed troops in China opposite Taiwan and lofted hints that it might attack. For 18 days, Chinese forces carried out menacing war games and imposed a virtual blockade of Taiwan with a series of four short-range-missile tests bracketing the island. US officials said the actions, taken together, could be viewed as a "contingency scenario for an invasion of Taiwan." It was a blatant attempt to influence the election.

The exercises prompted a major show of US force: the deployment of two aircraft carrier battle groups near the island. According to US officials, dispatch of the battle groups shocked

Chinese military leaders, who had questioned American resolve to defend what they regard as a breakaway province. Prueher would say only, "We and the other nations are very much committed to freedom of navigation in the South China Sea."

For Prueher, the Pacific commander, the long-running crisis in the Taiwan Strait was a highly significant event; he said that the world should take it as a wake-up call and ominous reminder that even hoped-for friends can become potential enemies.

Arthur Waldron, a leading China specialist at the US Naval War College, sees troubling signs in China's arms buildup, which is aimed at projecting power far from the mainland's shores, and in recent signs of "aggressive intent," not only over Taiwan but also with respect to the Spratly Islands, in conflicting claims in the South China Sea.

Ross H. Munro, coauthor of a much-discussed new book with the ominous title, *The Coming Conflict With China*, says many US intelligence and policy officials play down the Chinese military threat, comparing China's arsenal with superior US counterparts. "That is a very misleading way to look at rising Chinese military power," he says. "Even today, Chinese military power is much greater than that of Iraq, but Iraq was able to create very serious problems for us."

Beijing's top leaders, in an effort to expand Chinese influence, are making claims to national boundaries that extend 1,000 miles beyond those recognized by most of its neighbors and reach as far south as the southern rim of the South China Sea, says Waldron. "It's illusory to think they can achieve that by military force, but it's a goal, and they are attempting to structure their forces with that as a target," he says. "That is something that must cause us concern."

On the Line

Washington has committed itself to a "one China" policy but has pledged to prevent reunification by force and would surely be drawn into the confrontation if China tried to seize Taiwan. Prueher says China's actions toward Taiwan in the crisis prompted unified resistance from the United States, and many nations in the region are committed to seeing

that China and Taiwan resolve their differences peacefully, he says.

China is making territorial claims to the Spratlys and Paracel Islands that have angered its Asian neighbors. Waldron views the actions as part of a Chinese strategy of challenging US influence in the Pacific by taking actions that are aggressive but which do not necessarily prompt action on the part of the United States.

One of the few US military assessments to be produced recently is a Pentagon study, "Selected Military Capabilities of the People's Republic of China," released in April by the House National Security Committee. It expresses uncertainty about China's ultimate military aims but states flatly, "As an emerging great power, China will probably build its military power to the point where it can engage and defeat any potential enemy within the region with its conventional forces and can deter any global strategic threat to China's national security."

According to the report, China has embarked on a deliberate effort to strengthen itself in seven military areas:

- Sea denial, meaning the ability to prevent another naval power, such as the US, from achieving sea control.
- Advanced intelligence, surveillance, and reconnaissance.
- Accuracy of ballistic and cruise missiles.
- Stronger command and control networks.

- Advanced unmanned aerial vehicles.

- Rapid deployment forces.

- Enhanced precision targeting and strikes.

China, aided by infusions of Russian technology, now has the industrial capacity to produce as many as 1,000 new ballistic missiles within a decade even as it continues developing new land-attack cruise missiles that are a high priority for "theater warfighting and attack."

Rep. Floyd D. Spence (R-S.C.), the chairman of the House National Security Committee, criticized the Pentagon for couching the bad news in the report in "careful bureaucratic language." He warned that the wording cannot mask real fears about China's ultimate aims. "Chinese leaders have said that we are the enemy and stand as the major roadblock checking their desire to dominate East Asia," Spence said, noting that the report "admits as much."

Without Peer—For Now

The Quadrennial Defense Review, completed in May, came to the conclusion that the US will face no "global peer competitor," such as the old Soviet Union, for some time. The QDR also stated the view that no regional power or coalition will be able to amass sufficient conventional military strength in the next 10 to 15 years to defeat US armed forces in a theater war, once the full military potential of the United States is mo-

bilized and deployed to the region of conflict.

Whether the United States will remain the world's sole superpower is less certain, according to the QDR. After 2015, it said, "there is the possibility that a regional great power or global peer competitor may emerge." Russia and China are two candidates to be such competitors, but their futures are "quite uncertain," the review says.

The Pentagon has no doubts, however, that China is engaged in an across-the-board effort to buy and develop advanced weapons that will permit the PLA to challenge US military power in the Pacific. "We aren't trying to portray China as an enemy," a senior military intelligence official says, but "the trend that we see in China—arming itself with strategic capability—is not positive."

China's military buildup includes a range of new and modern weapons that US officials say are directed at countering US airpower, surface warships, and submarines.

- At least three current-generation fighters: the license-built Russian Su-27 air-superiority fighter, the indigenous F-10 multirole fighter, due out in 2005, and an aircraft carrier aircraft (possibly a derivative of the F-10). The Chinese also are designing an advanced fighter with radar-evading stealth characteristics known as the XXJ, along with a new FB-7 light strike aircraft, an improved F-8 interceptor, and the FC-1, a light fighter based on the MiG-21 that the Chinese will export.

China currently has over 50 Su-27s, purchased from Russia, and by 2012 will have built or purchased over 250 of the fighters equipped with advanced radar and AA-11 radar-guided missiles capable of hitting targets beyond visual range.

- At least one aircraft carrier with a displacement of over 40,000 tons that will be fielded by 2010.

- Beijing recently concluded a deal with Russia to buy two *Sovremenny*-class destroyers that will be armed with SS-N-22 cruise missiles that were designed specifically to attack US AEGIS-class ships. Pentagon officials said the Russian destroyer purchase, part of a weapons purchase worth between \$8 billion and \$10 billion, was a direct response to the deployment of US aircraft carriers during the Taiwan crisis.



Beijing plans to equip two *Sovremenny*-class destroyers with next-generation Russian SS-N-22 *Sunburn* antiship cruise missiles. US defense officials say China will advance a generation with the new supersonic *Sunburns*.

■ China is building a new version of the 8,000-mile CSS-4 nuclear missile and in 1995 conducted the first test of a new road-mobile ICBM believed to be similar in design to the Russian SS-25. The DF-31 will be deployed within the next three years. The DF-31, with a range of 5,000 miles, will be deployed on mobile launchers and submarines. Another new missile, the DF-41, will be deployed around 2000 and will have a range of up to 7,500 miles. China will be only the second nation in the world to field hard-to-find, road-mobile nuclear missiles.

■ China's strategic force of some 17 single-warhead, land-based ballistic missiles will be equipped with multiple independently retargetable warheads. The strategic force also includes more than 70 medium-range nuclear missiles and one *Xia*-class ballistic-missile submarine with 12 CSS-N-3 nuclear missiles.

■ In addition to the Russian-made destroyers, which will be used to enhance Chinese naval technology, China is focusing vast resources on building several new types of surface warships, notably adding to the two *Luhu*-class guided-missile destroyers and five *Jiangwei*-class guided-missile frigates now in its fleet.

■ The conversion of five B-6 bombers into aerial refueling tankers was described in one Pentagon intelligence report last year as part of an effort to extend the range of Chinese aircraft over large areas of the Pacific. "By

1997, Chinese tanker and receiver aircraft probably will be able to perform some long-range escort, air-to-air, and ground-attack missions over the South China Sea or elsewhere in the region," the report stated.

■ Development of new nuclear submarines to replace China's aging diesel submarines. The first is a new attack submarine called the "Type 093" that is expected soon after 2000, according to DoD. The submarine will use advanced quieting, weapons, and sensors and will be equipped with torpedoes, antisubmarine warfare missiles, and a submarine-launched anti-ship cruise missile based on an advanced version of China's C801, the ONI report states.

China also is building a new ballistic-missile submarine that DoD believes is part of China's "announced long-term national goal of attaining a survivable nuclear retaliatory force." The "Type 094" submarine will be built early in the next century, will be the largest Chinese submarine, and is expected to be armed with 16 JL-2 missiles, each with a range of 4,000 miles. "When deployed in the next decade, this missile will allow Chinese SSBNs to target portions of the United States for the first time from operating areas located near the Chinese coast," the ONI report states.

■ Purchase of four new *Kilo*-class submarines from Russia. Two *Kilos* have been delivered and a third will be launched soon in St. Petersburg. According to ONI, the last two *Kilos* will be upgraded submarines that

were described in a recent publication as "one of the quietest diesel submarines in the world."

"In addition, *Kilos* are exported with a weapons package that includes both wake-homing and wire-guided acoustic homing torpedoes," the report states. The Russian wake-homing torpedo is described by DoD as highly effective and designed to ignore acoustic ship defenses and evasive maneuvers.

■ China's military is actively acquiring Western and US military technology. For example, a Chinese company last year obtained sophisticated US power transmission devices used in airborne missile guidance and fire-control radar, targeting systems, and navigation pods.

■ China is investing in advanced Russian and Western surface-to-air missile systems, including up to 100 of Russia's SA-10 long-range SAMs used to protect major government and industrial centers. Beijing also is producing new shoulder-fired anti-aircraft missiles copied from Russia's SA-7. The Chinese air-defense developments emphasize building weapons that are capable of detecting and eventually engaging radar-evading stealth aircraft and cruise missiles—all systems owned exclusively by the United States.

■ Purchase from Russia of 10 Il-76 aircraft transports, 24 Mi-17 assault helicopters, and some 50 T-72 tanks.

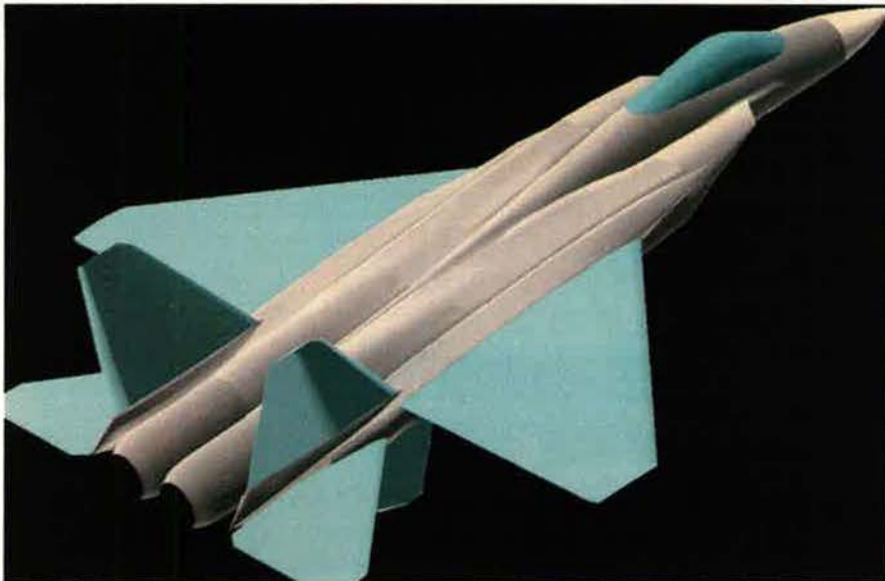
Military analysts are impressed not only with China's drive to acquire advanced platforms but also with their weapons and support systems. For example, each of the two *Sovremenny*-class missile destroyers that Beijing is buying from Russia will be equipped with up to eight SS-N-22 Sunburn antiship cruise missiles. China also is buying *Kilo* submarines from Russia—as many as 10 vessels—and each could be equipped with up to 10 wake-homing torpedoes that are especially deadly and hard to counter.

China is expected to field up to 250 Su-27s (NATO "Flanker"), including Russian-purchased jets, jets assembled in China, and those that eventually will be indigenously produced from scratch, said Naval Intelligence. The Flanker—the closest competitor to the F-15—is China's only fourth-generation fighter and will be equipped with world-class

Facts and Figures on the China Military Machine

ARMED FORCES

Active:	2.9 million
Reserves:	1.2 million
Army:	2.2 million
Air Force:	470,000
Navy:	175,000
Marines:	90,000



China is currently developing at least six tactical aircraft, including an indigenous F-10 multirole fighter and, still in conceptual design this even more advanced XXJ—featuring radar-evading stealth characteristics.

AA-10 and AA-11 air-to-air missiles and beyond-visual-range, radar-guided missiles.

Michael Pillsbury, a China specialist and senior defense official during the Reagan and Bush Administrations, says the public debate on the China threat is healthy. "Chinese diplomacy since 1992 has succeeded in intimidating foreign specialists from even talking publicly about a China threat," he says.

"Chinese purchases of Russian wake-homing torpedoes for their *Kilo* submarines, ECM pods for their Flankers, [and] Sunburns for their destroyers already escalate the challenge to US forces in Asia," Pillsbury warns. "China's new conventional missiles that can reach our bases in South Korea, Okinawa, Japan, and even Guam will have a chilling effect on future Presidents considering the use of force. China's robust space program already possesses an inherent capability for a direct ascent, antisatellite missile of the type the Russians have had for two decades."

Analysts contend that, despite China's claims of benign intent, its military buildup can only be viewed as provocative. Sen. Jon L. Kyl (R-Ariz.), a member of the Senate Intelligence Committee, said, "The kinds of things the Chinese are doing to enhance their military capability are both offensive in nature, in the sense they involve power projection, and also out of proportion to any threat. That's the con-

cern the policy-makers have."

Military analysts said that the kind of weapons being purchased and developed include systems that seem specifically designed for attacking US ships and aircraft, including a deal with Moscow to buy two Russian warships with SS-N-22 antiship cruise missiles. The SS-N-22 is a high-speed missile that Moscow developed specifically to destroy US AEGIS-class ships.

"Significant Threat"

A recent report by the Air Force's National Air Intelligence Center reveals that China's new DF-31 mobile ICBM will be deployed around the turn of the century and "will narrow the gap between current Chinese, US, and Russian ballistic missile designs." The report added, "It will be a significant threat not only to US forces deployed in the Pacific theater, but to portions of the continental United States and to many of our allies."

Actual construction of a Chinese carrier has not begun, but US naval intelligence officials say the multibillion-dollar program is under way and will be a major step forward for a sea-and-air-oriented strategy of projecting power up to 1,000 miles from China's east coast. Chinese

success at operating a carrier, which requires unique tactical skills and special aircraft, is not certain. "This is a future kind of thing," says a US Navy intelligence analyst. "We say it will be around 2010, or about 13 years away."

A Pentagon specialist on China says the Chinese army, with some 2.2 million troops, is not modernizing as rapidly as is the case with its naval and air forces. The ground forces are likely in the future to be called on to maintain civil order in the western and northern regions rather than to defend borders. A key component of China's ground force modernization is the purchase of Russian 120 mm self-propelled gun mortars. About 100 have been purchased so far and more are expected.

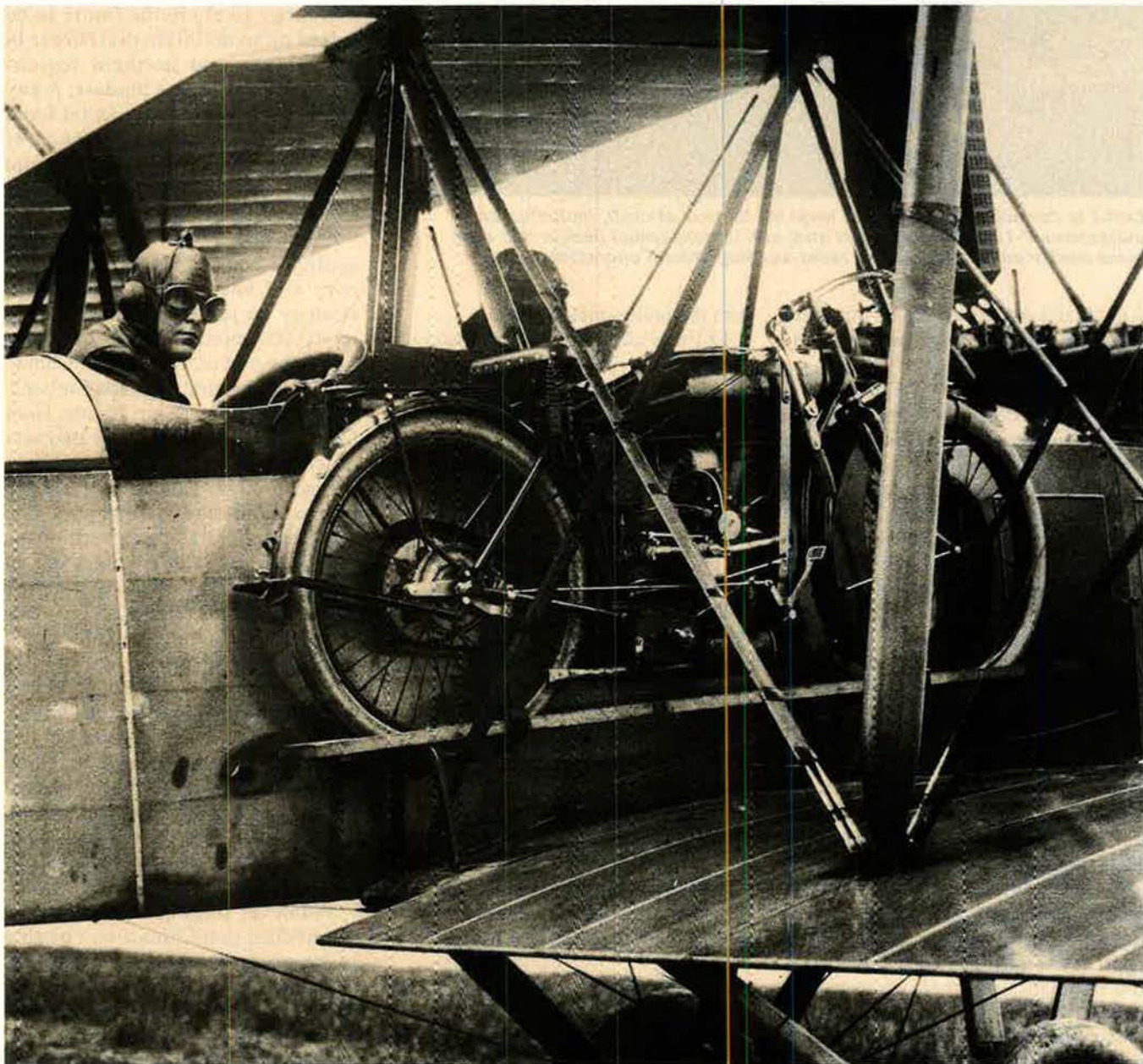
China has begun seeking high-quality, advanced-technology weaponry and has focused its military strategy on projecting power along its 10,000 nautical miles of coastline as part of a "Two Island Chain" strategy. The strategy calls for beefing up naval and air forces from China's east coast to cover two sets of islands. One stretches south from Japan through Taiwan and all the way to Indonesia and Singapore. The other embraces a huge swath of the Pacific Ocean that includes all of Japan's islands, areas beyond the Mariana Islands, and a line extending southward hundreds of miles west of the Philippines.

"The Chinese navy should exert effective control of the seas within the first island chain," said Gen. Liu Huaqing, head of the PLA Navy. "'Offshore' should not be interpreted as 'coastal' as we used to know it. Offshore is a concept relative to the high seas. It means the vast sea waters within the second island chain."

