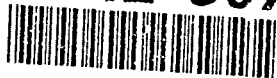


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1. AGENCY USE ONLY (Leave Blank)		2. REPORT DATE 1991	3. REPORT TYPE AND DATES COVERED Annual
4. TITLE AND SUBTITLE Air Force Issues Book, 1991			5. FUNDING NUMBERS NA
6. AUTHOR(S) Air Force Issues Team, SAF/LLX			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Secretary of the Air Force SAF/LLX Wash DC 20330-1000			8. PERFORMING ORGANIZATION REPORT NUMBER NA
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) NA			10. SPONSORING/MONITORING AGENCY REPORT NUMBER NA
11. SUPPLEMENTARY NOTES Updated versions supersedes new editions.			
12a. DISTRIBUTION/AVAILABILITY STATEMENT Copies are available at Air Force public affairs office and are cleared for open release. <i>by This report</i>			12b. DISTRIBUTION CODE NA
13. ABSTRACT (Maximum 200 words) Provides information on a wide range of Air Force programs and concerns, Helps Air Force commanders and representatives stay abreast of the major issues facing the Air Force today. The Issues Book updates and focuses on those topics and programs that have drawn national or Congressional interest. <i>Positive impact on (7 p.c.)</i>			
14. SUBJECT TERMS Strategic Nuclear Forces, threatener/contingency forces, Global mobility/reach airlift, space and C ³ I, readiness and sustainability supply, manpower and personnel			15. NUMBER OF PAGES 38
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT unclas	18. SECURITY CLASSIFICATION OF THIS PAGE unclas	19. SECURITY CLASSIFICATION OF ABSTRACT unclas	20. LIMITATION OF ABSTRACT SAR

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FOREWORD

The *Air Force Issue Book* is designed to provide Air Force commanders and representatives with information on a wide range of Air Force programs and concerns. It is distributed to all active duty, Air National Guard, Air Force Reserve and retired general officers as well as commanders and key staff offices. This updated version supersedes the 1990 edition and will help you stay abreast of the major issues facing the Air Force today.

This *Air Force Issues Book* complements the *FY 1992/93 Air Force Report to Congress* published earlier in the year. While the *Report* discussed Air Force portions of the President's Budget, the *Issues Book* updates and focuses on those topics and programs that have drawn national or Congressional interest. When used together within the tenets of *Global Reach -- Global Power* (Appendix 1, *Report to Congress*), these documents address the capabilities necessary to realize and sustain the vision. Copies of both are available at your public affairs office and are cleared for open release.

We hope you find this edition of *The Issues Book* informative and useful in telling the Air Force story. Please direct any questions or suggestions you may have to the Air Force Issues Team at (703) 695-0137 or Autovon 225-0137 or write to SAF/LLX, Washington, DC 20330-1000.

Sincerely,


BUSTER C. GLOSSON
Major General, USAF
Director
Air Force Issues Team

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INTRODUCTION

As the 1991 *Air Force Issues Book* goes to press, the United States Air Force is unquestionably the best in the world - bar none. But, while the threat of a global military confrontation with the Soviet Union has receded, the uncertain future of the Soviet state and continuing dangers in other regions offer little reason for complacency. Poised to defend our national interests against both strategic and regional threats, today's Air Force has an unparalleled ability to provide our nation's leaders with the options necessary to tailor responses to unfolding world events. A snapshot of recent events in one corner of the globe, South and Southwest Asia, clearly demonstrates the capabilities of our personnel, equipment, and doctrine:

- In Operation Desert Shield, we helped deter further Iraqi aggression against our Saudi Arabian allies and other Middle Eastern states
- In Operation Desert Storm, we spearheaded efforts to liberate Kuwait from Iraqi subjugation and eliminate the threat to the region posed by Iraq's offensive military forces
- In Operation Provide Comfort, we assisted Kurdish war refugees
- In Operation Sea Angel, we helped Bangladeshi victims recover from the cataclysmic devastation of Tropical Cyclone 02B

While not all-inclusive or even cataloging all of the "most important" activities undertaken, this listing illustrates that airpower's attributes -- speed, range, flexibility, precision, and lethality -- can effectively satisfy a range of national objectives. But, these capabilities were not developed overnight. They resulted from years of planning, programming, and organizing resources into highly effective forces that can rapidly execute the direction of the National Command Authorities' directives. The FY 92/93 President's Budget recognizes that, while the international security environment has changed, the world can still be a dangerous place. But declining budgets have posed real challenges -- and we've had to make tough choices. Our objective is to create a smaller force with cutting edge capabilities and top quality people.

STRATEGIC NUCLEAR FORCES

Deterrence of nuclear attack is the cornerstone of U.S. national security. The Soviet Union remains the only nation capable of destroying the United States, and for the foreseeable future even with a new START treaty, the Soviets will retain the capability to deliver thousands of nuclear warheads against our nation. The Triad concept remains fundamental. Each leg of the Triad possesses unique and complementary characteristics which synergistically provide a retaliatory capability that no adversary could hope to successfully overcome. Air Force objectives in sustaining strategic deterrence are to maintain military sufficiency, and flexibility, while increasing stability in the post-START force. We continue, albeit at a scaled-back pace, to modernize the two legs of the Triad provided by the Air Force: bombers and ICBMs.

BOMBERS

The Air Force's commitment to maintaining a viable long range bomber force is rooted in the bomber's indispensable role in supporting nuclear deterrence and the unique versatility that makes it a particularly effective weapon for conventional operations and the projection of U.S. power.

The bomber enhances the stability of the nuclear balance. Its high survivability promises any aggressor that an attack will be met with devastating retaliation, while its relatively slow speed means that the bomber does not pose a credible first strike threat. Because it can be generated, dispersed, launched under positive control, and then recalled or redirected, the bomber also provides our nation's leaders with a highly flexible means of sending a variety of unmistakable messages to an adversary that can help defuse and stabilize crises. The United States currently fields two major types of heavy bombers -- penetrating bombers and stand-off cruise missile carriers. A balanced combina-

tion of these enhances deterrence by complicating the enemy defensive problem and adding targeting flexibility. Cruise missiles have proven to be a valuable complement to the penetrating bomber force; they extend the lives of older bombers no longer capable of penetrating effectively, add mass to the bomber attack by saturating defenses, and are excellent weapons against many fixed targets. The manned penetrating bomber is an extremely efficient, flexible and effective system. The key to its warfighting versatility and efficient weapons delivery is the presence of a crew in the cockpit capable of reacting to changing situations.

Under current plans, some reductions to bomber force structure will occur as a result of retiring ALCM-capable B-52Gs, but manned bombers will continue to provide a large percentage of the weapons dedicated to the Triad's nuclear deterrent mission. The continuing modernization of Soviet air defenses and changes in the target base make modification of existing bomber systems and acquisition of the B-2 essential.

ISSUE: B-2

The B-2 bomber has been shrouded in controversy since it came "out of the black" in 1989. The major issues are cost and affordability, mission, technological performance and risk. For many, the key issue is cost.

ISSUE: B-2 Cost

Affordability is best measured in terms of cost-to-go. More than half the money to complete 75 aircraft has already been appropriated. Stopping the program at only 15 aircraft would result in substantial termination costs, leave the nation with a force that has little or no combat utility, and squander our past investment. The additional cost-to-go for the remaining 60 aircraft is \$21.8 billion (\$FY 91) -- there is no cheaper alternative.

When compared to other bomber acquisition programs, the B-2 will consume a smaller share of the total DOD budget. In its peak spending year, the B-2 will represent only two percent of the entire DOD budget which is less than every other bomber peak funding year since World War II. Peak funding years for bomber programs are:

B-36	1949	2.3%
B-47	1951	6.2%
B-52	1957	3.0%
B-1B	1985	2.7%
B-2	1992	2.0%

The true test of affordability is value. While the B-2 cost is high, it is a bargain in terms of overall value. For example, in the conventional role, no one today argues that the F-117 is not a cost-effective aircraft. Although

the F-117's unit cost is high, it proved critical in Desert Storm. The B-2 is more costly than the F-117, but is even more cost-effective. It offers 5 times the range and up to 10 times the payload of an F-117 for 5-6 times the cost. The B-2 leverages our up-front investment in stealth technology. We are at the stage now where we can begin to reap the benefits of that investment by producing the operational aircraft.

