

By Peter Grier

USAF Grapples With F-22 Costs

Air Force officials say that they have been hit with nearly \$1 billion worth of F-22 fighter cost increases.

They hasten to add that they believe they can still complete the Raptor program without busting a Congressionally mandated cost cap, due to budget flexibility.

The price rises are reflected in a \$312 million increase in the Air Force's 2000 budget request for the F-22 and a projected \$667 million in further increases noted in a recent preliminary General Accounting Office report.

Lt. Gen. Gregory S. Martin, principal deputy assistant secretary of the Air Force for acquisition, noted these figures at a March House hearing—though he added that the \$667 million in out-year hikes was only an estimate.

Air Force planners are aiming to bring the F-22 research and development program to a close under an \$18.6 billion cap.

The flight test program might be one area of savings, said Martin, since the airplane is performing so well. If further penny-pinching is necessary, service leaders have already decided to delay the F-22's certification of external weapons carriage.

Avionics delays are one factor driving Raptor costs up, according to the GAO. Past problems in manufacturing the titanium castings which connect wings and other body parts have also contributed.

The F-22 is not the only tactical aircraft program currently under the budget microscope.

The GAO also reports that it does not accept the Navy's assertion that the F/A-18E/F program is on schedule and within cost. The Navy's conclusion "reflects the projected aircraft performance, not the actual performance being demonstrated in flight tests," Louis J. Rodrigues, GAO director of defense acquisition issues, told Congress in March.

Boeing Joint Strike Fighter Passes Review

On Feb. 24, Boeing announced that its entry in the Joint Strike Fighter competition passed its third formal

Defense Department review with flying colors.

"The program is on schedule, on budget, and has the ability and will to fly two demonstrators," said Richard D. Hearney, Boeing's vice president of military aircraft and missile systems group.

The program is 56 percent finished, on a cost basis, with only a 5 percent cost overrun, said Boeing officials.

Recently, Boeing changed its X-32 JSF design, adding horizontal tails, a modified wing trailing edge, and an aft-swept inlet. The changes should not mean that the program cannot meet military specifications, said Boeing.

The Pentagon is expected to select either Boeing's X-32 or Lockheed Mar-

tin's X-35 for its JSF in March 2001. The winner will land a huge prize: a program that could be worth \$300 billion if all 6,000 projected aircraft are eventually built.

Air Force Defends Airborne Laser

Air Force officials are defending the Airborne Laser program against charges the program faces too much technological risk. The system is also known as the YAL-1 Attack Laser.

A restructuring that stretches the program by a year and adds more risk reduction testing should take care of the problem, according to service and contractor officials.

A report by Gen. Robert T. Marsh, Continued on p. 18

Boeing Offers More C-17s, Lower Price

Boeing offered to sell the Air Force a new batch of 60 C-17 transports at a cost 15 percent below current contract prices.

The offer, if accepted in full, would increase the ultimate size of the C-17 fleet from 120 to 180 aircraft. At present, the service has 120 of the advanced airlifters either on the ramp, in construction, or under contract for future delivery.

In addition, USAF has previously stated its requirement for 15 C-17s beyond the 120 and has included funding for all but one of them in the Fiscal 2000–05 defense plan.

The Air Force currently is buying the advanced airlifter under a multiyear contract. The 60 new airplanes would carry more fuel, which would increase their range and payload.

The offer was made to give the Air Force "real numbers" to work with in the preparation of several ongoing mobility studies, such as Mobility Requirements Study–05, set to be completed late this spring, according to Boeing's Stuart Thomson, vice president for business development.

The Air Force is reassessing the lift requirement in light of the true pace of operations since the end of the Cold War. It is planning a major rehabilitation of the C-5 Galaxy fleet, to include re-engining.

Thomson said production of long-lead items for the C-17 begins shutting down in 18 months. By considering the cost data now, he said, the Air Force can make an informed choice about putting more airplanes into "the normal process of the [program objective memorandum] development" rather than as a "crisis action" when the production line starts to close.

Under the proposal, the average flyaway price of each additional C-17 would be \$149 million, a figure that includes the cost of government-furnished engines. Under the existing C-17 contract, the best single-airplane price is \$198 million.

Both figures are in current dollars.

In addition, the airplanes would have additional fuel tankage of 10,000 gallons, or 67,000 pounds. The baseline C-17 carries 182,000 pounds of fuel.

The price quoted to the Air Force assumes maintaining production at 15 airplanes per year through 2006 and finishing out the buy with five in 2007, rather than in 2003, as is now planned. It also assumes that Boeing will be able to achieve further materials and process savings. The company is investing \$275 million in manufacturing improvements, which Thomson said are expected to yield a 3-to-1 return in savings.

—John A. Tirpak, Senior Editor

To War in the Balkans

APRIL 12, 1999

Relying on a formidable air armada, the US-led NATO Alliance on March 24 launched Operation Allied Force against Serb forces in Yugoslavia. The Allies mounted the air operation to end the crisis in Kosovo, a province where Serbs were committing atrocities against ethnic Albanians in a spasm of "ethnic cleansing."

This marked the first time in NATO's 50-year history that the Alliance had conducted armed operations against a sovereign nation.

Send-off. A member of the 510th Fighter Squadron, Aviano AB, Italy, salutes an F-16 pilot about to launch a mission into Yugoslavia.



