

Aerospace World

By Peter Grier

B-1B Flies First JDAM Sortie

The B-1B flew its first Joint Direct Attack Munition test flight Nov. 24. During the training run, a Lancer from the 77th Bomb Squadron flew from Ellsworth AFB, S.D., to the Utah Test and Training Range and dropped four inert BDU-56 2,000-pound bombs outfitted with operating JDAM tail kits.

The drop was filmed for further evaluation.

"We're looking for a correlation between what the engineers think should happen with the JDAM and with what actually happens in a mission," said Maj. Dan Troutman of the 53d Test and Evaluation Group, Det. 2, part of the 53d Wing at Eglin AFB, Fla.

The addition of JDAM will give the B-1 near-precision strike capability for the first time in its history. Guided by signals from the Global Positioning System, JDAM can hit with great accuracy. It is less expensive than many other precision systems, however, because it is a kit of steerable fins that is added on to a "dumb" munition.

A standard two-airplane formation of B-1s is capable of deploying 48 2,000-pound JDAMs.

"No one else can wreak that kind of havoc," said Maj. Jim Fryer, chief of the Aeronautical Systems Center's B-1 JDAM integration office at Ellsworth.

DoD Issues New Guard, Reserve Commissary Policy

On Dec. 16, the Department of Defense released a policy memorandum detailing how members of the Guard, Reserve, and retired reserve can take advantage of a new law granting them 24 annual commissary visits.

For calendar year 1999, eligible Guardsmen and Reservists will receive two 12-visit DD Forms 2529. For calendar year 2000 the form will be revised to contain 24 blocks for recording the dates of visits.

"Service in the National Guard and Reserve is now more challenging and more difficult than ever before," said Charles L. Cragin, acting assistant secretary of defense for reserve affairs. "Doubling the commissary access for reservists and their families



USAF Chief of Staff Gen. Michael Ryan testifies before the Senate Armed Services Committee Jan. 5 with Army Gen. Hugh Shelton, Chairman of the Joint Chiefs of Staff, and the other service chiefs. Ryan called the President's proposed defense increase in Fiscal 2000 "a good start" but termed USAF readiness "very fragile."

helps to level the playing field and improve their quality of life. For that reason, it was very important for us to get the policy out quickly."

Congress authorized the expanded number of visits when it passed the 1999 Defense Authorization Act last October. Ready Reserve members are eligible if they satisfactorily complete 50 or more retirement points for military service in a calendar year. Reserve retirees can benefit if they are eligible for retired pay at 60 but have not yet reached that age. The benefit also applies to the dependents of these personnel.

Unused visits do not carry over from one year to the next.

Northern Watch Hits 100 Percent

For the first time in its history, Operation Northern Watch has achieved a 100 percent mission effectiveness rating for two months in a row.

Every scheduled ONW mission for October and November was flown. There were no cancellations caused by maintenance or political constraints. Two days were scrubbed because of weather, which does not

count when judging the mission effectiveness rate.

Improved airspace control procedures, communications upgrades, and improved cooperation among the coalition nations were all factors in ONW's effectiveness improvement.

"Accomplishing this feat demonstrates once again the dedication and motivation of the high-caliber professionals from the three nations that make up the ONW team," said the Combined Task Force's US commander Brig. Gen. David A. Deptula.

ONW replaced Operation Provide Comfort in January 1997. It enforces an air-exclusion zone that controls Iraqi airspace above the 36th parallel.

Modified KC-135R in First Overseas Mission

The Air Force announced Dec. 21 that a modified KC-135R refueler flew its first overseas mission under revised cockpit crew procedures and transferred 95,000 pounds of fuel to a B-52 in Alaskan airspace.

The Dec. 12 air refueling sortie was the first operational Pacer CRAG overseas mission flown under three-

USAF photo by SSgt. Angela Stafford



Desert Fox marked the combat debut of B-1s from Dyess AFB, Texas, and Ellsworth AFB, S.D.

Desert Fox—and Beyond

WASHINGTON, Jan. 14

In a limited, four-day operation, American and British aircraft and US air- and sea-launched cruise missiles struck some 100 Iraqi targets with no losses. However, the effect of the raids was in doubt as confrontation with Iraq continued.