ISSUE: B-2 Mission

The mission of the B-2 is the same as every manned bomber before it: deterrence, both nuclear and conventional. The B-2 will be a mainstay of the nation's nuclear deterrent Triad well into the next century. Its stealth technology revolutionizes our manned bomber force and prevents atrophy in the airbreathing leg that would otherwise lead to the eventual disintegration of the balanced Triad concept. With its combination of penetrativity, accuracy and weapon yield, and "man-in-the-loop" damage assessment, the B-2 can hold the full range of targets at risk. The B-2 will carry out the same mission as its predecessors, such as the B-36 and the B-52 by holding valued enemy assets at risk by retaining the ability to penetrate enemy airspace and destroy enemy targets. (See Conventional B-2, Theater/Contingency Force Section).

A new stealthy airplane is essential to continued viability of the bomber force. The B-52 has served the United States well, but service life is limited and the technology is old. The B-1B is the best operational long-range bomber in the world today, but continuing improvements to Soviet air

defense systems tax the penetration abilities of both the B-52 and B-1B. Improved air defenses will eventually force traditional bombers into a "stand-off" cruise missile role constraining our ability to hold at risk a wide variety and number of targets.

Without the B-2, by 1993, the bomber force will shrink to about 200 bombers -- half of them over 30 years old. By 2010, the B-52H will be over 50 years old and the B-1B nearly 25.

ISSUE: B-2 Producibility and Testing

The B-2 is producible and with little risk. Early, extensive risk reduction gives high confidence in product integrity. The B-2 has 10 years of risk closure so far. It has had the most extensive computer aided design and simulations in the history of aircraft development. All production tooling is in place and was used to build the very first B-2. This differs from conventional aircraft production which builds a prototype and then develops production tooling. As of July 1991, the first three aircraft have logged 65 flights and 272.1 hours flight time demonstrating excellent early aircraft reliability.

The Defense Science Board, the Director of Operational Test and Evaluation, the Office of the Secretary of Defense, and the GAO have found no surprises in B-2 testing. The B-2 equaled or bettered predicted performance and flying qualities. Initial low observable testing found no signature surprises. Testing against operational radars will be accomplished in the future.

ISSUE: B-1 Electronic Countermeasure "Core" Program

In December 1988 the Air Force developed the B-1B ECM Recovery Plan. It included a common configuration, the "core" correction of deficiencies to the ALQ-161A, a stand-alone radar warning receiver, and an improved antenna. The FY 90 Authorization Act approved up to \$527 million of expired or lapsed funds for this effort. However, the FY 91 Authorization Act eliminated access to the unused portion of these funds, of which \$298 million was planned to complete the "core" program. As a result, the Air Force chose to terminate the Eaton AIL "core" production effort. This summer, after all "core" lab and flight tests were completed and the Congressionally directed independent assessment of the B-1B penetration capability became available, the Air Force requested, through omnibus reprogramming, funds to begin "core" production. This request was denied and remains the number one priority for the B-1B other than safety of flight.

ISSUE: Short-Range Attack Missiles (SRAM)

SRAM II is a replacement for the SRAM-A and can be employed on the B-1B and B-2. It will be able to effectively strike hardened, defended targets from longer ranges and with greater flexibility than the SRAM-A. Other attributes include increased reliability, reduced size and weight, and improved penetration flexibility when compared to existing air-delivered missiles. The SRAM II warhead also meets or exceeds all modern nuclear safety standards.

The critical design review for SRAM II has been delayed because of propellant development problems. We have developed a new propellant. After completing the ground test, the program will be poised to begin the flight-test phase. In addition, the program has been delayed because of development problems in the missile guidance computer which lacked sufficient throughput for the current software requirements. The solution was a larger computer to process the software for flight, which maintains a 30 percent spare memory for future growth.

The SRAM II program experienced a Nunn-McCurdy Program Acquisition Unit Cost breach of 126.4 percent. This caused the program to lose its certification and, therefore, its ability to obligate funds. The reduction of the total missile buy from 1,633 to 700 caused the majority of the unit cost increase. Contributing factors were increases in vendor unit cost and inflation. The program is being restructured and a certification review is planned for late September.

ISSUE: Advanced Cruise Missile (ACM)

The ACM is a second generation cruise missile that provides significantly greater range, more targeting flexibility, better accuracy, and greater survivability than the current air launched cruise missile. Its extreme accuracy makes it effective against hard targets, and its low observability increases its probability of arrival against even the most heavily defended targets. As of July 1991, the ACM test program has completed 32 test flight flights with 21 successes.

Fourteen of the last 17 tests have been successful, including five of the six attempted follow-on test and evaluation flights conducted since the end of the development program.

The ACM is designed to be compatible with current and future strategic platforms; however, current plans deploy it exclusively on the B-52H. Fiscal considerations have caused the deployable quantity of ACMs to be reduced to 1,000 from 1,461. Of these, 120 are planned to be special mission variants. Currently, two contractors are producing the missiles. There will be a competitive down-selection to one production source for missiles to be produced in FY 93 and thereafter.

ICBMs

ICBMs make unique contributions to the Triad. They are valued for their promptness, reliability, accuracy, low operating cost, connectivity, and availability. ICBMs maintain nearly a 100-percent alert rate and comprise about half of the nation's day-to-day alert weapons. Their high alert rate allows the other two legs of the Triad to operate at more economical tempos.

Currently, we deploy 1,000 silo-based ICBMs divided among three operational systems -- 450 single-re-entry vehicle (RV) Minuteman IIs, 500 three-RV Minuteman IIIs, and 50 ten-RV Peacekeepers. The Minuteman II was initially deployed 25 years ago; the Minuteman III was installed in upgraded silos in the 1970s. Peacekeeper, the nation's most accurate land- or sea-based ballistic missile, achieved full operational capability in

December 1988 in silos at F.E. Warren AFB, Wyoming. Together, these three missile systems provide an economical means to sustain a significant number of warheads at a constant high state of alert.

ISSUE: Minuteman

Minuteman will remain the backbone of the ICBM leg of the Triad. However, like many other segments of our armed forces, Minuteman will undergo a dramatic transition over the next few years. The Air Force will begin retiring Minuteman IIs in the first quarter of FY 92 while maintaining Minuteman IIIs well into the next century. Downloading of a portion of the Minuteman III force from three to one or two RVs has been successfully negotiated in the recently signed START treaty.

Next year, the Air Force will begin replacing the 150 Minuteman IIs at Malmstrom AFB, Montana, with Minuteman IIIs. The initial replacement missiles will come from depot-stored flight test assets. The source for the remaining missiles has yet to be decided. By replacing Malmstrom's Minuteman IIs with Minuteman IIIs, the base's total complement of missiles will be 200 Minuteman IIIs (they already have one squadron of 50 Minuteman IIIs). This will capitalize on the base's existing infrastructure and most efficiently maintain our more modern 500-missile Minuteman III force. Once completed, this program is expected to generate a net savings of over \$25 million per year.

ISSUE: Peacekeeper in Minuteman Silos

Peacekeeper can promptly engage and destroy -- thereby, "hold at

risk" -- those assets Soviet leaders most value such as hardened ICBM silos and military command bunkers. Peacekeeper also provides stability by partially offsetting the Soviet advantage in prompt hard target kill capability. But, deterrence cannot be a bluff; it must be based on proven performance. In 1991 Peacekeeper continued its unprecedented flight test program with two more successful launches. This brings the total to 23 successes out of 24 flight tests (DT&E and OT&E) -- the best record in the history of sea- and land-based ballistic missiles. Furthermore, Peacekeeper continues to demonstrate accuracy far better than design thresholds. It is the most accurate ballistic missile in the U.S. inventory. In addition, reliability of the guidance system has more than doubled from below 2,500 hours mean time between failure (MTBF) to over 5,000 hours MTBF.

As a result of these successes and confidence in the Peacekeeper missile, CINCSAC has reduced the pace of the flight test program from seven to three launches per year. This decision was based on the success of the test and evaluation program, engineering estimates that proved to be extremely accurate, and the fiscal realities of the 1990s. This allows us to decrease the total Peacekeeper missile buy from 173 to 114, saving over \$2 billion. Even with fewer total missiles, barring a future arms control agreement banning silo-based MIRVed missiles, we expect Peacekeeper to remain in the force structure beyond its projected 15-year life cycle and well into the 21st century.

ISSUE: ICBM Modernization

Soviet advancements in ICBM accuracy and increased MIRVing led to

increasing concern over the vulnerability of our silo-based ICBMs and the potential for crisis instability. Adding mobility to the ICBM force was determined to be the most effective option to address these problems, which in turn led to the Peacekeeper Rail Garrison (PRG) and Small ICBM (SICBM) in Hard Mobile Launchers (HML) programs. PRG would remove the 50 Peacekeeper missiles from their silos and rebase them on trains in secure garrisons on Air Force bases. The mobile SICBM would be carried on HMLs deployed on existing Minuteman launch facilities or in a random movement mode in the Southwest.

