

Aerospace World

By Peter Grier

Bush Nominates Service Secretaries

President Bush tapped three veterans of private industry as his nominees for secretaries of the military services.

James G. Roche, Air Force Secretary nominee, is currently a corporate vice president of Northrop Grumman. Before joining the giant defense contractor in 1984, he worked as the Democratic staff director of the Senate Armed Services Committee, as principal deputy director of policy planning at the State Department, and served 23 years in the Navy, retiring as a captain.

Thomas E. White, nominee for Secretary of the Army, is currently vice chairman of Enron Energy Services in Texas. A West Point graduate and 23-year Army veteran, White reached the rank of brigadier general and was executive assistant to Gen. Colin Powell when the latter was Chairman of the Joint Chiefs of Staff.

Gordon R. England, the choice for Secretary of the Navy, recently retired as an executive vice president of General Dynamics, where he worked for nearly 30 years.

USAF Faces \$500M in Unanticipated Costs

The Air Force needs \$500 million by the end of July to pay for unanticipated increases in the cost of fixing aircraft, said Gen. John W. Handy, the vice chief of staff.

Much of the money would go to



USAF photo

Skillful Flying. AFRC Pilot Maj. Greg Lloyd lands his C-5 at Rogers Dry Lake, Calif., without nose landing gear May 2. The crew and passengers were unharmed. Starting from Travis AFB, Calif., on the first leg of a supply mission to England, the crew discovered the nose landing gear door was stuck. They returned to Travis, then opted for the lake bed when it became clear the gear couldn't be freed.

repair F-15 and F-16 engine components, many of which are no longer made by original manufacturers. The cost of replacing the F-16 engine core has gone up 300 percent, for instance. The F-15's core hot section turbine now costs 236 percent more.

"We'd like to say we could predict those increases in costs and program and budget for it," said Handy. "But in fact things that are breaking

on our weapons systems aren't the predictable parts that you have engineered predictions on."

If it doesn't get the money the Air Force will have to curtail flying hours, said Handy. Reflective of the overall problem, the service's flying hour program costs have increased from seven to 12 percent annually over the last five years.

AMC Chief Says US May Need More C-17s

If it is to acquire enough airlift capacity to meet US national requirements, the Pentagon may need to buy up to 180 C-17s rather than the 134 currently planned, Air Force Gen. Charles T. Robertson Jr., head of US Transportation Command and Air Mobility Command, told a Senate subcommittee April 26.

USAF might require even more than 180 C-17s if the Department of Defense fails to fully modernize the older C-5 fleet, said Robertson. Replacement of C-5 avionics, engines, and other equipment could raise the air-

Zaire in Permafrost

"Over the past decade, Russia's population has been shrinking by almost a million a year, owing to a plummeting birth rate and a rising number of deaths from alcoholism and violence. Predictions are astonishingly grave: The country could lose a third of its population (now 146 million) by the middle of the century. This does not factor in new scourges—tuberculosis and HIV, in particular, which have been spreading exponentially since 1998. ... Russia is following the path of Mobutu's Zaire, becoming a sparsely populated yet gigantic land of natural resources exploited by an authoritarian elite as the citizenry sinks into poverty, disease, and despair."

—From "Russia Is Finished" by Jeffrey Tayler, in the May Atlantic.

Rumsfeld Makes Air Force Lead Service for Space

The Air Force will become the lead military service for space activities, but the idea of a separate space service remains one for debate, Defense Secretary Donald H. Rumsfeld announced in May.

Rumsfeld offered the Pentagon's official response to the recommendations of the Commission to Assess United States National Security Space Management and Organization—usually referred to simply as the Space Commission.

Rumsfeld announced 14 steps he would take to strengthen America's military space capabilities, chiefly by streamlining the space bureaucracy. He accepted nearly all of the commission's findings, which is not surprising, given that he served as the panel's chairman until President Bush tapped him to become Defense Secretary. (See "The Space Commission Reports," March, p. 30.)

Rumsfeld, at a Pentagon press conference, said the streamlining moves were necessary because "more than any other country, the United States relies on space for its security and well-being." The steps, he said, will sharpen the military's focus on space and help discourage adversaries from attempting to exploit US "vulnerabilities" stemming from dependence on space systems.

Deterrence and Dissuasion

"History shows that deterrence and dissuasion are important," Rumsfeld said. "Our first choice is not to prevail in a conflict but to be arranged in a way that can dissuade others from engaging in acts hostile to the United States national security interests, and therefore, deterring conflict from occurring."

He emphasized that the announcement in no way signaled a US intent to weaponize space, and he insisted that he believes there is no "anti-satellite warfare race in space."

Though US policy calls for the military to be able to "defend and protect" US assets in space, Rumsfeld said there are various terrestrial means of doing so, including disruption of uplinks and downlinks.

Among Rumsfeld's initiatives:

- The Air Force, alone among the armed services, will be designated "executive agent" for US space activities, giving it official authority to plan, program, and acquire space systems. USAF will also have responsibility to "organize, train, and equip for prompt and sustained offensive and defensive space operations."

- Air Force Space Command will take over the job of performing military space research, developing space systems, and acquiring them. It will also be given the money to carry out this mission. AFSC will also be in charge of managing the space career field within the Air Force.

- Space becomes the 12th major force program and gets a special budget and accounting line in the overall DOD budget in an effort to increase the visibility of the space program.

- A four-star USAF general will be assigned to lead Air Force Space Command, and he will be instructed to focus solely on that job. US Space Command and North American Aerospace

Defense Command will be commanded by a different general officer. (Until now, the same person commanded all three.) Moreover, DOD will end the practice of assigning only flight-rated Air Force officers to be CINCSPACE and CINC NORAD. In the future, the job will be filled by flag officers from any service, rated or nonrated, so long as they possess "an understanding of space and combat operations."

- The undersecretary of the Air Force will become the military's acquisition executive for space systems and also serve as director of the National Reconnaissance Office. The national security space architect will report to the Air Force undersecretary.

- The NRO will establish a new Office of Space Reconnaissance.

- The role that space plays in all manner of operations is to be worked into the curricula of professional military education in all the military services.

- The Navy and Army are to continue to develop service-unique space systems and cultivate a cadre of space-qualified officers. They will coordinate their efforts with the Air Force.

- Service labs and the Defense Advanced Research Projects Agency are to undertake demonstrations of "innovative space technologies and systems for dedicated military missions."

- On the National Security Council at the White House, a Policy Coordinating Committee for Space is being formed which will rationalize the space efforts of the military, NASA, the CIA, and other government agencies with space activities.

- The Defense Secretary and Director of Central Intelligence will meet regularly to discuss intelligence matters and coordinate space activities. They will co-chair a committee to review intelligence issues.