US officials said Washington and London mounted the 70-hour campaign, dubbed Desert Fox, to punish Iraq for blocking United Nations arms inspectors, "degrade" its ability to acquire weapons of mass destruction, and to curb Baghdad's ability to threaten neighboring countries.

The attacks commenced Dec. 16 and targeted Iraq's integrated air defenses, command and control facilities, weapons development facilities, Republican Guard barracks, airfields, and an oil refinery. Iraqi put up virtually no resistance.

Navy F-14s and Navy/Marine F/A-18s aboard USS *Enterprise* struck with precision weapons, and surface ships and submarines launched 325 Tomahawk Land Attack Missiles. USAF A-10s, F-16s, and F-117s participated, using precision munitions. In action were B-52Hs, launching Conventional Air Launched Cruise Missiles, and B-1B Lancers, in their first combat, employing 500-pound bombs. UK Tornado attack aircraft flew numerous sorties. In all, allied air services flew some 650 combat sorties.

The Joint Chiefs of Staff Chairman, Army Gen. Hugh Shelton, said Iraq's missile effort was set back "at least a year." Defense Secretary William S. Cohen claimed "substantial" degradation of Iraq's command and control setup. Cohen and Shelton acknowledged many targets were not destroyed but insisted the attacks had the desired effect.

Skeptics—and they were many—saw Desert Fox not as a 1998 replay of 1991's 43-day-long Desert Storm campaign but as a rerun on a bit larger scale of earlier, ineffectual "pinprick" attacks on Saddam Hussein. "The Administration clearly rejected ... a policy of coercion, a policy of bombing until Saddam complied," former Bush advisor Richard Haass told the *Washington Post*. "It looks to me like 'pinprick-plus.'"

Baghdad within days was again defying allied demands. On Dec. 28, US warplanes exchanged fire with Iraqi air defenses, which had launched Surface-to-Air Missiles at them. The US aircraft were not hit. On Dec. 30, Iraqi defense forces fired six to eight SAMs at a British aircraft enforcing a no-fly zone over southern Iraq. USAF F-16s responded by firing two HARM missiles and several precision guided munitions at the site.

Then, on Jan. 5, two USAF F-15s and two Navy F-14s tussled with several Iraqi fighters violating a no-fly zone over southern Iraq. The US fighters fired several air-to-air missiles, which apparently failed to hit the Iraqi airplanes. One Iraqi fighter ran out of fuel and crashed. Five more incidents (Jan. 7, 11, 12, 13, and 14) took place in the northern no-fly zone.

person cockpit crew procedures, according to Maj. Hal Rice, 905th Air Refueling Squadron (Grand Forks AFB, N.D.) deputy commander for operations.

Pacer CRAG upgrades allow the aircraft to be flown by a pilot, copilot, and boom operator. Unmodified KC-135s are flown by a four-member aircrew, which includes a navigator.

Besides improving the KC-135's operational capability, the Pacer CRAG upgrade also reduces maintenance-related costs. During a 1994 study that compared existing KC-135 maintenance costs to the Pacer CRAG-equipped aircraft maintenance costs, the Air Force found the Pacer CRAG is cheaper and easier to maintain.

Global Hawk Still Soars

Global Hawk continues to fly successfully, with two aircraft now in operation and eight sorties completed as of early December.

The second flight of the long-range Unmanned Aerial Vehicle's airframe No. 2 took place Dec. 4, 1998. The UAV soared to 50,000 feet after its takeoff from Edwards AFB, Calif., and checked wideband communications links during its three hours and 18 minutes aloft.

"We confirmed the system's ability to send imagery data to the warfighter on the ground," said Col. Pat Bolibrzuch, program manager. "This is another first step and will help pave the way as we enter sensor flight testing in a couple of weeks."

The operation of Global Hawk's Integrated Sensor Suite is the next major item on the test agenda. Both air vehicles will be used to characterize ISS Electro-Optical and Synthetic Aperture Radar functions.

Manufactured by Teledyne Ryan, Global Hawk is intended to provide commanders with near-real-time intelligence imagery from high altitudes for long periods of time, using SAR, Moving Target Indicator, EO, and infrared sensor systems.