Changes in the international environment make a deep crisis involving the Soviet Union less likely. In addition, potential future arms control talks beyond START I increasingly focus on reducing or eliminating heavily MIRVed land-based systems such as the Peacekeeper and the Soviet SS-18. Because of this and fiscal realities, the Air Force has paused its plan to deploy the PRG. However, as a hedge, we will continue to develop and test it, permitting deployment should future international

conditions warrant. This is especially important in the face of continued robust Soviet strategic modernization.

With a fully successfully second missile flight in April 1991, the SICBM program is continuing missile full scale development (FSD) and will restart HML basing FSD in FY 92. While the current FYDP does not contain production or MILCON funding, it contains sufficient RDT&E to complete development in the late 1990s. Additionally, if production and MILCON are funded in FY 94, the program can still meet a 1997 FAD/IOC.

SICBM, with its single warhead, will be more stabilizing during periods of crisis than MIRVed ballistic missiles. Therefore, SICBM meets START objectives of more stabilizing nuclear forces. The SICBM basic missile design is capable of supporting either HML or silo basing, but SICBMs in HMLs would improve stability in a post-START environment by ensuring survivability through a price-to-attack ratio that would exhaust the attacker's force without significantly degrading our own capability.

THEATER/CONTINGENCY FORCES

CONTROL OF THE AIR

Control of the air must be the joint force commander's first consideration in conducting operations. We must ensure our forces have free access to the air to attack the enemy at a time and place of our choosing, while at the same time denying such access to the enemy. History has shown time and again that joint forces, free from the threat of enemy air attack, can pursue their objective with the vigor and freedom of maneuver necessary for victory. Perhaps there has never been a more explicit example of this concept than in Desert Storm. Coalition air forces achieved air superiority quickly and were able to attack the enemy forces at will. The results of the air campaign were obvious; we destroyed Iraqi centers of gravity and decimated their armed forces. At the other extreme, Saddam Hussein's forces were never able to use airpower against us. There was not one allied aircraft shot down by Saddam's air force, not one attack against an allied airfield, not one bomb dropped on our ground troops, and not one fatality due to enemy air attack. Air superiority is essential.

ISSUE: Advanced Tactical Fighter (ATF) Development

The F-22 program will develop a new air superiority fighter for introduction in the early 2000s. A follow-on to the F-15, the F-22 will be capable of gaining and maintaining air superiority against current and future adversary fighters, and guaranteeing freedom of maneuver for ground, air, and naval forces. Incorporating a revolutionary blend of superior aerodynamic performance, low-observable signatures, and advanced integrated avionics, the F-22 will be lethal, durable, and survivable in the future high threat environment. In addition, the F-22's improved supportability features will enhance its deployability and permit the high sortie rates necessary to dominate the air-to-air arena.

Despite the need for air superiority, as demonstrated in the Gulf, Congress has expressed concern over both quantitative and qualitative

aspects of the F-22 program. Quantitatively, the Air Force has revised the total program quantity downward, from the original 750 aircraft to the current 648. This reduction tracks with the overall fighter-force reduction, from 38.5 Tactical Fighter Wing Equivalents (TFWEs) to 26.5 TFWEs, and the reduction in F-15 wings from seven to five and one half. Qualitatively, both the 1990 Major Aircraft Review, and the 1991 follow-on review of the F-15XX/Falcon 21++ confirmed that the F-22 is the most cost-effective solution incorporating the right blend of low-observability, performance, and avionics.

Current Soviet fighters, with their look-down/shoot-down capability, are at essential parity with our F-15 and F-16 aircraft, and over 1,300 operational aircraft are deployed worldwide. With near qualitative equivalence and quantitative superiority, they pose a significant potential threat across a broad spectrum of conflict.

The Soviets clearly have no intention of being left behind in the fighter business. They recently announced, for example, the planned development of an enhanced Su-27 featuring vectored thrust engines and low observable technologies. In addition, the prospect of entirely new follow-ons to the Su-27 and Mig-29, incorporating low observable technology sometime after the turn of the century, remains a concern. The ATF is the only cost-effective long-term solution to this threat.

STRATEGIC ATTACK/INTERDICTION

Strategic attack seeks to destroy or neutralize the enemy's capability and will to wage war, while interdiction seeks to delay, divert, disrupt, or destroy enemy surface forces (follow-on forces and materiel) before they can be used effectively against friendly forces. We continue to emphasize the high leverage effects of strategic attack and interdiction through bomber and fighter force modernization.

ISSUE: F-15E Procurement

The F-15E provides enhanced interdiction capabilities, complementing the F-111 and F-117 in this role, while retaining the F-15's inherent air superiority characteristics. At issue is whether F-15 procurement should be extended.

Despite Congressional concerns over the F-15 vendor base, there are adequate F-111s, F-117s, and F-15Es to meet the Air Force's long-range, deep strike/interdiction requirements into the 21st century. In addition, an F-15XX is not a suitable substitute for

the ATF (see discussion above). However, last year Congress authorized the SECAF to obligate up to \$100 million in FY 91 to protect the F-15 vendor base. This was conditional on whether the Air Force would buy additional F-15Es with the proceeds from the sale of F-15s to Saudi Arabia, or Saudi Arabia itself would purchase additional F-15s. The Department of Defense has decided not to procure additional F-15E aircraft with Saudi sale proceeds, and a potential sale of F-15s to Saudi Arabia is not yet finalized. Consequently, the Air Force will apply the \$100 million appropriation toward the final 36 aircraft authorized in FY 91, as planned.

ISSUE: F-16 Procurement

The F-16 is the primary multi-role Air Force fighter aircraft and is being modernized continuously to meet the evolving threat. However, because of the significant reductions in the fighter force structure, the F-16 production rates have been reduced to 48 per year in FY 92 and 24 in FY 93. F-16 procurement will cease in FY 93 and the last delivery will be in 1995. There is some Congressional interest in raising procurement rates and/or extending the F-16 buy beyond FY 93.

F-16 procurement decisions are heavily dependent on force structure considerations and fiscal constraints. The significant force structure reductions, from 38.5 TFWs to 26.5 TFWs, dictate reduced F-16 procurement. Current fiscal realities dictate even further reductions. However, current firm Foreign Military Sales (FMS) commitments should keep the production line open, at an average

rate of 30 aircraft per year, through at least 1997. Other potential FMS sales could keep the production line open beyond the year 2000.

ISSUE: Stealth

Low observable platforms, now proven in combat, have changed the face of the battlefield. Overnight, stealth aircraft have made billions of dollars and 45 years worth of air defense equipment obsolete. In the future, stealth technology will render obsolete entire air forces. The Air Force is fielding two new aircraft that will take advantage of our superiority in stealth technology: the B-2 bomber and the F-22 Advanced Tactical Fighter. Congress is concerned with the necessity for and cost of future stealth aircraft.

Stealth is an essential component of our future Air Force. As evidenced by Operation Desert Storm, stealth aircraft are critical to success. The F-117 was the only aircraft used against targets in downtown Baghdad; a city more heavily defended than any in Eastern Europe during the height of the Cold War. The F-117A accomplished its mission again and again without loss or damage.

Stealth aircraft are also the most cost-effective means of conducting many missions. During Operation Desert Storm, F-117As, flying 2 percent of the combat sorties, covered 40 percent of the strategic targets. The stealthy F-117A aircraft operated with impunity in contested airspace, and in many instances without the host of support aircraft (air escort, defense suppression, and associated tankers) required by more conventional air-

frames. A standard attack package in Desert Storm required 32 bomb dropers, 16 air escort fighters, 12 suppression of enemy air defense assets and 15 tankers -- 75 aircraft costing a total of over \$6.5 billion (for procurement and 20 years of operations costs). That same mission could have been performed in many instances with 8 F-117s and 2 tankers at a cost of \$1.5 billion, or two B-2s, and nothing else, at a total cost of \$1.3 billion. Stealth provides not only a significant cost savings, but puts far fewer lives at risk to conduct the mission.

Low observable platforms also cripple the enemy's efforts to detect, identify, engage, and destroy our forces and act in concert with conventional aircraft to generate synergistic effects. Stealth aircraft, which will be few in number until after the turn of the century, can attack and neutralize enemy air defenses with impunity, thus serving as valuable force multipliers. This allows more conventional aircraft, such as F-16s and B-52s, to attack and achieve mission success with greatly reduced losses. This tactic was used with exceptional success during operation Desert Storm.