No Undersecretary—Yet

The only Space Commission recommendation Rumsfeld did not put into effect was the establishment of a new undersecretary of defense for space, intelligence, and information. He said he was having his staff review the responsibilities now under the assistant secretary for command, control, and communications, with recommendations to follow as to what steps may be necessary to ensure proper top-level guidance and advocacy for space.

Rumsfeld was joined at the press conference by Sen. Bob Smith (R-N.H.), who spearheaded the drive in Congress for an overhaul of military space organization. Smith said those steps requiring Congressional action will likely be approved.

Asked if the initiatives are a step toward a Space Corps or Space Force, Rumsfeld said many on the commission and Congress felt "that's where it might have been good to go now" and "that it is conceivable we could end up there in some period of years."

However, he cited the disadvantage of the cost and overhead involved in setting up such a new branch of the military and noted that some on the commission feel such a thing is "unlikely, and that you might find, if the Air Force does well with this, that they would be a space-air entity."

—By John A. Tirpak

craft's mission capable rate to 75 percent and keep them in service until almost mid-century.

One caveat, according to the mobility chief: If air carriers purchase commercial versions of the C-17 and agree to make them available to the military during times of need, the requirement increase would "adjust downward slightly."

"Bottom line: This nation's No. 1 DTS [Defense Transportation Sys-

tem] 'shortfall' is its ailing and numerically inadequate strategic airlift fleet," said Robertson.

Aldridge Steps into Top Acquisition Post

The Senate on May 8 confirmed former Secretary of the Air Force Edward C. "Pete" Aldridge Jr. to be the Pentagon's senior weapons official.

Aldridge assumed the post of under-

secretary of defense for acquisition, technology, and logistics.

He, Defense Secretary Donald Rumsfeld, Deputy Defense Secretary Paul Wolfowitz, and the three service secretaries, will serve on a key "acquisition executive committee" formed to help carry out President Bush's new strategic plan.

Aldridge was Secretary of the Air Force during the period April 8, 1986, through Dec. 16, 1988, in the second

Bush Makes it Official: US Would Defend Taiwan

Using some of the bluntest language a President has ever employed in regards to a sensitive issue in US–China relations, President Bush on April 25 said the United States would do “whatever it took” to defend Taiwan against Chinese military aggression.

Deployment of US military forces “is certainly an option” if Taiwan is threatened by invasion, Bush said.

But he also cautioned that Taiwan should think twice before declaring independence, a move Beijing has warned could trigger an armed response. “I would certainly hope that Taiwan would not do such a thing,” Bush said.

The statements about the US commitment to an island that China has long considered a wayward province came in a series of broadcast and wire service interviews meant to help mark George W. Bush’s first 100 days in office.

Aides said the President did not misspeak and that his choice of words was deliberate. However, they denied the claim that Bush had altered the long-standing US policy of maintaining “strategic ambiguity” about what it would do if Chinese forces invaded Taiwan.

“Let the President speak for himself,” said State Department spokesman Philip T. Reeker. “He said, very specifically, nothing has changed in our policy.”

Under the terms of the 1979 Taiwan Relations Act the US is required by Congress to arm the Taiwanese so they can defend themselves, but Ronald Reagan, George H.W. Bush, and Bill Clinton kept quiet about whether the US would also send American troops to the area in a crisis. In part, this is meant to prevent the bolder factions in Taiwanese politics from unilaterally fomenting an armed clash with the mainland, secure in the knowledge that US forces were at their backs.

Whether US strategic ambiguity on Taiwan really leaves anyone guessing is an open question. When China conducted military tests off Taiwan’s coast during Taiwan’s 1996 elections, President Clinton dispatched two carriers to the region as a show of US resolve.

In fact, at least two high-ranking members of Bush’s foreign policy team—Deputy Secretary of Defense Paul Wolfowitz and Deputy Secretary of State Richard Armitage—before taking office signed a public letter calling for a more explicit US commitment to Taiwan’s defense.

President Bush’s remarks triggered some consternation on Capitol Hill. Conservatives generally supported the tougher tone, yet said they remain unsure whether strategic ambiguity has been abandoned. Liberals were similarly unsure about whether policy had really been changed, but pretty sure they weren’t happy about whatever had happened.

“If what the President said is in fact what he means or if it is indeed the new policy of the United States, it has profound implications for our country,” said Sen. John F. Kerry (D) of Massachusetts.

The response in Taiwan itself was somewhat low-key. Officials appeared reluctant to say anything that would further anger a Chinese government already upset over the US decision to sell Taiwan Kidd-class destroyers, P-3 patrol aircraft, and to help the Taiwanese obtain diesel submarines.

Beijing, for its part, accused the Bush Administration of further damaging the already strained US–Chinese relationship.

“There is only one China in the world. Taiwan is part of China. It is not a protectorate of any foreign country,” said Chinese Foreign Ministry spokesman Zhang Qiyue.

Reagan Administration. Earlier, he was undersecretary of the Air Force and director of the National Reconnaissance Office.

Bolton Confirmed for Top Arms Control Spot

John Bolton won Senate approval to become undersecretary of state for arms control and international security affairs.

The 57–43 vote to confirm Bolton was taken May 8. He is expected to play a key role in the Bush Administration drive to amend, abandon, or supersede the 1972 Anti-ballistic Mis-

sile Treaty and erect a national missile defense system.

Many Democrats voted against confirmation to signal their displeasure with the Bush Administration’s missile defense and arms control plans.

Air Force Ponders Minuteman IV

The Air Force is contemplating whether it makes sense to develop and produce a next-generation intercontinental ballistic missile. It’s at a “thought-process stage,” said a top USAF officer.

Work on an all-new Minuteman IV ICBM could begin as early as 2004, said Maj. Gen. Franklin J. Blaisdell, Air Force director of nuclear and counterproliferation, at a Washington seminar.

Today’s arsenal of 500 Minuteman IIIs dates to the 1970s. Current improvement programs to replace guidance and propulsion systems will keep the missiles in good operational order until 2020. After that, the US may need a new weapon if it intends to maintain a land-based nuclear deterrent, said Blaisdell.

The 1980s–vintage Peacekeeper ICBMs are slated for retirement if the START II treaty comes into force. Plans call for the Defense Department to carry out a full-scale nuclear posture review this year.

US Seeks Full Hearing on Veterans Case

The Bush Administration has asked a full federal appeals court to rehear arguments in a case which, if it stands, may well result in Washington being forced to provide free lifetime health care for about 1.4 million elderly military retirees.

In February, a three-judge panel of the US Court of Appeals in Washington, D.C., ruled that the US had illegally breached an implicit contract by forcing military retirees into Medicare at age 65.