USAF photo by SrA. Jeffrey Allen

USAF photo by SSgt. Eirain Gonzalez



The Bone and the BUFF. At RAF Fairford, UK, a B-52H sits on the ramp as a B-1B bomber lands. The two USAF heavy bombers played a major role in Operation Allied Force. B-52s forward deployed to Britain carried out precision cruise missile attacks on Yugoslav targets, firing the opening shots of the war. The B-1B, with a 42,000-pound payload, dropped cluster munitions on Serb forces in Kosovo. Allied Force marked the first time USAF has used all three types of bombers in a single conflict. NATO at the outset of the war publicly ruled out use of ground forces, and by the third week of the war, NATO's air fleet had swelled to some 600 fighter, bomber, transport, and special-purpose aircraft, the bulk of them belonging to the US Air Force.

B-2 at the rendezvous. USAF's newest combat aircraft, the B-2 bomber, went to war for the first time. On opening night of the war, two of the long-range stealth aircraft flew from Whiteman AFB, Mo., dropped 32 precision weapons on Yugoslav targets, and returned to base, completing a 30-hour trip. Here, a B-2 refuels from a KC-10 Extender after completing an Allied Force mission. KC-135R Stratotankers also played a key role in refueling operations.



USAF photo by SSgt. Ken Bergmann

USAF photo by Kristina P. Cilia



Bound for the Balkans. Members of the 60th Aerial Port Sq., Travis AFB, Calif., throw a cargo net over palletized crates of tents. The shelters were used by ethnic Albanian refugees forced from their Kosovo homes. USAF mounted a major airlift of food, water, shelter, medicine, and other items needed to establish temporary camps for homeless thousands. This humanitarian mission, called Operation Sustain Hope, featured C-5s, C-17s, C-130s, and contract 747s. Overall AMC missions for Allied Force also included C-141s, KC-10s, and KC-135s.

US Army photo by Spc. Tracy Trotter



Requiem for a MiG. A NATO team surveys what's left of a Yugoslav MiG-29, one of two shot down by USAF F-15C fighters on March 26. The Fulcrums crossed into Bosnian airspace, possibly to attack NATO peacekeepers. The shootdowns brought to five the number of MiG-29s destroyed. USAF itself lost an aircraft—an F-117 stealth fighter, which was brought down on March 27. US forces rescued the pilot and returned him to Italy.

Eagle to the fight. For weeks on end, NATO warplanes streaked out of Aviano AB, Italy, headed for operations over Yugoslavia. F-15E Strike Eagles, such as this one, were sent against some of the toughest Yugoslav targets in the early going. Ground attacks were also carried out by F-16, A-10, and special operations aircraft, while E-3 AWACS, E-8 Joint STARS, Rivet Joint, and USAF spacecraft provided critical support.



USAF photo by SrA. Jeffrey Allen

USAF (Ret.), sent to Congress March 18 concluded that ABL officials had outlined too little testing in such areas as atmospheric measurement. It endorsed the proposed program restructure, however, and spoke enthusiastically of the potential of the system.

If achieved, the ability to deliver lethal doses of electromagnetic energy from an aircraft onto distant targets at the speed of light will represent a truly revolutionary weapon in the nation's arsenal, said the Marsh study.

Peters Announces Humanitarian Mini-AEFs

On March 5, acting Secretary of the Air Force F. Whitten Peters announced the creation of five mobility Aerospace Expeditionary Force lead wings designed to carry out such humanitarian missions as delivery of relief supplies. The five will complement the 10 combat Aerospace Expeditionary Force lead wings and two on-call Aerospace Expeditionary Wings whose fighters and bombers will remain committed to national security missions.

The mobility AEF wings will draw many of their forces from the other AEFs.

It was the experience of helping out after Hurricane Mitch that caused service leaders to realize they needed humanitarian AEWs, said Peters. Such airlift efforts require a different set of skills than patrolling over Iraq or Bosnia.

EAF Wings in Three Flavors

USAF on March 5 announced changes in force structure affecting operating locations, people, and aircraft in the US and Britain. Included were identities of 10 Aerospace Expeditionary Force combat lead wings, five mobility lead wings, and two permanent on-call AEFs.

Lead wings are the heart of the Expeditionary Aerospace Force concept, scheduled to become operational by Jan. 1, 2000. The goal is to reduce the stress and strain of high optempo.

Aerospace Expeditionary Force Lead Wings (Combat)

No.	Wing	Base	Command
1	388th Fighter Wing	Hill AFB, Utah	ACC
2	7th Bomb Wing	Dyess AFB, Texas	ACC
3	3d Wing	Elmendorf AFB, Alaska	PACAF
4	48th FW	RAF Lakenheath, UK	USAFE
5	355th Wing	Davis-Monthan AFB, Ariz.	ACC
6	20th FW	Shaw AFB, S.C.	ACC
7	2d BW	Barksdale AFB, La.	ACC
8	28th BW	Ellsworth AFB, S.D.	ACC
9	27th FW	Cannon AFB, N.M.	ACC
10	1st FW	Langley AFB, Va.	ACC

AEF Lead Wings (Mobility)

1/2	43d Airlift Wing	Pope AFB, N.C.	AMC
3/4	60th Air Mobility Wing	Travis AFB, Calif.	AMC
5/6	22d Air Refueling Wing	McConnell AFB, Kan.	AMC
7/8	319th ARW	Grand Forks AFB, N.D.	AMC
9/10	92d ARW	Fairchild AFB, Wash.	AMC

On-Call Aerospace Expeditionary Wings

1	366th Wing	Mountain Home AFB, Idaho	ACC
2	4th FW	Seymour Johnson AFB, N.C.	ACC

National Missile Defense Legislation Advances

Both chambers of Congress in early March passed bills mandating deployment of a National Missile Defense system for the United States. Neither piece of legislation mentions a specific deployment date, but the Senate version does call for construction of such an NMD system "as soon as technologically possible."