Whatever Beijing's intentions, it seems clear that China won't be able to go on too much longer without creating a major response from nations such as Japan, Korea, and Taiwan. As the report of the QDR put it, "China's efforts to modernize its forces and improve its power-projection capabilities will not go unnoticed, likely spurring concerns from others in the region." ■

Bill Gertz covers national security affairs and defense for the Washington Times. His most recent article for Air Force Magazine, "Crowding In on the High Ground," appeared in the April 1997 issue.

Fully Equipped



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Glenn L. Martin, aviation pioneer, wrote a letter to the Los Angeles Times on Aug. 7, 1914, stating that the airplane would practically decide the war in Europe. "For the old-time war tactics are no more," he said. "The generals who realize this quickest and fight first with the flying death will win." In 1916, when the War Department asked Martin

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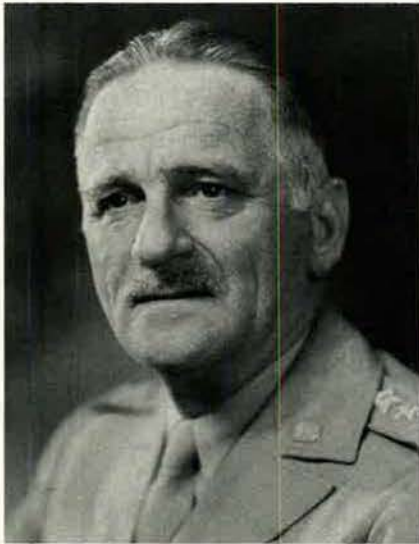


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Maj. Gen. Earle E. Fartridge



Asst. Chief of Air Staff 4
Maj. Gen. Edward M. Powers



Asst. Chief of Air Staff 5
Maj. Gen. Otto P. Weyland

Major Commands

Air Defense Command

Mitchel Field, N.Y.



Commander
Lt. Gen. George E. Stratemeyer

1st Air Force
Maj. Gen. Robert W. Douglass Jr.
Ft. Slocum, N.Y.

2d Air Force
Maj. Gen. Frederick W. Evans
Ft. Crook, Neb.

4th Air Force
Maj. Gen. Willis H. Hale
Hamilton Field, Calif.

10th Air Force
Maj. Gen. Howard M. Turner
Brooks Field, Texas

11th Air Force
Maj. Gen. Thomas J. Hanley Jr.
Olmsted Field, Pa.

14th Air Force
Brig. Gen. Leo A. Walton
Orlando, Fla.

Strategic Air Command

Bolling Field, D.C.



Commander
Gen. George C. Kenney

8th Air Force
Maj. Gen. Clement McMullen
Fort Worth, Texas

15th Air Force
Maj. Gen. Charles F. Born
Colorado Springs, Colo.

20th Air Force
Maj. Gen. Francis H. Griswold
Andersen Field, Guam

311th Reconnaissance Wing
Brig. Gen. Donald R. Hutchinson
MacDill Field, Fla.

Tactical Air Command

Langley Field, Va.



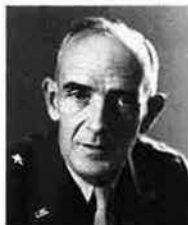
Commander
Maj. Gen. Elwood R. Quesada

9th Air Force
Maj. Gen. Paul L. Williams
Biggs Field, Texas

12th Air Force
Maj. Gen. William D. Old
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Maxwell Field, Ala.



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Air Tactical School
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Tyndall Field, Fla.

Air Command and Staff School
Brig. Gen. Earl W. Barnes
Maxwell Field, Ala.

Air War College
Maj. Gen. Orvil A. Anderson
Maxwell Field, Ala.

AAF Institute of Technology
Vacant
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Mitchel Field, N.Y.



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Lt. Gen. George E. Stratemeyer

Air Materiel Command

Wright Field, Ohio



Commander
Gen. Joseph T. McNarney

Air Transport Command

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Maj. Gen. Robert W. Harper

Air University

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Commander
Maj. Gen. Muir S. Fairchild

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Commander
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 Compiled by Juliette Kelsey-Holland, Editorial Associate
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Maj. Gen. Gregory S. Martin



Director, Operations and Training
Vacant



Director, Weather
Brig. Gen. Fred P. Lewis

**Deputy Chief of Staff,
Installations and Logistics**
Lt. Gen. William P. Hallin



Civil Engineer
Maj. Gen. Eugene A. Lupia



Director, Maintenance
Brig. Gen. Michael E. Zettler



Director, Plans and Integration
Robert D. Wolff



Director, Supply
Brig. Gen. Leon A. Wilson Jr.



Director, Transportation
Brig. Gen. Mary L. Saunders



Director, Services
Vacant

**Deputy Chief of Staff,
Personnel**
Lt. Gen. Michael D. McGinty



Director, Civilian Personnel Policy and Personnel Plans
Sandra G. Grese



Director, Military Personnel Policy
Brig. Gen. John F. Regni



Director, Personnel Programs, Education, and Training
Brig. Gen. Michael S. Kudlacz

Deputy Chiefs of Staff (continued)

Deputy Chief of Staff,
Plans and Programs
Lt. Gen. Lawrence P.
Farrell Jr.



Director, Programs
Brig. Gen. Joseph H. Wehrle Jr.



Director, Strategic Planning
Maj. Gen. David W. McIlvoy



**Director, Manpower,
Organization, and Quality**
Brig. Gen. Larry W.
Northington



Director, Systems
Col. Anthony W. Bell



Director, Plans and Programs
Col. Michael A. Cuolo

Air Force Acquisition System

Asst. Secretary of the Air
Force for Acquisition
Hon. Arthur L. Money



**Principal Deputy Asst. Secretary
of the Air Force for Acquisition**
Lt. Gen. George K. Mueller

**Principal Deputy Asst. Secretary
for Acquisition and Management**
Darleen A. Druyun

**Program Executive Officer
Airlift and Trainers**
Brig. Gen. Richard V. Reynolds

**Program Executive Officer
Combat Support Systems**
John M. Gilligan

**Program Executive Officer
Command, Control, and
Communications**
Brig. Gen. (sel.) Craig P. Weston

**Program Executive Officer
Fighter and Bomber Programs**
Maj. Gen. Robert F. Raggio

**Program Executive Officer
Joint Logistics Systems**
Oscar A. Goldfarb

**Program Executive Officer
Space Systems**
Brent R. Collins

**Program Executive Officer
Weapons**
Harry E. Schulte

Major Commands

Air Combat Command

Hq. Langley AFB, Va.



Commander
Gen. Richard E. Hawley

Vice Commander
Lt. Gen. Brett M. Dula

1st Air Force
Maj. Gen. Philip G. Killey
Tynccall AFB, Fla.

8th Air Force
Lt. Gen. Phillip J. Ford
Barksdale AFB, La.

9th Air Force
Lt. Gen. Carl E. Franklin
Shaw AFB, S.C.

12th Air Force
Lt. Gen. Frank B. Campbell
Davis-Monthan AFB, Ariz.

Air Warfare Center
Maj. Gen. Marvin R. Esmond
Nellis AFB, Nev.

Air Education and Training Command

Hq. Randolph AFB, Texas



Commander
Gen. Lloyd W. Newton

Vice Commander
Lt. Gen. John C. Griffith

2d Air Force
Maj. Gen. Andrew J. Pelak Jr.
Keesler AFB, Miss.

19th Air Force
Maj. Gen. Kurt B. Anderson
Randolph AFB, Texas

**Air Force Security Assistance
Training Squadron**
Col. Joseph E. Edwards
Randolph AFB, Texas

Air University
Lt. Gen. Joseph J. Redden
Maxwell AFB, Ala.

Air Force Recruiting Service
Brig. Gen. Walter E. Buchanan III
Randolph AFB, Texas

**Willford Hall USAF Medical
Center (59th Medical Wing)**
Maj. Gen. Paul K. Carlton Jr.
Lackland AFB, Texas

**Air Force Officer Accession
and Training Schools**
Col. Julius R. McRee
Maxwell AFB, Ala.

Air Force Materiel Command

Hq. Wright-Patterson AFB, Ohio



Commander
Gen. George T. Babbitt Jr.

Vice Commander
Lt. Gen. (sel.) Stewart E.
Cranston

Aeronautical Systems Center
Lt. Gen. Kenneth E. Eickmann
Wright-Patterson AFB, Ohio

Electronic Systems Center
Lt. Gen. Ronald T. Kadist
Hanscom AFB, Mass.

Human Systems Center
Brig. Gen. John G. Jernigan
Brooks AFB, Texas

**Space and Missile Systems
Center**
Lt. Gen. Robert G. DeKok
Los Angeles AFB, Calif.

US Air Force Museum
Charles D. Metcalf
Wright-Patterson AFB, Ohio

**Air Force Development Test
Center**
Maj. Gen. Michael C. Kostelnik
Eglin AFB, Fla.

Air Force Flight Test Center
Maj. Gen. Richard L. Engel
Edwards AFB, Calif.

**Arnold Engineering
Development Center**
Col. Robert W. Chodister
Arnold AFB, Tenn.

Ogden Air Logistics Center
Maj. Gen. Richard H. Roellig
Hill AFB, Utah

Oklahoma City Air Logistics Center
Maj. Gen. Charles H. Perez
Tinker AFB, Okla.

Sacramento Air Logistics Center
Maj. Gen. Eugene L. Tattini
McClellan AFB, Calif.

San Antonio Air Logistics Center
Maj. Gen. James S. Childress
Kelly AFB, Texas

Warner Robins Air Logistics Center
Maj. Gen. Rondal H. Smith
Robins AFB, Ga.

**Aerospace Maintenance and
Regeneration Center**
Col. Gregory O. Stanley
Davis-Monthan AFB, Ariz.

**Cataloging and Standardization
Center**
Col. Thomas L. Shively
Battle Creek, Mich.

**Air Force Security Assistance
Center**
Brig. Gen. Antonio J. Ramos
(As of Sept. 10)
Wright-Patterson AFB, Ohio

Materiel Systems Group
Col. Charlotte L. Rea-Dix
Wright-Patterson AFB, Ohio

Joint Logistics Systems Center
Brig. Gen. David A. Herreiko
Wright-Patterson AFB, Ohio

Air Force Research Laboratory
Maj. Gen. Richard R. Paul
Wright-Patterson AFB, Ohio

**Air Force Office of Scientific
Research**
Dr. Joseph F. Janni
Bolling AFB, D.C.

Air Force Reserve Command

Hq. Robins AFB, Ga.



Commander
Maj. Gen. Robert A.
McIntosh

Vice Commander
Maj. Gen. James E. Sherrard III

4th Air Force
Maj. Gen. (sel.) Wallace W.
Whaley
McClellan AFB, Calif.

10th Air Force
Maj. Gen. David R. Smith
NAS Fort Worth JRB, Carswell
Field, Texas

22d Air Force
Brig. Gen. Michael R. Lee
Dobbins AFB, Ga.

Air Force Space Command

Hq. Peterson AFB, Colo.



Commander
Gen. Howell M. Estes III

Vice Commander
Lt. Gen. Lance W. Lord

14th Air Force
Maj. Gen. Gerald F. Perryman Jr.
Vandenberg AFB, Calif.

20th Air Force
Maj. Gen. Donald G. Cook
F.E. Warren AFB, Wyo.

Space Warfare Center
Erig. Gen. Glen W. Moorhead III
Falcon AFB, Colo.

Air Force Special Operations Command

Hq. Hurlburt Field, Fla.



Commander
Maj. Gen. Charles R.
Holland

Vice Commander
Brig. Gen. Michael W. Wooley

16th Special Operations Wing
Col. Richard L. Comer
Hurlburt Field, Fla.

352d Special Operations Group
Col. Michael Planert
RAF Mildenhall, UK

353d Special Operations Group
Col. Gerald Folkerts
Kadena AB, Japan

720th Special Tactics Group
Col. James L. Oeser
Hurlburt Field, Fla.

**USAF Special Operations
School**
Col. Brian Maher
Hurlburt Field, Fla.

Air Mobility Command

Hc. Scott AFB, Ill.



Commander
Gen. Walter Kross

Vice Commander
Lt. Gen. John B. Sams Jr.

15th Air Force
Lt. Gen. Charles T. Robertson Jr.
Travis AFB, Calif.

21st Air Force
Lt. Gen. John W. Handy
McGuire AFB, N.J.

Air Mobility Warfare Center
Brig. Gen. William Welsler III
McGuire AFB, N.J.

Tanker Airlift Control Center
Brig. Gen. (sel.) Duncan J.
McNabb
Scott AFB, Ill.

Pacific Air Forces

Hq. Hickam AFB, Hawaii



Commander
Gen. Richard B. Myers

Vice Commander
Lt. Gen. Eugene D. Santarelli

5th Air Force
Lt. Gen. John B. Hall Jr.
Yokota AB, Japan

7th Air Force
Lt. Gen. Joseph E. Hurd
Osan AB, Korea

11th Air Force
Lt. Gen. Patrick K. Gamble
Egmond AFB, Alaska

13th Air Force
Maj. Gen. John R. Dailager
Andersen AFB, Guam

15th Air Base Wing
Col. Ann M. Testa
Hickam AFB, Hawaii

United States Air Forces in Europe

Hq. Ramstein AB, Germany



Commander
Gen. Michael E. Ryan
(Nominated for Chief of
Staff July 31, 1997)

Vice Commander
Lt. Gen. William J. Begert

3d Air Force
Maj. Gen. William S. Hinton Jr.
RAF Mildenhall, UK

16th Air Force
Lt. Gen. Richard C. Bathurem
Aviano AB, Italy

Field Operating Agencies

Air Force Agency for Modeling and Simulation

Orlando, Fla.



Col. Jimmy H. Wilson
Commander

Air Force Audit Agency

Washington



Auditor General
Jackie R. Crawford

Air Force Base Conversion Agency

Arlington, Va.



Director
Albert F. Lowas Jr. (acting)

Air Force Center for Environmental Excellence

Brooks AFB, Texas



Director
Gary M. Erickson

Air Force Center for Quality and Management Innovation

Randolph AFB, Texas



Commander
Brig. Gen. Hugh C. Cameron

Air Force Civil Engineer Support Agency

Tyndall AFB, Fla.



Commander
Col. H. Dean Bartel

Air Force Communications Agency

Scott AFB, Ill.



Commander
Col. Gilbert R. Hawk

Air Force Cost Analysis Agency

Arlington, Va.



Commander
Col. (sel.) Ed Weeks

Air Force Flight Standards Agency

Andrews AFB, Md.



Commander
Col. Patrick F. Nolte

Air Force Frequency Management Agency

Arlington, Va.



Commander
Col. Roderick A. Taylor

Air Force Historical Research Agency

Maxwell AFB, Ala.



Commander
Col. William E. Mathis

Air Force History Support Office

Washington



Commander
Col. Christine L. Jaremk

Air Force Inspection Agency

Kirtland AFB, N.M.



Commander
Col. James C. Robertson III

Air Force Legal Services Agency

Bolling AFB, D.C.



Commander
Col. Jerald D. Stubbs

Air Force Logistics Management Agency

Maxwell AFB, Gunter Annex, Ala.



Commander
Col. Richard M. Bereit

Field Operating Agencies (continued)

Air Force Medical Operations Agency
Bolling AFB, D.C.



Commander
Maj. Gen. Earl W. Mabry II

Air Force Medical Support Agency
Brooks AFB, Texas



Commander
Col. Sidney Brandle

Air Force News Agency
Kelly AFB, Texas



Commander
Col. Harold J. Smarkola Jr.

Air Force Office of Special Investigations
Bolling AFB, D.C.



Commander
Brig. Gen. Francis X. Taylor

Air Force Operations Group
Washington



Commander
Col. James S. Sheehan

Air Force Pentagon Communications Agency
Washington



Commander
Col. Richard H. Hange

Air Force Personnel Center
Randolph AFB, Texas



Commander
Maj. Gen. Susan L. Pamerleau

Air Force Personnel Operations Agency
Washington



Director
Susan A. O'Neal

Air Force Program Executive Office
Washington



Air Force Acquisition Executive
Hon. Arthur L. Money

Air Force Real Estate Agency
Bolling AFB, D.C.



Director
William E. Edwards

Air Force Review Boards Agency
Andrews AFB, Md.



Director
Joe G. Lineberger

Air Force Safety Center
Kirtland AFB, N.M.



Director
Maj. Gen. Francis C. Gideon Jr.

Air Force Security Forces Agency
Kirtland AFB, N.M.

Note: Merges with Air Force Security Forces Center and moves to Lackland in October 1997.



Commander
Col. Lawrence R. Mayes

Air Force Services Agency
San Antonio, Texas



Commander
Col. Gary C. Bradham

Air Force Studies and Analyses Agency
Washington



Commander
Col. Thomas L. Allen

Air Force Technical Applications Center
Patrick AFB, Fla.



Commander
Col. John T. Wingington III

Air Intelligence Agency
Kelly AFB, Texas



Commander
Brig. Gen. James E. Miller Jr.

Air National Guard
Washington



Director
Brig. Gen. Paul A. Weaver Jr.

Field Operating Agencies (continued)

**Air Reserve
Personnel
Center**
Denver



Commander
Col. Frank P. Cyr Jr.

**Air Weather
Service**
Scott AFB, Ill.



Commander
Col. Joseph D. Dushan

**Joint Combat
Rescue
Agency**
Langley AFB, Va.



Commander
Col. Denver L. Pietcher

**Joint Services
Survival,
Evasion,
Resistance,
and Escape
Agency**
Ft. Belvoir, Va.



Commander
Col. John C. Chapman Jr.

Direct Reporting Units

**Air Force
Communica-
tions and
Information
Center**
Washington



Commander
Lt. Gen. William J. Donahue

**Air Force
Doctrine
Center**
Maxwell AFB, Ala.



Commander
Maj. Gen. Ronald E. Keys

**Air Force
Operational
Test and
Evaluation
Center**
Kirtland AFB, N.M.



Commander
Maj. Gen. Jeffrey G. Cliver

**Air Force
Security
Forces Center**
Lackland AFB, Texas



Commander
Brig. Gen. Richard A. Coleman Jr.

**United States
Air Force
Academy**
Colorado Springs, Colo.



Superintendent
Lt. Gen. Tad J. Oelstrom

11th Wing
Bolling AFB, D.C.



Commander
Col. Peter U. Sutton

Senior Enlisted Advisers



CMSgt. Jim Finch
Air Combat Command
Langley AFB, Va.



CMSgt. Kenneth E. Hair
Air Education and Training Command
Randolph AFB, Texas



CMSgt. Marc A. Mazza
Air Force Materiel Command
Wright-Patterson AFB, Ohio



CMSgt. Carol A. Smits
Air Force Reserve Command
Robins AFB, Ga.



CMSgt. Robert M. Clougherty
Air Force Space Command
Peterson AFB, Colo.



CMSgt. Mike Reynolds
Air Force Special Operations
Command
Hurlburt Field, Fla.



CMSgt. Garland E. Gardner
Air Mobility Command
Scott AFB, Ill.



CMSgt. Dennis Fritz
Pacific Air Forces
Hickam AFB, Hawaii



CMSgt. Ken Casey
United States Air Forces in Europe
Ramstein AB, Germany



CMSgt. David I. Priest
Air Force Office of Special
Investigations
Bolling AFB, D.C.



CMSgt. Edwin B. Brown
Air National Guard
Andrews AFB, Md.



CMSgt. David Hill
Air Intelligence Agency
Kelly AFB, Texas



CMSgt. Wayne D. Petro
11th Wing
Bolling AFB, D.C.



CMSgt. Nicholas S.P. Davis Jr.
United States Air Force Academy
Colorado Springs, Colo.