Watts Takes Over Defense Department’s PA&E Shop

Retired Air Force officer Barry D. Watts on May 1 became the Pentagon director of Program Analysis and Evaluation.

PA&E has been controversial since its formation in 1961. It has been known at various times as the Office of Systems Analysis and as the Office of Planning and Evaluation. Its staff of about 160 civilians and military officers analyze alternative weapon systems and force structures, program alternatives, and the cost-effectiveness of defense systems. It is sometimes said to play the role of “devil’s advocate” on defense issues.

Watts is a former F-4G Wild Weasel pilot. From 1991 to 1993, he headed the Gulf War Airpower Survey’s work on operations and effectiveness. Watts had been the director of the Northrop Grumman Analysis Center in Arlington, Va., since 1986.

The decision in the case directly affects only two retired Air Force lieutenant colonels, Robert L. Reinlie and William O. Schism, who entered service prior to June 7, 1956—the day Congress passed a law that limited 65-and-over retiree health care in service facilities to a space-available basis.

The plaintiffs, two Air Force retirees, have said they plan to broaden the case into a class action suit. Their counsel is George E. “Bud” Day, a retired Air Force officer and recipient of the Medal of Honor.

New Military Pharmacy Benefit Begins

On April 1, an estimated 1.4 million military retirees age 65 or older became eligible for Tricare pharmacy benefits as a result of legislation passed by Congress last year.

Under the new program, these older retirees and their families are able to obtain prescription medications via a mail-order service, Tricare network pharmacies, and nonnetwork pharmacies. Co-payments will be relatively small.

Those interested in further information can call 1-877-363-6337.

CNO Says Carriers Still Beat All

Chief of Naval Operations Adm. Vern Clark gave a tub-thumping defense of aircraft carriers at the Navy League’s annual conference in Washington on April 12.

Responding to press reports that the Bush Administration might curtail or de-emphasize carrier programs in the future as a result of survivability and affordability concerns, Clark said, “For now and the near term there is no more powerful, no more capable platform ... than America’s large-deck aircraft carrier.”

The day of carrier vulnerability has not yet arrived, he said. One reason, he contended, is the speed of carrier movement itself. “This movement translates to a 700-square-mile area of uncertainty in 30 minutes,” said Clark. “In an hour-and-a-half it grows to 6,300 miles. That presents a serious targeting problem.”

Bush Calls for More Base Closures

As expected, the Bush Administration’s new Fiscal 2002 budget plan calls for more base closures.

“DOD wastes money on infrastructure it does not need. ... With 23 percent in estimated excess infrastructure, it is clear that new rounds of base closures will be necessary to shape the military more efficiently,” said budget documents.



SSgt. J.C. Clark, an assistant dedicated crew chief from the 411th Flight Squadron, Edwards AFB, Calif., marshals Raptor 4003. The F-22 had just completed its 1,000th flight-test hour April 18.

Vietnam War Erupts Anew for Ex-Sen. Robert Kerrey

As a raw, 25-year-old Navy lieutenant, former Sen. Robert Kerrey (D-Neb.) in early 1969 led a raid in Vietnam that ended in the deaths of a dozen or so noncombatants.

Kerrey’s revelation of his role in the long ago Thanh Phong killings came in the face of impending news reports detailing the events. Kerrey said a Bronze Star he had been awarded for leading the raid never meant a thing to him.

“I was so ashamed I wanted to die,” said Kerrey, who also received the Medal of Honor for later actions during his Vietnam tour as a Navy SEAL officer. Kerrey lost part of his right leg in the war.

According to Kerrey and five other members of his SEAL unit, the killings of the civilians were accidental and inadvertent. Kerrey had led his SEAL unit to the village on the night of Feb. 25, 1969, in search of a Viet Cong leader who was allegedly present in the area.

One former member of the unit, Gerhard Klann, says Kerrey ordered the killing for fear that leaving behind civilians would endanger the unit’s retreat. Every other team member disputes this “My Lai” interpretation of events, published in the *New York Times Magazine* on April 29.

Kerrey said his memory of the events is hazy but that in any case the deaths were not intentional. Kerrey and every member of the SEAL unit except Klann signed and issued a statement that said, in part:

“At the village we received fire and we returned fire. One of the men in our squad [Klann] remembers that we rounded up women and children and shot them at point-blank range in order to cover our extraction. That simply is not true. We know there was an enemy meeting in this village. We know this meeting had been secured by armed forces. We took fire from these forces and we returned fire. Knowing our presence had been compromised and that our lives were endangered we withdrew while continuing to fire.”

In the wake of the news reports, Kerrey won staunch support from three US Senators, all decorated Vietnam veterans. All said the Pentagon would be making a big mistake if it opened an investigation, as some have sought.

Sen. John F. Kerry (D-Mass.), a former Navy officer, said, “If you were to ask me, I’d say no. ... That would mean you really have to go back and look at the entire underlying thesis of the war.”

Sen. Max Cleland (D-Ga.), who lost both legs and an arm in combat, said, “I’m on the Armed Services Committee and I say no.”

Sen. Chuck Hagel (R-Neb.), a former infantryman in Vietnam, said, “What would be the point of it?”

In a joint article in the *Washington Post*, the three said: “For our country to blame the warrior instead of the war is among the worst and, regrettably, most frequent mistakes we as a country can make.”

US Resumes Surveillance Flights Near China

Twenty-four US servicemen and -women returned to US soil April 12 after being held for 11 days in China, where they landed after their Navy EP-3 surveillance airplane collided in midair with a Chinese F-8 fighter.

Their release followed the delivery of an official letter from US Ambassador Joseph W. Prueher expressing "sincere regret" for the loss of the Chinese pilot, who was killed in the accident. The letter also said the US was "very sorry" that its crippled aircraft landed on Chinese soil without prior clearance.

The wording of the letter allowed Beijing to claim it had forced the world's only superpower to apologize and Washington to say that it had not, in fact, apologized at all.

"This has been a difficult situation for both our countries," President Bush said after receiving news of the crew's impending release.

The lumbering EP-3 was flying an overt surveillance route in international airspace over the South China Sea on a route the US Navy had used for decades.

Crew debriefings indicated it was flying on autopilot, straight and level, when it was "buzzed" three times by a Chinese pilot.

On the third time, the fighter's tail hit the EP-3's No. 1 propeller. The autopilot went off, and the Navy airplane made a steep left turn and plunged 5,000 to 8,000 feet before its pilot, US Navy Lt. Shane Osborn, managed to regain control.

Metal shards pierced the EP-3 fuselage, creating noise and wind that made communication difficult. With two engines damaged, and missing its nose cone, the aircraft struggled to make an emergency landing at the nearest suitable field—Hainan Island, off the coast of southern China.