The votes—97–3 in the Senate and 317–105 in the House—put more pressure on an administration that has proceeded down the NMD road in a more leisurely manner than many lawmakers would like.

The White House had to abandon a veto threat levied against the NMD bills after Democratic senators said such a veto would be hard to sustain—and after passage of amendments that link American NMD policy to continued arms talks with Russia.

The Clinton Administration has long

USAF photo by SrA. Stan Parker



A1C Scott Richard (foreground) and SSgt. Gene Sukup, both of the 52d Civil Engineer Sq., Spangdahlem AB, Germany, secure the foundation for additional tents at Aviano AB, Italy, primary staging point for troops supporting Operation Allied Force.

planned to make an NMD decision in June 2000. If the decision is "go," a system could be ready by 2005, according to Pentagon estimates. First-generation NMD equipment would be intended to protect the US against limited missile launches and not an all-out attack.

NMD has been gradually gaining support in Congress as the potential threat of rogue nation ballistic missiles grows more apparent. North Korea's test of a Taepo Dong 1 missile over Japan, and intelligence reports that it will soon test a multistage missile capable of hitting some parts of the US, may have changed the minds of many missile defense opponents.

Sea-based NMD?

It is far from a forgone conclusion that any American National Missile Defense system will depend on land-based interceptor rockets. In recent months some Navy officers and outside experts have become increasingly outspoken about the virtues of sea-based NMD.



USAF photo by MSgt. Val Gempis

SrA. Christopher L. Bryer, an aircrew egress specialist, 35th Maintenance Sq., Misawa AB, Japan, performs cleaning and polishing on an F-16D canopy during its 36-month maintenance inspection. Bryer and about 150 other Misawa support personnel, along with eight F-16CJ Wild Weasel suppression-of-enemy air-defenses aircraft, deployed to Saudi Arabia recently to help enforce the southern no-fly zone in Iraq. The tour marks the fourth into the region for the 35th Fighter Wing.

The \$90 Billion Minimum

"CBO estimates that DoD would need to spend about \$90 billion a year to maintain steady-state procurement funding for today's force structure. ... DoD plans to spend much less than \$90 billion a year. Average annual spending in the Administration's six-year plan equals \$62 billion, which is DoD's goal. Planned purchases do not equal steady-state procurement since they do not halt fleet aging. And planned funding is only two-thirds of the funding DoD would need to maintain its forces.

"The cost of steady-state procurement for DoD is sensitive to a number of assumptions, changes in which could raise or lower that cost. The estimate of \$90 billion assumes that DoD will keep its major weapons longer than it has in the past. If DoD was unable to extend service lives as long as it plans, the estimate would be much higher."

From "Aging Military Equipment," a Feb. 24, 1999, report to Congress by Lane Pierrot, Congressional Budget Office senior national security affairs analyst.

Average Ages of Selected Equipment (In Years)

Type	Weapon Systems	Service	Midpoint of Planned Service Life	Average Age in 1999	Average Age in 2007
<i>Missions Without Replacement Plans</i>					
Tanks	M1 Abrams	Army	15	12	20
Shore-Based Maritime Patrol Aircraft	P-3C	Navy	15-20	23	31
Support Aircraft	E-2, EA-6B, S-3B	Navy	10-18	18	24
Bombers	B-52, B-1, B-2	Air Force	25-35	23	30
Tankers	KC-135, KC-10	Air Force	25-33	39	47
<i>Missions With Replacement Plans</i>					
Light Attack and Scout Helicopters	OH-58 Kiowa (Replacement: Comanche)	Army	10-18	21	28
Surface Combatants	DDG-51, DD-21 (Replacement: CG-47, others)	Navy	15-20	12	15
Multirole Fighters, Close Air Support	F-14, F/A-18, AV-8B (Replacement: Joint Strike Fighter)	Navy	10-15	13	16
Multirole Fighters, Close Air Support	F-16, A-10 (Replacement: JSF)	Air Force	10-15	12	19
Air Superiority Fighters	F-15A-D (Replacement: F-22)	Air Force	10-15	18	23

Source: Congressional Budget Office based on data from the Department of Defense.

The \$2.6 Billion Hole

When the latest Pentagon budget drill ended early this year, USAF wound up short of money for many validated requirements.

The Fiscal 2000 shortfall was \$2.6 billion, by official count.

In a Feb. 22 letter to Congress, Gen. Michael E. Ryan, USAF Chief of Staff, provided a list showing gaps of \$760 million in modernization, \$901 million in readiness, and \$926 million in infrastructure. The list follows:

(in millions)		(in millions)	
Cumulative Data	FY 2000	Readiness Item	FY 2000
Modernization items	\$759.9	Spares inventory	\$195.2
Readiness items	901.2	Initial spares	43.6
Infrastructure items	926.0	Engine modifications	16.5
Total unfunded	\$2,587.1	Training munitions	146.8
		AC2ISR Center programs	42.9
Modernization Item	FY 2000	EFX/Joint Experimentation	60.4
ALCM to CALCM conversion	\$69.1	Civil Air Patrol	7.5
B-52 radar upgrades	15.4	NBC high-leverage funds	18.8
F-16 HARM targeting system pods	6.4	Rivet Joint #15-16/Cobra Ball 3	32.4
LANTIRN midlife upgrade equipment	10.6	C-130J logistics and training	24.2
F-16 Goldstrike program	14.4	Depot maintenance to 90%	87.0
Accelerate JPATS buy	85.4	Mobility CLS contract	72.4
Wind-corrected munitions dispenser	10.1	Sustaining engineering	95.4
Communications	88.0	ICBM prime contract	16.3
Space range modernization	60.5	C-17 sustainability	41.8
60K loader acceleration	12.5	Unfunded	\$901.2
Special purpose vehicles	52.8		
C-17 modifications	35.9	Infrastructure Item	FY 2000
MILSATCOM terminals	23.8	Military family housing O&M	\$205.0
B-2 Link 16	36.0	Base operating support	169.9
E-8 and E-3 computer/display upgrades	17.1	Real property maintenance	360.0
Global air traffic management	59.1	Environmental clean-up funds	54.5
E-8 #14 procurement line shutdown	48.2	Communications infrastructure	74.0
Classified program 2	2.0	ACALS sustainment	13.6
Classified program 3	18.0	Real property support	49.0
Science and technology	94.6	Unfunded	\$926.0
Unfunded	\$759.9		