ISSUE: Conventional B-2

The B-2's assured ability to penetrate modern defenses, coupled with its high survivability, long range, and heavy payload, allows the United States to bring precise, heavy conventional firepower to bear at virtually any time or place on the globe. The B-2 combines the survivability of the F-117A with the greater payload and range of the B-52 -- the best of both worlds.

CINCSAC and the Air Force commander in Operation Desert Storm both said they would have used the B-2 against targets in Iraq. The three examples below are actual missions flown during the air war that demonstrate the B-2's potential conventional capabilities and what its contribution could have been -- survivability, precision, long range, and high payload.

An Iraqi nuclear research and development facility could not be struck for several nights because the F-117A did not have the range. Tanker aircraft to extend the F-117A's range were vulnerable at the time because Iraqi air defenses had not been suppressed. B-52s were too vulnerable over the heavily defended target. The target could not be struck until the allies achieved air superiority and the tankers could be moved north. The B-2 would have had the range and stealthiness to hit the target and on the first day -- without tanker support.

In another case, it took 50 sorties over several days to destroy 8 heavily defended, hardened chemical weapons bunkers. Each bunker had to be hit with a precision guided bomb and then hit again in the same spot with another bomb to destroy it. It would have taken only two B-2s with precision guided munitions to have done the job.

The last example demonstrates the need for heavy payload to cover an area target in a high threat environment. A military industrial complex was too heavily defended by surface-to-air missiles (SAMs) for B-52s. There were too many aim points for the F-117A. Consequently,

it took about three weeks before B-52s were able to strike the targets after F-117As eliminated the SAM threat. B-2s, with their large payload, could have destroyed the targets three weeks earlier.

The conventional mission for the B-2 is not new. The original mission statement published in 1981 required conventional weapons delivery missions in addition to its nuclear mission. The baseline B-2 has provisions to carry precision guided munitions, of classified capabilities, as well as a wide variety of unguided conventional munitions including the MK 82, 500 pound bomb.

ISSUE: Conventional B-1B

One of the big issues arising from Operation Desert Storm was the absence of the B-1B. The primary role of the B-1B is strategic nuclear deterrence. It has its baseline conventional capability; it is equipped and carries the MK-82 500 pound, general purpose bomb and could carry the MK-36 DST sea mine. On the other hand, the primary role of two of our B-52G squadrons is conventional. The B-52G carries a wide variety of munitions to include the full range of 500, 750, 1000, and 2000 pound general purpose bombs; cluster bombs; Harpoon anti-ship missile; Have Nap precision guided standoff munitions; naval mines; and other special effects weapons. B-52G aircrews are equipped with night vision goggles and train specifically for conventional operations, while B-1B pilots train primarily for the nuclear deterrence mission. Although the B-1B could have been used in Desert Storm, it was not a weapon of choice.

The B-1B conventional weapon release system was certified for use in July 1989. Initial Follow-on Operational Test and Evaluation (FOT&E) for the MK-82 500-pound general purpose munition was slipped due to a problem with the FMU-139 fuze. The FMU-139 fuze problem is not unique to the B-1B. After new fuzes were procured, their use for completing FOT&E was delayed because the fuzes were diverted for use in Operation Desert Storm. FOT&E testing resumed in April 1991 and is expected to be complete by the summer of 1991. The delay in FOT&E testing would not prevent the B-1B from using the MK-82 in a conventional combat role. It could be used now.

AIR ATTACK OVER THE BATTLEFIELD

The Air Force continues its strong commitment to Close Air Support/Battlefield Air Interdiction (CAS/BAI), dedicating approximately 25 percent of the fighter force structure to this mission area. Our current A-7D/A-10A CAS/BAI aircraft will be unable to fully meet the joint force commander's requirements for the mid 1990s and beyond, but fiscal constraints and force drawdowns preclude development of a totally new CAS/BAI aircraft. Consequently, the Air Force will modify existing aircraft, which are already capable in the role, to more effectively support the CAS/BAI mission.

ISSUE: Close Air Support/Battlefield Air Interdiction (CAS/BAI) Modernization

Significant force structure reductions have forced the Air Force to

modify its CAS modernization program. As a result of these changes, there is some Congressional concern that the Air Force is no longer adequately supporting CAS.

The dedicated CAS/BAI force structure will consist of three weapons systems. Approximately 300 Block 30 F-16 aircraft (3 wings) will be modified with several upgrades to become F/A-16s. When finished, these should include an improved night capability, a 30mm gun pod, improved data modem (formerly automatic target hand-off system), VHF anti-jam radio, laser seeker/tracker pod, and other selected items from the associated core avionics and safety upgrade programs. In addition, we will retain two wings of A-10 aircraft and designate (task and train) one wing of Block 40, Low-Altitude Navigation and Targeting Infrared for Night equipped F-16s for CAS/BAI support.

The Department of Defense has directed the Air Force to review alternatives to enhance night attack capability. Tactical Air Command is studying several alternatives, ranging from night vision goggles to a podded Forward-Looking Infrared Radar. Pending the results of their study, the Air Force will formulate a final modification strategy.

ISSUE: Fratricide

As a result of casualties from friendly fire in Operation Desert Storm, there is Air Force, DOD, and Congressional interest in finding solutions to fratricide. While this is a complex problem for both air and ground forces, the Air Force is committed to minimizing future incidents. During Operation Desert Storm, a

joint Defense Advanced Research Projects Administration/Air Force team developed and fielded interim solutions. A multi-service working group met April 17-18 to continue the work begun during Desert Storm, and they are considering forming a joint center for ground combat identification to coordinate all services' efforts. Fratricide is unacceptable, and the Air Force will work to eliminate it.

RECONNAISSANCE AND ENGAGEMENT SYSTEMS

Reconnaissance and engagement systems are a group of related programs designed to provide a comprehensive picture of the battlefield in near-real-time and allow commanders to immediately engage targets. The Joint Surveillance Target Attack Radar System (Joint STARS), with its unique capability to detect, track, identify, and target enemy maneuver elements is one example of a system designed for this role. In addition, the Air Force is developing the Contingency Airborne Reconnaissance System (CARS) to provide worldwide, day/night, all-weather, near-real-time imagery and signals derived intelligence products to appropriate command elements.

ISSUE: Joint STARS Procurement

While Congress has generally supported the Joint STARS program, it has stated some concern in the past about the requirement for Joint STARS, given the political changes in Europe.

Joint STARS was never intended solely for use in Europe.

Although Joint STARS development has concentrated on European scenarios, its utilization in other theaters has always been required and projected. The overwhelming success of Joint STARS (still in the development phase) in Operation Desert Storm points to these other requirements. The capability to identify, attack, and disrupt/destroy Iraqi forces before they could strike coalition forces was invaluable. JSTARS was able to identify and track Iraqi movements, appraise Allied leadership of these activities, and direct strikes against the appropriate positions. While we were able to move entire divisions without being detected, Iraqi forces could not move small units without our knowledge; a tremendous advantage for us, and disadvantage for our enemy. However, the Department of Defense also recognized the effect of changes in the political situation in Europe in September 1990, when the Joint Requirements Oversight Council reviewed and subsequently reduced the procurement objective from 22 to 20 aircraft. The current budget fully supports the revised procurement quantity.

ISSUE: Contingency Airborne Reconnaissance System (CARS)

FY 91 Congressional language directed the Air Force to restructure the TR-1 Ground Station into a CON-US-based facility to support contingency requirements. CARS fulfills this requirement. It will consist of two separate components, a fixed facility and deployable segments, and will be the Tactical Air Forces primary U-2/TR-1 processing and exploitation ground station.

CARS will provide direct support to theater commanders via worldwide, day/night, all-weather, near-real-time imagery and signals derived intelligence products. CARS will ultimately be capable of receiving input from tactical, theater and national sources, but is primarily designed to process data from the U-2/TR-1 aircraft.

Operation Desert Storm identified critical deficiencies in existing Air Force reconnaissance capabilities. The deployed U-2 and TR-1 aircraft were supported by ground stations and personnel belonging to several different agencies: the Army, the Air Force, national agencies and allied forces. Consequently, we were unable to provide timely, correlated intelligence reports. In addition, although the TR-1's radar sensor was able to provide accurate targeting information, communication shortfalls required the data be disseminated via telephone. Finally, national requirements for theater-derived imagery products were either not met or marginally supported.