Air Force Generals Serving in Joint and International Assignments

Office of the Secretary of Defense

Lt. Gen. Norman G. Lezy
Deputy Ass. Secretary of Defense (Military Personnel Policy)
Asst. Secretary of Defense (Force Management Policy)
Undersecretary of Defense (Personnel and Readiness)

Maj. Gen. Robert S. Dickman
DoD Space Architect
Undersecretary of Defense for Acquisition and Technology

Maj. Gen. Kenneth R. Israel
Director, Defense Airborne Reconnaissance Office and Asst. Deputy
Undersecretary of Defense (Airborne Reconnaissance)
Undersecretary of Defense for Acquisition and Technology

Maj. Gen. William F. Moore
Director, Special Programs
Undersecretary of Defense for Acquisition and Technology

Brig. Gen. Howard G. DeWolf
Director, Inter-American Region
Asst. Secretary of Defense (International Security Affairs)
Undersecretary of Defense for Policy

Brig. Gen. Paul L. Bielowiez
Commander, Defense Supply Center Columbus
Defense Logistics Agency
Columbus, Ohio

Brig. Gen. John W. Meincke
Vice Director
Defense Information Systems Agency
Arlington, Va.

Brig. Gen. John W. Rutledge
Director, Customer Support Office
National Imagery and Mapping Agency
Fairfax, Va.

Brig. Gen. Glen D. Shaffer
Asst. Deputy Director, Operations
National Security Agency
Ft. Meade, Md.

Brig. Gen. Richard W. Davis
Asst. Deputy for Theater Missile Defense Programs
Ballistic Missile Defense Organization

Brig. Gen. James E. Miller Jr.
Director, Joint Command and Control Warfare Center
Kelly AFB, Texas

Maj. Gen. John D. Hopper Jr.
Vice Director, Logistics

Maj. Gen. Hal M. Hornburg
Commander, Joint Warfighting Center
Ft. Monroe, Va.

Maj. Gen. Silas R. Johnson Jr.
Deputy Director, Operations
National Military Command Center

Maj. Gen. Stephen B. Plummer
Director, Joint Theater Air and Missile Defense Organization

Brig. Gen. Patrick D. Adams
Director, Manpower and Personnel

Brig. Gen. David E. Baker
Deputy Director, Operations (National Systems Support)

Brig. Gen. Robert R. Dierker
Deputy Director, International Negotiations

Department of Defense Agencies

Lt. Gen. Lester L. Lyles
Director, Ballistic Missile Defense Organization

Lt. Gen. Kenneth A. Minihan
Director, National Security Agency
Ft. Meade, Md.

Maj. Gen. Gary L. Curtin
Director, Defense Special Weapons Agency
Alexandria, Va.

Brig. Gen. Timothy P. Malishenko
Deputy Director, Acquisition Management, and Commander, Defense
Contract Management Command
Defense Logistics Agency
Ft. Belvoir, Va.

Joint Chiefs of Staff

Gen. Michael E. Ryan
Chief of Staff, United States Air Force
(Nominated July 31; not confirmed as of Sept. 1.)

Gen. Joseph W. Raiston
Vice Chairman, Joint Chiefs of Staff

Lt. Gen. David J. McCloud
Director, Force Structure, Resources, and Assessment

Brig. Gen. John H. Campbell
Deputy Director, Operations (Current Readiness and Capabilities)

Lt. Gen. Robert H. Foglesong
Deputy Director, Politico-Military Affairs

Joint Service Schools

Brig. Gen. William R. Looney III
Commandant, Armed Forces Staff College
National Defense University
Norfolk, Va.

US Atlantic Command

Gen. Richard E. Hawley
Commander, Air Force Component
Langley AFB, Va.

Maj. Gen. William T. Hobbins
Director, Plans and Policy
Norfolk, Va.

US Central Command

Lt. Gen. Carl E. Franklin
Commander, US Central Command Air Forces
Shaw AFB, S.C.

Maj. Gen. Thomas R. Case
Director, Operations
MacDill AFB, Fla.

Maj. Gen. Roger R. Radcliff
Commander, Joint Task Force—Southwest Asia
Riyadh, Saudi Arabia

Maj. Gen. John L. Welds
Deputy Commander, US Central Command Air Forces
Shaw AFB, S.C.

Brig. Gen. Harry D. Raduege Jr.
Director, C⁴ Systems
MacDill AFB, Fla.

US European Command

Gen. James L. Jamerson
Deputy Commander in Chief, US European Command
Stuttgart-Vaihingen, Germany

Gen. Michael E. Ryan
Commander, Air Force Component
Ramstein AB, Germany
(Nominated for USAF Chief of Staff; not confirmed as of Sept. 1, 1997.)

Maj. Gen. Michael J. McCarthy
Director, Plans and Policy
Stuttgart-Vaihingen, Germany

Maj. Gen. Raymond P. Huot
Chief, Office of Defense Cooperation to Turkey
Ankara, Turkey

Brig. Gen. Donald A. Lamontagne
Commanding General, Combined Task Force Operation Northern Watch
Incirlik AB, Turkey

Brig. Gen. Glen D. Shaffer
Director of Intelligence
Stuttgart-Vaihingen, Germany
(As of Sept. 30)

Brig. Gen. Charles E. Croom Jr.
Director, C⁴ Systems
Stuttgart-Vaihingen, Germany

US Pacific Command

Gen. Richard B. Myers
Commander, Air Component
Hickam AFB, Hawaii

Lt. Gen. Patrick K. Gamble
Commander, Alaskan Command
Elmendorf AFB, Alaska

Lt. Gen. John B. Hall Jr.
Commander, US Forces Japan
Yokota AB, Japan

Brig. Gen. Kenneth W. Hess
Deputy Director, Plans and Policy
Camp H.M. Smith, Hawaii

Brig. Gen. Norton A. Schwartz
Commander, Special Operations Command Pacific
Camp H.M. Smith, Hawaii

US Southern Command

Lt. Gen. Frank B. Campbell
Commander, US Southern Command Air Forces
Davis-Monthan AFB, Ariz.

Maj. Gen. Thomas J. Keck
Vice Commander, US Southern Command Air Forces
Davis-Monthan AFB, Ariz.

Brig. Gen. Randall M. Schmidt
Commander, US Southern Command Air Forces Forward
Howard AFB, Panama

Brig. Gen. Antonio J. Ramos
Special Asst. to the Commander in Chief for Regional Negotiations
Quarry Heights, Panama

US Space Command

Gen. Howell M. Estes III
Commander in Chief, US Space Command
DoD Manager for Manned Spaceflight Support Operations
Peterson AFB, Colo.

Maj. Gen. Jeffrey R. Grime
Commander, Cheyenne Mountain Operations Center
Cheyenne Mountain AS, Colo.

Maj. Gen. Gerald F. Perryman Jr.
Component Commander, USAF Space Operations
Vandenberg AFB, Calif.

Maj. Gen. John L. Woodward Jr.
Director, Command Control Systems
Peterson AFB, Colo.

Maj. Gen. Rodney P. Kelly
Director of Operations
Peterson AFB, Colo.

US Special Operations Command

Maj. Gen. Charles R. Holland
Commander, Air Force Component
Hurlburt Field, Fla.

Maj. Gen. Maxwell C. Bailey
Director, Operations
MacDill AFB, Fla.

Brig. Gen. Michael N. Farage
Deputy Commanding General, Joint Special Operations Command
Ft. Bragg, N.C.

Brig. Gen. Gary W. Heckman
Director, Resources
MacDill AFB, Fla.

US Strategic Command

Gen. Eugene E. Habiger
Commander in Chief
Offutt AFB, Neb.

Lt. Gen. Frank B. Campbell
Commander, Air Force Component
Davis-Monthan AFB, Ariz.

Maj. Gen. Donald G. Cook
Commander, ICBM (CTF-214) Task Force
F.E. Warren AFB, Wyo.

Maj. Gen. Thomas J. Keck
Vice Commander, Air Force Component
Davis-Monthan AFB, Ariz.

Maj. Gen. Ronald C. Marcotte
Director, Plans and Policy
Offutt AFB, Neb.

Brig. Gen. Robert F. Behler
Director, C⁴
Offutt AFB, Neb.

Brig. Gen. Tiiu Kera
Director, Intelligence
Offutt AFB, Neb.

Brig. Gen. Timothy J. McMahon
Deputy Director, Operations and Logistics, and Director, Combat
Operations Staff
Offutt AFB, Neb.

US Transportation Command

Gen. Walter Kross
Commander in Chief
Scott AFB, Ill.

Maj. Gen. Charles H. Coulidge Jr.
Director, Operations and Logistics
Scott AFB, Ill.

Brig. Gen. Stephen E. Kelley
Director, C⁴ Systems
Scott AFB, Ill.

Brig. Gen. Leonard M. Randolph Jr.
Command Surgeon
Scott AFB, Ill.

Brig. Gen. Gilbert J. Regan
Chief Counsel
Scott AFB, Ill.

North Atlantic Treaty Organization

Gen. Michael E. Ryan
Commander, Allied Air Forces Central Europe
Ramstein AB, Germany
(Nominated for USAF Chief of Staff; not confirmed as of Sept. 1, 1997.)

Lt. Gen. Richard C. Bethurem
Commander, Allied Air Forces Southern Europe
Aviano AB, Italy

Lt. Gen. Nicholas B. Kehoe III
Deputy Chairman, Military Committee
Brussels, Belgium

Maj. Gen. Charles R. Hellebower
Asst. Chief of Staff, Operations and Logistics Division
Supreme Headquarters Allied Powers Europe
Mons, Belgium

Maj. Gen. David R. Love
Deputy Commander, 6th Allied Tactical Air Force, Allied Air Forces
Southern Europe
Izmir AS, Turkey

Maj. Gen. John F. Miller Jr.
Chief of Staff, Allied Forces Northern Europe
Stavanger, Norway

Maj. Gen. Thomas C. Waskow
Chief of Staff, Allied Air Forces Southern Europe
Naples, Italy

Brig. Gen. William M. Guth
Asst. Chief of Staff, Operations
Allied Air Forces Northwestern Europe
RAF High Wycombe, UK

Brig. Gen. Robert M. Murdock
Deputy US Military Representative to the NATO Military Committee
Brussels, Belgium

Brig. Gen. Maurice L. McFann Jr.
Commander, E-3A Component Command, NATO Airborne Early Warning
Force
Gellenkirchen AB, Germany

Brig. Gen. Ralph Pasini
Vice Director, Allied Command Europe Reaction Force Air Staff
Kalkar, Germany

Brig. Gen. James N. Soligan
Executive Officer to Supreme Allied Commander Europe
Supreme Headquarters Allied Powers Europe
Mons, Belgium

Brig. Gen. Scott P. Vancielef
Director, Combined Air Operations Center
5th Allied Tactical Air Force, Allied Air Forces Southern Europe
Vicenza, Italy

Brig. Gen. Garry R. Trexler
Deputy Commander, 5th Allied Tactical Air Force, Allied Air Forces
Southern Europe
Vicenza, Italy

North American Aerospace Defense Command

Gen. Howell M. Estes III
Commander in Chief, North American Aerospace Defense Command
Peterson AFB, Colo.

Lt. Gen. Patrick K. Gamble
Commander, Alaskan NORAD Region
Elmendorf AFB, Alaska

Maj. Gen. Jeffrey R. Grime
Commander, Cheyenne Mountain Operations Center
Cheyenne Mountain AS, Colo.

Maj. Gen. John L. Woodward Jr.
Director, Command Control Systems
Peterson AFB, Colo.

Brig. Gen. Thomas L. Baptiste
Deputy Commander, Canadian NORAD Region
CFB North Bay, Ontario, Canada

Brig. Gen. Paul D. Nielsen
Director, Plans
Peterson AFB, Colo.

United Nations Command Korea

Lt. Gen. Joseph E. Hurd
Deputy Commander in Chief, United Nations Command, Korea
Commander, US Forces Korea
Commander, Air Component Command, ROK/US Combined Forces
Command
Osan AB, Korea

Maj. Gen. Michael V. Hayden
Deputy Chief of Staff, United Nations Command, Korea
Deputy Chief of Staff, US Forces Korea
Yongsan, Korea

Central Intelligence Agency

Lt. Gen. John A. Gordon
Associate Director, Central Intelligence for Military Support

Departments of the Army and the Air Force

Maj. Gen. Allen D. Bunger
Commander, Army and Air Force Exchange Service
Dallas, Texas



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THE U.S. AIR FORCE 50 CHRONOMAT

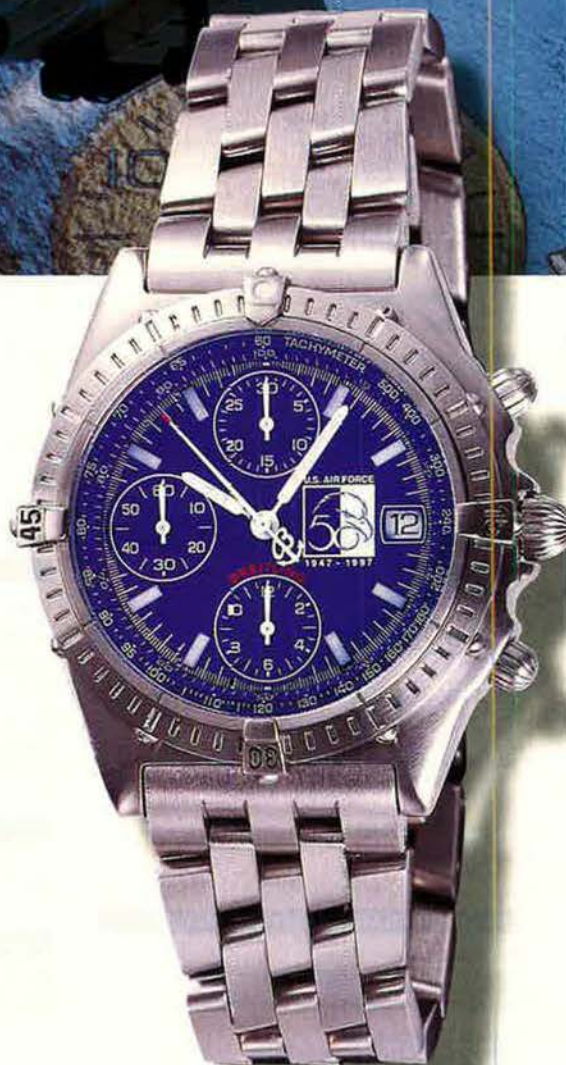
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Public Affairs' Best

Public affairs personnel try to expand public awareness of and support for the Air Force through public affairs offices, Air Force bands, and broadcast services. Their products reach a broad audience, including military leaders and personnel, news media, civic leaders, and the public at large.

At a dinner honoring the awardees, AFA President Doyle E. Larson noted, "At no other time in Air Force history has the military's relationship with the American public been more critical. Getting the Air Force story to that public in a timely, authoritative, and professional manner is the job of public affairs."

Pictured from (l-r):

SSgt. John Hancock, chief, News Services Branch, Air Force Personnel Center, Randolph AFB, Texas, organized AFPC's World Wide Web page—featuring a "hot news" section. AFPC attributed a 16 percent increase in USAF members' awareness of personnel issues, based on a public affairs survey, to Hancock's distribution of 238 press releases. It was the biggest two-year jump in the survey's history and earned the unit a Public Relations Society of America Silver Anvil Award. Following the aircraft crash that killed Commerce Secretary Ron Brown, there was intense pressure for early release of casualty information on the crew, but Hancock's thoroughness ensured that accurate information was released.

SSgt. Leslie McCoy, a public affairs specialist in community relations at AFMC's Robins AFB, Ga., created and implemented the "Friends of Robins Air Force Base Day," designed to foster base and community relations. Her Community Team Talk program drew 350 area attendees who were briefed on Warner Robins Air Logistics Center's mission and strategic plan and the community's role in bringing that about. For Sen. Sam Nunn's retirement, she



planned and managed a three-day program of events honoring his relationship with Robins and the mid-Georgia community.

SrA. William Granger serves as principal tubist with the Concert Band, Dixieland Band, and Tuba Ensemble with the Band of the Air Force Reserve at Robins AFB, Ga. As the volunteer recording production coordinator, he worked up four major recording projects—managing all contracting details, including selection of the recording facility, recording engineer, graphic cover art, and CD booklet design. He also coordinated the "Holidays at the Ryman Radio Show," which played to American troops worldwide and included USAF 50th-anniversary messages. The recording was also released to US commercial radio stations with more than 200 broadcasts, worth \$1 million in advertising.

As a soprano with the Singing Sergeants/USAF Band at Bolling AFB, D.C., **TSgt. Carol Wiley** was featured soloist on a three-week spring CONUS tour. She performed in a "Porgy and Bess" duet

and sang a moving rendition of the spiritual "Swing Low, Sweet Chariot" before a crowd of 32,000. As final soloist in a new opera medley during a fall US tour, Wiley appeared in seven performances before 10,000 people. She coordinated the first Singing Sergeants Classics Series, organizing three concerts. As acting chief of operations, she booked more than 30 performances.

TSgt. Christopher Beckwith, a writer-producer at Air Force Electronic News Division, Air Force News Agency, Kelly AFB, Texas, was covering the F-111 to F-16 conversion at Cannon AFB, N.M., when he spontaneously reported on a family reunion when a unit returned from Southwest Asia. Upon release of the investigation into the CT-43 crash that killed Commerce Secretary Ron Brown, Beckwith wrote and produced an on-deadline, but complete, story—aired as a special "Eye on the Air Force" report. When the German Air Force Training Center opened at Holloman AFB, N.M., Beckwith organized the news conference for the Defense Secretary's briefing to national and local media. ■

AFA and the Air Force recognize the best crews, crew chief, and aerial tactician for their 1996 accomplishments.

USAF's Best in Operations

Gen. Jerome F. O'Malley Award

Best Reconnaissance Crew

Cobra Ball crews from the 45th Reconnaissance Sq. and the 97th Intelligence Sq. set new excellence marks during overseas taskings last year. On one mission, the composite crew, based at Offutt AFB, Neb., flew from Australia to the Indian Ocean within seconds of a specific time—an unprecedented achievement in airborne reconnaissance.

Pictured, back row (l-r): TSgt. Robert Brandriff, 1st Lt. William Buschur, Capt. Richard Sutton, TSgt. Mark Trimmer, SSgt. Gregory Roseberry, Capt. Clinton Wander III, Capt. David Pavik, SSgt. Thomas Lawton, SSgt. Andre McClen-don. Front row (l-r): Capt. Daniel Talati, Capt. Stephen Taylor, Capt. Michael Clay, Capt. James Partin, and SSgt. William Maner. Not pictured: Maj. David Kersey, MSgt. Stephen Wilhelmsen, MSgt. Wendell Miller, and SrA. Jeffrey Nichols.



Brig. Gen. Ross G. Hoyt Award

Outstanding Air Refueling Aircrew

Cool heads prevailed on the 909th Air Refueling Sq.'s KC-135R flight TORA 98, during a potentially disastrous in-flight emergency. While on an air refueling mission from Misawa AB, Japan, to the island of Ckinawa on June 16, 1996, the aircraft lost all direct current electrical power and had other systems failures: All fuel control valves, the primary engine instruments, and aircraft radar were down. For communications, only the long-range high-frequency radio worked, but it could not be used for air traffic control. Approaching nightfall, worsening weather, and a 3,500-foot obscuring cloud deck added complications. The crew set up a telephone patch via HF between Yokota Global and Radar Approach Control. With that patch and despite no antiskid control, the crew successfully landed the \$50 million aircraft at Yokota AB, Japan.