"I am told that the crew made some 25 to 30 attempts to broadcast Mayday and distress signals and to alert the world, as well as Hainan Island, that they were going to be forced to land there," said Defense Secretary Donald H. Rumsfeld at a briefing for reporters on April 13.

In the wake of the incident, the Chinese government continued to demand that the US halt surveillance flights off its coast and over the South China Sea. US officials, for their part, said there was no chance of that happening. "Reconnaissance flights are a part of a comprehensive national security strategy that helps maintain peace and stability in our world," said Bush.

The President declared that the flights would continue. Flights resumed May 7.

China did not immediately release the EP-3. The US continued to demand its return. There was concern that China's military would be able to acquire significant intelligence and technical information from the aircraft.

Sen. John McCain (R-Ariz.) and Sen. Carl Levin (D-Mich.) introduced legislation in February that would authorize base closing rounds in 2003 and 2005.

Choice of Retirement Plans Available

Beginning this August, military personnel who joined the service on Aug. 1, 1986, or later will have new choice in retirement plans.

They will be able to either stay with the Redux system (at 40 percent of pay, plus a Career Status Bonus of \$30,000) or go with 50 percent retirement under the High-3 plan.

This sweetening of the retirement pot was included in the Fiscal 2000 National Defense Authorization Act. Information about the new choices is available at the Air Force Personnel Center Web site at <http://www.afpc.randolph.af.mil/retsep>.

Congress Mulls Ending Tax on Bonuses

Rep. John Hostettler (R-Ind.) introduced legislation that would end the tax on re-enlistment and other retention incentive military bonuses.

Under the current system, such bonuses are taxed at a rate of at least 28 percent unless the receiving service member is deployed to a combat zone.

"The current taxation of bonuses can mean the difference between retaining a pilot that this nation has

War and Peace

"Even with the currently approved C-17 'multiyear procurement' program, we will still fall approximately 10 percent short of being able to meet ... operational war plans. Complicating matters even more, the ongoing retirement of our C-141 fleet ... is rapidly putting Air Mobility Command in a position, based on a simple shortage of airframes, where ... it is losing the flexibility to reliably and efficiently meet the country's peacetime requirements. Simply put, the authorized C-17 fleet of 134 programmed aircraft cannot and will not offer the same flexibility as did the 256 aircraft C-141B fleet it is replacing."

—**USAF Gen. Charles T. Robertson Jr., commander, Air Mobility Command, from April 26 remarks to a Senate panel.**

Global Hawk Goes Trans-Pacific

The Air Force's Global Hawk Unmanned Aerial Vehicle on April 22–23 became the first UAV to traverse the Pacific Ocean nonstop.

After taking off from Edwards AFB, Calif., before dawn, the aircraft flew southwestward for roughly 22 hours, at altitudes as high as 65,000 feet. It covered a distance of 8,600 miles.

USAF operators, working out of a control facility at Edwards, got the UAV airborne. Ground crews monitored the UAV's flight but did not control it. It flew autonomously on a preprogrammed route, successfully landing on a runway at an Australian military base outside the southern city of Adelaide. It touched down at 8:41 p.m. local time, April 23. It was 14 minutes ahead of schedule.

Plans called for the high-altitude, long-endurance UAV to participate in combined US–Australian military exercises through May and early June. While deployed, the Global Hawk will have the special designation "Southern Cross II," commemorating a previous US–Australian aviation event. In 1928 two US and two Australian aviators crossed the Pacific in a Fokker trimotor named "Southern Cross."

The Global Hawk's 116-foot-span wings enable the jet-powered aircraft to carry 15,000 pounds of fuel, which accounts for 60 percent of the aircraft's weight. It cruises at a speed of about 400 miles per hour.

It has a range of 13,800 miles.

Its current sensors include a synthetic aperture radar with a moving target indicator mode and an electro-optical and infrared sensor. Using a combination of these sensors, the system can "see" through adverse weather and image day or night, from an altitude of up to 65,000 feet.

spent millions of dollars to train or losing him to one of the major airlines," said Hostettler. "If we want to retain the best and most experienced people in our armed services, then we must at least provide greater incentives for them to stay."

IDA Slams Mobile Offshore Base Idea

The Mobile Offshore Base—a sort of giant, semistationary aircraft platform that some envision as fulfilling a multitude of deployment roles—would in fact be more expensive and less effective than alternatives.

That is the conclusion of an Institute for Defense Analyses study, according to "Inside the Navy," a Washington newsletter.

One 5,000-foot-long MOB would cost about \$10 billion to purchase and another \$25 billion to maintain over a 40-year life span, according to IDA. Aircraft carriers, large monohull sea bases, and ground bases would all be less expensive, it added.

While strike aircraft might be able to operate from an MOB, support aircraft could not, necessitating additional basing options. Furthermore, the presence of many strike aircraft in a small seaborne area could present a tempting target for ballistic missiles or other adversary weapons.

"The MOB is subject to the same threats as any large naval vessel," says the IDA study, as quoted by "Inside the Navy." "Its large size is both an advantage and a liability."

Predator UAVs Begin Operating From Macedonia

USAF Predator Unmanned Aerial

Osprey Crash Caused by Hydraulic, Software Failures

The crash of a V-22 Osprey during a training flight in North Carolina last December was caused by a deadly combination of a burst hydraulic line and defective computer software.

The accident, which killed four Marines, was not attributable to aircrew error, said officials.

"Failures and mishaps are seldom caused by a single factor. This one was no exception," said Marine Gen. Martin R. Berndt at an April 5 Pentagon briefing for reporters.

According to the report, the trouble began as the Osprey's pilot, Lt. Col. Michael L. Murphy, tried to shift the aircraft's tilt rotors from the horizontal, airplane mode into their vertical, helicopter mode.

Midway through the shift, a titanium hydraulic line burst, causing total loss of fluid in the V-22's primary flight control system. Bundled wire within the left engine compartment had chafed the tube enough to cause it to fail.

By itself, such a problem should not have caused the aircraft to crash, due to backup systems. But the fluid loss caused a flight control warning light to flash and a warning tone to sound.

"The published procedure for responding to such a failure is to press the primary flight control system reset button," said Berndt.

When Murphy did so, a software flaw caused rapid and significant changes to the aircraft's prop-rotor pitch, causing the V-22 to speed up and then slow down. He continued to press the button, as many as 10 times in a few seconds. Unbeknownst to him, that was making things worse.

"The accelerating and decelerating of the aircraft every time that button was pressed was what caused the aircraft to stall and lose controlled flight," said Berndt.