Such a system would expand on the current tracking and fire-control capabilities of Aegis cruisers and destroyers. Building on existing equipment could provide a near-term technical advantage, proponents say.

It might also make defensive sites more survivable, as the stealthiness and mobility of Trident missile subs make them harder to attack than land-based ICBM silos.

But cost is an issue. A recent Pentagon study asserted that a sea-based NMD system would cost \$19 billion—almost twice as much as the \$10.5 billion DoD has currently allotted for a first-generation land-based NMD.

A recent Heritage Foundation report claimed the \$19 billion figure was excessive and put the cost of a sea option at \$8 billion. Unlike DoD, Heritage assumed that existing Aegis ships would make up the backbone of the system, as opposed to new NMD-only craft.

One big stumbling block could be the Anti-Ballistic Missile Treaty struck with the Soviets in 1972. The ABM pact specifically prohibits sea-based defense missiles.

Army, Navy Open Recruit Door Wider

In recent months both the Army and the Navy have relaxed their educational requirements for enlistees. But the Air Force won't be following their lead—despite today's tough recruiting environment.

The policy remains that 99 percent of young people coming into the Air Force must either have a high school diploma or a General Equivalency Degree and at least 15 hours of college.

Without such an education, it is hard to master the high-tech skills needed to keep today's aircraft flying, say service officials.

The Air Force is maintaining this standard despite indications that it may not meet its annual recruiting goal for the first time since 1979. At the end of February, the service was 7.7 percent short of its month-to-month recruiting goals.

Things are even tougher for the Army and Navy. That is why both now allow up to 10 percent of their recruits to be high school dropouts who have an equivalency degree only.

A booming civilian economy is

one reason recruitment is tough. But youngsters today are also less likely to accept the discipline and uniformity that a tour in the military requires.

Pay and pension increases now moving through Congress could help. Sen. John W. Warner (R-Va.), chairman of the Senate Armed Services Committee, has another idea: shorten enlistments, despite the fact that such a move would raise training costs considerably.

In a March letter to service chiefs, Warner urged them to consider reducing enlistment time from four years or more to 18 months.

The Army already allows two-year enlistments in a number of combat arms specialties. The Navy has a handful of two-year slots available. The Air Force, and the Marines, have continued to insist on a four-year minimum.

F-16 Crash Rate Rising

F-16 crash rates are rising again after years of decline, and worried Air Force officials can see no obvious cause for the spike.

For the Record

“The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defense recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.”

—Article 5 of the Washington Treaty, basis of NATO, signed April 4, 1949.

Albanian Population in Southern Balkans

Albania	Pop: 3,400,000	Ethnic Albanians: 99%
Kosovo	Pop: 1,600,000	Ethnic Albanians: 81%
Macedonia	Pop: 441,000	Ethnic Albanians: 23%
Montenegro	Pop: 41,000	Ethnic Albanians: 7%

Source: National census of Yugoslavia, Albania, as reported in the *Washington Post*, March 24, 1999.

In 1996, the Class A accident rate for the lightweight fighter jet was a record-low 2.14 per 100,000 flying hours. In 1997, it climbed to 3.0 and in 1998 to 3.89. As of mid-February, the Fiscal 1999 F-16 crash rate was 5.83 per 100,000 flying hours.

Engine trouble may be one reason. Of the nine 1999 crashes, six were caused by engine failure. Five of 1997's 11 Class A accidents were engine-related.

But officials caution that “engine failure” is a broad term that can cover everything from design problems to poor maintenance. And engines have not been failing in the same manner—each has been a unique and isolated problem.

Still, Air Force officials had an informal meeting at Luke AFB, Ariz., this winter to discuss the possibility of acute F-16 engine problems.

Over time, about 52 percent of the F-16's Class A accidents have been caused by pilot failure, according to manufacturer Lockheed Martin. Some 36 percent have been engine related.

USAF Wants F-16 Engine Fixes Accelerated

The Air Force has asked Pratt & Whitney and General Electric, the contractors who manufacture the engines used in the F-16, to accelerate planned power plant improvements, officials told a House appropriations panel March 10.

The high number of F-16 crashes attributable to engines has caused the service to allocate funds in its Fiscal 2000 budget to redesign some engine parts as a precautionary

measure. The current time frame to field the new components is 18 to 24 months, and the Air Force leadership has decided it wants things to move faster than that.

Officials told the House panel that they have conducted thorough inspections and do not think additional crashes will result if the parts are delayed.

Optempo a Factor in Pave Hawk Collision

High operations tempo, and the crew burnout it causes, may have been a contributing factor to the Sep-

tember midair collision of two HH-60G helicopters at Nellis AFB, Nev.