CARS will rectify most Desert Storm shortfalls by incorporating all U-2/TR-1 ground station functions into a single system. Sensor cross-cueing, tip-offs and intelligence correlation will enhance the reliability and accuracy of intelligence support to the warfighter. A robust communication suite will provide timely reporting and product dissemination to all customers, including national agencies.

Procurement funding is sufficient to develop and field the initial CARS capability -- one fixed, and one transportable segment; however, we must identify funding for manning,

O&M, some building modifications and future system upgrades (pre-planned product improvements). CARS is planned for joint operations and other service involvement will address part of the shortfall.

MUNITIONS

Desert Storm clearly demonstrated the importance of developing and producing the right mix of munitions prior to entering into any conflict. The world's finest air-to-air missiles and precision-guided air-to-ground munitions developed over the last two decades, provided our forces with the punch necessary to quickly defeat enemy forces. The next generation air superiority missile, the Advanced Medium Range Air-to-Air Missile (AMRAAM), has now become operational and is an essential component of our force structure. Sensor Fuzed Weapon (SFV) is our next generation anti-armor munition that will give us multiple-kills-per-pass.

ISSUE: Advanced Medium Range Air-to-Air Missile (AMRAAM)

AMRAAM remains the Tactical Air Forces' highest priority munitions program and is essential in our effort to upgrade the air superiority capabilities of our current and future fighter force. Current inventory radar missiles (AIM-7 Sparrow) must be continuously guided to their target by the launch aircraft, requiring the launch aircraft to keep its radar antenna pointed at the target until missile impact. This severely restricts the aircraft's post-launch maneuvering and allows only one target to be attacked at a time. The AMRAAM has an active radar seeker that can oper-

ate independently of the aircraft radar, allowing the pilot to launch AMRAAM at one target, maneuver as necessary to evade enemy threats, engage and launch at another target, and continue maneuvering -- all while the missiles are independently homing in on their respective targets.

In the past, AMRAAM has experienced reliability problems due to vendor quality and manufacturing processes. These were aggravated by the unusually turbulent F-15 forward fuselage station environment. Congress is concerned that these problems have not been adequately corrected and that contractor performance is well behind schedule.

The Air Force has implemented an AMRAAM corrective action and production reliability plan that has exceeded interim reliability goals. Following the problems identified in Stage III Captive Carry Reliability Program (CCRP), independent Red Teams assessed AMRAAM reliability, design adequacy, and contractor effectiveness. These independent analyses confirmed the missile design was robust and served as a basis for the Air Force corrective action plan. In August 1990, the Defense Acquisition Board reviewed and approved the Air Force plan and delayed full-rate production pending demonstration of 200 hours mean-time-between-maintenance (MTBM) on the F-15. Individual contractors then provided their get-well plans, and incorporated their fixes into Stage IV CCRP missiles that began flying on F-15/16/18s in December 1990. During the test program, AMRAAM has exceeded 200 hours MTBM (280-400 hours MTBM as of July 2, 1991). During Operation Desert

Storm, AMRAAM MTBM exceeded 1,300 hours in more than 2,600 flight hours on the F-15.

On May 23, 1991, the Defense Acquisition Board (DAB) reviewed the Air Force's request for AMRAAM to proceed to full-rate production. Although they recognized AMRAAM's readiness for full-rate production, the DAB was unable to grant the request due to limitations imposed by the FY 90 Authorization Act. Language contained in the Act requires the Director, Operational Test and Evaluation (DOT&E) to certify that AMRAAM has met all of the requirements specified in the joint operational requirement. DOT&E has declared AMRAAM operationally effective and potentially operationally suitable pending tests of missiles with operationally representative captive carry time. The Air Force is preparing an FOT&E test plan amendment for DOT&E approval which includes firing high time missiles from the CCRP and Desert Storm. The DAB approved low-rate production through Lot VI (FY 92).

ISSUE: Sensor Fuzed Weapon (SFW)

SFW will provide a multiple-kill-per-pass capability against armored vehicles and will be used to interdict enemy armor concentrations before they can engage friendly forces. Each SFW munition contains 40 "Skeet" submunitions, each capable of independently tracking armored vehicles. Congress has expressed concern over the SFW requirement, program uncertainties, and schedule slips.

Although the anti-armor munition requirement has reduced in light

of recent developments in Eastern Europe and the Soviet Union, the Air Force still needs an anti-armor munition capable of achieving multiple kills-per-pass. SFW is the most cost-effective anti-armor munition alternative. A recent Air Force Studies and Analyses report, considering cost, attrition, and anti-armor effectiveness, indicates SFW can be two to three times as effective as Maverick and the Combined Effects Munition against armor. SFW will be the mainstay of the Air Force's future anti-armor program.

The SFW program has been on cost, on schedule, and on performance since the program was restructured in November 1989 to address cost concerns, program uncertainties, and schedule slips. As a result of the restructuring, the Air Force added a production transition program to reduce production risk and cost, delayed production start from FY 91 to FY 92, and removed program concurrency. Developmental Test and Evaluation is complete with 33 of 35 drops successful and the results exceeding requirements by over 50 percent. Initial operational test and evaluation (IOT&E) began Sept. 5, 1990 and the ongoing results have also exceeded requirements by over 50 percent. IOT&E will be complete in November 1991 and low-rate initial production will begin in December 1991. SFW is meeting Air Force requirements in a cost-effective manner.

THEATER FORCE STRUCTURE

ISSUE: Relocation of the 401 TFW to Croton AB, Italy

The US-Spanish Defense Cooperation Agreement requires the

withdrawal of the 401st TFW from Torrejon AB, Spain, by May 4, 1992. In order to keep a fighter wing presence in the NATO's Southern Region, Italy volunteered to host, and NATO supported Croton, Italy, as the optimum available site to construct a new home for the 401st. Congress continues to express concern about constructing a new base in the Southern Region when so many other forces are being withdrawn from existing bases in Europe. Consequently, in the FY 91 DOD Authorization Act, Congress precluded expenditure or obligation of any DOD funds, including contributions to the NATO Common Infrastructure Program, to relocate the 401 TFW to Croton until the North Atlantic Council (NAC), meeting at the Ministerial level, endorsed continued construction at Croton. On December 17, 1990, the NAC reaffirmed the need for the 401st TFW at Croton, noting that retention of the wing is important, construction of Croton is the best course of action, no other existing base is available, and use of Croton for out-of-area operations will be determined on a case-by-case basis.

The Air Force continues to support the 401st move to Croton. We did not program any Military Construction funding in the FY 92 President's Budget because US construction funds are not yet needed. OSD retains management responsibility for all US contributions to the NATO infrastructure fund, the source of funding for initial Croton construction.

ISSUE: Composite Wings

The value of the integrated employment of airpower was clearly

demonstrated by Desert Storm. The air campaign was well orchestrated, but that orchestration was built up and fine tuned in the months prior to Desert Storm. We can't always count on having months to prepare in the future. We have to be ready to fight on day one. The Composite Wing will help us achieve that Goal. Under this organizational construct, the wing commander will have the proper mix of aircraft (strike, sweep, defense

suppression, refueling, etc) under his command to ensure mission effectiveness. The commander will be able to conduct routine composite training to increase combat capability, and will be given the responsibility for mission execution. This will simplify command and control and allow us to increase the use of mission-type orders -- enhancing initiative, flexibility, and responsiveness.

GLOBAL MOBILITY/REACH

As vividly demonstrated during Operations Desert Shield, Desert Storm, and Provide Comfort, airlift provides the National Command Authorities vital flexibility in an unpredictable international environment. That flexibility will be even more important in a world where the shape and direction of future threats cannot be predicted with certainty. Deterrence is credible and effective only if you can project combat power where it is needed, when it is needed. During the height of Operation Desert Shield, 127 airlift aircraft were landing daily in Southwest Asia, averaging one arrival every 11 minutes. By the cease fire, strategic airlift had moved over 482,000 passengers and 513,000 tons of cargo and theater airlift had flown over 40,000 sorties. During the ground campaign C-130s were flying over 500 sorties per day providing theater logistic support, battlefield mobility, and medical evacuation. While airlift was providing the logistics lifeline, tanker aircraft were providing the inflight refueling bridge to quickly deploy forces into the theater. Air refueling aircraft expanded the reach and combat capability of the coalition forces by flying over 20,000 sorties and offloading over 178 million gallons of fuel to more than 60,000 receivers.

AIRLIFT

Strategic and theater airlift are the heart of deterrence in the emerging security environment. Airlift is an ideal tool for an environment of uncertainty across widely dispersed potential flashpoints.