The report called for a complete redesign of the systems at issue. Such work could delay the already-troubled Osprey program anywhere from three months to two years.

Vehicles began operating from Macedonia's Petrovec airport the first week in April.

The UAVs were part of NATO's increasing effort to prevent infiltration of forces across the Kosovo-Macedonia border.

Previously, the only UAVs available to help patrol for Albanian rebel insurgents moving into Macedonia

were short-range German army models. Force protection guidelines restricted use of manned US reconnaissance flights.

Meanwhile, an Air Force crash report released April 12 linked the Oct. 23 crash of a Predator operating over Kosovo to improper maintenance.

Evidence indicated that propeller assembly components were improperly lubricated, and a key bolt was stripped, said the report. These faults led the Predator to crash into a hill 180 miles southeast of Tuzla AB, Bosnia.

Production of JDAM Accelerates

The Office of the Secretary of Defense recently approved full-rate production of the Joint Direct Attack Munition—a step that clears the way for production of upward of 90,000 JDAM conversion kits by 2008.

The new precision guidance kit proved its worth during Operation Allied Force in 1999. During the Kosovo campaign 652 JDAMs were dropped by B-2 stealth bombers. Weapon accuracy has far exceeded expectations, said officials.

JDAM tail kits are fitted on existing "dumb" iron bombs and use a Global Positioning System/Inertial Navigation System to steer toward a target.

Weapon requirements call for an



Chuck Gardner, a Northrop Grumman Ryan systems engineer for the Global Hawk Unmanned Aerial Vehicle tests some of its systems before its departure April 22 on its trans-Pacific journey from Edwards AFB, Calif., to Australia.

USAF photo

Female USAF Fighter Pilot Slams Dress Rules in Saudi Arabia

The top-ranked female fighter pilot in the Air Force has gone public with objections to the way in which US servicewomen are ordered to behave while deployed to Saudi Arabia, an ultraconservative Muslim kingdom.

Maj. Martha McSally, an A-10 pilot, says it contravenes US values for her commanders to order her to satisfy host nation sensibilities by wearing a black head scarf and a neck-to-toe robe when she leaves her base.

She further objects to being asked to sit in the backseats of cars, per the Saudi interpretation of Islamic tenets.

In Saudi Arabia she is "treated like a Muslim piece of property," McSally told *USA Today*.

McSally said some military women based in Saudi Arabia have had run-ins with the Saudi religious police.

"Some of our gals who have walked through a mall, they are kind of lax on the headgear thing where some of them just wear them around their neck—but there have been times where a [Saudi religious policeman] comes up and just gets angry and starts kind of hitting them with little sticks."

McSally told *USA Today* that, at a minimum, she should be permitted to wear long pants and long-sleeve shirts when traveling at night in a car between military installations and that women should be allowed to wear their uniform when off base on official business.

Her previous attempts over the past six years to get some action on her complaints within the system have been to no avail, she said.

"I understand for security reasons why we need to be allies with the Saudis," she said. "But it is also part of our national security strategy to promote American values abroad. We, in the military, sign up to give our lives for the freedoms that we value deeply and people have died for before us."

USA Today reported on April 30 that the senior American military commander in Saudi Arabia, USAF Brig. Gen. Gary R. Dylewski, will review and may change a policy requiring female military personnel deployed in that country to wear a neck-to-toe robe known as an abaya, military officials say.

Military spokesmen say that Dylewski, who assumed the command in April, would review the policy. As the new commander, they say, he is reviewing all policies, and there is no assurance he will change this one.

The dress code governing female US military personnel actually is promulgated by US authorities, not the Saudis themselves. US employees of the State Department in Saudi Arabia are not required to wear the abaya.

Part of the reason for the stricter rules is that US military personnel, unlike diplomats, are not protected from local laws by diplomatic immunity.

accuracy of 30 meters using only INS guidance, and 13 meters when INS is supplemented by GPS.

"We are getting 14 meters with INS and 8 meters with GPS/INS. So we are almost meeting the GPS-aided requirement with only the INS," said Lt. Col. Richard Walley, JDAM program deputy director.

New Munitions Dispenser Gets Green Light

The Department of Defense has approved full-rate production of the Wind-Corrected Munitions Dispenser, the Air Force announced April 10.

Officials said the WCMD had proved itself a model acquisition program. It reached the full-rate goal line in five years, instead of the 10 years typically required of a program of its size. Initially estimated to cost \$25,000 per unit, WCMD kits in fact will cost around \$9,000 apiece.

"We are absolutely ecstatic about the recent [full-rate] decision," said Lt. Col. Jeff Severs, WCMD development system manager.

The WCMD is a tail kit that is fitted on unguided cluster munitions to convert them into more accurate adverse weather weapons. Inertial guidance

allows pilots to deliver cluster munitions from altitudes of up to 45,000 feet, without regard to wind or the possibility of launch alignment error.

Plans call for eventual purchase of a total of 40,000 units—30,000 for the CBU-87 Combined Effects Munition, 5,000 for the CBU-89 Gator mine system, and 5,000 for the CBU-97 Sensor Fuzed Weapon.

Rumsfeld Aide Tapped for DOD Policy Slot

Stephen A. Cambone, a special assistant to the Secretary of Defense, Donald Rumsfeld, has been nominated for the position of principal deputy undersecretary of defense for policy, the White House announced on April 23.

Cambone has served as staff director of the Commission to Assess US National Security Space Management and Organization and director of research at the National Defense University's Institute for National Strategic Studies. He was also staff director of the Rumsfeld Commission study of the ballistic missile threat to the US.

Air Force Proposes Langley for F-22

The Air Force has filed a draft Environmental Impact Statement with the Environmental Protection Agency regarding proposed homes for the first wing of F-22 Raptor fighter aircraft.

Among the items analyzed in the study are the estimated effect of a wing of 72 F-22s on air, water, and land quality and on the quality of life for the population surrounding proposed basing locations.

Langley AFB, Va., is the service's first choice for an initial F-22 location. Others in the running include Eglin AFB, Fla., Tyndall AFB, Fla., Elmendorf AFB, Alaska, and Mountain Home AFB, Idaho.

The Air Force has already sched-

China's Burgeoning Public Image Problem

Chinese belligerence about Taiwan and US operations in the South China Sea and other irritants are affecting US opinion.

According to a CNN/*USA Today*/Gallup poll released in late April, the American view of China has grown much more negative over the past year.

In May 2000, 51 percent of Americans thought of China as either an ally or friendly nation. Only 43 percent said China was unfriendly or an enemy.

A year later, the proportion of Americans with a positive view of China has plummeted to 27 percent. Meanwhile, 69 percent view the Communist giant as unfriendly or even as an enemy.