An accident investigation report released March 15 said that the accident, which killed all 12 crew members from the two 66th Rescue Squadron aircraft, was directly caused by operator error and possible breakdown in crew coordination during evasive maneuver or close formation flying.

A number of things may have lain behind these human mistakes, said Col. Denver L. Pletcher, head of the board and commander of the Joint Combat Rescue Agency at Langley, AFB, Va.

“They include operation tempo, training shortfalls, leadership dynamics, broken squadron processes, and human factors,” said Pletcher.

The Pave Hawk pilots just weren't as sharp as they could be, said officials. The squadron had been home only 10 months out of the previous 36. A clinical psychologist assigned to the board concluded that the 66th was severely overtasked at the time and under immense operational stress.

In addition, the squadron was faced with what Pletcher described as a virtually unmanageable imbalance in copilot manning and experience levels. This was due to the addition of four Pave Hawks to the unit, the replacement of several experienced commanders, and a lack of seasoned instructors to break in the new pilots.

“Put all these together and you make an accident more probable,” said Pletcher.



SSgt. Nathaniel L. Raney, an orthotic laboratory technician, 374th Medical Operations Sq., Yokota AB, Japan, uses a sewing machine to fabricate leather cuffs for custom-made leg braces. The lab, which makes wrist splints, cervical collars, ankle supports, and other braces for people with compression-type problems, is the only one of its kind in the Pacific theater.

USAF photo by MSgt. Val Gempis

Photo by Ted Carlson



The Joint STARS Imperative

Congress wants the Pentagon to buy more E-8 Joint STARS surveillance aircraft—lots more.

Members of the Senate and House, in separate but identical March 11 letters to Secretary of Defense William S. Cohen, urged the Defense Department to ramp up production of the USAF system.

“We believe that it is imperative that the acquisition of Joint STARS continue in the most cost effective and timely manner so that we meet the clearly stated and existing operational requirement for at least 19 aircraft as soon as feasible.”

The letters were signed by majorities in both bodies—56 senators (31 Republicans, 25 Democrats) and 238 representatives (147 Republicans and 91 Democrats).

The Air Force is planning to spend \$483.0 million next year for one more E-8C, the 14th. Cohen in 1997 cut the planned buy from 19 to 13 but has had second thoughts and shifted course, adding one in Fiscal 2000.

Air Force officials said they do not know whether the service will be permitted to buy any more. The last five E-8s—numbers 15 through 19—are not included in long-range budget plans.

apply for certificates honoring them for their role in winning the Cold War.

Those eligible must have served with the War, Navy, or Defense departments some time during the period Sept. 2, 1945, through Dec. 26, 1991. Among the documents that will be accepted as proof of service are copies of active duty discharges (DD Form 214) for the military and Standard Form 50 for civilians.

Applicants can mail requests to: Cold War Recognition, 4035 Ridge Top Rd., Suite 400, Fairfax, VA 22030.

Individuals may also apply via the Internet at <http://coldwar.army.mil>; by e-mail at cwrs@Fairfax-emh1.army.mil; or fax at (703) 275-6749.

New Bomber a Long Way Off

A new USAF white paper predicts that the service will not see a new long-range bomber enter operational service until 2037. That means, among other things, that the B-52 will likely still be flying until at least that date—when some models will be over 80 years old.

The white paper was produced in response to a 1998 Congressional request. It says that a mission area assessment of the next bomber program will begin in 2013, with the acquisition program starting in 2019 and production in 2034.

“Long-range bombers are integral to [the] Air Force Global Engagement vision,” said the report.

Currently there are 190 bombers in the fleet: 93 B-1s, 76 B-52s, and 21 B-2s. The Air Force study does not

The Air Force is already moving to prevent similar accidents in the future, said officials. Air Combat Command now formally requires a post-deployment training plan for squadrons that takes it easy upon returning home—what officials described as a crawl, walk, and run philosophy.

In January, the Air Force approved funding for four more Pave Hawks, to help ease the deployment burden. “And we are re-evaluating all initial qualification training, mission qualification training, contingency training, and continuation training to ensure that they meet the [66th’s] combat mission needs,” said Maj. Gen. David F. MacGhee Jr., ACC director of air and space operations.

Cold War Certificates

Beginning April 5, military personnel and Department of Defense civilians who took part in the long twilight struggle against the Soviet Union could



A T-39B ejects a flare during recent testing by the 418th Flight Test Sq., Edwards AFB, Calif. The T-39 can now serve as a low-cost chaff and flare dispenser to support various users, including the Army in testing its ground-based radar systems.

envision growth in those numbers. Where the Cold War put a premium on the ability to stealthily deliver nuclear weapons on heavily defended targets, today's world demands large platforms that can deliver large loads of standoff conventional weapons from a distance.

"Preserve what we have" is the theme for bombers, said acting Air Force Secretary F. Whitten Peters at a briefing on the white paper.

Pay OK, Despite Y2K

The Year 2000 computer problem will not stand in the way of the Defense Department paying all civilian employees, military members, and retirees, according to a Defense Finance and Accounting Service official.

DFAS has been working on the problem for three years, and all its payroll systems are now Y2K compliant, said DFAS Director Gary W. Amlin in March. "I feel confident we'll do extremely well," he said.

The agency continues to work on its computer interfaces with various outside financial institutions. Federal Reserve Banks are all compli-

More on the "Space Force"

Sen. Bob Smith (R-N.H.) used a March 22 public hearing in Colorado to promote the idea of creating a separate "Space Force" from the structure of today's Air Force. He said he meant this as no criticism of the Air Force and thought it might even be helpful to the service.