Pictured (l-r) are SSgt. Rodney Cline, Capt. Samuel Lightfoot Jr., Capt. Scott Fitzgerald, and Capt. Daniel Taylor. Not pictured: Capt. Lawrence Fahy and MSgt. William Shippey.

Gen. Curtis E. LeMay Award

Outstanding Bomber Aircrew

Crew A72, 96th Bomb Sq., Barksdale AFB, La., conducted the first combat sortie and live Conventional Air-Launched Cruise Missile launch for the B-52H during Operation Desert Strike in September 1996.

Leading a three-ship formation from Andersen AFB, Guam, the crew had to replan the mission in flight because of aerial refueling delays and routing and target time changes. When two missiles malfunctioned, the crew carried out a restrike, despite additional risk, to complete the mission in a combat zone. Leaving the area, the crew successfully evaded interception by potentially hostile aircraft.

Pictured (l-r) from the Desert Strike mission are Lt. Col. Floyd Carpenter, Capt. John Miller, Capt. William Simpson, Capt. Grey Morgan, Capt. Gary Brooks, Capt. Alan Ringle, and Capt. David Mack.



Lt. Gen. Claire L. Chennault Award

Outstanding Aerial Warfare Tactician

With ACC's 366th Wing, Mountain Home AFB, Idaho, Maj. Mark Altobelli is an expert on the F-16's Suppression of Enemy Air Defense capability. He wrote the F-16 SEAD section of the Multicommand Manual 3-1, Volume 5. All Block 50 units rely on his techniques and briefing guides, and his work appears in the F-16 classified tactics manual. Altobelli applied his knowledge when the 366th deployed to Jordan as part of Air Expeditionary Force II. Instead of using the F-16's standard load of two AGM-88 HARMs, he introduced a new mix of one AGM-65G Maverick missile and one AGM-88. This innovation enabled the F-16s to "hard" kill surface-to-air missile sites with the Maverick as well as the HARM. A live firing proved the mix would enhance F-16 lethality in combat.

Gen. Thomas S. Power Award

Outstanding Missile Combat Crew

First Lt. Dona'd Holloway (left) and Capt. Eric Brown earned top honors as the "Best Missile Operations Crew" at Guardian Challenge 1996, scoring 1,824 points out of 2,100. Their prowess earned the Blanchard Trophy for the 90th Missile Wing's 319th Missile Sq., F.E. Warren AFB, Wyo. As a missile combat crew commander, Holloway directed maintenance, security, and operations actions during the annual cryptographic code change—the most difficult task in peacetime—on time and error free. Brown teaches two different weapon systems and is a certified evaluator. All of his students achieved ratings of "highly qualified." In simulator software tests, Brown's identification of programming errors led to correction of 150 hours of training scripts.





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Space Operations Award

Best Space Operations Crew

Dedicating the Sept. 12, 1996, launch of a Global Positioning System satellite to US POW/MIAs, the 45th Space Wing's Delta II GPS II-27 launch crew at Cape Canaveral, Fla., set a new record in GPS orbital accuracy. Backed by extensive technical knowledge and thorough preparation, the crew resolved last-minute problems—some created by Hurricane Fran—quickly to adhere to the launch schedule. After the storm passed, they launched on time and on target. Air Force Space Command declared the satellite operational two weeks ahead of schedule.

Pictured (l-r) are 1st Lt. Dawn Rea, Capt. Al Wassel, 1st Lt. Gregg Leisman, Joel Tumbiolo, Capt. Rob Stanley, Capt. Dave Bliesner, and 1st Lt. Steve Lang.

Lt. Gen. William H. Tunner Award

Outstanding Airlift Aircrew

For seven narrowing days in April 1996, the Sea Lion 23 crew, 21st Special Operations Sq., RAF Mildenhall, UK, helped evacuate 2,114 noncombatants from the chaos in Monrovia, Liberia. As part of a 13-aircraft operation, the MH-53J Pave Low helicopter crew inserted Navy SEAL security forces to help set up a landing zone in the US Embassy compound. The crew successfully carried out several nighttime and daytime evacuations in the midst of hostile gunfire and civilians desperate to leave Monrovia.

Sea Lion 23 evacuated the last 16 Americans from the embassy. The crew also achieved the first C-17 airlift of an MH-53 J helicopter.

The crew: Maj. Charles Harmon, Capt. Gordon Moore, MSgt. Michael Nicholas, SSgt. Todd Buice, SSgt. Joseph Frank Jr., and SrA. Sean Burnett.



USAF photo by SrA. Richard M. Hellman



CMSAF Thomas N. Barnes Award

USAF's Top Crew Chief

SSgt. Daniel Paris' detailed knowledge of the KC-135 was a crucial factor in the 22d Air Refueling Wing's top score of 1,674 out of 1,700 points, earning the unit the "Best KC-135 Maintenance" and "Best KC-135 Postflight" awards at the USTRANSCOM 1996 Rodeo competition. In the postflight inspection, Paris' airframe expertise enabled the McConnell AFB, Kan., unit to score 599 out of 600 points. On deployment to Istres, France, in support of Operation Decisive Endeavor, his efforts resulted in a 97 percent mission-capable rate, helping reach a 99 percent overall KC-135 MICAP. Result: 76 sorties flown and 3.6 million pounds of fuel off-loaded to 520 allied receivers. ■

AFA and USAF recognize the best Reserve and Guard airmen, crews, and units for their 1996 accomplishments.

Best of Reserve and Guard



Outstanding Air Force Reserve Unit

Top AFRC Unit of the Year

Based at Tinker AFB, Okla., the 507th Wing provides airlift, refueling, and airborne command and control support for Air Mobility Command and Air Combat Command. For Operation Joint Endeavor, the 507th served as the main component for a 135-day deployment to Taszar, Hungary, providing logistical, administrative, and engineering support, as well as airlift. The wing's 513th Air Control Group became the first reservists to assist in a counternarcotics surveillance mission. During US Strategic Command's Global Guardian exercise, the wing deployed a KC-135R tanker aircraft and crew on short notice to Bangor IAP, Maine, to support refugee relief operations in Rwanda and Zaire. The 507th also chalked up 12 years and three months of flight operations without a single Class A mishap.

Pictured (l-r) is the first alert crew: Lt. Col. Ted White, Capt. Mike Cahill, Maj. Bill Tabor, SMSgt. Jim Hackworth, and TSgt. Rick Abbott.

Outstanding Air National Guard Unit

Top ANG Unit of the Year

The 146th Airlift Wing, assigned to Channel Islands Air Guard Station, Port Hueneme, Calif., deployed its members on supporting missions from Panama to Thailand, while simultaneously sending troops in support of operations Joint Endeavor in Bosnia and Southern Watch in Kuwait. During this demanding optempo, the wing achieved a landmark safety record of 30 years (more than 250,000 hours) of accident-free flying. Fire-fighting efforts in support of the US Forest Service from August through October engaged 120 personnel and six aircraft in 116 sorties. The crews dropped 3.4 million pounds of fire retardant, saving lives, property, and natural resources in a year of rampant fires.



President's Award

Outstanding Air Force Reserve Aircrew

Maj. Leonard Dick, weapons officer, 302d Fighter Sq., Luke AFB, Ariz., graduated with the Top Flying Award in his F-16 class at the six-month USAF Weapons School course. He also took the 1996 William Tell Top Gun trophy as team leader for the 944th Fighter Wing. A flight examiner with 12th Air Force's inspection team rated Dick as "exceptionally qualified" for his work as mission commander during a Joint exercise with the Marines. His abilities were also key to the wing's overall outstanding rating. Dick participated in Air Force Reserve Command's precision guided munitions working group, where his guidelines helped enhance F-16 precision strike and night combat capability.



Maj. Gen. Earl T. Ricks Award

Outstanding Airmanship in the Air National Guard

It had been a routine weapons delivery sortie, and the four F-16s were returning to Andrews AFB, Md. Suddenly, as Capt. Christian Rose throttled his aircraft to climb, the engine made a loud noise, then started to vibrate forcefully. Rose quickly informed his flight lead that his engine had failed. Using the next critical minutes to position the powerless aircraft for a flameout landing, he jettisoned his external fuel tanks into an empty field. Rose navigated by radio calls from his flight lead, his sight of a nearby landing field obscured by clouds. At five miles out and 5,000 feet above ground, he spotted the airfield. The pilot, from the 113th Wing, S.E., D.C. ANG, landed his crippled fighter safely.

CMSgt. Dick Red Award

Outstanding ANG Aerospace Maintenance

CMSgt. Brank Wade, stationed with the Air National Guard's 134th Air Refueling Wing, McGhee Tyson Airport, Tenn., specializes in KC-135 maintenance and safety. Wade rewrote many of the KC-135 compliance and standardization directives and included self-assessment checklists for guidance on proper procedures concerning maintenance. Under his leadership, the 134th has received eight Air Force Outstanding Unit Awards. His emphasis on safety directly contributed to the unit's accumulation of 100,000 accident-free flying hours. Wade was tapped as the Guard representative on a team assigned to rewrite the operations plan for KC-135 support of NATO AWACS training and NATO exercises. ■





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Books

Compiled by Juliette Kelsey-Holland, Editorial Associate

Astor, Gerald. *The Mighty Eighth: The Air War in Europe as Told by the Men Who Fought It.* Donald I. Fine Books, 375 Hudson St., New York, NY 10014. 1997. Including photos, bibliography, sources, and index, 464 pages. \$26.95.

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Clancy, Tom, with Gen. Fred Franks Jr., USA (Ret.). *Into the Storm: A Study in Command.* G.P. Putnam's Sons, 200 Madison Ave., New York, NY 10016. 1997. Including photos, maps, and bibliography, 531 pages. \$27.50.

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glossary, notes, and index, 345 pages. \$32.95.

Mehring, MSgt. James A., USAF (Ret.). *One Patriot's Saga: An Enlisted Man's Story of WW II, Korea, and Vietnam.* Pentland Press, Inc., 5124 Bur Oak Cir., Raleigh, NC 27612. 1997. Including photos and appendix, 177 pages. \$24.95.

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AFA/AEF Almanac

AFA Units of the Year

YEAR	RECIPIENT(S)
1953	San Francisco Chapter (Calif.)
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 (Calif.)
1959	Cleveland Chapter (Ohio)
1960	San Diego Chapter (Calif.)
1961	Chico Chapter (Calif.)
1962	Fort Worth Chapter (Texas)
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 (Ga.)
1972	Utah State AFA
1973	Langley Chapter (Va.)
1974	Texas State AFA
1975	Alamo Chapter (Texas) 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 (Okla.)
1981	Alamo Chapter (Texas)
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 (Fla.) 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 (Fla.)

Profiles of AFA Membership

As of June 1997 (Total 160,816)

62%	One-year members	Of AFA's service members (who account for about 10 percent of the US Air Force total strength):
12%	Three-year members	
26%	Life Members	61% are officers
		39% are enlisted
23%	Active-duty military	
43%	Retired military	Of AFA's retired military members:
18%	Former service	75% are retired officers
6%	Guard and Reserve	25% are retired enlisted
6%	Patron	
2%	Cadet	
2%	Spouse/widow(er)	

AFA "Member of the Year" Award Recipients

State names refer to winner's home state at the time of the award.

YEAR	RECIPIENT(S)	YEAR	RECIPIENT(S)
1953	Julian B. Rosenthal (N.Y.)	1975	Martin M. Ostrow (Calif.)
1954	George A. Anderl (Ill.)	1976	Victor R. Kregel (Texas)
1955	Arthur C. Storz (Neb.)	1977	Edward A. Stearn (Calif.)
1956	Thos. F. Stack (Calif.)	1978	William J. Demas (N.J.)
1957	George D. Hardy (Md.)	1979	Alexander C. Field Jr. (Ill.)
1958	Jack B. Gross (Pa.)	1980	David C. Noerr (Calif.)
1959	Carl J. Long (Pa.)	1981	Daniel F. Callahan (Fla.)
1960	O. Donald Olson (Colo.)	1982	Thomas W. Anthony (Md.)
1961	Robert P. Stewart (Utah)	1983	Richard H. Becker (Ill.)
1962	(no presentation)	1984	Earl D. Clark Jr. (Kan.)
1963	N.W. DeBerardinis (La.) and Joe L. Shosid (Texas)	1985	George H. Chabott (Del.) and Hugh L. Enyart (Ill.)
1964	Maxwell A. Kriendler (N.Y.)	1986	John P.E. Kruse (N.J.)
1965	Milton Caniff (N.Y.)	1987	Jack K. Westbrook (Tenn.)
1966	William W. Spruance (Del.)	1988	Charles G. Durazo (Va.)
1967	Sam E. Keith Jr. (Texas)	1989	O.R. Crawford (Texas)
1968	Marjorie O. Hunt (Mich.)	1990	Cecil H. Hopper (Ohio)
1969	(no presentation)	1991	George M. Douglas (Colo.)
1970	Lester C. Curl (Fla.)	1992	Jack C. Price (Utah)
1971	Paul W. Gaillard (Neb.)	1993	Lt. Col. James G. Clark (D.C.)
1972	J. Raymond Bell (N.Y.) and Martin H. Harris (Fla.)	1994	William A. Lafferty (Ariz.)
1973	Joe Higgins (Calif.)	1995	William N. Webb (Okla.)
1974	Howard T. Markey (D.C.)	1996	Tommy G. Harrison (Fla.)
		1997	James M. McCoy (Neb.)

Air Force Association National Presidents



James H. 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



D.R. Crawford
1990-92



James M. McCoy
1992-94



Gene Smith
1994-96



Doyle E. Larson
1996-

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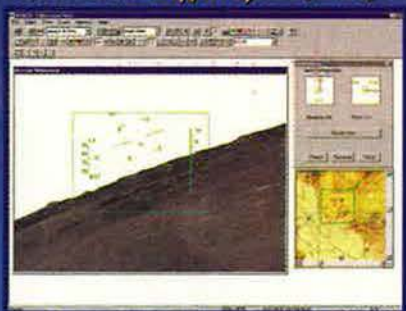
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Virginia 9,000

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Lynchburg 103
Northern Shenandoah Valley 137
Richmond 467
Roanoke 297
Tidewater 353
William A. Jones III 185

West Virginia 359

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Tucson 1,708

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 E. LeMay 1,066
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San Diego 1,103
Tennessee Ernie Ford 991

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Guam-Arc Light 263

Hawaii 1,236

Hawaii* 1,207
Maui 29

Nevada 2,340

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Thunderbird 1,852

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Chicagoland-O'Hare 1,079
Greater Rockford 102
Illini 271
Land of Lincoln 200
Lee Cordell Memorial 420
Quad Cities 282
Scott Memorial 1,840

Indiana 1,777

Central Indiana 456
Columbus-Bakalar 47
Falls Cities 58
Fort Wayne 225
Grissom Memorial 195
Gus Grissom 149
Lawrence D. Bell Museum 300
Lester W. Johnston 43
P-47 Memorial 64
Southern Indiana 143
Terre Haute-Wabash Valley 97

Kentucky 785

Gen. Russell E. Dougherty 401
Lexington 256
West Kentucky 128

Michigan 2,467

Battle Creek 236
Huron 142
James H. Straubel 933
Kalamazoo 275
Lake Superior Northland 230
Lloyd R. Leavitt Jr. 160
Mid-Michigan 96
Mount Clemens 313
PE-TO-SE-GA 82

Ohio 5,607

Capt. Eddie Rickenbacker
 Memorial* 679
Cleveland 423
Frank P. Lahm 574
Mid-Ohio 180
Steel Valley 233
Wright Memorial* 3,518

Wisconsin 1,314

Badger State 259
Billy Mitchell 678
Madison 377

MIDWEST REGION 6,711

John J. Politi

Iowa 743

Gen. Charles A. Horner 277
Lancer 172
Northeast Iowa 96
Richard D. Kising 198

Kansas 1,208

Contrails 65
Lt. Erwin R. Bleckley 766
Maj. Gen. Edward R. Fry 377

Missouri 2,309

Central Missouri 523
Harry S. Truman 631
Ozark 249
Spirit of St. Louis 906

Nebraska 2,451

Ak-Sar-Ben 2,161
Lincoln 290

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Dr. Phillip J. Sleeman

Connecticut 1,019

Central Connecticut 123
Charles A. Lindbergh 143
First Connecticut 159
Flying Yankees 142
Gen. Bennie L. Davis 62
Gen. George C. Kenney 81
Igor Sikorsky 117
Northern Connecticut 143
Sgt. Charlton Heston 49

Maine 392

Eastern Maine 215
Maj. Charles J. Loring Jr. 97
Southern Maine 80

Massachusetts 2,488

Boston 206
Laurence G. Hanscom 183
Maj. John S. Southrey* 263
Minuteman 307
Otis 193
Paul Revere 792
Pioneer Valley 205
Taunton 162
Worcester* 177

New Hampshire 840

Amoskeag 309
Pease 531

Rhode Island 241

Metro Rhode Island 241

Vermont 253

Burlington 253

NORTH CENTRAL REGION 2,900

Vic Seavers

Minnesota 1,326

Gen. E.W. Rawlings 1,069
Richard I. Bong 257

North Dakota 900

Gen. David C. Jones 410
Happy Hooligan 138
Red River Valley 352

South Dakota 674

Dacotah 269
Rushmore 405

NORTHEAST REGION 10,480

Dolores F. Vallone

New Jersey 3,122

Adm. Charles E. Rosendahl 137
Aerospace Founders 73
Atlantic City Area 198

Brig. Gen. Frederick W. Castle 212

Hangar One 158
Highpoint 96
Hudson* 91
John Currie Memorial 27
Mercer County 239
Passaic-Bergen* 223
Sal Capriglione 121
Teterboro-Bendix 31
Thomas B. McGuire Jr. 1,107
Tri-County 57
Union Morris 281
Wings 71

New York 3,785

Albany-Hudson Valley* 403
Brooklyn "Key" 258
Chautauqua 74
Cofin P. Kelly 321
Forrest L. Vosler 268
Francis S. Gabreski 291
Gen. Daniel "Chappie"
 James Jr. Memorial 90
Genesee Valley 286
Iron Gate 210
L.D. Bell-Niagara Frontier 454
Lloyd Schloen-Empire 65
Nassau Mitchel 361
Queens 253
Thomas Watson Sr. Memorial 189
Westchester Falcon 262

Pennsylvania 3,573

Altoona 61
Beaver Valley 107
Brandywine 185
Col. Stuart E. Kane Jr. 181
Eagle 87
Erie 95
Greater Pittsburgh* 477
Joe Walker-Mon Valley 114
Lehigh Valley 247
Lt. Col. B.D. "Buzz" Wagner 126
Metropolitan Philadelphia* 724
Mifflin County* 121
Olmsted 393
Pocono Northeast 213
Total Force 183
York-Lancaster 259

NORTHWEST REGION 7,696

I. Fred Rosenfelder

Alaska 1,239

Anchorage 946
Fairbanks Midnight Sun 293

Idaho 825

Boise Valley 524
Magic Valley 114
Snake River Valley 187

Montana 572

Big Sky 464
Treasure State 108

Oregon 1,316

Eugene Basin 333
Klamath Basin 129
Portland* 854

Washington 3,744

Greater Seattle 1,304
Inland Empire 915
Tacoma 1,525

*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.