C-17 Quality Honored

The C-17 program, once near death due to design and production problems, won a major quality honor Nov. 17. Consistent improvements led Boeing's Globemaster III production team to a prestigious Malcolm Baldrige National Quality Award.

The Commerce Department's National Institute of Standards and Technology, which bestows the Baldrige awards, cited a 54 percent reduction in C-17 rework and repair since 1992 and 100 percent on-time delivery of new aircraft since 1995, among other things.



An F-16CJ returns from an Operation Northern Watch mission minus a high-speed anti-radiation missile fired against an Iraqi surface-to-air missile site. SSgt. Rodney Johns, with the 22d Expeditionary Fighter Squadron deployed from Spangdahlem AB, Germany, marshals the fighter aircraft.

"Exceptional" ratings in C-17 contractor performance assessment reports have also increased significantly since 1995, noted the Commerce Department.

"The process improvements made by Boeing continue to give us great confidence in the C-17 program. ... Better reliability and reduced ground time help keep us light, lean, lethal, and ready to move quickly to the fight," said Brig. Gen. George N. "Nick" Williams, director of plans for Air Mobility Command.

The Baldridge awards were established by Congress in 1987 to enhance US competitiveness by recognizing significant quality improvements by US companies.

US Rebuffs German Nuke Proposal

The US has rebuffed an effort by new German Foreign Minister Joschka Fischer to get NATO to change its policies on the use of nuclear weapons. Fischer, a leader of the anti-nuclear Greens Party and a key member of Germany's new coalition government, urged the Alliance to renounce first use of nuclear arms at a press conference on the eve of his debut at a NATO foreign ministers' meeting in December.

He was given a polite hearing. But the organization's nuclear powers, the United States, France, and Britain, rejected any attempt to lessen their flexibility in a crisis.

"We do not believe that a review is necessary. We have the right nuclear

strategy," said US Secretary of State Madeleine K. Albright.

AMRAAMs Find Y2K Is No Problem

On Dec. 9, an Advanced Medium-Range Air-to-Air Missile passed a Year 2000 test with no problems when it destroyed a target drone over the Eglin AFB test range off the coast of Florida.

The test was accomplished by entering data into both the AMRAAM and the F-15C fighter which carried it that indicated the year 1999 had already passed into history.

Extensive ground testing by the makers of both the missile and the aircraft had indicated neither had a Y2K problem. But the Air Force directed a flight test to make sure.

"This test indicates the seriousness with which the Air Force takes the Y2K problem," said Brig. Gen. William A. Peck Jr., director of requirements for Air Combat Command. "With this test, we were able to demonstrate that the two centerpieces of our current air superiority fighter force, the F-15 fighter and the AMRAAM missile, will work together beyond the year 2000."

Board Thinks Space Based Laser Unready

The Air Force Scientific Advisory Board believes it is too early for the service to forge ahead with its Space Based Laser Readiness Demonstrator. There are still too many unanswered questions about the

technology involved, the board said in a report on space issues.

As an alternative the Air Force should aim to make a decision in 2003 about whether to conduct an SBL on-orbit demonstration. Leading up to this decision point, risk reduction activity should focus on high-performance optical systems and ground demonstrations, said the SAB.

The Air Force should also consider alternatives to the current planned use of a hydrogen fluoride laser in the SBL system, said the study. It would be too expensive, at some \$2.5 billion, to conduct the system engineering, beam and fire control, and integration fixes needed to make the hydrogen fluoride system work.

An alternative would be a number of satellites equipped with electric solid-state lasers. These weapons could be recharged when not in use, unlike the hydrogen fluoride system, which carries a limited amount of fuel.

Meanwhile, the board report was effusive in its praise for another effort, the Space Based Radar program. SBR is "the one major new system to which we believe the Air Force should commit," said the SAB.

JASSM Program Slows, a Bit

The Joint Air to Surface Standoff Missile program is entering the Engineering and Manufacturing Development phase—but that phase will take a little longer than planned.

Pentagon officials have approved a change in JASSM's EMD schedule from 34 to 40 months amid concerns that the program's fast pace was a tad too aggressive.