"It may be unrealistic and unfair to expect the Air Force to be the pre-eminent airpower and also fully exploit space," said Smith, chairman of the Senate Armed Services Committee's Strategic Forces subcommittee.

Smith spoke at a Congressional field hearing held at Peterson AFB, Colo. According to Smith, relieving USAF of space missions could not only strengthen the nation's military space capabilities but also let USAF concentrate on air warfare.

"I don't see any advantage to that, right now," responded Gen. Richard B. Myers, commander in chief of US Space Command and commander of Air Force Space Command.

Myers, echoing Gen. Michael E. Ryan, Air Force Chief of Staff, said creating a separate branch would duplicate costs and increase bureaucracy, leading to less real emphasis on space. The proper route, said these generals, is to seek a full integration of air and space capabilities.

Smith first broached the subject in a Nov. 18 address at Cambridge, Mass. He warned that the Air Force needed to "truly step up to the space power mission" or run the risk that Congress would create a new military service for space.

Smith recognized that "the Air Force has played the dominant role in military space matters for decades" and that "a significant portion of its budget has gone toward developing and operating the nation's military space systems."

However, he made his opinion clear that the Department of Defense and the Air Force are shortchanging space power and that "America's future security and prosperity depend on our constant supremacy in space."

Photo by Ted Carlison



Global Hawk Crashes

The Air Force announced that Global Hawk Unmanned Aerial Vehicle No. 2 was destroyed in a March 29 crash during testing at Naval Air Weapons Station China Lake's south range in California.

There were no injuries or property damage. The crash came after a flight of about 20 minutes, the Air Force said. The Air Force has appointed an investigation team to determine the cause of the crash.

The in-development aircraft is to provide battlefield imagery while flying at high altitude and over a long period. When it becomes operational, Global Hawk will be able to fly higher than 60,000 feet and remain on station for more than 24 hours.

Global Hawk is the Air Force's most prominent remaining UAV. The service canceled its stealthy DarkStar UAV earlier this year.

ant from a system standpoint, said Amlin. The Fed is supporting testing of Y2K solutions with selected state-side financial institutions and overseas credit unions and Nations-Bank, the defense contractor that provides banking services to all DoD personnel overseas.

Contingency plans include provision for backup computer tapes on standby at the Fed in case there are data transmission problems. DFAS will have an extra stockpile of checks on hand, in case individual banks cannot post deposits.

"If an institution does not electronically receive a transaction, we can mail a check," said Amlin.

Stockpiling banknotes isn't necessary, said the DFAS chief. "I'm not going to go out and store cash," he said. But he recommends that all who use DFAS services ask their individual financial institutions what they are doing to make sure their data systems work when "2000" clicks over for the first time.

AMC Chief Cancels Charleston Inspection

On a March 4-5 visit to Charleston AFB, S.C., Air Mobility Command chief Gen. Charles T. "Tony" Robertson announced that he was canceling the base's upcoming operational readiness inspection.



TSgt. Mario V. Bandalan Jr., SSgt. Tapu Sitagata, and A1C Kevin R. Tuten, all aerospace propulsion technicians from the 374th Maintenance Sq., Yokota AB, Japan, ensure the paperwork for a propeller assembly is in order before shipment. Yokota handles all C-130 engine repair for Pacific Air Forces.

Charleston had canceled two mobility exercises so it could respond to Operations Northern and Southern Watch, among others, Robertson noted. The base also took the lead in providing airlift to deliver humanitarian supplies to Puerto Rico and Honduras in the wake of this winter's severe hurricanes.

"I am recognizing your contributions to our nation's defense by awarding Team Charleston full operational readiness inspection credit," Robertson told a crowd of nearly 700 in the base theater. He received a standing ovation in response.

The AMC head also authorized an extra \$132,000 for base Year of the Family initiatives. The money will be used to improve several base areas, including the athletic field, jogging trail, picnic area, and playground.

Congress Weighs Future of "Troops to Teachers"

Congress is considering legislation that would reauthorize and strengthen the expiring "Troops to Teachers" program, which provides incentives for retiring military personnel to enter the education field.

If it passes, the Troops to Teachers Improvement Act would extend the program through 2004, while taking its \$25 million budget out of the hands of the Defense Department and giving it to the Department of Education.

"Troops to Teachers is an ingenious idea," said Sen. Joseph I. Lieberman (D) of Connecticut, one of 13 co-sponsors of the legislation. "It harnesses a unique natural resource to meet a pressing national need."

Congress first created the program in 1993, partly to assist military personnel being shuffled out of the service by reductions in force. As envisioned by the reauthorization bill, it will provide a stipend of \$5,000 to assist with certification and relo-

cation costs for military personnel who agree to go into teaching for at least four years. A further \$10,000 bonus would go to those who agree to four years in schools with a large population of low-achieving at-risk students.

Eligibility is limited to retired military personnel with 20 years of service, disabled veterans, or those who served six years and were then affected by military downsizing.

"Since its inception, Troops to Teachers has been a resounding success with over 3,000 highly qualified men and women having filled school vacancies in 48 states," said Sen. John McCain (R) of Arizona, chief sponsor of the new bill.

Global Hawk Down Under

If all goes according to plan, in the spring of 2001, the Global Hawk Unmanned Aerial Vehicle will take off from its Edwards AFB, Calif., base and fly 12,000 miles down under, all the way to Australia.

The exercise will be part of a \$20 million cost-sharing exercise between the United States and Australia.