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Colorado 5,460
 Colorado Springs/Lance Sijan ... 3,101
 Gen. Robert E. Huyser 151
 Long's Peak 313
 Mel Harmon 137
 Mile High 1,758

Utah 1,683
 Northern Utah 673
 Salt Lake 455
 Ute-Rocky Mountain 555

Wyoming 511
 Cheyenne Cowboy 511

SOUTH CENTRAL REGION 9,965

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Alabama 2,705
 Birmingham 428
 Gadsden 38
 Mobile 331
 Montgomery 1,581
 Tennessee Valley 327

Arkansas 1,519
 David D. Terry Jr. 1,137
 Ouachita 114
 Razorback 268

Louisiana 2,137
 Alexandria 159
 Ark-La-Tex 1,219
 Maj. Gen. Oris B. Johnson 392
 Greater New Orleans Area 367

Mississippi 1,518
 Golden Triangle 380
 Jackson 205
 John C. Stennis 933

Tennessee 2,086
 Chattanooga 136
 Everett R. Cook 507
 Gen. Bruce K. Holloway 591
 Maj. Gen. Dan F. Callahan 585
 H.H. Arnold Memorial 267

SOUTHEAST REGION 23,561

Craig R. McKinley

Florida 12,811
 Cape Canaveral 1,535
 Central Florida 1,310
 Citrus Belt 121
 Col. H.M. "Bud" West 313
 Eglin 2,193
 Falcon 357
 Florida Gulf Coast 348
 Florida Highlands 120
 Gainesville 284
 Brig. Gen. James R. McCarthy 396
 Gen. Nathan F. Twining 535
 Gold Coast 414
 Hurlburt 590
 Indian River 141
 Jerry Waterman 1,040
 John C. Meyer 180
 John W. DeMilly Jr. 269
 Miami 391
 Morgan S. Tyler 237
 On Wings of Eagles 179
 Panama City 846
 Peace River 154
 Pensacola 114
 Southwest Florida 269
 St. Augustine 72
 West Palm Beach 403

Georgia 4,546
 Athens 186
 Atlanta 662
 Carl Vinson Memorial 2,005

Chatahoochee Valley 79
 Coosa Valley 71
 Dobbins 826
 Savannah 228
 South Georgia 430
 Southeast Georgia 59

North Carolina 3,482
 Blue Ridge 352
 Cape Fear 163
 Eastern Carolina 78
 First in Flight 65
 Kitty Hawk 75
 Piedmont 475
 Pope 790
 Roanoke Valley 34
 Scott Berkeley 737
 Tarheel 434
 Triad 279

Puerto Rico 142
 San Juan 142

South Carolina 2,580
 Charleston 765
 Columbia 490
 Ladewig-Shine Memorial 245
 Strom Thurmond 386
 Swamp Fox 694

SOUTHWEST REGION 21,846

Kenneth W. Calhoun

New Mexico 2,514
 Albuquerque 1,557
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 Llano Estacado 408

Oklahoma 3,649
 Altus 513
 Central Oklahoma (Gerrity) 2,020
 Enid 646
 Tulsa 470

Texas 15,683
 Abilene 541
 Aggieland 207
 Alamo 5,324
 Austin 1,418
 Concho 418
 Dallas 1,184
 Del Rio 203
 Denton 335
 Fort Worth 2,184
 Gen. Charles L. Donnelly Jr. 743
 Ghost Squadron 156
 Heart of the Hills 191
 Lee Glasgow-Waco 294
 Lubbock 286
 Northeast Texas 448
 Panhandle AFA 157
 Paso Del Norte 179
 Permian Basin 135
 San Jacinto 1,280

AFA's Network of Units Overseas

AFA UNIT	LOCATION
United States Air Forces in Europe (USAFE)	
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
Manila	Manila, the Philippines
Misawa	Misawa AB, Japan
Tokyo	Tokyo, Japan
Supreme Headquarters Allied Powers Europe (SHAPE)	
Gen. Lauris G. Norstad	Mons, Belgium

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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.

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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	Hon. 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	Hon. 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, commander, Ballistic Missile Division, ARDC
1959	Gen. Thomas S. Power, commander in chief, Strategic Air Command
1960	Gen. Thomas D. White, Chief of Staff, USAF
1961	Hon. Lyle S. Garlock, assistant secretary of the Air Force
1962	Dr. A.C. Dickieson and John R. Pierce, Bell Telephone Laboratories
1963	The 363d Tactical Reconnaissance Wing, TAC, and the 4080th Strategic Wing, SAC
1964	Gen. Curtis E. LeMay, Chief of Staff, USAF
1965	The 2d Air Division, PACAF
1966	The 8th, 12th, 355th, 366th, and 388th Tactical Fighter Wings and the 432d and 460th Tactical Reconnaissance Wings
1967	Gen. William W. Momyer, commander, 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. Samuel C. Phillips, USAF; and astronauts Neil Armstrong, Col. Edwin E. Aldrin Jr., USAF, and Col. Michael Collins, USAF)
1971	Dr. John S. Foster Jr., director 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, USAF (Ret.), former Chief of Staff, USAF
1974	Gen. George S. Brown, USAF, Chairman, Joint Chiefs of Staff
1975	Hon. 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, commander in chief, Strategic Air Command
1981	Gen. David C. Jones, USAF, Chairman, Joint Chiefs of Staff
1982	Gen. Lew Allen Jr., USAF (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, Supreme Allied Commander, Europe
1986	Gen. Charles A. Gabriel, USAF (Ret.), former Chief of Staff, USAF
1987	Adm. William J. Crowe Jr., USN, Chairman, 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, commander in chief, Strategic Air Command
1991	Lt. Gen. Charles A. Horner, commander, US Central Command Air Forces and 9th Air Force
1992	Gen. Colin L. Powell, USA, Chairman, Joint Chiefs of Staff
1993	Gen. Merrill A. McPeak, Chief of Staff, USAF
1994	Gen. John Michael Loh, commander, 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

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 Corp.
1993	Daniel M. Tellep, chairman and chief executive officer, Lockheed Corp.
1994	Kent Kresa, chief executive officer, Northrop Grumman Corp.
1995	C. Michael Armstrong, chairman and chief executive officer, Hughes Aircraft
1996	Harry Stonecipher, president and chief executive officer, McDonnell Douglas Corp.
1997	Dennis J. Picard, chairman and chief executive officer, Raytheon Co.

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.

W. Stuart Symington Award Recipients

YEAR	RECIPIENT
1986	Hon. Caspar W. Weinberger, Secretary of Defense
1987	Hon. Edward C. Aldridge Jr., Secretary of the Air Force
1988	Hon. George P. Schultz, secretary of state
1989	Hon. Ronald W. Reagan, former President of the United States
1990	Hon. John J. Welch, assistant secretary of the Air Force (acquisition)
1991	Hon. George Bush, President of the United States
1992	Hon. Donald B. Rice, Secretary of the Air Force
1993	Sen. John McCain (R-Ariz.)
1994	Rep. Ike Skelton (D-Mo.)
1995	Hon. Sheila E. Widnall, Secretary of the Air Force
1996	Sen. Ted Stevens (R-Alaska)
1997	Dr. William Perry, former Secretary of Defense

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

Aerospace Education Foundation Presidents



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1963-64



Dr. Lindley J. Stiles
1964-66



Dr. B. Frank Brown
1966-67



Dr. Leon M. Lessinger
1967-68



Dr. L.V. Rasmussen
1968-71



Dr. Leon M. Lessinger
1971-73



Dr. Wayne O. Reed
1973-74



Dr. William L. Ramsey
1975-81



Dr. 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
1994-97



Walter E. Scott
1997-

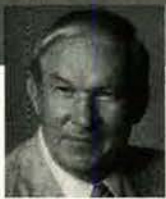
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1963-64



Gen. Laurence S. Kuter, USAF (Ret.)
1964-66



Dr. Walter J. Hesse
1966-69



J. Gilbert Nettleton Jr.
1969-73



George D. Hardy
1973-75



Sen. Barry M. Goldwater
1975-86



George D. Hardy
1986-89



James M. Keck
1989-94



Walter E. Scott
1994-97



Thomas J. McKee
1997-

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1946-47



James H. Straubel
1948-80



Russell E. Dougherty
1980-86



David L. Gray
1986-87



John O. Gray
1987-88



Charles L. Donnelly Jr
1988-89



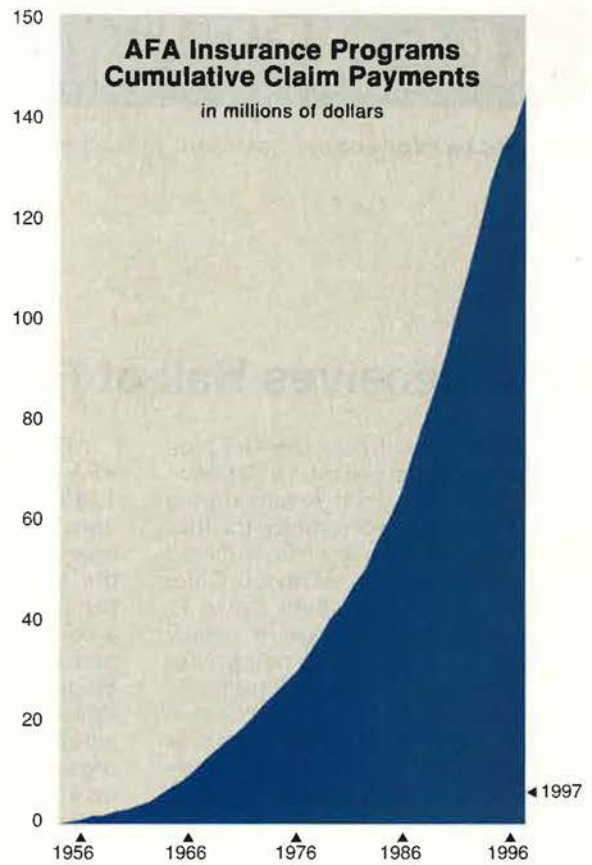
John O. Gray
1989-90



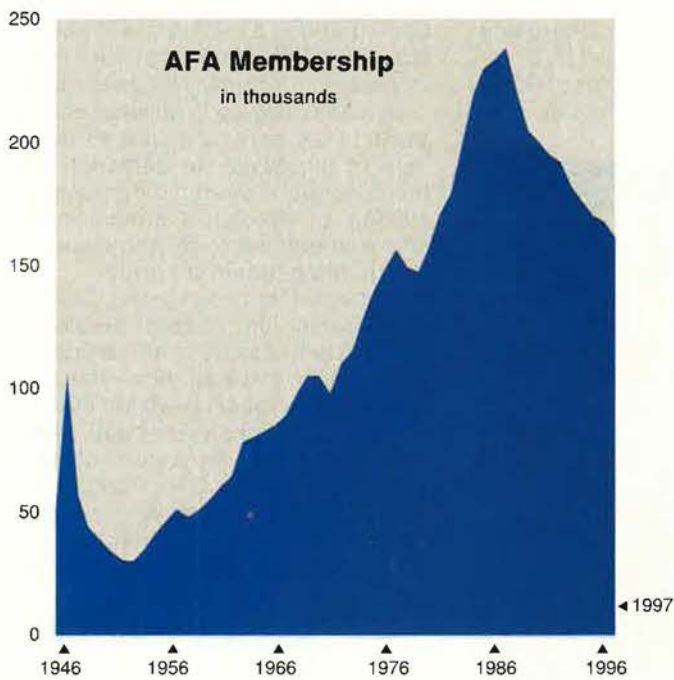
Monroe W. Hatch Jr.
1990-95



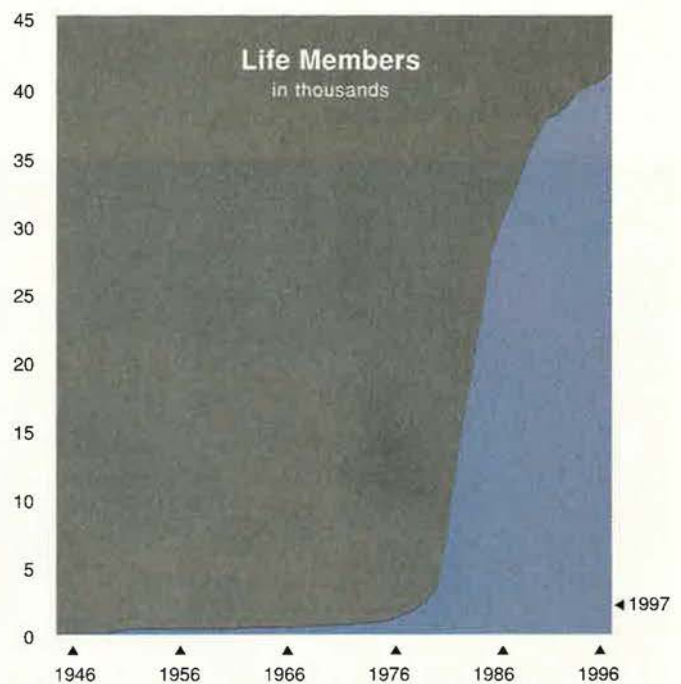
John A. Shaud
1995-



AFA insurance programs have grown steadily from modest beginnings in the 1950s. Through June 1997, cumulative claim payments totaled \$143,955,309.



Strong growth in the 1970s and 1980s reflected the remarkable success of the Base Drive membership program. As of June 30, 1997, AFA membership is 160,816.



Life membership in AFA became increasingly popular in the 1980s. As of June 1997, Life Members account for 26 percent of total membership.

AFA / AEF National Report

By Frances McKenney, Assistant Managing Editor

AFA Receives Hall of Fame Award

At a ceremony in July, the Air Force Association received the 1997 Milton Caniff Spirit of Flight Award during an enshrinement ceremony for four aviation pioneers held at the National Aviation Hall of Fame in Dayton, Ohio.

AFA National President Doyle E. Larson accepted the award, which recognized AFA's outstanding contributions and accomplishments in promoting airpower. First presented in 1981, the prestigious award is named for Caniff, creator of the "Steve Canyon" and "Terry and the Pirates" comic strips.

The four National Aviation Hall of Fame enshrinees for 1997 were Clayton J. Brukner (1896-1977), inventor, aviator, and founder of the Waco Aircraft Co.; Herbert A. Dargue (1886-1941), military aviator and an early participant in in-flight radio communications; retired Col. Joseph W. Kittinger Jr., a USAF test pilot and record-setting balloonist; and retired Lt. Gen. Thomas P. Stafford, an Air Force test pilot and astronaut.

AFA notables James H. Straubel, AFA executive director from 1948 to 1980, and Gill Robb Wilson, AFA national president and chairman of the board in the mid-1950s, were among the 47 people who established the National Aviation Hall of Fame. Now a nonprofit public foundation, the organization began inducting aviation pioneers in 1962, when it recognized Wilbur and Orville Wright. It has now inducted more than 150 people. The organization is scheduled to open its own building in September 1998, next to the US Air Force Museum at Wright-Patterson AFB, Ohio.

New European Chapter

In large part due to efforts by Frank Swords, AFA's special assistant for Europe, a new AFA chapter has been organized in the UK. It was chartered on May 1, 1997.

The **United Kingdom Chapter's** president is Lt. Col. Michael D. Bradley, a 13-year AFA member. Other officers are Charles D. Poynor, vice

Calling Berlin Airlift Veterans

Air Force Magazine would like to receive names, addresses, and telephone numbers of active AFA members who are also veterans of the Berlin Airlift for possible participation in a special project. Write to "Berlin Airlift," *Air Force Magazine*, 1501 Lee Highway, Arlington, VA 22209-1198, or send E-mail to afmag@afa.org.

president, and Capt. S. Michael Convertino II, secretary, who are new to AFA. Capt. Thomas L. Tate, an AFA member since 1986, serves as treasurer.

So far the Lakenheath-based chapter has 54 members.

Billy Mitchell Remembered

Billy Mitchell (Wis.) Chapter members attended a memorial service for Maj. Gen. Billy Mitchell at the Forest Home Cemetery in Milwaukee in May.

Mitchell grew up in Milwaukee and became an early, outspoken advocate of airpower. He demonstrated the concept of strategic bombing by sinking an obsolete German battleship and defined roles and missions for an independent air force.

At the memorial ceremony, Charles W. Marotske Jr., chapter president, spoke briefly about the AFA chapter's sponsorship of the service—this year covered by a local television station.

Gilbert Kwiatkowski, state president; Edgar W. Kynaston, chapter vice president; and Gary Parker were also present at the service, cosponsored by local chapters of the American Legion and Boy Scouts of America.

The following month, Marotske was a special guest of the family of Capt. Lance P. Sijan at the dedication of a memorial wall at the Serb Memorial Hall in Milwaukee. A native of the city, Sijan received a Medal of Honor for gallantry as a POW during the Vietnam War. Lt. Gen. (sel.) Tad J. Oelstrom, who was then commander

Photo by Theresa Luszczek



AFA National President Doyle Larson (left) accepted the Spirit of Flight Award (on easel) from John Bosch, president of the National Aviation Hall of Fame, at a ceremony in July. Special guests at the event included Wilkinson Wright, grandnephew of the Wright brothers, and astronaut Walter Schirra Jr.



Gilbert Kwiatkowski (left), Wisconsin state president, and Charles Marotske (right), Billy Mitchell Chapter president, presented Anthony LaPorte with an AFA Citation recognizing him as a charter AFA and chapter member.

of 3d Air Force and is now the Air Force Academy superintendent, was a guest speaker at the dedication. It honored more than 300 American Serbs for their military service. Sijan and Oelstrom, also born in Milwaukee, graduated from the Air Force Academy in the Class of 1965.

In June, the chapter honored Anthony J. LaPorte as part of its celebration of USAF's 50th anniversary. LaPorte, who is a charter member of both AFA and the Billy Mitchell Chapter, was recognized for his leadership and service. Over the years, he has served as chapter and state president.

In the Land of Enchantment

After learning that Gen. Ronald R. Fogleman, then USAF Chief of Staff, was due in town for a Chamber of Commerce Armed Forces Day banquet in Albuquerque, N.M., State President Charles Thomas planned the New Mexico State Convention to coincide with this visit. He put together the convention with only six weeks' lead time, according to Edward S. Tooley, president of the

event's host group, the **Albuquerque Chapter**.

AFA members attended the banquet, where Fogleman was the keynote speaker. In his speech, he highlighted the quality, education, and dedication of USAF's all-volunteer force. He described what they are called on to do, the high operations tempo, and the sacrifices their families make in support of the Air Force mission. He also expressed appreciation for the support USAF receives from the community.

The evening's black-tie dinner honored outstanding members of the armed services stationed in the local area. Distinguished guests included Rep. Steven Schiff (R-N.M.).

Speakers at the state convention's business and information session earlier that day included Maj. Gen. George B. Harrison, who was then commander of the Air Force Operational Test and Evaluation Center at Kirtland AFB, N.M. He presented an update on several programs, such as the B-2, F-22, and Joint STARS. Lt. Col. John Young, director of the Test and Evaluation Division at Kirtland

for the Space and Missile Systems Center, spoke on the Attack Laser program.

Col. Daniel Dansro, 377th Air Base Wing vice commander at Kirtland; Col. Michael Koerner, 27th Fighter Wing commander from Cannon AFB, N.M.; and Col. Cecil Jones, 49th Fighter Wing chief of staff from Holloman AFB, N.M., gave state-of-the-base briefings.

Two-time Winner

For the second consecutive year, the **Gen. E.W. Rawlings (Minn.) Chapter** received the North Central Region Chapter of the Year Award at the North Central Region Conference held this year in Fargo, N.D., in conjunction with the North Dakota State Convention.