Terry Little, JASSM program director at the USAF Air Armament Center, Eglin AFB, Fla., pointed out that the entire development of the long-range cruise missile is expected to take five years, as compared to 10 years for other such weapon programs.

"Folks were skeptical about that and our ability to achieve that," he said.

JASSM is a joint Air Force-Navy effort intended to provide US aircraft with a weapon capable of destroying high-value targets without putting aircrews at risk. The program entered EMD in November 1998. Plans call for JASSM to enter the Air Force inventory in 2002. The F-16 and the B-52 will be its first two delivery platforms.

"One of this program's initiatives is an early focus on manufacturing," said Little. "It's an integral part of our design phase. That's the way you have to do it if you want to be able to have a low-cost solution."

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Retired Gen. Benjamin Davis Jr. received his fourth star from President Clinton at a White House ceremony in December. At right is Elnora Davis McLendon, Davis' sister.

Benjamin O. Davis Jr. Gets Fourth Star

Gen. Benjamin O. Davis Jr. was "the first black everything" in the United States Air Force, says one historian. He was the service's first African-American lieutenant, captain, major, lieutenant colonel, and so forth.

Now, the retired World War II hero and race relations pioneer has won another laurel: his fourth star. At a White House ceremony Dec. 9, President Clinton made Davis a four-star general in honorarium. He is only the third Air Force commander to be presented with this honor, the others being Lt. Gen. Ira C. Eaker and Lt. Gen. Jimmy Doolittle, who received their promotions in 1985.

Despite his distinguished Air Force career, Davis is best known for his role as a commander of the all-black Tuskegee Airmen during World War II. The son of an Army general, he had graduated near the top of his West Point class, despite the fact that none of the cadets in four years ever spoke to him except on official business.

When President Franklin D. Roosevelt ordered the creation of a black military flying group in 1940, Davis won his chance to train as a pilot. In 1942, he was named commander of the 99th Pursuit Squadron in Tuskegee, Ala. He led the 99th, and later the 332d Fighter Group, into battle as bomber escorts in Europe. His forces never lost a bomber to enemy fire.

"He was a straight arrow and really made a lot of guys toe the line, and they appreciate it today, even though they didn't appreciate it then," said Woodrow Crockett, who served with Davis on 149 World War II combat missions.

After the war, Davis served as commander of Lockbourne AAB, Ohio; helped form the Thunderbirds aerial demonstration team; and commanded 13th Air Force at Clark AB, Philippines, among other posts. He retired from active duty in 1970.

Tuskegee Airmen veterans, in conjunction with the Air Force Association and such Congressional allies as Sen. John McCain (R) of Arizona, lobbied successfully for Davis to receive this rare post-career promotion.

"General Davis richly deserves this honor," said Thomas J. McKee, AFA national president.

US Sues Contractor Over USAF Housing Faults

The US Department of Justice has filed a \$45 million suit against the nation's largest builder of military family housing, alleging that more than half of the housing units it built at Ellsworth AFB, S.D., are so shoddy they are uninhabitable.

The suit charges that Hunt Building Corp. of El Paso, Texas, and its South Dakota subsidiary failed to design and construct the base's Centennial Estates 828-unit housing subdivision in compliance with applicable codes and did not have a comprehensive program to control unit construction quality. Among the houses' flaws, according to the government, are heating systems that leave lower-level bedrooms unheated, flimsy design that allows the units to twist and break apart in South Dakota's high, sustained winds, and pipes simply inserted into the ground to imitate mandatory sewer clean-outs.

Hasty construction may have been the basic cause of the problem, says DoJ. Hunt built Centennial Estates in less than 500 days, although its contract allowed up to 1,440 days before completion.

"No contractor should be able to get away with such shabby construction at taxpayer expense," said Karen Schreier, US attorney for South Dakota.

Under terms of the original contract, Hunt owns the housing and leases it back to the Air Force for around \$8 million per year. Since the Air Force occupied the first completed units in December 1990, it has paid Hunt some \$60 million in rent. Relocation costs for moving families out of the shoddy units already totals some \$7 million.