"This is a historic moment for the [High Altitude Endurance] Global Hawk UAV program," said Col. Craig McPherson, director of the Joint HAE UAV Division at the Aeronautical Systems Center Reconnaissance Systems Program Office. "The agreement affords us the unique opportunity to demonstrate, in an overseas deployment, the reconnaissance capabilities of the HAE UAV system and its

Senior Staff Changes

NOMINATION: To be **Lieutenant General:** Maj. Gen. Donald G. **Cook**.

CHANGES: Maj. Gen. (sel.) Scott C. **Bergren**, from Cmdr., 82d Tng. Wg., AETC, Sheppard AFB, Texas, to Dir., Maintenance, DCS, Instl. & Log., USAF, Pentagon ... Brig. Gen. Randall K. **Bigum**, from Cmdr., 4th FW, ACC, Seymour Johnson AFB, N.C., to Dir., Rqmts., ACC, Langley AFB, Va. ... Maj. Gen. Paul K. **Carlton Jr.**, from Cmdr., 59th Medical Wg., AETC, Lackland AFB, Texas, to Cmdr., AF Medical Ops. Agency, Bolling AFB, D.C. ... Brig. Gen. (sel.) Kenneth M. **Decuir**, from Dep. Dir., Jt. Matters, DCS, Air & Space Ops., USAF, Pentagon, to Cmdr., 354th FW, PACAF, Eielson AFB, Alaska ... Brig. Gen. Paul R. **Dordal**, from Vice Cmdr., 7th AF, PACAF, Osan AB, South Korea, to Dep. Dir., Ops. & Tng., DCS, Air & Space Ops., USAF, Pentagon ... Brig. Gen. (sel.) William M. **Fraser III**, from C/S, USSTRATCOM, Offutt AFB, Neb., to Cmdr., 2d BW, ACC, Barksdale AFB, La. ... Brig. Gen. Michael G. **Lee**, from Dir., Inspections, IG, USAF, Pentagon, to Dep. Dir., Ops., Natl. Mil. Cmd. Center, Pentagon ... Maj. Gen. Earl W. **Mabry II**, from Cmdr., AF Medical Ops. Agency, Bolling AFB, D.C., to Cmdr., 59th Medical Wg., AETC, Lackland AFB, Texas ... Brig. Gen. David L. **Moody**, from Dep. Dir., Ops. & Tng., DCS, Air & Space Ops., USAF, Pentagon, to Cmdr., 57th Wg., ACC, Nellis AFB, Nev. ... Maj. Gen. William A. **Peck Jr.**, from Dir., Rqmts., ACC, Langley AFB, Va., to Vice Cmdr., 7th AF, PACAF, Osan AB, South Korea ... Brig. Gen. Neal T. **Robinson**, from Assoc. Dir., Ops., C³I, Langley AFB, Va., to Dir., Intel., USEUCOM, Stuttgart-Vaihingen, Germany ... Brig. Gen. (sel.) Norman R. **Seip**, from Exec., C/S, USAF, Pentagon, to Cmdr., 4th FW, ACC, Seymour Johnson AFB, N.C. ... Brig. Gen. Andrew W. **Smoak**, from Cmdr., 2d BW, ACC, Barksdale AFB, La., to Dir., Customer Spt. Office, NIMA, ASD, C³I, Reston, Va.

interoperability with the Australian JP 129 Project.”

As part of JP 129, Australia plans to buy an airborne wide-area surveillance system soon after the turn of the century.

Air Sovereignty Operations Center Online

Air Sovereignty Operations Centers are now up and running in Hungary, Poland, Czech Republic, and Romania.

Run by Electronic Systems Center at Hanscom AFB, Mass., the centers are intended to produce a real-time military air-situation display. Except for the ASOC in Romania, they are connected to NATO air surveillance systems, and to each other, as part of their mission in each nation.

“The ASOC brings a new degree of command and control to these countries by creating a comprehensive military air picture and by promoting cooperation and cross-border data sharing,” said Col. Bruce Hevey, ESC’s director of Combat Air Forces Command and Control Systems.

Similar facilities are planned for Slovakia and Slovenia. A regional Air Surveillance Coordination Center, serving the Baltic nations of Latvia, Lithuania, and Estonia, is under construction in Lithuania.

Promotions to Master Sergeant Hit Five-Year High

On March 8, the Air Force announced that it has reached a five-year high in its selection rate for promotion to senior master sergeant. The service picked 1,506 of 18,862 eligibles for promotion, a 7.98 percent selection rate.

The rate has gone up each year since 1994, when it was 4.62 percent. With the drawdown of Air Force personnel largely over, officials are hopeful this percentage will keep heading up. They are optimistic that senior master sergeant promotions will at least remain above the objective of 6 percent per year.

Ellsworth Fraud Case Settled

The nation’s largest builder of military family housing has agreed to pay the US government \$8 million over a five-year period to settle a fraud claim brought by the Justice Department.

Hunt Building Corp. also agreed to make repairs to an allegedly faultily designed and constructed 828-unit family housing project at Ellsworth AFB, S.D.

“This settlement will ensure that our servicemen and -women will be

able to live in habitable housing on Ellsworth AFB and that the United States recovers rents that were paid in the past for uninhabitable housing units,” said US Attorney Karen E. Schreier of Sioux Falls, S.D.

The project, known as Centennial Estates, was built between 1989 and 1991. Alleged structural and design defects included violations of fire-safety requirements, flaws that caused the units to twist and break apart in the fierce winds of the high plains, and pipes simply inserted into the ground to make it appear as if they were mandatory sewer clean-outs.

The Air Force had declared 500 of these units uninhabitable.