ISSUE: Strategic Airlift Modernization

Recent world events have highlighted both the importance of strategic mobility and the need to upgrade an aging fleet of aircraft designed in the 1950s and 1960s. The C-141, currently the "workhorse" of the strategic airlift fleet, now averages over 32,000 hours of flying time per airframe and a portion of the fleet is rapidly approaching the end of its service life. Several studies have examined various alternatives and all have concluded that the C-17 is the best and most cost-effective solution to

our airlift needs. The flexibility provided by the C-17 is vital in an unpredictable security environment. The entire program was recently reviewed by the Under Secretary of Defense for Acquisition and found to have no major show stoppers. Douglas Aircraft Company's management and efficiency indicators are steadily improving, and previous cost and schedule problems are being brought under control. The first test aircraft (T-1) assembly was completed on schedule in December 1990 and the first flight is scheduled for the end of the summer.

The congressionally mandated Mobility Requirements Study will help quantify and refine mobility requirements of an era in which fewer U.S. forces will be forward deployed. The Secretary of Defense, during his Major Aircraft Review, has already acknowledged the need for responsive airlift by projecting (and committing to) a buy of 120 C-17s. Had the C-17 been

available during Operation Desert Shield, throughput would have been significantly increased with a corresponding increase in combat power delivered during the first critical days of the operation. During the next conflict, we may not be given the luxury of 23 weeks to position our forces prior to the onset of hostilities. The C-17 remains the key component of the airlift modernization program with delivery of the first production aircraft scheduled for next year.

ISSUE: Theater Airlift Modernization

The C-130 characteristics of timeliness and flexibility proved essential during Operations Desert Shield, Desert Storm, and Provide Comfort. The Air Force will purchase 165 new C-130Hs beginning with eight aircraft in FY 92 in an effort to upgrade the active portion of theater airlift. The C-130H was selected in lieu of other C-130 derivatives because more aircraft can be procured over the FYDP at lower cost. With approximately 75 percent of existing Air Force C-130Hs in the Air Reserve Component (ARC), this modernization effort will help balance the active and ARC C-130H force. The ARC will also benefit as active C-130Es will be transferred to Guard and Reserve units to replace aging ARC C-130Bs.

The ratio of Active to ARC forces will remain close to the operationally effective mix of 37 percent active and 63 percent ARC, allowing the active force to meet overseas permanent duty and rotational requirements while remaining able to meet peacetime training and limited contingency requirements.

ISSUE: Cargo Movement Operations System (CMOS)

During Operations Desert Shield and Desert Storm, one of the recurring concerns from all Services was the tracking of cargo and passengers as they moved through the airlift system. The implementation of CMOS will give the Air Force the capability to track the location of all cargo and passengers in the airlift system. CMOS will establish the automated linkages essential for the integration of Service, Agency and commercial logistics management systems. CMOS will be the major segment of the Air Force's compliance with Defense Guidance mandated Transportation Coordinator-Automated Information Management System (TCAIMS). TCAIMS provides the integration of movement information used in the force deployment process, from the base level through the National Command Authorities.

ISSUE: Materials Handling Equipment (MHE)

Airlift operations in support of Operation Desert Shield and Desert Storm were constrained by the ability to load and unload aircraft with the current generation of MHE. The primary piece of MHE is currently the 40K-Loader. It transports five pallets of cargo to and from the aircraft and is the platform for loading cargo into and out of the aircraft. While fully compatible with the C-141, C-130, and C-5, it cannot reach high enough off the ground to onload or offload commercial wide body CRAF aircraft or the KC-10. The next generation MHE, the 60K-Loader, will transport six pallets and be able to service both

commercial and military aircraft. The 60K-Loader is an essential ingredient in the modernization of the airlift support infrastructure and key to realizing the full benefits of the C-17's enhanced airlift capabilities. The first deliveries of the 60K-Loader are expected in FY 95/1.

AERIAL REFUELING

As forward bases are eliminated, the ability to deploy tactical forces over long distances and to employ them once in theater will become increasingly important. Our tankers give us the ability to rapidly deploy tactical assets. With aerial refueling, our strategic forces can strike anywhere in the world within hours.

ISSUE: Tanker Enhancements

To increase operational flexibility, fighter throughput, redundancy, and joint/combined interoperability, the Air Force is continuing to pursue

an initiative to add wing-tip drogue pods to KC-135E, KC-135R, and KC-10 aircraft. Probes will be added to Air Force fighter aircraft, similar to US Navy and many allied fighters, to improve commonality among receivers. The importance of tanker availability and interoperability with other services and allied aircraft was demonstrated in Operations Desert Shield and Desert Storm as tankers provided gas to over 60,000 coalition receivers in support of air operations.

Another initiative currently under way is the cost-effective re-engining of the KC-135 fleet. The Air Force has requested 18 aircraft be modified per year. These new engines are not only cleaner, quieter, and cheaper to operate and maintain, they also increase each tanker's refueling capacity by approximately 50 percent. Both of these initiatives will enhance timely tanker support for the deployment and employment of DOD aircraft.

SPACE AND C³I

The military advantage and force multiplying effects inherent in space-based systems -- global coverage, relatively low vulnerability, and autonomous operations -- were vividly demonstrated during Operations Desert Shield and Desert Storm. Desert Storm was the first conflict in which support from space was fully integrated, with various platforms providing coalition forces high resolution, near real-time weather information, accurate and reliable navigation data, and secure and non-secure voice and data transmissions. The success of space systems as force enhancers during the gulf conflict has convinced field commanders of their importance. Desert Shield/Storm operations have provided a new baseline from which to measure the impact of space assets in future conflicts.

SPACE AND C³I SYSTEMS

Field commanders in the Middle East were provided with more real-time data than ever before -- information critical to planning, supporting, and executing tactical operations. In the future, commanders will need even better communications to successfully conduct tactical and strategic operations.

ISSUE: Restructured Milstar

Milstar remains the Air Force's highest priority space C³ program. Consistent with Congressional direction, restructured Milstar will emphasize tactical use while providing "global reach" with flexible, jam-resistant command and control capability. Although the number of mobile control stations, and the constellation size will be reduced, Milstar will now have a tactically oriented medium data rate payload which will significantly increase communications throughput. Program reorientation is projected to reduce cost 35 percent over the FYDP and 25 percent over the program's 20-year life cycle.

ISSUE: Tactical Exploitation of National Capabilities (TENCAP)

TENCAP is an Air Force wide

program to generate and disseminate significant information from commercial and military space assets to support military operations. TENCAP resources can provide tailored mission support to units involved in operations such as Desert Storm. Equipment prototypes developed by Air Force TENCAP were employed by Air Force, Army, and Marine Corps units throughout the Gulf crisis. TENCAP benefits the warfighters, even at the lowest echelons, by sourcing a wide variety of space capabilities to put information at their disposal.

ISSUE: Air Force Intelligence Command

The new Air Force Intelligence Command (AFIC) will be established at Kelly AFB, Texas, on October 1, 1991. AFIC will integrate the people and missions of the Air Force Foreign Technology Division, Wright-Patterson AFB, Ohio; the Air Force Special Activities Center, Ft. Belvoir, Va.; elements of the Air Force Intelligence Agency, Washington, D.C.; and the Electronic Security Command, Kelly AFB.

The mission of AFIC will be to provide direct intelligence support to Air Force, joint and allied commanders, and national agencies to help

them perform their missions. Integrating the current diverse Air Force intelligence functions under one command will enhance intelligence support to commanders conducting their war-fighting responsibilities. Support to the customer will be improved because this new organization creates a single focal point to satisfy intelligence requirements. The merger of the various intelligence organizations will allow intelligence personnel to gain broader experience across a variety of specialties with the objective of more complete data integration and responsive support.

SPACE SUPPORT

Support to space activities encompasses the full spectrum of launching, deploying, maintaining, and controlling space assets. We have provided the backbone of the nation's space support for more than thirty years and are uniquely qualified to develop these essential assets to support the security needs of the nation beyond the turn of the century.

ISSUE: Titan IV Solid Rocket Motor Upgrade (SRMU) and Restructure

Although the Titan IV SRMU program has suffered a number of setbacks, most recently the April explosion during the first test firing of the SRMU (caused by a flaw in the solid rocket propellant shape), the SRMU will eventually provide a significantly increased capability (25 percent - 30 percent) to launch heavier payloads. The Air Force continues to support development of the SRMU as both the Department of Defense and NASA have payloads

requiring the use of the new solid rocket motors. Options for continued development of the new motors will be evaluated once formal results from the April test failure are analyzed.