According to the poll, a plurality of Americans don't want Beijing to host the 2008 Olympic games.

From Bush, a "New Framework" for Defense and Deterrence

In a major security affairs address at National Defense University, President George W. Bush on May 1 called on the US to move beyond the 1972 Anti-Ballistic Missile treaty and erect missile defenses as soon as possible.

"We need a new framework that allows us to build missile defenses to counter the different threats of today's world," said Bush. He added, "This treaty does not recognize the present or point us to the future. It enshrines the past."

Such a switch could lay the groundwork for further deep reductions in nuclear warheads, said Bush. Taken as a whole these steps would create a new concept of nuclear deterrence. "We must seek security based on more than the grim premise that we can destroy those who seek to destroy us," the President declared in the Washington speech.

Bush emphasized that he did not propose to abandon deterrence but rather enhance it and put it in broader context. He said, "We need new concepts of deterrence that rely on both offensive and defensive forces. Deterrence can no longer be based solely on the threat of nuclear retaliation."

This new framework, said Bush, would in fact encourage further cuts in offensive nuclear weapons. "Nuclear weapons still have a vital role to play in our security and that of our allies," he said, but "my goal is to move quickly to reduce nuclear forces."

The United States currently has 7,295 deployed strategic warheads compared to Russia's 6,094. Russia has been looking for big cuts, while the Bush Administration unofficially has been discussing making unilateral cuts down to 1,500 US warheads.

The missile defenses envisioned by Bush officials go far beyond the limited land-based system called for in plans produced by the Clinton Administration.

The postulated near-term missile defense system might feature both sea-based and land-based technologies, the President said. Such weapons would aim to knock down ballistic missiles in midcourse or as they re-enter the atmosphere.

Bush's speech offered no system specifics. Army officials have reportedly claimed the service could have a start-up, land-based interceptor system ready in 2004, if pressed. The Navy has said that two Aegis cruisers equipped with 50 missiles optimized for missile defense could be deployed in about the same time.

In the medium-term, weapons that seek to attack missiles in their boost phase, when they are more vulnerable, could add depth to an initially deployed system. The Air Force's Airborne Laser is a pre-eminent candidate to provide such capability.

"We have more work to do to determine the final form the defenses might take," said Bush. "We will explore all of these options further."

The President promised to consult closely with allies on the missile defense subject. In the past, many European nations have worried that US withdrawal from the ABM accord could reignite the nuclear arms race, with a fearful Russia rebuilding its nuclear arsenal to try and make sure it can always strike US soil.

Bush's speech called for Russia and the US to work together to develop a "new foundation for world peace and security in the 21st century." Moscow's initial reaction was guarded but at least not hostile.

Russia is "ready for consultations and we have something to say," said Russian Foreign Minister Igor Ivanov.

On Capitol Hill, senior Democrats had only a negative reaction, indicating that Bush's push for missile defense could become a major point of difference between the parties.

Democrats objected to abandoning the ABM pact, which they described as a cornerstone of the world arms control regime, for a defensive system which is unproved at best and unworkable at worst.

The struggle over the issue of missile defense could become "one of the most important and consequential debates we will see in our lifetime," said Sen. Thomas Daschle (D-S.D.), the Senate minority leader.

Bush, however, said his new framework will permit "a clear and clean break from the past and especially from the adversarial legacy of the Cold War."

uled a series of public hearings in communities surrounding these installations in an attempt to gather public comment regarding F-22 basing.

The full text of the F-22 EIS statement can be found on the World Wide Web at www.cevp.com.

Property Maintenance Shortfalls Dogging AFRC

Lack of money for building new buildings and maintaining old ones is hurting Air Force Reserve Command readiness, AFRC officials told Congress.

"For the men and women of the Air Force Reserve, their quality-of-life facilities are where they train and work," Hilton Culpepper, AFRC assistant civil engineer, told a Senate panel. "When they are constantly faced with inadequate facilities that we cannot maintain, it eventually takes its toll on recruitment, retention, and mission accomplishments."

AFRC owns and operates 12 installations consisting of more than 10,000 acres, 1,000 buildings, and 12 million square feet of space.

Operating from these and 55 other locations, AFRC provides 20 percent of Air Force capability at a cost of only four percent of the service's budget, according to Culpepper.

AFRC military construction requirements are more than \$683 million, yet the command only receives enough funding to complete fewer than two projects per year.

"At this rate, our facilities can be replaced only every 314 years," said Culpepper.

House Considers Military Voting Rights Bill

A bipartisan group of House lawmakers introduced legislation to protect voting rights for military members and their families.

The legislation follows last fall's Florida election controversy, which, among other things, showed inconsistencies in the treatment of service member absentee votes.

"A military person's vote should not be overshadowed by postmark discrepancies, confusion about residency requirements, or other technicalities that are often times out of their control," said Rep. Mac Thornberry (R-Tex.), a bill sponsor.

The measure would guarantee residency for service members and their families in all federal, state, and local elections. It would establish a standard 30-day period for receiving and mailing in absentee ballots and require states to find clear and convincing evidence of fraud before

Mediocre Pilot—And Much More

“Hero of the era,” “martyr of the revolution,” “heroic defender of the motherland,” “brave serviceman,” “versatile talent,” “good husband,” “good cook, able to prepare delicious food,” “skillful tailor who made a fashionable skirt for his wife to mark their wedding anniversary,” “accomplished painter,” “fine singer,” “flower arranger,” “meticulous housekeeper,” “a man of fantastic health,” “adept at computers,” “a man who persuaded his wife, pregnant for the first time, to have an abortion.”

—Official propaganda tributes to Wang Wei, late Chinese pilot who flew his fighter into a US Navy EP-3 aircraft over the South China Sea. From report in April 27 New York Times.

throwing out ballots in a federal election because they lack postmarks.

Kuwait Bombing Was Pilot Error

The mistaken bombing on March 12 of an observation post at a training range in Kuwait stemmed largely from pilot error, said an accident report.

A Navy F/A-18 pilot, Cmdr. David O. Zimmerman, mistook the post for his intended target, according to the report. An Air Force ground controller taking part in the night bombing run was using an infrared beam visible through the Hornet's night vision equipment to point out the true target.

For some reason Zimmerman focused on the source of the beam and not on its endpoint.

A moment's distraction on the part of the ground controller caused him to clear the Hornet for weapons delivery moments before he realized it was in fact aiming for him. Six people died in the accident.

GD to Buy Newport News Shipbuilding

General Dynamics on April 25 announced that it had agreed to purchase Newport News Shipbuilding Inc. for \$2.1 billion.

The deal has yet to be approved by shareholders and must pass legal muster with the Department of Defense and Department of Justice. If completed, it would leave General Dynamics as the nation's lone builder of nuclear-powered aircraft carriers and submarines.