The **Happy Hooligan (N.D.) Chapter** hosted the consolidated event, which included members from chapters in North Dakota, South Dakota, and Minnesota.

AFA National President Doyle Larson and AEF President Walter E. Scott were keynote speakers. They emphasized the importance of the Aerospace Education Foundation's programs not only to students but also to AFA.

New state officers elected at the convention were President Ron Garcia of the **Gen. David C. Jones (N.D.) Chapter**, Vice President Gary Olson and Secretary Steven A. Brososke, both from the Happy Hooligan Chapter, and Treasurer Michael D. Chilson of the Gen. David C. Jones Chapter.

Last Full Measure

The **James H. Straubel (Mich.) Chapter** remembered POWs and MIAs at a Missing Man Honors Ceremony held during its June meeting at Lawrence Technological University in Southfield, Mich.

Arthur Massucci, from the Washington-based National League of Families of American Prisoners and Missing in Southeast Asia, was the featured speaker. His brother, USAF Maj. Martin J. Massucci of Royal Oak, Mich., has been missing in Vietnam since 1965.



Rodney Coleman (center), assistant secretary of the Air Force for manpower, reserve affairs, installations, and environment, was keynote speaker for Maryland's State Convention. He also participated in an Armed Forces Day breakfast earlier that day with Robert Gatewood (left), state president, and Sam O'Dennis, former state president.

Rep. Joseph Knollenberg (R-Mich.) presented letters of appreciation to Massucc and to Tuskegee Airman Alexander Jefferson and Nemo Warr, chapter members who were World War II POWs.

Jefferson read the traditional POW/MIA program against a backdrop featuring the symbolic single table and its untouched place setting as well as three panels listing Michigan's 66 service members missing in Southeast Asia.

Mayor Donald Fracassi proclaimed June 7 as USAF 50th-Anniversary and Missing Man Honors Day in Southfield. Others who participated in the events included James Trew, chapter president; Edward S. Papelian, chapter vice president; and an AF-JROTC color guard from Garden City High School in Garden City, Mich., whose instructor is chapter member William C.G. Savage Jr.

In closing the ceremony, its organizer, Chapter Secretary Al Scafuri said, "We have rededicated ourselves to the cause of bringing home those who gave the last full measure of devotion for America."

ANG Focus in Arkansas

Since the State AFA designated 1997 as the Year of the Arkansas Air National Guard, the Arkansas State Convention in June included Maj. Gen. Donald W. Shepperd, who was then ANG director, as guest speaker and other ANG visitors.

The **Ouachita Chapter** served as

host for the 100 people who participated in two days of activities at Hot Springs.

Chapter member Lt. Col. Marc W. Barber of the 223d Combat Communications Squadron (ANG) at Memorial Airport, Hot Springs, received the Commander of the Year Award. Capt. James E. Palmer Jr. received the Company Grade Officer of the Year Award, and MSgt. Ramona L. Huber received the award for Outstanding

ANG Enlisted Person. They are both from the 188th Fighter Wing (ANG) at Fort Smith MAP, Ark. The Senior NCO of the Year honor went to MSgt. Thomas W. Daughenbaugh Jr. of the 189th Airlift Wing (ANG) from Little Rock AFB. NCO and Airman of the Year awards were given, respectively, to TSgt. Nolan E. Bramlett Jr. and SSgt. Christopher W. Miller (then a senior airman), both from the 223d CCS.

The ANG's 184th Fighter Squadron from Fort Smith MAP and 189th Mission Support Flight from Little Rock AFB received awards as Squadron and Flight of the Year.

Arthur H. Wellinger was named Arkansas Person of the Year. He is the Ouachita Chapter vice president and was chairman of the convention. The **Razorback Chapter's** John L. Burrow, state vice president for government affairs, was honored with the State President's Special Award. The **David D. Terry Jr. Chapter** received honors for Best Overall Performance.

Aid for the Air Victory

Several **Brig. Gen. Frederick W. Castle (N.J.) Chapter** members have been regular volunteers at the Air Victory Museum, which opened in 1989 at South Jersey Regional Airport in Medford, N.J.

The museum's exhibits include several aircraft such as the A-7, Navy E-2B, F-4, F-14, F-86, and F-104—either owned or on loan.

Chapter President Dennis M. Mo-



At the Arkansas State Convention, Lt. Col. Marc Barber (second from left) received an award from (l-r) Maj. Gen. Don Morrow, state ANG adjutant general, Marleen Eddlemon, state president, Maj. Gen. Donald Shepperd, then ANG director, and Col. Tom Landers, state ANG executive officer.

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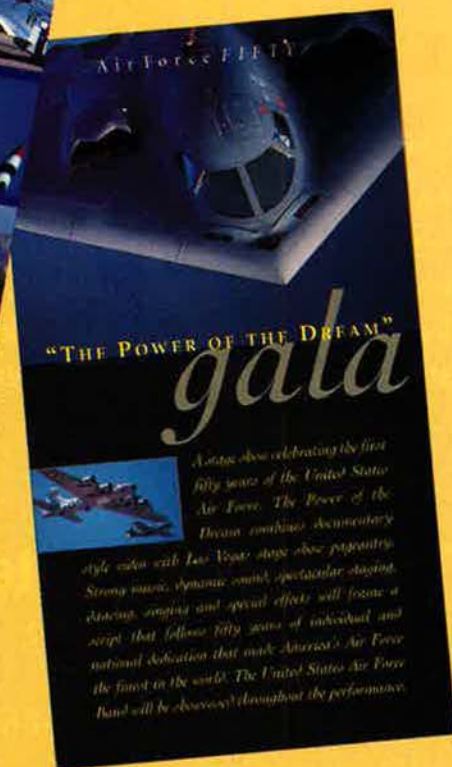
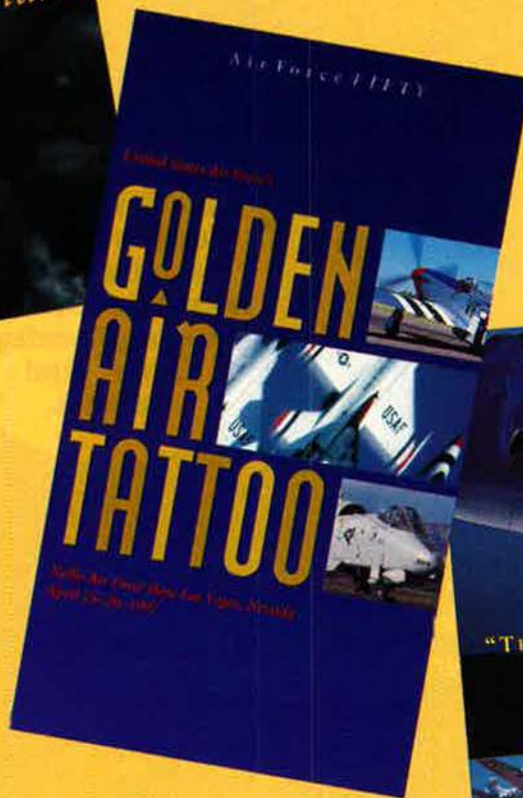
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han, one of the most valued volunteers at the museum, spearheaded the move of the F-14 from NAS Warminster, Pa., to the museum. The undertaking involved partial disassembly of the aircraft and arranging for the use of cranes and transport of a superload on a highway at night.

Joseph J. Stefula, chapter vice president; John Passanante, secretary; George A. Filer, treasurer; and Steve Snyder also volunteer at the museum, along with Charles J. Seacrook Jr. from the **Thomas B. McGuire Jr. (N.J.) Chapter**. Chapter volunteers most recently helped with the museum's second annual open house in April. They also help with its September air show, doing everything from directing the parking of cars and aircraft to selling souvenirs and running exhibits.

Edgar Wolf Jr., chapter vice president for government relations, recently donated to the museum 34 years of back issues of *Air Force Magazine's* "Almanac," plus memorabilia from Air Force Fifty.

Wolf also presented an AFA Medal in May to cadet John Langshaw, group commander of the state's 781st AFJROTC Group. Langshaw is now a



William Spruance (center) presented scholarships at Embry-Riddle Aeronautical University's Prescott, Ariz., campus to (l-r) cadets Brad Funk, Bill Tice Jr., Ian Kemp, Scott Silvester, Ariel Garcia, and Kevin Smith.

senior at Cherry Hill High School West, Cherry Hill, N.J.

Winners All

National Director and AEF Trustee William W. Spruance, of the **Diamond**

State (Del.) Chapter, presented scholarships to AFROTC cadets at Embry-Riddle Aeronautical University's Prescott, Ariz., campus in April.

Gen. William W. Spruance. Scholarships of \$1,000 each went to cadets



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AFA/AEF National Report

Brad T. Funk and Ian W. Kemp. Cadet Kevin J. Smith received the Col. and Mrs. Warren Bennett Scholarship. These scholarships are awarded to junior or senior-level AFROTC cadets.

The \$1,000 Col. Louisa Spruance Morse Civil Air Patrol scholarships, named for Spruance's sister, a retired CAP colonel, went to cadets Ariel Garcia and Bill T. Tice Jr. The scholarships recognize former or active members of the CAP who are enrolled in ROTC.

Cadet Scott D. Silvester received the William N. Webb Scholarship. The \$1,000 scholarship honors the memory of the former AFA National Treasurer and is awarded to a sophomore-level cadet majoring in aviation business administration or computer science.

Spruance and Louisa Spruance Morse fund these and several other scholarships.

More Chapter News

It's all in the family for James F. Clavenna. President of the **Spirit of St. Louis Chapter**, the retired lieutenant colonel administered the commissioning oath to his son, James A. Clavenna, in 1991, on the younger

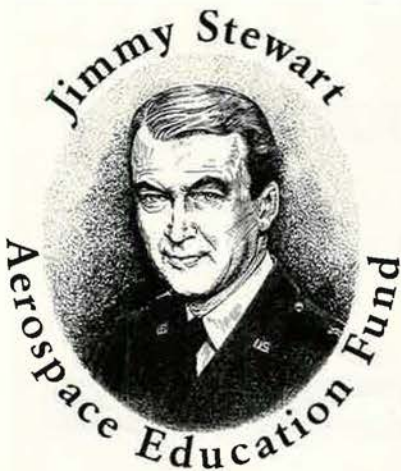


Photo by Theresa Lusczek

Accepting awards at the National Aviation Hall of Fame were (l-r) Herbert Dargue II, grandson of the pioneering aviator; Joseph Kittinger; Doyle Larson; Joan Heidelberg, executive director of the Clayton Brukner Nature Center, accepting the award for Hall of Famer Brukner; and astronaut Thomas Stafford.

Clavenna's graduation from the Air Force Academy. This spring, Captain Clavenna administered the oath to his sister, USAF 2d Lt. Jennifer Clavenna, on her graduation from

the University of Notre Dame in South Bend, Ind. The siblings each received a lifetime membership in AFA as a graduation gift from their father. Captain Clavenna is now stationed at




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In honor of an American hero James M. Stewart

- ★ **Founding member of the Air Force Association**
- ★ **Staunch supporter of an independent Air Force**
- ★ **Served his country as an aviator**
- ★ **Received the Distinguished Flying Cross for his valor**
- ★ **Believed in patriotism and always doing your best**

To honor the memory of Jimmy Stewart (1908-1997), this new Aerospace Education Fund will endow scholarships and grants for programs that will encourage young people to study science and technology and seek careers in the Air Force and aerospace industry.

 **Clip and send!**

Please include my contribution of \$ _____ toward the Jimmy Stewart Aerospace Education Fund. Let's keep his memory in the minds of America's youth.

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Please mail to the Aerospace Education Foundation, 1501 Lee Highway, Arlington, VA 22209-1198, and put "Attention: Jimmy Stewart Fund" on the envelope.

Aviano AB, Italy. Lieutenant Clavenna is a member of the **Lawrence D. Bell Museum (Ind.) Chapter**.

An appearance by SR-71 test pilot Robert Gilliland brought **Lexington (Ky.) Chapter** members to one of the quarterly history lectures sponsored by the Aviation Museum of Kentucky in Lexington. Chapter Vice President Daniel G. Wells said Gilliland described working with Lockheed (now Lockheed Martin) Skunk Works' Clarence "Kelly" Johnson, who helped design the P-38, T-33, U-2, and SR-71. A US Naval Academy graduate and former USAF test pilot, Gilliland

Coming Events

Sept. 5-6, **Oregon and Washington State Convention**, Tacoma, Wash.; Sept. 6, **Delaware State Convention**, Dover, Del.; Sept. 15-17, **AFA National Convention and Aerospace Technology Exposition**, Washington.

flew the SR-71A prototype from Palm-dale, Calif., on Dec. 22, 1964. Wells was impressed by Gilliland's interest in helping those seeking a career in aerospace and noted that the test pilot willingly stayed late to autograph programs and books. Wells said, "I think he is an underutilized historical resource."

The **John W. DeMilly Jr. (Fla.) Chapter** held a quarterly meeting at and also toured a new US Customs Service facility at Homestead ARB, Fla. Chapter members joined guests from three other military organizations for what Michael E. Richardson, chapter vice president for communications, reported was the first major public showing of the largest of 17 Customs Service air units. The original Customs Service buildings on the base were destroyed by Hurricane Andrew in 1992, and it had operated from Opa-Locka Airport near Miami until resuming operations from Homestead in May. Located on 32 acres within Homestead ARB, the unit is staffed by 66 pilots and air officers, 33 contract employees, and 14 aircraft, including Cessna

Citations modified with F-16 radar systems and infrared scanning systems.

Rep. Jim Saxton (R-N.J.) and New Jersey Governor Christine Todd Whitman presented **Sal Caprigione Chapter** President Joseph M. Caprigione and member Carol Durnak with a proclamation in March, recognizing the 50th anniversary of USAF. The chapter reports that Whitman was the first governor to honor the Air Force's Golden Anniversary.

The **Fort Wayne (Ind.) Chapter** showed up in force when invited by their local Civil Air Patrol to CAP Family Night to honor the cadets. Chapter members who attended were Gene Royer, Thomas Hissem, Everitt Padgitt, Samuel S. Conte, Theodore Huff Jr., Allen P. Feedback, Marjorie Feedback, and Bill Cummings, chapter president.

Have AFA/AEF News?

Contributions to "AFA/AEF National Report" should be sent to *Air Force Magazine*, 1501 Lee Highway, Arlington, VA 22209-1198. Phone: (703) 247-5828. Fax: (703) 247-5855. ■

Unit Reunions

Air Force Postal and Courier Assn. Oct. 14-17, 1997, at the Best Western Northwoods Atrium Inn in Charleston, SC. **Contact:** Jim Foshee, 3509 Deer Trail, Temple, TX 76504. 254-774-7303.

CBI Hump Pilots Assn. Oct. 1-5, 1997, at the Sheraton Colorado Springs Hotel in Colorado Springs, CO. **Contact:** Jan Thies, P.O. Box 458, Poplar Bluff, MO 63902. Phone or fax: 573-785-2420.

Strategic Support Sq (1st, 2d, 3d, and 4th Sqs). Sept. 10-13, 1997, in Colorado Springs. **Contact:** Ray Rote, 7741 N. 16th Lane, Phoenix, AZ 85021. 602-943-3969. John Tuck, 383 Lansdale St., Oak Harbor, WA 98277. 206-675-8233.

1st Aircraft Repair Unit (WWII). Oct. 23-25, 1997, at the Beach Cove Resort in N. Myrtle Beach, SC. **Contact:** Clyde Barbare, P.O. Box 1581, Banner Elk, NC 28604.

3d Strategic Air Depot, 8th AF, Watton, UK (WWII). Sept. 10-13, 1997, at the Ridpath Hotel in Spokane, WA. **Contact:** Wiley Noble, 7266 Goodwood Ave., Baton Rouge, LA 70806. 504-925-8454.

21st/6461st Troop Carrier "Kyushu Gypsy" Sq (Korea). Oct. 29-Nov. 2, 1997, at the Beach Colony Resort in Myrtle Beach, SC. **Contact:** Arthur J. Deangelis, 13 S. Lawn Ave., Elmsford, NY 10523-3604. 513-451-2355 (Robert Creutzinger) or 606-331-5999 (William Dehlinger).

51st Fighter Sq, 6th AF (WWII). Oct. 2-4, 1997, during Confederate Air Force Air Show in Midland, TX. **Contact:** Joe Benham, 1405 Langley Dr., Sun City Center, FL 33573-6506. Phone or fax: 813-634-3094.

55th Troop Carrier Sq, 5th AF. Oct. 2-5, 1997, at the Holiday Inn Downtown in Louisville, KY. **Contact:** Richard C. Sauber, 2575 27th St. S.W., Akron, OH 44314-1510.

63d AAF Flying Training Det (Douglas, GA). Sept. 17-21, 1997, at the Holiday Inn North in Dayton, OH. **Contact:** Dayton A. Starnes, 3832 Huntcliff Dr., Charlotte, NC 28226. 704-542-3456. Fax: 704-583-9922.

78th Fighter Sq. Oct. 17-19, 1997, in Las Vegas. **Contact:** G. T. Alexander, 11141 Wychwood Dr., Mechanicsville, VA 23116. 804-550-3415.

97th Bomb Gp. Oct. 22-26, 1997, at the Holiday Inn Palo Verde in Tucson, AZ. **Contact:** Harry Alasker, 1308 Jackson St., Missoula, MT 59802. 406-543-5388.

306th Bomb Gp. Nov. 6-9, 1997, at the Adam's Mark Hotel in Orlando, FL. **Contact:** Russell A. Strong, 5323 Cheval Pl., Charlotte, NC 28205. 704-568-3803 or 704-568-0153.

Mail unit reunion notices well in advance of the event to "Unit Reunions," Air Force Magazine, 1501 Lee Highway, Arlington, VA 22209-1198. Please designate the unit holding the reunion, time, location, and a contact for more information.

312th Bomb Gp (WWII). Oct. 9-12, 1997, at the Weston Plaza Hotel and Convention Center in Elkhart, IN. **Contact:** Paul M. Stichel, 1136 Gray Ave., Greenville, OH 45331-1127. 937-548-5767.

317th Troop Carrier Gp, 41st Troop Carrier Sq (WWII). Oct. 9-12, 1997, in Louisville, KY. **Contact:** Earl F. Clinton, 8030 Harrison Dr., Lawrence, IN 46226. Joe Leslie, 1492 Trevilian Way, Louisville, KY 40205.

385th Bomb Gp. Nov. 14-18, 1997, at the Doubletree Hotel at Randolph Park in Tucson. **Contact:** Kenneth J. Laffoon, 4780 N. Snyder Cir., Tucson, AZ 85749-9674. 520-749-4333.

389th Bomb Gp, 8th AF (WWII). Nov. 6-9, 1997, in Savannah, GA. **Contact:** Felix Leeton, 7325 Bonanza Pl., Greenwell Springs, LA 70739. 504-261-5300.

468th Bomb Gp. Oct. 12-14, 1997, at the Holiday Inn Longboat Key in Longboat Key, FL. **Contact:** Bill Egan, 6558 N. Pinewood Dr., Parker, CO 80134. 303-841-2394.

601st or 615th Aircraft Control and Warning Sq, Rothwesten and Wasserkuppe, Germany (1954-60). Oct. 2-6, 1997, in Gulfport, MS. **Contact:** Glen Griffiths, 7565 Ridgewood Dr., Gladstone, OR 97027. 503-656-3161.