Freedom One Retires

Freedom One, the Air Force C-137B that flew home from Rhein-Main AB, Germany, the 52 remaining American hostages released by Iran in January 1981, has quietly retired.

When it left to retrieve the captives at Rhein-Main, the airplane was named simply Aircraft #971. But upon its re-entry into American airspace a Boston air traffic controller radioed, "Welcome home, *Freedom One*." Crew members liked the name and painted it on the nose of the aircraft.

Freedom One played the same role again 10 years later, when it flew home 20 prisoners of war released by Iraq at the end of the Persian Gulf conflict. A crowd of 8,000 greeted the aircraft and its passengers at Andrews AFB, Md., on March 19, 1991.

Ironically, Boeing originally was building Aircraft #971 for Cubana Airlines in 1958. But when Fidel Castro seized control of the country in February 1959, the US blocked delivery of the airplane and USAF took possession of it.

Unlike another recent service retiree, the famous Air Force One which carried President John F. Kennedy's body home from Dallas, *Freedom One* is not destined for a life as a tourist attraction at the US Air Force Museum, Wright-Patterson AFB, Ohio.

Instead, it was flown this fall to the Aerospace Maintenance and Regeneration Center at Davis-Monthan AFB, Ariz.—the Air Force boneyard.

AFSPC Supports Space Station Construction

NASA's space shuttle may be doing

the heavy lifting into orbit, but the Air Force space team is part of the US contribution to the construction of the multibillion dollar International Space Station, 240 miles above Earth.

The 5th Space Operations Squadron at Onizuka AS, Calif., provides data communications support for shuttle missions at some of their most critical moments. The recent mission of the shuttle *Endeavour*, in which it carried a Unity connecting node to attach to the orbiting Zarya control module launched by Russia, required 200 such SOPS supports, for instance.

"We're proud to be contributing to this international endeavor," said Capt. Chuck Spillar, 5th SOPS flight director for the *Endeavour* mission.

The squadron, in conjunction with the Air Force Satellite Control Network, is the primary source of data com-

munications during a shuttle's launch and landing and during space walks.

During the *Endeavour* mission, the crew completed three space walks during which they connected power and data lines. The 5th SOPS provided links during all those walks.

The Air Force involvement in shuttle communications stems from the fact that the space vehicle cannot communicate entirely via NASA infrastructure when its Ku-band antenna is turned off or stowed away. It is stowed during takeoff and landing. It is turned off during space walks, since it emits radiation that could be harmful to astronauts.

Since space is a vacuum, the radiation is not diffused by air, and any area outside the shuttle is dangerous when the Ku band is turned on.

"We also provide support during

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Maj. Alan Zwick from the 9th Reconnaissance Wing, Beale AFB, Calif., broke a 19-year-old record Dec. 12 when he flew his U-2 and payload more than 12.5 miles above Earth. Zwick surpassed the previous record of 28,513 feet—set by a Czech pilot in a Yak-40—12 minutes into his one hour, 55 minute flight.

docking to and undocking from the station," said Spillar.

Line Officer Promotion Rate Moves Up

The Air Force says it will increase its lieutenant colonel promotion rate—another sign that the age of the personnel drawdown is fading into history.

For the 1999 Line Lieutenant Colonels Board, set to meet April 19, the Air Force plans to promote at a 75 percent rate, up from the 70 percent rate that has been in effect since 1991.

The increase is part of a trend that has been building since 1996, when the promotion opportunity for line officers competing for major returned to the pre-drawdown rate of 90 percent.

Personnel officials also expect pin-on times to improve for all grades. The schedule of promotion boards will be pushed forward as a result.

The promotion board schedule for the second half of 1999 includes a colonels board in August instead of December, for instance, and a second lieutenant colonels board in December.

"These changes are a welcome reversal from rising pin-on times and lower promotion opportunities prevalent during recent drawdown years," said Lt. Gen. Donald L. Peterson, USAF's deputy chief of staff for personnel.

Space Research Funds to Increase

The Air Force plans to double its

space research budget by the end of the current future years defense plan, says acting Air Force Secretary F. Whitten Peters.