The Titan IV contract is also being restructured to reflect reduced launch rates. Launch requirements through the end of the century have decreased due to the restructuring of Milstar and the stretchout of other programs. The goal of the reduced production rate is to meet the new launch schedule while maintaining the industrial base.

ISSUE: National Launch System (NLS)

The National Launch System evolved from the Advanced Launch System (ALS) and the Advanced Launch Development (ALD) programs. ALS was a joint DOD/NASA program to develop a new family of launch vehicles which would lead to a more cost effective, flexible, and responsive launch capability. ALD, which was restructured from ALS due to changing SDI requirements and reduced funding, was to stress development of technologies which would support the development of ALS while meeting DOD's need for more robust, cost-effective access to space. NLS will be a jointly managed and funded DOD and NASA program. Its goals will be to improve access to space by enhancing current systems and to develop a new launch system to meet DOD and NASA requirements. The National Space Council supports a program schedule which protects a 1999 launch option, pending an FY 93 decision based upon validated requirements, credible costs, and technical merit.

ISSUE: U.S. Space Launch Infrastructure

The Air Force Space Launch Infrastructure provides operational support to current and future US launch vehicles. The infrastructure includes launch support areas such as: launch pads, vehicle and payload processing facilities, communications sites, launch range radars, optical tracking stations and associated launch support activities. These systems are 20-30 years old and require modernization to meet the demands of expendable boosters to launch DOD payloads. An upgraded space launch infrastructure will enhance the nation's space capabilities for national security, civil, and commercial missions.

ISSUE: National Aero-space Plane (NASP)

This Presidentially-directed joint DOD/NASA program continues to demonstrate and validate the technologies needed for runway-launched space transportation capable of single-stage-to-orbit and for aircraft capable of hypersonic flight in the atmosphere. The joint program, with the Air Force responsible for overall program management, continues to progress and is currently in an intense period of demonstration hardware fabrication and ground testing. The Air Force continues its strong support and funding for NASP as an essential element not only of the Air Force's future, but also of the nation's ability to maintain its competitive edge into the 21st century.

STRATEGIC DEFENSE

The Air Force surveillance mis-

sion provides our command centers with the needed tactical warning and attack assessment to conduct defensive and retaliatory offensive operations.

ISSUE: Early Warning System (EWS)

EWS is the recently approved successor to the current Defense Support Program. While validated requirements for improved tactical warning and attack assessment (TW/AA) have existed for years, funding constraints terminated the previous alternative, the Advanced Warning System (AWS). Analyzing both requirements and affordability, the Air Force developed EWS to meet CINCSpace space-based TW/AA sensor requirements. EWS will have an improved capability by using satellites with crosslinks, improved sensors, and the potential to expand to meet AWS requirements. Crosslinks could allow closure of overseas ground stations while the new sensors will improve missile detection performance to meet emerging missile technologies and capabilities. AWS contracts have been closed out this summer while technological efforts applicable to EWS will be continued as necessary.

ISSUE: Over-the-Horizon Backscatter (OTH-B)

Due to the changing international environment and reduced force structure, the Air Force has decided to "mothball" the east and west coast OTH-B radars and cancel the Alaskan and Central OTH-B systems. By mutual agreement with CINCNORAD, the East Coast Radar System will be reduced from 24 hour per day operation to 40 hours per week, allowing

for restoration to full operation within six months. The West Coast Radar System will be maintained for recall to full operation within 12 months. This reduced posture attempts to balance CINCNORAD's operational needs with fiscal realities by retaining potential OTH-B capabilities while significantly lowering overall costs. The Air Force ... complete the ongoing Initial Operational Test and Evaluation in order to document the performance of the OTH-B radar under operational conditions. Results will be evaluated to determine if other OTH-B configurations would be more economical while still meeting anticipated defense needs.

ISSUE: Cheyenne Mountain Upgrade (CMU)

The overall program, consisting of six operational systems upgrade programs, is on schedule and within budget. Two of the six systems which comprise the CMU achieved significant initial operational capabilities in 1991:

the Communications System Segment Replacement and the Space Defense Operations Center Phase 4B. Two other systems experienced development or technical performance problems within the last 18 months. Granite Sentry Phase II, which will provide air defense warning processors and integrated warning processors for the command director and battle staff, experienced software development problems in March of last year. The schedule and its contents were realigned and are currently on track. The Survivable Communications Integration System experienced significant technical performance problems and missed a major contract milestone in October of last year. A "cure notice" was issued in February, and a recovery plan with an alternate hardware architecture was accepted by the Air Force effective Aug. 1, 1991. The final two systems, the Command Center Processing and Display System Replacement and the Offutt Processing and Correlation Center, are on schedule.

READINESS AND SUSTAINABILITY

Current rock-solid readiness and sustainability levels -- the results of near full funding for operations and support in the mid-1980s -- are the highest ever achieved by the Air Force. Although the indicators show the beginning of a reversing trend, the current readiness level was clearly validated by Operations Desert Shield and Desert Storm. Aircraft mission capable rates, even at the end of combat operations, averaged better than 92 percent and logistics support functions performed like clockwork. Although supportability may have looked easy, a combination of factors -- e.g. people, training, planning, surging, innovating -- overcame the challenges and made this happen. The future challenge is to maintain required capability in the changing world and economic environment. Greater uncertainty and fewer resources place greater importance on our readiness and sustainability posture. Despite the challenges, the Air Force remains committed to preserving the same per unit readiness and sustainability for the remaining force structure. Numerous initiatives from the Defense Management Report are underway which will help us do so.

SUPPLY

ISSUE: War Readiness Materiel (WRM)

The significant role WRM plays in successful force projection has been vividly demonstrated during operations in Southwest Asia. WRM posture remains one of the most critical logistics factors of deterrence, and responsive and prolonged power projection. The current posture has begun to erode as a result of partial to no funding since FY 88. The FY 92 budget submission does not ameliorate the devastating FY 91 cut. However, it arrests the downward trend and provides a modest, but solid, baseline for programming a recovery over the FYDP.

Currently, there are two myths regarding WRM that are used to seek Congressional reductions in appropriations. The first myth is that force drawdown and retirement of older weapon systems will generate surplus

items which can be used to fill critical WRM shortages. Unfortunately, these items will be mostly inapplicable. The majority of WRM requirements are for new acquisitions and much of the remaining requirements are new items as a result of modifications. The second myth is that WRM is a significant contributor to the inventory growth problem that the Air Force, DOD, and Congress have focused on during the past five years. The fact is restrictive disposal policies of the past, accounting procedures for calculating inventory value, and inflation factors are the primary cause of growth in the total dollar value of inventory.

Some of the prime systems FY 92 WRM funding will support are new aircraft like the C-17 and the F-15E. Since there were no funds approved for FY 91 and there are long lead times to procure aircraft parts, many of these wartime spares will lag aircraft deliveries. This cut directly decreases combat capability and reduces support for FY 93 flying hours

and sorties. The following examples of the impacts of this cut highlight the need to protect WRM funding:

- 427 F-15E tactical sorties
- 5,292 strategic airlift hours (C-5/C-141/C-17)
- 900 SOF and combat rescue sorties (AC/MC-130/H-53/H-60)

The FY 92 PB also funds other critical sustainability items like non-rotatable, shelf-life items associated with contingency hospitals and aeromedical staging flights. All WRM items programmed in this request are geared to sustaining our weapon systems and airmen for force projection, deterrence and, should deterrence fail, combat.

ISSUE: Inventory Management

The Air Force manages more than 875,000 items of spare parts, spare engines, and support equipment valued at approximately \$59 billion. Over 70 percent of this, or \$42 billion, comprises our secondary item inventory, more commonly referred to as spare parts. The value of the spares inventory has grown from \$19 billion in FY 80 to \$42 billion in FY 90. Reasons include modernization (both new weapon systems and modification to older systems), a conscious commitment to improve readiness and sustainability through greater funding of requirements in the mid-1980s, changes to retention policy, and price escalation. However, while the value of our spare parts inventory has increased, the ratio of the inventory value to the value of the end items

they support (for example, F-16s and AIM-9s) is the same now as it was in FY 80 -- when supportability was less robust than it is today.