Seeking **16th Communications Construction Sq** (Japan) personnel for reunion. **Contact:** Lloyd Wiggs, 767 W. Sierra Ave., Fresno, CA 93704-1060. 209-436-8170. ■

By John L. Frisbee, Contributing Editor

Lest We Forget

During the winter of 1944-45, 6,000 Air Force noncoms took part in an event of mass heroism that has been neglected by history.

MOST Americans know in at least a general way about the Bataan Death March that took place in the Philippines during April 1942. Few have even heard of an equally grim march of Allied POWs in northern Germany during the winter of 1945, the most severe winter Europe had suffered in many years. The march started at Stalag Luft IV in German Pomerania (now part of Poland), a POW camp for US and British aircrew men, most of them captured aerial gunners.

A prelude to that tragedy took place earlier and set the tone for what was to follow. In mid-July 1944, about 2,500 POWs from a camp near Memel, Lithuania, were jammed into the holds of two dilapidated coastal coal tramp steamers and spent five days en route to the German port of Swinemünde, thence by cattle car to a rail station near Stalag Luft IV.

The POWs' shoes were taken from them, they were chained in pairs—many of them ill and wounded—then double-timed three kilometers through a cordon of guards who used bayonets, rifle butts, and dogs to keep them moving. Some were seriously injured. (German doctors later testified that the injured suffered only from sunburn.) They had had neither food nor water for five days. The next day they were given water and driven through a gauntlet of armed guards and guard dogs, then strip-searched and had most of their clothing and possessions taken from them.

Early in 1945, as the Soviet forces continued to advance after their breakout at Leningrad, the Germans decided to evacuate Stalag Luft IV. Some 3,000 of the POWs who were not physically able to walk were sent by train to Stalag Luft I, a camp far-

ther west. On Feb. 6, with little notice, more than 6,000 US and British airmen began a forced march to the west in subzero weather for which they were not adequately clothed or shod.

Conditions on the march were shocking. There was a total lack of sanitary facilities. Coupled with that was a completely inadequate diet of about 700 calories per day, contrasted to the 3,500 provided by the US military services.

Red Cross food parcels added additional calories when and if the Germans decided to distribute them. As a result of the unsanitary conditions and a near starvation diet, disease became rampant—typhus fever spread by body lice, dysentery that was suffered in some degree by everyone, pneumonia, diphtheria, pellagra, and other diseases. A major problem was frostbite that in many cases resulted in the amputation of extremities. At night the men slept on frozen ground or, where available, in barns or any other shelter that could be found.

The five Allied doctors on the march were provided almost no medicines or help by the Germans. Those doctors, and a British chaplain, stood high in the ranks of the many heroes of the march. After walking all day with frequent pauses to care for stragglers, they spent the night caring for the ill, then marched again the next day. When no medication was available, their encouragement and good humor helped many a man who was on the verge of giving up.

Acts of heroism were virtually universal. The stronger helped the weaker. Those fortunate enough to have a coat shared it with others. Sometimes the Germans provided farm wagons for those unable to walk. There seldom were horses available, so teams of POWs pulled the wagons through the snow. Captain (Dr.) Caplan, in his testimony to the War Crimes Commission, described it as "a domain of heroes."

The range of talents and experience among the men was almost unlimited. Those with medical experi-

ence helped the doctors. Others proved to be talented traders, swapping the contents of Red Cross parcels with local civilians for eggs and other food. The price for being caught at this was instant death on both sides of the deal. A few less Nazified guards could be bribed with cigarettes to round up small amounts of local food.

In a few instances, when Allied air attacks killed a cow or horse in the fields, the animal was butchered expertly to supplement the meager rations. In every way possible, the men took care of each other in an almost universal display of compassion. Accounts of personal heroism are legion.

Because of war damage, the inadequacy of the roads, and the flow of battle, not all the POWs followed the same route west. It became a meandering passage over the northern part of Germany. As winter drew to a close, suffering from the cold abated. When the sound of Allied artillery grew closer, the German guards were less harsh in their treatment of POWs.

The march finally came to an end when the main element of the column encountered Allied forces east of Hamburg on May 2, 1945. They had covered more than 600 miles in 87 never-to-be-forgotten days. Of those who started on the march, about 1,500 perished from disease, starvation, or at the hands of German guards while attempting to escape. In terms of percentage of mortality, it came very close to the Bataan Death March. The heroism of these men stands as a legacy to Air Force crewmen and deserves to be recognized.

In 1992, the American survivors of the march funded and dedicated a memorial at the former site of Stalag Luft IV in Poland, the starting place of a march that is an important part of Air Force history. It should be widely recognized and its many heroes honored for their valor. ■

Thanks to George W. Guderley, a survivor of the march.

Bulletin Board

Seeking **Lt. Barney Lamb**, 492d FS, 48th FG, 1944. **Contact:** Duward L. Crow, 610 Lamont Ave., San Antonio, TX 78209-3644.

Seeking **Capt. William O. Beaton** and **Lt. Robert D. McCorkle** and information on a B-24 accident near Topeka, KS, Aug. 24, 1943. **Contact:** Benjamin J. Abruzzo, 10375 Carrollwood Ln., Apt. 331, Tampa, FL 33618-4734.

Seeking contact with **Harry M. Gilbert**, from Newark, N.J., who was stationed at Earsham, UK, 1943-45. **Contact:** Gladys Garrould Parker, 21 Walnut Tree Ground, Fyfield, Andover, Hampshire SP11 8EH, UK.

Seeking **14th and 15th Airdrome Sq** and the **6th, 320th, 321st, and 572d Air Service Gp** members. **Contact:** Frank Pace, 315 W. 15th St., Dover, OH 44622.

Seeking collectors of military fire department patches and histories. **Contact:** Jack R. Bol, 2802 S. Roslyn St., Denver, CO 80231.

Seeking information about the **719th BS**, 449th BG, December 1943-January 1944. **Contact:** Carolyn Wilcher, 5018 Linda St., Venice, FL 34293.

Seeking former students of **52d College Training Det**, Butler University, IN, December 1943-May 1944. **Contact:** Charles R. Craddock, 302 Mound St., Jonesville, LA 71343.

Seeking information on **Project Apollo** proposals and feasibility studies. **Contact:** Paul Carsola, 2001 Pan American Plaza, Balboa Park, San Diego, CA 92101.

Seeking **Michael R. Dater**, **Melvin J. Healy**, **Bobby D. Morriss**, and **Robert F. Smith**. Also seeking **MSgt. Joseph Hazelbrouck**, WWII B-24 flight officer in Etain, France, in 1957. **Contact:** Robert H. Barnes, P. O. Box 1697, Battle Creek, MI 49016.

Seeking members of **31st FIS**, Larson AFB, WA, Wurtsmith AFB, MI, and Elmendorf AFB, AK. Also seeking back issues of *Interceptor Magazine*. **Contact:** Ben Georgeson, 2501 S. Sycamore Ave., Kerman, CA 93630.

Seeking **pilots** whose WWII training was at King City, CA, West Coast Flying Training Cmd. Also seeking a regional or sectional **Civil Aeronautics Admin. airway chart** issued before visual omnirange radio navigation. **Contact:** John T. Gaffey II, 54 Oak Tree Ln., Irvine, CA 92715.

The large number of items that *Air Force Magazine* receives every month for this service has created a serious backlog. We devoted some additional space to Bulletin Board in this month's magazine and modified the format to accommodate more items on a page. In the future, items submitted by AFA members will have first priority. We will run nonmember items on a space-available basis. If an item has not run within six months, the sender should resubmit an updated version.—THE EDITORS

Seeking information on a poem carved in the sentry watchtower of a weapons storage area at **Kunsan AB, South Korea**, sometime before September 1964. **Contact:** John Muschick, 184 Alcan Dr., Pittsburgh, PA 15239.

Seeking **James Plumber** and **63d Aviation Cadet College Training Det** members from the University of Tennessee, Knoxville, 1943-44. **Contact:** Louis Roberts, 1350 S.W. Sunset Trail, Palm City, FL 34990-3345.

Seeking navigator **Marvin L. Fox** and nose turret gunner **Earle H. Colburn**, who flew with 27th BS's B-24 *Kontagious Katie*, based at Kwajalein and Saipan. **Contact:** Robert W. Forker, 3903 Avenida Madera, Bradenton, FL 34210.

Seeking information on the **64th Airdrome Sq** (WWII). **Contact:** Robert McFall, 108 S. Westlink St., Wichita, KS 67209.

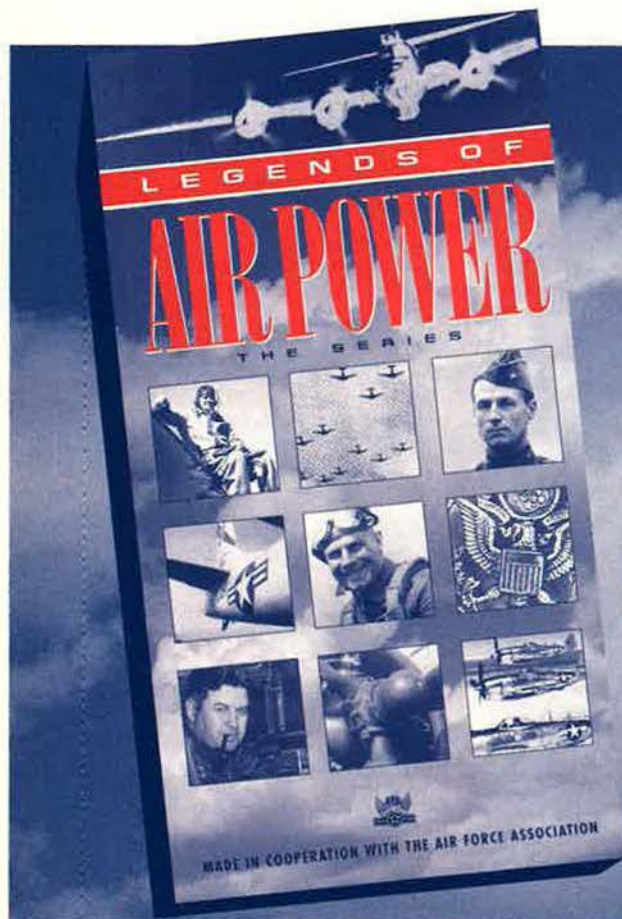
Seeking information, photos, or contacts with **8th Airdrome** personnel, China-Burma-India Theater, 1942-45, who knew **MSgt. Richard Lewis Blanton**. **Contact:** Richard L. Blanton Jr., 306 Amherst Bend, Dayton, OH 45440.

Seeking a 1944-era **cadet service cap insignia** (large wings with propeller). **Contact:** Henry Delaney, 68 Avenue of the Oaks, Beaumont, TX 77707.

Seeking **Leonard F. Janssens'** 529th Sq, 380th BG, crew. **Contact:** Daniel E. McIntyre, 9207 McIntyre Rd., Brooksville, FL 34601.

Seeking **374th BS** members, 1942-86. **Contact:** Robert Eagle, 10214 Ni River Dr., Spotsylvania, VA 22553.

Seeking research material and project photos of **XF-85A Goblin Parasite Fighter** trapeze mechanism and B-29 mother ship. **Contact:** T.S. Martin, 124 Freeman Ave., Solvay, NY 13209.



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Seeking information on a **dummy airfield and dummy Spitfires** on Norwich-Bungay Rd. near Poringland, Brook, Kirkstead Green, UK. **Contact:** Albert Krassman, 177 Santa Anita Ct., Sierra Madre, CA 91024-2520.

Seeking USAF pilot **John McConville** from Chicago, who served in Middle East in 1948. **Contact:** Max Kahn, 1395 Nancy Dr., Southampton, PA 18966.

Seeking **F-86 pilots** who served in Korean War and **2060th Mobile Weather Sq** members based at Tinker Field, OK, January 1949–December 1950. **Contact:** Jack Gatton, 12449 Barkley St., Overland Park, KS 66209.

Seeking information on a **353d BS**, 361st BG, B-17 lost Feb. 25, 1944, over Regensburg, Germany. **Contact:** Thomas Ross, 2735 Meandering Trail, Kingwood, TX 77339-1015.

Seeking **OV-10 pilots** and backseater **French-speaking interpreters** stationed at Bien Hoa AB, Vietnam, 1970–71. **Contact:** Claude Newland, 4033 Indian Trail Dr., Destin, FL 32541.

Seeking **Betty Pierce** (or family), widow of Sgt. George Pierce, who was at Landstuhl and at Ramstein AB, Germany, 1953–54. **Contact:** Wilfred E. Bamford, 26 Alta Ave., Salem, NH 03079-2633.

Seeking the **B-17 crew** (other than 100th BG) that flew a mission over northern Germany April 7, 1945, and 83d FS **P-51 pilots** who escorted the bombers that day, including two P-51 pilots who flew with tail partially missing. **Contact:** Henry Cervantes, 13900 Panay Way, Marina del Rey, CA 90292.

Seeking a **general's garrison hat** (with three lightning clouds) or a **general's overseas cap** (with all-silver cording around the top) in Shade 84. **Contact:** Oscar D. Kulman, 2550 Dellwood Dr. N.W., Atlanta, GA 30305-3576.

Seeking **Aviation Cadet Class 56Q** classmates. **Contact:** Norm Lockard, 4907 W. Royal Palm Rd., Glendale, AZ 85302.

Seeking former members of **3917th ABG**, RAFs Manston and East Kirkby, UK, and the **3928th ABG**, RAF Sturgate, UK. **Contact:** George J. McNally, 123 School Rd., Bethel, PA 19507-9410.

Seeking **Lt. John W. Whiteside** from Pilot Class 44-E, Frederick, OK. **Contact:** Leon W. Whitmore, 112 Brookhaven Trail, Smyrna, TN 37167-3102.

Seeking **Kendra Keith**, daughter of Brig. Gen. Keith, who was stationed in Rhinetalen, Germany, in mid-1980s. **Contact:** Janet Sharp Seymour, 70 Deer Park Dr., Bestwood Park, Nottingham NG5 8SF, UK.

Seeking **Eugene Latalien** or any crew member of a B-50 that was TDY from Eglin AFB, FL, to Kirtland AFB, NM, on **Operation Teapot** in spring 1955. **Contact:** Ed Graham, F.O. Box 76, Mackinaw, IL 61755-0076.

Seeking information about the Nov. 7, 1944, attack by 15th AF on the **Florisdorf and Lobau**, Austria, oil refineries, possibly by the 5th, 47th, 49th, 55th, and 304th Wgs. **Contact:** G.A. Paulikas, 1537 Addison Rd., Palos Verdes Estates, CA 90275.

Seeking aeromedical evacuation **patches**. **Contact:** Wilbur Fosman, 2528 S. Sable Way, Aurora, CO 80014.

Seeking "**Rusty**" **Fetterman**, crew chief, 40th FS, Okinawa, July–September 1945. **Contact:** Louis Lemoine, 1471 Hill Cr., Los Angeles, CA 90041-1544.

Seeking **Ground Launched Cruise Missile** veterans for a GLCM organization and to establish a GLCM display at an air museum. **Contact:** Ground Launched Cruise Missile Historical Foundation, 8987-309 E. Tanque Verde Rd., #338, Tucson, AZ 85749-9339.

Seeking members of **Pilot Class 58-J**, with Primary Flight School in 1957 and Basic Flight School 1957–58. **Contact:** George C. Trail, 364 George Trail Rd., McMinnville, TN 37110 (GeorgeT797@aol.com) or Jonathan Myer, 2502 Davis Ave., Alexandria, VA 22302 (jmyer@tasc.com).

Giving away old **Air Force Magazine** issues in excellent condition. **Contact:** Louis Roberts, 1350 S.W. Sunset Trail, Palm City, FL 34990.

Seeking NAA factory **model** of an F-100. **Contact:** Howard Chilton, 3306 Wiley Post Rd., Ste. 106, Carrollton, TX 75006.

Seeking **Det 030** Univ. of Arkansas at Fayetteville **AFROTC** graduates. **Contact:** John A. Boen, AFROTC Det 030, University of Arkansas, Fayetteville, AR 72701.

Seeking Auburn University ROTC graduate **Clarence Covey Campbell** from Montgomery, AL, whose last known assignment was at Hickam AFB, HI (circa late 1960s). **Contact:** Arthur E. Green, 1063 W. Belvedere Cir., Mobile, AL 36606-2525.

Seeking the former **Betty Norberg**, wife of **USAAF Capt. David Coleman**. **Contact:** Warren M. Jensen, 2395 Lyall Way, Belmont, CA 94002.

Seeking contact with the crew of the **B-29** bomber that crashed off Vlissingen, Netherlands, Sept. 3, 1948, including **Cpts. Durocher and Farmer, Lts. Dixon, Thornton and Wilson, and Sgt. Brofft**. **Contact:** Julius Braat, Gulden Hoeve 19, 3451 TE Vleuten, Netherlands.

Seeking contact with personnel stationed on **Oahu, HI**, March 3–4, 1942, particularly **18th Pursuit Wg** personnel. **Contact:** Steve Horn, 701 Greenwood Dr., Hendersonville, NC 28791.

Seeking information and photos from persons who flew or maintained the **Bell P-39 Airacobra** and **P-63 Kingcobra**. **Contact:** Rick Mitchell, 730 White Oaks Ave., Baltimore, MD 21228.

Seeking **Maj. (Dr.) Harold C. Morgan**, stationed at Evreax, France, in 1965. **Contact:** Pauline Shouldis, 4601 Lake County Hwy., Callistoga, CA 94515.

Seeking **Col. John F. Groom**, who flew with the 19th BG in 1945 from North Field, Guam. **Contact:** Larry Clark, 29 Esmeyer Dr., San Rafael, CA 94903.

Seeking **identification (recognition) models** of aircraft (all scales, issues, and countries); postwar ship IDs, Teacher scale 1-to-500 and 1-to-250; Kix cereal 1-to-432 scale aircraft models from the 1940s; and Wings or Players cigarette cards. **Contact:** James A. Dorst, 113 Beach Rd., Hampton, VA 23664-2054.

Seeking photos of **Clark AB**, Philippines; Fields Ave., Angeles City, Philippines; and back issues of **Air Force Magazine**, 1980–86. **Contact:** Tim Hardegree, 3045 N. 67th Ave., #3030, Phoenix, AZ 85033-5755.

Seeking **Reese AFB pilot training graduates** to give them class plaques dating back to 1972. **Contact:** Brian P. O'Rear, 6906 Fulton Ave., Lubbock, TX 79424.

Seeking members of the **8th FG**, 5th AF (WWII), including 80th FS, 36th FS, and 35th FS in which 1st Lt. Rolland E. Wiegand was a P-38 pilot. **Contact:** Richard E. Wiegand, 15827 S.E. 50th St., Bellevue, WA 98006-5107.

Seeking **WWII strike photos** or **gun camera clips** of low-level attacks from either ETO or MTO. **Contact:** John W. Lambert, Phalanx Publishing Co., 1051 Marie Ave. W., St. Paul, MN 55118-4131.

Seeking contact with former members of **3d BW**, ultimately **9th AF**, **9th BD**, September 1942–October 1945. **Contact:** George J. Kerins, 47 Everett St., Sherborn, MA 01770-1527.

Seeking former USAF and civilian personnel associated with the **F-101 Voodoo**. **Contact:** Dennis Kelsey, PO Box 1169, Connell, WA 99326.

Seeking members of **Aviation Cadet Class 45-D**, Maxwell Field, AL. **Contact:** H.R. Dunlap, Rt. 1, Box 2330, King William, VA 23086.