Analysts said that a GD-Newport News consolidation could raise anti-trust issues, but the slow pace of large shipbuilding for the military means that competition in the area is already virtually nonexistent.

Northrop Grumman announced May 9 that it has offered to acquire Newport News, citing concern that

the GD merger “would create an unhealthy monopoly.”

Crash Kills Two Luftwaffe Officers

Two German air force aircrew members were killed March 25 when their Tornado fighter-bomber crashed on the Nevada Test and Training Range.

The two Germans were taking part in a Red Flag exercise at Nellis AFB, Nev. Germany was one of five for-

eign nations that sent crews to participate in the latest Red Flag sequence.

An investigation is under way. It involves investigators from the US and German air forces.

Minuteman Refurbishing Proceeds

A newly refueled Minuteman III ICBM was recently installed in launch facility Hotel-02 at Malmstrom AFB, Mont., as part of the Air Force's ongoing Propulsion Replacement Program.

Malmstrom is the first installation to take part in the program. Minuteman units at F.E. Warren AFB, Wyo., and Minot AFB, N.D., will begin receiving updated boosters later this year.

New propellant has previously been poured into several stages of the three-stage Minuteman systems. However, the current program represents the first time all three stages have been refueled simultaneously, said officials.

“As the solid propellant [inside the boosters] ages, it dries out and shrinks,” said Col. Jack Anderson,

DOD Sees Little Danger From Gulf War Chemical Agent

Two new Pentagon investigative studies conclude that no US service personnel—with the possible exception of a few special operations force units—were exposed to chemical warfare agents in the aftermath of coalition air attacks on several Iraqi munitions dumps.

One of the reports focuses on Al Muthanna, the nucleus of Iraq's entire chemical weapons programs.

During the night of Feb. 8, 1991, a USAF F-117 penetrated Al Muthanna's Bunker 2 with a laser-guided bomb. Postwar inspection confirmed that the attack destroyed hundreds of nerve agent-filled 122 mm artillery rockets.

Of an estimated nine tons of nerve agent sarin in the bunker, only about 10 kilograms escaped into the atmosphere, the new DOD study concludes. The rest was destroyed in the fierce fire that followed the attack.

Pentagon computer models estimate that the maximum hazard area extended no farther than 50 kilometers to the southeast. Yet no US forces in the region were closer than 412 kilometers from Al Muthanna.

The second study deals with the destruction of the Muhammadiyat Ammunition Storage Site as the result of a series of air raids in January and February 1991.

Coalition planners knew that Muhammadiyat was an ammo dump and suspected Scud missile depot. It is unclear whether they knew it also contained nerve- and mustard gas-filled bombs before a postwar UN inspection.

Muhammadiyat was bombed 17 times, on 15 separate days. In total, 180 kilograms of nerve agents and 2,969 kilograms of mustard blister agent were released into the atmosphere, according to DOD estimates.

The closest that US forces were to the nerve agent hazard area, at any time, was 35 miles. They never came closer than 125 miles to the possible mustard agent hazard area, according to the study.

It is possible that a few forward deployed special operations forces personnel operating in Iraq were exposed to a low level of nerve agent on Feb. 17, 19, or 24, 1991.

“For these soldiers, we cannot determine if nerve agent exposure occurred since we only know the general vicinity, not the precise location, of these soldiers during the time of the hazard,” concluded the Pentagon study.

341st Logistics Group commander. "Eventually it pulls away from the liner of the booster and leaves air spaces or gaps."

These gaps can greatly impact the nature of the propellant burn and its efficiency and reliability, said Anderson.

The approximate cost of the program is \$1.8 billion for 607 boosters. Life of the ICBMs will be extended at least through 2020.

DSB Says US Should Strengthen Homeland Defense

A new Defense Science Board report says the Pentagon needs to place greater emphasis on homeland defense.

"Asymmetric" threats such as biological weapons, cyber-war, and even suitcase nuclear bombs are increasing and require a more sophisticated US response, the DSB study says, according to "Inside the Air Force."

Perimeter defense is no longer enough. DOD needs to think more about a layered approach that would include information defense, unconventional nuclear warfare defense, and intelligence for civil defense, among others.

The 2000 DSB study, "Protecting the Homeland," was recently cleared for public release. Its call for a more energetic homeland defense mirrors the Hart-Rudman Commission final report issued in late January. (See "Hart-Rudman Calls for Homeland Defense," April, p. 64.)

News Notes

- Lt. Col. Stayce D. Harris assumed command of the 729th Airlift Squadron, March ARB, Calif., on Feb. 24, becoming the first African American woman to command an Air Force flying squadron.

- The first Milstar II satellite has begun on-orbit testing following a successful Feb. 27 launch.

- The Air Force has sent its 21st Defense Support Program satellite to Cape Canaveral, Fla., to prepare for a summer launch. Air Force Space Command's 3rd Space Launch Squadron is working toward an early August liftoff.

- The Air Force took delivery of its first Block 12 C-17 on March 23. Among other improvements, this updated Globemaster version incorporates global air traffic management capability and the extended range fuel system.

- On April 3 Raytheon Aircraft announced that the US Navy and US



USAF photo by SSgt. Jennifer C. Wallis

SrA. Rene Marvel and A1C Frank Collins, chefs from the 21st Space Wing "Knights," serve their teammates during a food preparation event at Guardian Challenge 2001. Air Force Space Command holds the annual four-day space and missile wartime readiness competition at Vandenberg AFB, Calif.

Air Force have ordered 59 T-6A Texan II trainers and technical support worth \$148.3 million. Of the 167 ordered so far, 30 will go to the Navy and 137 to USAF, which is slated to begin training later this year. Plans call for the Navy to receive a total of 328 T-6As through 2017 and the Air Force 454.

- Seymour Johnson AFB, N.C., is the Air Force winner of the 2001 Commander in Chief's Award for Installation Excellence. Other winners included the Army's Ft. Bragg, N.C., Fleet Activities Yokosuka, Japan, and Marine Corps Base Camp Lejeune, N.C.

- SSgt. Pete Leija, RAF Lakenheath, UK, was selected as the Air Force Exceptional Innovator of the Year. Leija was honored for a suggestion of a change in the inspection criteria for F-100-229 engines that could save the service more than \$8 million annually.

- The Air Force recently named its 2000 Air Force Contracting Award recipients. In the Professionalism in Contracting category, the winners included: Supervisory, Maj. Thomas J. Snyder, San Antonio Air Logistics Center, Tex.; Nonsupervisory, Capt. Cameron G. Holt, Aeronautical Systems Center, Wright-Patterson AFB, Ohio; President's Committee Award, 6th Contracting Squadron, MacDill AFB, Fla.; Chairman's Award, Beatrice R. De Los Santos, 311th Human Systems Wing, Brooks AFB, Tex.