News Notes

■ US airlift and sealift capacity in the Pacific region is not adequate to respond to crises that may be developing there, Army Gen. John H. Tilelli Jr., commander in chief of US Forces Korea, told a Congressional committee March 3. The C-17 and roll-on, roll-off sealift are critical to quick response time to North Korea and other aggressors, said Tilelli.

■ The Air Force won the 1999 Armed Forces Cross-Country Championship, held at NAS Mayport, Fla., Feb. 19. The contest consisted of a 12K and 5K race for men and a 5K race for women. The composite Air Force team time was 3 hours, 27 minutes, 58 seconds. The Army came in second, with a composite time of 3:35:46.

■ On March 5, the US Air Force Academy filed charges against 13 cadets as the result of an investigation into mail theft from the cadet post office. If found guilty, those charged could face up to five years in jail, as well as dismissal from the service.

■ The November crash of an Air National Guard F-16C on the Jefferson Proving Ground Range near Madison, Ind., was caused by engine failure, according to an accident investigation report released March 9. According to the investigating officer, the crash occurred because of a defective compressor discharge pressure rotating air seal in the engine.

■ A film by the 375th Communication Squadron’s Visual Information Flight, depicting 50 years of air mobility, won first place in the historical film category at the fourth annual International Military Film Festival in Bucharest, Romania. It was the first time the US had taken such top honors.

■ On March 8, the 37th Airlift

For THAAD, That’s Six in a Row

The Pentagon announced March 29 that the Theater High Altitude Area Defense interceptor once again failed to intercept a missile target in a flight test above the White Sands Missile Range, N.M.

It was THAAD’s sixth straight miss with no hits. The Army program, which is to produce a weapon capable of shooting down an incoming missile, is in deep trouble in Congress.

The Ballistic Missile Defense Organization and the Army announced the test occurred at high altitude over the central portion of the White Sands National Missile Range. The Hera target, which simulated a Scud ballistic missile, was launched seven minutes before the intercept test.

The test was the ninth in a planned series of THAAD program definition and risk reduction flight tests to verify the THAAD prototype design and performance of the system components.

Squadron, Ramstein AB, Germany, delivered a C-130 loaded with almost 3,500 pounds of clothes, toys, toiletries, and blankets to Tuzla, Bosnia. The supplies are intended for orphans and widows at a facility near Eagle Base in that recovering corner of the Balkans.

■ Boeing and the Air Force commemorated the 10th anniversary of the first launch of a Block II Global Positioning System satellite March 11. The first Block II lifted off aboard a Delta II rocket in 1989 and has since orbited the Earth over 7,300 times.

■ On March 7, Lockheed Martin Astronautics delivered the first of its new Atlas III rockets to Cape Canaveral AS, Fla. Designated AC-201, the rocket is being readied for launch in mid-June. It will carry aloft the Telstar 7 satellite for Loral Skynet.

■ In the first Air Force court-martial for computer hacking, Air Force Academy cadet Christopher D. Weist was found guilty March 14 of breaking into the systems of Interlink Communications of North Carolina and causing \$6,300 in damage. A military jury of eight academy officers dismissed Weist from the service.

■ SrA. Chris Bloomfield, 20th Special Operations Squadron, Hurlburt Field, Fla., rescued a

USAF photo by SrA Jeffrey Bishop



Army jumpmasters watch as members of the 820th Security Forces Group, Lackland AFB, Texas, practice parachute landing falls during Basic Airborne Refresher Training at Ft. Sam Houston, Texas. The airborne training is necessary for the 820th's role as USAF's rapidly deployable, first-in force protection unit.

woman from a burning car on Interstate 75 near Tampa, Fla., Feb. 15. The MH-53J Pave Low gunner came upon the crumpled car when returning from the Daytona 500 auto race. He smashed a window with a hammer and pulled the victim from the auto after several tries.

■ Two firefighters from the 45th Civil Engineer Squadron at Patrick AFB, Fla., saved the life of a man injured in a beach accident March 7. A1C Mark Huetter and Amn. Archie Clemons stabilized the condition of the victim who had been injured after

diving off a shallow pier. They did chest compressions and helped push air into the victim's lungs. Although no pulse was detectable at the scene, the man revived at the hospital and survived, despite spinal injuries.

■ The Air Force has changed the name of its Social Actions offices to Military Equal Opportunity to better reflect the human resource program's current mission. The new tag correctly defines the office's mission to prevent discrimination, said officials March 12, when announcing the shift. Prevention of substance abuse, a former mission,

has now been moved to the Air Force Surgeon General's purview.

■ The LeMay Foundation wants to remind the Air Force family that its services are available to assist widows of former service members who need help to remain in their homes after their spouses pass away. Named for Gen. and Mrs. Curtis E. LeMay, the foundation has lately seen a surge in requests. Since last September it has approved 57 grants—32 one-time payments and 25 continuing monthly payments.

■ A Congressionally appointed commission voted against separating men and women during basic training. By a 6–2 margin the panel declared March 17 that each service should be allowed “to continue basic training in accordance with its current policies. This includes the manner in which basic trainees are housed and organized into units.” Last year, another study group had urged that men and women be split up at this crucial time in their military careers.

■ Launch vehicles based on Lockheed Martin's new Common Core Booster will carry the name “Atlas V,” company officials announced in February.

■ The Air Force Continuing Care Retirement Communities—Air Force Villages I and II in San Antonio; Air Force Village West in Riverside, Calif.; and the Air Force Retired Officers Community in Sterling, Va.—have formed an association to promote their common interests. Neither the new AFCCRC Association nor the individual communities are directly related to the US Air Force. ■

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