Seeking **A1C William C. Tait**, in fleet service at Haneda AB, Japan, 1948–50, and who fought in Korean War. **Contact:** Dennis L. Dagen, 101 Elm Dr., Warroad, MN 56763.

Seeking information on pilot **O.D. Cunningham Jr.**, 6166th AWRP, K-14 (Kimpco AB), Korea, 1953. **Contact:** Don H. Hall, 64 Linwood Rd., Fort Walton Beach, FL 32547.

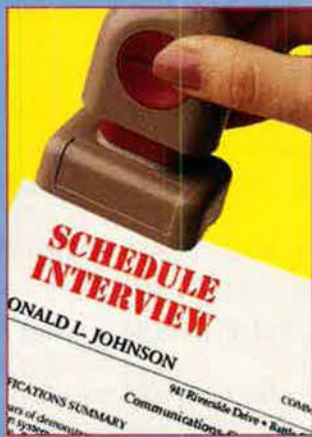
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Seeking **Capt. Stephen W. Pavlisin, Sgt. Roger Tardie, Ralph Gastelum, and Manuel Mercado.** Contact: Andy Capon, 35 Cyprus Rd., Faversham, Kent ME13 8HB, UK.

Seeking information about **KC-97 crews** from the 11th, 22d, 100th, and 305th AF Sqs and **SAC rotational tankers** at Goose Bay, which refueled 93d BW B-52s Jan. 16-18, 1957, during flight around the world. Contact: Patrick M. Stinson, 7203 Pine Dr., Annandale, VA 22003.

Seeking information on **African-Americans** who served in the **Royal Canadian Air Force** during WWII. Contact: Frank Mebane, P.O. Box 11653, Kansas City, MO 64138.

Seeking **Col. R.H. Boardman**, 26th TRW commander stationed at Toul Rosieres AB, France, 1965-66. Contact: Andre J. Mathy, 31440 Cazaux, Layrisse, France.

Seeking information on **493d BG**, "Helton's Hellcats," including **Col. Elbert Helton, Capt. Ken Saenz, and 2d Lt. Thomas Landry**, 3d BD, 93d CBW, 8th AF, April 1944-May 1945. Contact: Paul S. Burdett Jr., 25 Viola Ave., Leonardo, NJ 07737-1410.

Seeking books on **aerospace, aviation, air forces, and airplanes.** Contact: A.D. Chapman 3101 W. Tucana St., Tucson, AZ 85745-1507.

Seeking **Brewster Buffalo** pilots, crew of a 19th BG B-17 *Suzy-Q*, and the pilot of the last flight of a P/F-80. Contact: John Ford, 3614 S. Barrington Ave., Los Angeles, CA 90066.

Seeking **Pilot Class 44-B** memorabilia, especially class books. Contact: Douglas B. Brown, 1906 Hillrose Dr., Loveland, CO 80538-3439.

Seeking identity of USAF unit at **Nome Field, Alaska**, 1951-53, that shared facilities with Army Security Agency, Det T-23, 333d Comm. Recon. Co. Contact: David J. Aul, 45127 Harrison Rd., Spartansburg, PA 16434.

Seeking a **route planning chart** valid from the end of WWII to 1950, showing radio flight facilities in Germany, France, and Switzerland. Contact: James Long, 25485 Canada Dr., Carmel, CA 93940 (oldjim@montereybay.com).

Seeking crew of B-24 *Tagalong*, piloted by R.V. Hinch, shot down Aug. 1, 1943, on Ploesti raid. Contact: Charles W. Holmes, 2613 15th Ave., Greeley, CO 80631-8328.

Seeking photos of equipment and fire stations and information from firefighters with the **12th CES** at Cam Ranh Bay AB, Vietnam, especially personnel on "A" and "B" shifts, February 1967-68. Contact: Jim Mindak, 3647 N. Tripp Ave., Chicago, IL 60641-3038.

Seeking **SrA. Daniel Dvorkin** and **SrA. Ben Kratzer**, 10th TFW clinic, RAF Upwood, UK, 1990-92, and **SrA. Matt "Moon" Mullins**, High Wycombe, 1990, and Lajes Field, Azores, 1993. Contact: D.B. and Z.N. Smith, 87 Rodway Rd., Tilehurst, Reading, Berkshire RG30 6EH, UK.

Seeking personnel from the **475th FG (WWII)**, including the 431st, 432d, and 433d P-38 Sqs in Australia and Korea, 1943-48. Contact: Curt Tinker, P.O. Box 498, Intervale, NH 03845-0498 or George McLees, 216 Lesesne Dr., Sumter SC 29150-4046.

Seeking former members of **1st Tactical Depot Sq**, including 1st Tactical Support Sq and 9th Aviation Field Depot Sq. Contact: Fred Chanatry, 3709 Big Sky Dr. N.E., Albuquerque, NM 87111.

Seeking a Vietnam War-era **bush hat**. Contact: Don R. Tweedel, 6936 Alden Ct., Baton Rouge, LA 70806.

Seeking crew members of **B-17 El Lobo II** and **B-17G Bobby Sox**, 850th BS, 490th BG, out of Eye, UK, WWII. Contact: Grey Eagles Project, Hugh Fred Jope, 1047 Broadway, Haverhill, MA 01832.

Seeking **John W. Carpenter**, an exchange duty officer with the USN FS 51 (VF-51), in San Diego, March 1951-52. Contact: John E. Curtis, 100 S. Avalon Dr., Los Altos, CA 94022.

Seeking old issues of Air Defense Command **Interceptor Magazine**, 1964-67. Contact: L.D. Graves, 715 Baronridge Dr., Seabrook, TX 77586.

Seeking **25th TRS**, 5th AAF, members, Osaka, Japan, 1945-46, at Itami AB. Contact: C.T. Halfhill, 36 Harbinger Ridge Rd., Harbinger, NC 27941.

Seeking **B-17** vertical tail without dorsal spline, the aircraft number, and group fin flash. Contact: Bruce E. Slasienski,

Rue des Paquis 51, Geneva 1201, Switzerland.

Seeking accident report on aircraft **42-101209** which crashed in Burma August 1945. Contact: John D. Henno, 9422 Shields Dr., San Antonio, TX 78245.

Seeking **Portuguese, Cape Verdean, and Brazilian immigrants** who served in Vietnam with the US military. Contact: Adalino Cabral, P.O. Box 494, Boston, MA 02155-0004.

Seeking **Vietnam veterans** who flew missions and have memorabilia for display. Contact: Terry Carlson, Illinois Chapter, 8th AF Historical Society, P.O. Box 250, Round Lake, IL 60073-0250.

Seeking autograph of Apollo astronaut **James Irwin**. Contact: Bob Kasprzak, 5435 Emmons St., Fairborn, OH 45324-1915.

Seeking **Lt. Joseph R. Rosar**, 319th FS, 325th FG. Con-

tact: S.J. Podgorski, 13 North St., #412, Granby, MA 01033.

Seeking **40th BG members**, especially anyone who knew **Cpl. Darrell E. Nash**. Contact: Jeffery A. Nash, 3593A Kelly Cir., Bolling AFB, DC 20336.

Seeking **Capt. Charles G. New**, OIC, 49th Ammun. Supply Sec., at Taegu AB, Korea, in 1951. Contact: Bob Eakes, 105 Eagle Way, Warner Robins, GA 31088.

Seeking **SSgt. Larry T. Jones**, crew chief for Capt. Donald Emerson, 336th FS, 4th FG, in 1944, Debden, UK. Contact: R.C. Tullius, 44 Victory Ln., Sebring, FL 33870.

Seeking former members of and memorabilia from the units that preceded the 436th Tng Sq, including **4235th STS, Det 35 SAC OTSL, 4347th CCTS, 4347th OTSL, 3526th CCTS, and 436th BS**. Contact: Matthew K. Rodman, 436th TS/DOMT, 197 Ave. D, Dyess AFB, TX 79607-1297.

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Seeking photos and unit histories from **609th Air Commando Sq "Nimrods."** Contact: Larry Davis, 4713 Cleveland Ave. NW, Canton, OH 44709.

Seeking Lt. **Richard Balka**, 310th BW, Smokey Hill AFB, KS, who was TDY at Greenham Common, UK, in 1956. Contact: Bud Trill, 255 Colonial Blvd., Palm Harbor, FL 34684-1316 (bud-dee@juno.com).

Seeking information on **Project Kedlock** and its successor. Contact: Ron Kloetzli, 206 W. Brookdale Pl., Fullerton, CA 92832.

Seeking **1st Lt. John C. Edwards**, who led a flight of four AT-6Bs to Colombia in early 1942. Contact: Dan Hagedorn, PO Box 682, Centreville, VA 20122-0682 (R1RX1HP1@BELLATLANTIC.NET).

Seeking **25th FS**, 51st FW, members, stationed at Suwon, Korea, 1952-53. Contact: William T. Farrell, 19 Emerson Rd., Needham, MA 02192.

Seeking **William Lyon**, son of Gen. Alfred J. Lyon. Contact: Martin W. Berndt, 4312 S. Kirkwood Ave., Cudahy, WI 53110 (baker@haas.berkeley.edu).

Seeking **302d TRS** members from Shaw AFB, SC, 1952-53; Sembach AB, Germany, 1953-57; and Laon AB, France, 1958-59. Contact: Roger Wilkes, 1341 North 3175 East, Layton, UT 84040.

Seeking information on and photos of Saturday "Pass in Review" at Bergstrom Field, TX, 1994-95. Contact: George Wamsley, 1161 Deerfield Rd., Prescott, AZ 86303.

Seeking 305th and 68th BW patches. Contact: Dick Goldhammer, 14 Glenkirk Drive, Charleston, SC 29414.

Seeking a photo of a B-17 formation showing contrails. Contact: Noel Young, PO Box 7003, Laramie, WY 82070.

Seeking information on the crew of B-29 *City of Milwaukee*, 19th BG, 20th AF, which flew nonstop from Guam to Milwaukee in December 1945. Contact: Charles W. Marotske, 5406 Somerset Ln. S., Milwaukee, WI 53221-3247.

Seeking information on an **F-86F**, #24625, from the 311th FBS, 58th FBW, which flew during the Korean War and in Taiwan during the Formosa crisis. Contact: George L. Getchell, 2177 Harpoon Dr., Stafford, VA 22554.

Seeking B-24 *Her Man* crew members **SSgts. Max A. Martin, Curtis E. O'Neal, James H. Roberts, and Martin S. Sagala** and **TSgts. John J. Doyle and David G. Roberts**. Contact: Gerald C. Clough Jr., 103 Bellwood Ct., Jamestown, NC 27282.

Seeking graduates or students of **Univ. of Alabama** from AFROTC, AFIT, or OTS programs. Contact: The Crimson Tide of the Air Force, Capstone Dr. Barnard Hall, The University of AL, Box 870258, Tuscaloosa, AL 35487-0258 (afrotc@aalan.ua.edu).

Seeking contact with anyone who received pilot training at **Carlstrom Field, FL, Cochran Field, GA, and Marianna AAF, FL**, or had instructor duty at **Malden AAF, MO**, 1943-44. Contact: John Burnett, PO Box 90, Dundee, FL 33838.

Seeking Special Ops or Combat Air Rescue patches. Contact: Wes Wittkopp, 7103 Oakwood Glen, #31, Spring, TX 77379.

Seeking photos and slides of the Wild Weasel **F-100F**, 6234th TFW, based at Korat AB, Thailand, 1966. Contact: Jerry Geer, 1605 NW 65th St., Topeka, KS 66618.

Seeking **Neil J. Cody** of Hampton, NH, in pilot training 1942-43, at Gunter Field, AL, and an ETO POW. Contact: George I. Knight, 1435 S. James Pl., Arlington Heights, IL 60005.

Seeking **Henry L. Olson**, former Flying Tigers pilot. Contact: Charles J. Akins, 19603 Forest Fern, Humble, TX 77346 (cakins@ix.netcom.com).

77346 (cakins@ix.netcom.com).

Seeking **Thomas Sweeter (or Suiter)**, who knew **Monique Levasseur, Thomas Campbell, Doug C. Cooper, Richard Johnson, and Edwin L. Scott**, who were at AB 105, Evreux-Fauville, France, 1965-67. Contact: Sandy Levasseur, 12 rue des Tisserands, Apt. 611, 27400 Louviers, France.

Seeking pilot and observer of the **Stinson L-1A** that crashed into American Iron Works machine shop in New Iberia, LA, May 1, 1942. Contact: J.R. Bailey, 1541 Eastwood Dr., Slidell, LA 70458.

If you need information on an individual, unit, or aircraft, or if you want to collect, donate, or trade USAF-related items, write to "Bulletin Board," Air Force Magazine, 1501 Lee Highway, Arlington, VA 22209-1198. Letters should be brief and typewritten; we reserve the right to condense them as necessary. We cannot acknowledge receipt of letters. Unsigned letters, items or services for sale or otherwise intended to bring in money, and photographs will not be used or returned.—THE EDITORS

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Seeking C-119F #51-8039 crew members, Project C-119L, Itazuke, Japan, 1956-57, including **Capt. Slaughter D. Mimms, 1st Lts. Allen L. Haedrich and Harold L. Aldridge, 2d Lt. Howard Heikens, and A1Cs William B. Culpepper and James H. Murphey.** Contact: Paul M. Lovrencic, 932 Keystone Ave., Northbrook, IL 60062-3663.

Seeking members of **Class 43-C, SEAAFTC**, Moody Field, GA. Contact: John L. Maddray, 1601 Amberly Rd., Charleston, SC 29407.

Seeking emblem or emblem photo, **326d Tactical Electronic Warfare Sq**, Da Nang, Vietnam February-June 1972. Contact: Thom Raab, 366th Wing History Office, 366 Gunfighter Ave., Ste. 331, Mountain Home AFB, ID 83648-5299 (raabt@366wing.mountainhome.af.mil).

Seeking memorabilia, pictures, or model of **C-124.** Contact: Kenneth Ward, 36 Springfield St., Somerville, MA 02143-4018.

Seeking information on **396th BG**, Walla Walla, WA, in summer 1943. Contact: Richard E. Seigle, 1135 McKinley St., Philadelphia, PA 19111-5831.

Seeking information on June 13, 1966, crash of **F-106A #58-0798**, assigned to 1st FW. Contact: Richard J. Smart, 2715 Glen Rd., Richland, WA 99352-4907.

Seeking 509th BW and 393th BS historical notes, mission reports, anecdotes, and **patches.** Contact: Paul Metro, 78 Dalton Pl., Edison, NJ 08817-3227.

Seeking pilot **Lt. Vincent Jamme**, 71st BS, 38th BG, SWPA, 1944-45. Contact: Robert Bucholz, 7704 Valley Villas Dr., Parma, OH 44130-6171.

Seeking glossy photo of B-25J #44-30934. **Betty's Dream**, 499th Sq, Okinawa, WWII. Contact: Cliff Burk, 43277 Lochrisen Way #2611, Novi, MI 48275.

Seeking **John Messerschmitt**, AAF cadet pilot Class 44-F, Lakeland, FL, January 1944. Contact: Lew Wright, 112 Rosemont St., St. Simon's Island, GA 31522.

Seeking 1950s-era, blue wool **men's trousers**, 36"x32".

Contact: Paul Block, 5827 Cambridge Cir. #6, Racine, WI 53406-2846.

Seeking photos of **women in the military** in dress uniform. Contact: Ken McNall, 1114 First St., Cheney, WA 99004.

Seeking members of **19th BG**, 1927-57, especially WWII veterans. Contact: Larry Davis, 4713 Cleveland Ave., NW, Canton, OH 44709.

Seeking information on **B-17F Full House**, #42-3322, 339th BS, 96th BG, 3d AD, in 1944. Contact: Vincent C. Gill, 29 Quinapoxet Ln., Worcester, MA 01606-1549.

Seeking information on pilot **Lt. Charles Landon Maggart**, B-25 *O'Cappy*, 38th BG, MIA November 1942. Contact: Philip E. Maggart, 516 Spencer Ave., Marion, IN 46952.

Seeking aerobatic demonstration team **F-86H** pilots or crews or anyone who witnessed them. Also seeking information on an Iowa ANG crew chief who flew an F-86D or L before being talked down by an F-86 pilot. Contact: Michael A. Fox, PO Box 640, Troy, MI 48099-0640 (matfox@troy.findlayindustries.com).

Seeking **Capt. Cecil E. Walters, Lt. John S. McCollom, and TSgt. Kenneth W. Decker**, involved in the May 1945 crash of a C-47A in Dutch New Guinea. Contact: Mark Meatto, Harvard University Film Study Center, 24 Quincy St., Cambridge, MA 02138.

Seeking memorabilia and members of the **22d Tactical Drone Sq**, 432d Tactical Drone Gp, 1976-79, Davis-Monthan AFB, AZ. Contact: Joseph Jordan Jr., 7517 Hollybrook Rd., Glen Burnie, MD 21061 (jjjorda@juno.com).

Seeking to return photo of **Gens. W. Krupinski and A. Galland** found at Air Force 50 Convention in Hilton Hotel, Las Vegas. Contact: John A. Herberg, PO Box 1589, Prescott, AZ 86302.

Seeking information and crew of **B-17G #44-6407**, 419th BS, 301st BG, 15th AF, WWII. Contact: Szymon Serwatka, ul. Kosciuszki 9, 58-100 Swidnica, Poland (serwatka@it.com.pl).

Seeking pilot scarf of the **76th FS**, England AFB, LA. Contact: Tom Woodfield, 3412 Crosswinds Dr., Hope Mills, NC 28348.

Seeking members of **21st Troop Carrier Sq**, Harmon Field, Guam, 1946-48. Contact: James T. Nojima, 3882 Crenshaw Blvd., Los Angeles, CA 90008.

Seeking **Carol E. Brown, Thomas C. Bunn Jr., Robert G. Gorry, Kenneth C. James, and William A. Mayfield**, pilot training class 60-D members, Bainbridge AB, GA, and Vance AFB, OK. Contact: Charles R. Skinner, 201 Jefferson Dr. W., Palmyra, VA 22963-2325.

Seeking **flight clothing, escape equipment, and squadron or group patches** from WWII and Vietnam. Contact: Terry Carlson, PO Box 250, Round Lake, IL 60073-0250.

Seeking back issues of **Interceptor Magazine.** Contact: Elmer Ross, PO Box 807, Everett, WA 98206.

Seeking anyone who may have had contact with **AFISO**, Wright Field, 1948, or has an organizational flow chart for AFISO with meanings of office symbols. Contact: Shawn Tabor, 9801 Somerford Rd., Louisville, KY 40242.

Seeking information or photos on **309th Fighter (Pursuit) Sq.** Contact: Todd Houchins, 309 FS/CCOA, Sq Historian, 14053 W. Shooting Star St., Luke AFB, AZ 85309.

Seeking WWII fighter ace **Urban Drew.** Contact: Dennis R. Lindsey, 3124 Del View Dr., Del City, OK 73115.

Seeking **Capt. Art Sakaye**, 84th FS, Hamilton AFB, CA, 1957-58. Contact: Tom Gerbing, 26951 Johnson Dr., Klamath Falls, OR 97601.

Seeking **Capt. W. Cox** and B-25 *Damn Yankee* crew that crashed off Wogat Island, Papua New Guinea, 1943. Contact: Walter Deas, 11 Platypus Ave., Isle of Sorrento, Gold Coast, Queensland, 4217 Australia.

Seeking **82d Airborne** members dropped in Guilleville, Normandy, France, in 1944. Contact: Andre Germain, 68 rue Danielle Casanova, 91700 Ste. Genevieve Des Bois, France.

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