The money will come out of the funds formerly devoted to research on air-breathing vehicles. The consolidation of research facilities under the Air Force Research Laboratory has made the shift possible, according to Peters.

The increase in research funds is just one part of a trend toward more national spending on the space industry, the acting Air Force chief said at a commercial space industry leaders conference Dec. 10. Another example of this is the Evolved Expendable Launch Vehicle, which has received a billion dollars apiece from the Air Force, Lockheed Martin, and Boeing.

"The better Lockheed Martin and

Boeing do commercially, the better off we are because it will reduce our cost of getting to space," he said.

Beginning in 1999, two Air Force space ranges—the Eastern Range at Patrick AFB, Fla., and the Western Range at Vandenberg AFB, Calif.—will have more commercial launches than military ones.

"Realistically they are both national ranges now," said Peters. "We are in an era where the ranges serve a very large commercial base."

As the center of gravity in space activities switches to the commercial side, the Air Force must make sure it retains the right space force and the right people.

"Whatever we do, first we need to make an assessment of what the space career field is ... and make sure we retain the assets we need to have a national defense space team," said Peters.

News Notes

■ An Air Force staff sergeant and two noncommissioned officers from the Japan Air Self Defense Force recently received the Air Force's highest peacetime medal for their efforts to save a downed F-16 pilot from a fiery July 1998 crash. SSgt. Miguel Perez of the 3d Space Surveillance Squadron, SMSgt. Hiroshi Nishihama of the JASDF's 3d Air Wing, and SSgt. Kenzo Koyama of the Airborne Early Warning Group received their Airman's Medals before a packed house at the Tohoku Enlisted Club, Misawa AB, Japan, Nov. 11.

■ Two air mobility leaders were inducted into the Airlift/Tanker Association Hall of Fame Dec. 3 at a Scott AFB, Ill., ceremony. Retired Gen. William G. Moore Jr., a former commander of Military Airlift Command and a veteran of three wars, and retired Col. Joe M. Jackson, the

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Pay Raises in Offing

With Clinton Administration backing, the Pentagon is proposing the most sweeping military pay increases and retirement system changes since the Reagan buildup of the early 1980s.

The total pay package would cost \$30 billion over six years.

Under the plan, which must win Congressional approval, everyone in uniform would get at least a 4.4 percent raise on Jan. 1, 2000, plus 3.9 percent annual raises in fiscal years 2001 through 2005. In addition, targeted additional raises of up to 5.5 percent would go to those in positions where the Pentagon most wants to increase retention, particularly mid-career officers and noncommissioned officers.

Experience would count, as well as rank. A major with two years' experience would receive the base 4.4 percent increase, for instance, while a major with six years would get a total of 9.9 percent—5.5 percent more as part of the targeted pay reform.

"We want the best that we can attract," said Secretary of Defense William S. Cohen when announcing the proposal on Dec. 21. "We are working in an environment in which it's very hard to compete against a robust economy such as we have."

On the whole, however, the changes would reform the pay tables to make raises for promotion bigger than those for longevity.

Today, for instance, an individual in the E-6 pay grade with eight years of service may make the same or less than one of his subordinates, an E-5 with 14 years of service. The proposed pay change would alter this situation, without cutting anyone's salary.

"We're targeting that, and that's part of the retention concerns we have," said Army Gen. Hugh Shelton, Chairman of the Joint Chiefs of Staff.

The retirement pay changes would take the military back to the future. Personnel with 20 years' experience would be able to retire with retirement pay pegged at 50 percent of base pay. That is the basic formula that was in effect before 1986, when budget-cutters in Congress slashed prospective pensions for 20 years of service to only 40 percent of base salary.

"Today, in this uncertain time of high demand and smaller forces, the retirement change—popularly known as Redux—is undermining morale and it's hurting retention," said Cohen. "Therefore, we are committed to returning 20-year retirement to 50 percent of base pay."

Potential retirement pay is a large factor in many mid-career military career decisions. DoD's top leadership hopes the new package will help tip in their favor many stay-or-go questions for F-16 crew chiefs, radio technicians, and other key personnel.

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only airlift pilot to receive the Medal of Honor, were the ATA honorees.