- Lt. Col. Tony Aretz, deputy department head for behavioral science at the US Air Force Academy, was recently named an American Council on Education fellow for 2001-02. The award will allow Aretz to spend time at a university in Denver or Boulder, Colo., studying conflict resolution.

- On April 2, 1st Lt. Mark Hadley, Misawa AB, Japan, ejected safely before his F-16 crashed into the ocean off northern Japan. He was taking part in an air-to-ground combat training exercise at the time of the incident.

- The winners of the 45th annual Air Force media contest were announced April 3. They include: Print Journalist of the Year, Tim Barela, Air Education and Training Command, Randolph AFB, Tex.; Broadcast Journalist of the Year, SrA. Marty Rush, Air Force News Service, San Antonio, Tex.; Military Funded Newspaper (large), "Northern Light," 35th Fighter Wing, Misawa AB, Japan, and Military Funded Newspaper (small), "Patriot," 439th Airlift Wing, Westover ARB, Mass.

- Col. Alvin L. Hicks, former commander of the 311th Air Base Group, Brooks AFB, Tex., was sentenced April 3 to three months of confinement, a loss of all pay and allowances, and a \$50,000 fine. He had been convicted of indecent assault and conduct unbecoming an officer in regards to an attack on a lieutenant under his command.

- The Air Force's 2000 Mainte-

nance Effectiveness Awards were announced April 4. Among 13 winners, four were selected to compete at the DOD level. They are: 20th Component Repair Squadron, Shaw AFB, S.C., for maintenance, component repair, and equipment maintenance; 37th Airlift Sq., Ramstein AB, Germany, for aircraft maintenance (medium); 62nd/446th Aircraft Generation Sq., McChord AFB, Wash., for aircraft maintenance (large); 86th Logistics Support Sq., Ramstein, for logistics support.

■ Thirty-eight residents of the US Soldiers' and Airmen's Home in Washington, D.C., were presented with Republic of Korea War Service Medals on April 11. The South Korean award went to 15 airmen, 18 soldiers, three sailors, and two Marines.

■ The US Air Force and Boeing have tied up a deal for 10 new F-15E fighters at a cost of about \$571 million. The jets will be built at Boeing's St. Louis plant, company officials said.

■ An Air Force-sponsored car, driven by Elliott Sadler, of Wood Brothers Racing, won a NASCAR Winston Cup Series race on March 25. Sadler came from near the tail of the field to seal his first win in the race. USAF hopes its symbol on the race car will attract recruits with mechanical backgrounds.

Condescending Arrogance

"Words like 'atrocities' and 'massacre' are routinely being thrown about [concerning a 1969 military action in Vietnam by ex-Sen. Bob Kerrey's SEAL unit]. ... Aggressive reporters have played 'gotcha' with every Kerrey statement. 'How could he say it was a moonless night, when the charts say it was a half-moon?' ... For many who went through extensive combat in Vietnam, such parsing brings back an anger caused by memories not of the war but of the condescending arrogance directed at them upon their return, principally by people in their own age group who had risked nothing and yet microscopically judged every action of those who had risked everything and often lost a great deal."

—James Webb, former Navy Secretary and decorated USMC combat veteran of the Vietnam War, quoted in May 1 Wall Street Journal.

■ The US Air Force Reserve Pipe Band performed at a special Tartan Day ceremony held April 5 on the lower west terrace of the US Capitol. The band performed for an audience that included actor Sean Connery as well as political figures.

■ Starting May 1, diesel-powered government vehicles at Scott AFB, Ill., will begin testing an alternative fuel composed of 80 percent diesel and 20 percent soybean oil. Commercial use has indicated that the fuel burns cleaner than straight diesel and costs about the same.

■ Eglin AFB, Fla., won the Best Large Commissary in the US honor when the Defense Commissary Agency announced the winners of its 2000 Best Commissary Awards on April 9. Beale AFB, Calif., took home honors

as Best Small Commissary in the US. Osan AB, South Korea, won the Best Large Commissary overseas award.

■ A group of West Texas ranchers—the Davis Mountains Trans-Pecos Heritage Association—has filed a suit in US District Court alleging that Air Force low-level training is damaging their property, reported the *Dallas Morning News*. At issue is the environmental impact of flights over 15 million acres of private property in Reeves, Hudspeth, Jeff Davis, Presidio, Brewster, Pecos, and Culberson counties.

■ Air Force Reserve Command formally activated the 39th Flying Training Squadron at Moody AFB, Ga., on April 2. Lt. Col. Dave Coffman assumed command of Moody's first Reserve squadron. ■

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Senior Staff Changes

RETIREMENT: Brig. Gen. Richard B. Bundy.

NOMINATIONS: To be **AFRC Lieutenant General:** James E. Sherrard III.

To be **Brigadier General:** James P. Hunt, John C. Koziol, David R. Lefforge, Thomas J. Loftus, William T. Lord, Arthur B. Morrill III, Larry D. New, Leonard E. Patterson, Michael F. Planert, Jeffrey A. Remington, Edward A. Rice Jr., David J. Scott, Winfield W. Scott III, Mark D. Shackelford, Glenn F. Spears, David L. Stringer, Henry L. Taylor, Richard E. Webber, Roy M. Worden, Ronald D. Yaggi.

CHANGES: Brig. Gen. (sel.) Rosanne Bailey, from Armament Product Gp Mgr., Air Armament Ctr., Eglin AFB, Fla., to Dir., Aging Aircraft SPO, ASC, AFMC, Wright-Patterson AFB, Ohio ... Brig. Gen. (sel.) Charles C. Baldwin, from Command Chaplain, AETC, Randolph AFB, Tex., to Dep. Chief, Chaplain Service, Hq. USAF, Bolling AFB, D.C. ... Brig. Gen. (sel.) Arthur B. Morrill III, from Assoc. Dir., Log. Resources, DCS, Instl. & Log., USAF, Pentagon, to Dir., Log., PACAF, Hickam AFB, Hawaii ... Brig. Gen. (sel.) Leonard E. Patterson, from Dir., Ops., AFOSI, Andrews AFB, Md., to Cmdr., AFOSI, Andrews AFB, Md.

SENIOR EXECUTIVE SERVICE RETIREMENT: Horst R. Kelly.

SES CHANGES: Gregory W. Den Herder, to Exec. Dir., AFPC, Randolph AFB, Tex. ... Michael A. Gill, to Dir., Contracting, Ogden ALC, Hill AFB, Utah. ■