- Amn. Reggie Jones, a fuels technician for the 97th Supply Squadron at Altus AFB, Okla., single-handedly put out a fire on a fuel truck Nov. 17. His quick use of a handy extinguisher prevented a possible explosion near the KC-135 he was refueling. A worn wire and safety circuit breaker switch were determined to be the fire's cause.

- An F-16 from Luke AFB, Utah, crashed about 3:30 p.m. Dec. 15 about 40 miles west of Gila Bend, Ariz. The airplane was on a routine training mission. The pilot, Maj. Will Sparrow of the 61st Fighter Squadron, ejected safely.

- The Department of Defense has published its first comprehensive history of the captivity of Vietnam-era prisoners of war. The book was produced by the Secretary of Defense's Historical Office and is titled *Honor Bound: The History of American Prisoners of War in Southeast Asia, 1961–1963*.

- Outgoing House Speaker Rep.

Newt Gingrich (R) of Georgia is joining a national security study commission he helped create while on Capitol Hill. He will be a member of the 21st Century National Security Study Group, which is charged with assessing the global security environment for early next century and crafting strategies for US forces to protect the nation's interests.

- F-15D Eagle tail #80-0058 of the 33d Fighter Wing, Eglin AFB, Fla., reached a historical milestone by becoming the first USAF F-15 to reach 6,000 flying hours. While a notable accomplishment, the mark also highlights the age of the nearly 20-year-old aircraft design, said officials.

- Sen. John W. Warner (R-Va.) was elected chairman of the Senate Armed Services Committee by his GOP panel colleagues Dec. 2. Warner is a former Navy Secretary. He succeeds Sen. Strom Thurmond of South Carolina.

- The Airborne Laser program won a *Popular Science* magazine annual "Best of What's New" award Nov. 13.

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The program office accepted the award at ceremonies in New York's Central Park.

■ Rob DeJesus, a crew chief with the 309th Fighter Squadron, Luke AFB Ariz., and his partner, Tom Fuhrmann, an air traffic control officer at Sheppard AFB, Texas, won a National Racquetball Doubles Championship in Baltimore this fall. The pair beat several touring professionals and top-rated amateurs in the 25-and-older division to win the first national amateur racquetball title for the armed forces.

■ A1C Richard Beard, an air traffic controller at Pope AFB, N.C.; Allison Rupert, daughter of a retired Air Force ground safety member from the Pope area; and Charlene Stewart, daughter of Lt. Col. Barbara Stewart of Laughlin AFB, Texas, this fall became the first USAF people to win US Congressional Awards. The awards, for young people age 14 to 23, emphasize community service, physical fitness, and personal development.

■ Air Force Space Command's Space Battlelab recently tested an inexpensive commercial telescope and determined that it could save the Air Force up to \$1 million. The 16-inch telescope is smaller and cheaper than the current Space

Surveillance Network and is capable of providing accurate deep-space tracking data that could augment the SSN.

■ US and North Korea have reached agreement on remains recovery operations for 1999. Joint teams will take part in an expanded scheduled of six such recovery operations, beginning in Kujang and Unsan, where previous teams have worked. During the past three years, joint teams have recovered the remains of 29 soldiers.

■ TSgt. Randall Stewart, engine quality assurance inspector at Hurlburt Field, Fla., has designed a simple foam and nylon plug that could save the Air Force hundreds of thousands of dollars. The new plug replaces an old metal one used to cover the engine intake of H-53 helicopters while on the flight line. The H-53 was the last air vehicle in the Air Force inventory to have metal

plugs, which can easily shed pieces that damage engines.

■ A civil engineer at Grand Forks AFB, N.D., recently earned a Federal Energy and Water Management award for a water heater replacement program in military family housing. The project, designed by 319th Civil Engineer Squadron electrical engineer Michael J. Anderson, will yield \$630,000 in annual savings.

■ Three US airmen based at RAF Lakenheath, UK, recently received the Airman's Medal. Maj. (Dr.) Michael Mann and Capt. (Dr.) Michael Kadrmas, both from the 48th Medical Operations Squadron, were honored for pulling injured crewmen from a burning Angolan cargo airplane during a deployment to Brazzaville, Congo. SrA. Jason Smith, 493d Fighter Squadron, was honored for helping to pull a drowning child from the Ceyhan River while on deployment in Turkey. ■

Senior Staff Changes

NOMINATIONS: To be **Lieutenant General:** Eugene L. Tattini.

To be **Brigadier General:** James B. Armor Jr., Barbara C. Brannon, David M. Cannan, Richard J. Casey, Kelvin R. Coppock, Kenneth M. Decuir, Arthur F. Diehl III, Lloyd E. Dodd Jr., Bob D. Dulaney, Felix Dupre, Robert J. Elder Jr., Frank R. Faykes, Thomas J. Fiscus, Paul J. Fletcher, John H. Folkerts, William M. Fraser III, Stanley Gorenc, Michael C. Gould, Paul M. Hankins, Elizabeth A. Harrell, Peter J. Hennessey, William W. Hodges, Donald J. Hoffman, William J. Jabour, Thomas P. Kane, Claude R. Kehler, Frank G. Klotz, Robert H. Latiff, Michael G. Lee, Robert E. Mansfield Jr., Henry A. Obering III, Lorraine K. Potter, Neal T. Robinson, Robin E. Scott, Norman R. Seip, Bernard K. Skoch, Robert L. Smolen, Joseph P. Stein, Jerald D. Stubbs, Kevin J. Sullivan, James P. Totsch, Mark A. Volcheff, Mark A. Welsh III, Stephen G. Wood, Donald C. Wurster.

CHANGES: Brig. Gen. Michael M. Dunn, from Dir., P&P, PACAF, Hickam AFB, Hawaii, to DCS, UN Command/US Forces Korea, Yongsan, South Korea ... Brig. Gen. (sel.) Thomas J. Fiscus, from Staff Judge Advocate, PACAF, Hickam AFB, Hawaii, to Staff Judge Advocate, ACC, Langley AFB, Va. ... Brig. Gen. (sel.) Donald J. Hoffman, from Spec. Asst., Supreme Allied Cmdr. Europe, SHAPE, Belgium, to ACS, Ops., Allied Air Forces Northwest Europe, RAF High Wycombe, UK ... Brig. Gen. (sel.) Jerald D. Stubbs, from Cmdr., AF Legal Services Agency, Bolling AFB, D.C., to Staff Judge Advocate, AFMC, Wright-Patterson AFB, Ohio.

SENIOR ENLISTED ADVISOR CHANGES: CMSgt. Billy Blackburn to AFRC, Robins AFB, Ga. ... CMSgt. Raymond G. Carter to AFOSI, Andrews AFB, Md.

SENIOR EXECUTIVE SERVICE RETIREMENT: Robert D. Wolff.

SES CHANGES: Michael A. Aimone, to Dep. Civil Engineer, Office of the Civil Engineer, USAF, Pentagon ... Timothy A. Beyland, to Assoc. Dep. Asst. Secy., Contracting, Asst. SECAF, Acq., Pentagon ... Charles E. Browning, to Dir., Materials & Manufacturing Directorate, Air Force Research Lab, Wright-Patterson AFB, Ohio ... Joseph G. Diamond, to AFPEO, Weapons, Pentagon ... Timothy L. Dues, to Assoc. Dir., Manufacturing Tech. & Affordability, Air Force Research Lab, Wright-Patterson AFB, Ohio ... David Hamilton, to Dep. Dir., Test & Eval. Directorate, USAF, Pentagon ... Lawrence B. Henry Jr., to Dep. Admin. Asst., Office of the Administrative Asst., Pentagon ... Terry L. Neighbor, to Dir., P&P, Air Force Research Lab, Wright-Patterson AFB, Ohio ... Milton C. Ross, to Dep. Dir., Contracting, AFMC, Wright-Patterson AFB, Ohio ... John B. Salvatori, to Dir., Intel. Systems Spt. Office, Pentagon ... Judy A. Stokley, to Prgm. Dir., Air-to-Air Joint SPO, Eglin AFB, Fla. ... Marion L. Williams, to Technical Dir., AFOTEC, Kirtland AFB, N.M.