Although the results of the investment of the last 10 years produced dramatic improvements in readiness and sustainability, the General Accounting Office (GAO) and others have criticized the Air Force for growth in its "excess" inventory. In the case of its most recent report, GAO inappropriately categorized valid inventory at the retail level as excess by ignoring DOD policy. The assets cited in the report are not excess to total Air Force requirements or the levels at the individual bases. The audit states 41 percent of the retail inventory is excess, when in fact, only four percent of the Air Force combined wholesale and retail inventory is excess in accordance with the DOD-approved definition.

As a result of this report, Congress is considering a deletion of \$140 million from the Air Force FY 92 O&M request to support the major command customers' purchase of secondary items from the Air Force Stock Fund. Deleting customer buying dollars will not achieve a reduction in inventory, but will actually trigger an increase. Assets in the procurement pipeline, which were based on spending levels associated with the President's Budget, will stagnate in inventories as a result of reducing O&M purchases due to reductions in customer buying power. On the other hand, the Air Force's Pacer Trim program and its participation in the DOD Inventory Reduction Plan are making real progress on inventory reduction. FY 90 disposal actions

increased to \$1.8 billion, six times the disposals in FY 85 and 59 percent higher than FY 89. Several other initiatives are also underway.

The Air Force has been at the forefront in the effort to identify and correct core causes of inventory growth, even before it became a Congressional concern. Although we are open to additional suggestions and concepts for improving inventory management, we do not concur with arbitrary adjustments to our programmed inventories. Our programmed inventories are calculated as the minimum acceptable levels for readiness and sustainability of our reduced force structure.

REVOLVING FUNDS

ISSUE: 80 Percent Restriction of Obligations to Net Sales

Section 311 of the FY 91 Defense Authorization Act limited DOD stock funds (except for fuel and subsistence items) from incurring FY 91 obligations in excess of 80 percent of that year's sales. The Act provided authority to waive the 80 percent limit if the Secretary of Defense should determine that a waiver is critical to national security and Congress is so notified. For the current fiscal year, the Air Force justified and gained approval of a waiver to this restrictive provision based on three reasons: (a) sales were an invalid measure for the Air Force Stock Fund (AFSF) in FY 91, (b) retail divisions of the AFSF would experience rapid depletion of inventories, and (c) the limitation would have a devastating impact on mission support.

The 80 percent limitation would significantly impact the availability of spares for every organization and mission in the Air Force. For example, curtailing Reparable Support Division procurement and repair alone is estimated to reduce the Air Force's aggregate mission capability (MC) rate from 81 percent in FY 91 to 53 percent in FY 95. The F-16 would experience a drop in MC rate from 85 percent to 56 percent and the F-15, C-5, C-141, B-1, B-52, and KC-135 would suffer decreases between 20 and 30 percentage points. Mission capable rates would erode further due to the additional impact of halting reorders, depleting the General Support Division inventory, and having no FY 91 WRM funding.

ISSUE: The Defense Business Operations Funds (DBOF)

The DOD Comptroller initiated the DBOF to incorporate commercial business practices in DOD and Service operations. It is intended to motivate managers at all levels to make better decisions which impact on cost of operations by providing total cost visibility. DBOF provides for some significant changes from the way we do business today. It is a multi-faceted/time-phased plan with four distinct phases.

The FY 92 PB begins the first phase of DBOF implementation with four actions. These actions are classified as accounting changes with no real change to operations. First, our existing stock and industrial funds are disestablished and reconstituted under a single DOD revolving fund, the DBOF. We retain the responsibility for the Air Force components, Air

Force Stock Fund (AFSF), Depot Maintenance Industrial Fund (DMIF), Airlift Services Industrial Fund, Laundry and Dry Cleaning Industrial Fund, and Communications Service Industrial Fund within five existing DOD "business-like areas": supply operations, depot maintenance, transportation, base support, and information services. Second, the budget reinstitutes and expands on the same concept as the former Asset Capitalization Program, once used successfully in the DMIF. In essence, this means DBOF activities would be financially responsible for capital equipment and facility needs of their operations. They would fund these capital improvements through the pricing of their products and services, just as the private sector does today. The intent is that MILCON projects associated with these activities will be included under this concept. Third, DBOF provides operating cost reimbursement for both new and existing Defense agencies (e.g. Defense Finance and Accounting Service, Defense Contract Management Center, Defense Contract Audit Agency and Defense Reutilization and Marketing Service). Finally, phase one changes include productivity savings of one percent per year (compounded yearly) beginning in FY 93 to account for the improved efficiencies expected as a result of DBOF applications.

Congress has voiced some concerns regarding the full implications of DBOF, even though they applaud its goal of more efficient operations. For instance, the aspect of incorporating MILCON into the price of products and services could take it out of the Congress' direct appropriation process, something Congress may not approve in FY 92. They might even delay

DBOF's initial implementation for a year to study the full range of potential changes.

OPERATION & MAINTENANCE (O&M)

ISSUE: Consolidation of Maintenance Depots

During the first round of DMR proposals were introduced to consolidate the Services' aeronautical and non-aeronautical depot maintenance functions into several single, defense-wide entities. The goal of these initiatives was to reduce the cost of depot activities through reductions in overhead, duplication and under-utilized capacity. In order to effectively implement policy to achieve this initiative, a Defense Depot Maintenance Council (DDMC) was established with membership encompassing all of the Services. The Air Force representative is the Commander, Air Force Logistics Command.

One of the current DDMC issues centers around the Air Force and Army strategy to openly compete their workload in the private sector. Both Services devised programs that would meet the large savings associated with the aggressive use of competition. Congressional legislation, however, restricted this competition to a small test program in FY 91. Currently, Congress appears to be lifting this restriction and imposing other limitations on money amounts and percentage of workload in competition. The Air Force's ability to contribute its share of the savings depends on management's flexibility to compete its workloads in an open and unrestricted manner.

ISSUE: Adoption of the Navy Aircraft Service Period Adjustment (ASPA)

The FY 91 Appropriation Act directed the Air Force to implement a program similar to the Navy's Aircraft Service Period Adjustment Program (ASPA) by April 1, 1991. Based on savings realized by the Navy, Congress reduced the Air Force's FY 91 Operation and Maintenance funding by \$100 million.

The Navy's ASPA program includes the establishment of Operating Service Periods (OSPs) and Maximum Service Periods (MSPs) for each aircraft mission design series (MDS). The OSP is the minimum amount of months, flight hours or cycles between depot inductions and marks the beginning of a series of aircraft general material condition evaluations, whereas the MSP is a mandatory operating limit. The ASPA inspections are performed by depot field teams on each aircraft that has reached its OSP. Over 70 percent of their aircraft pass their initial ASPA evaluation and are consequently deferred one year from depot maintenance induction. Because the Navy's depot maintenance funds are allocated based on inducting their aircraft when they reach their OSP, the Navy can attribute savings by deferring inductions through ASPA evaluations.

Air Force programmed depot maintenance (PDM) uses one induction interval for each aircraft MDS. PDM intervals are the result of rigorous, continual analyses and, like Navy MSPs, are driven by non-deferable, safety driven, maintenance requirements. Since our aircraft inter-

vals are already pushed out to their maximum safe limit, ASPA inspections will not result in their deferral from depot maintenance. Incorporating modifications and improved materials and processes are our primary method for increasing PDM intervals. This approach provides extensions for the entire MDS fleet without the cost of individual ASPA evaluations. The Air Force has numerous success stories where current programs have extended PDM intervals up to three years past their original induction interval.

The costs associated with adopting and maintaining ASPA procedures within the Air Force are significant. For example, using ASPA procedures within the F-15 program would increase FY 91-96 depot maintenance costs by \$194 million. Not only do ASPA procedures result in a more expensive depot maintenance approach than Air Force PDM, the extensive jacking, shoring and disassembly required to conduct adequate ASPA evaluations would cause aircraft readiness rates to fall to unacceptable levels.

MANAGEMENT

ISSUE: Consolidation of Automated Data Processing (ADP) Operations and Design Centers

In November 1989, DOD initiated consolidation of ADP operations and design facilities to achieve efficiencies and savings. In response to the DMR, the Air Force developed a consolidation plan that would save \$1.1 billion by the year 2000. Included in the savings were 751 manpower positions from computer

operations and design activities and the elimination of over 750 computers. To implement the plan and achieve these savings the Air Force created an investment line of \$300 million, distributed mostly from FY 92 through FY 94. OSD approved the Air Force plan in November 1990 and initial implementation is currently underway.

The Air Force plan calls for the creation of regional data processing centers in the CONUS to support standard base level processing (e.g. aircraft maintenance, supply, personnel, accounting and finance); MAJCOM non-command and control processing (e.g. command manpower and budget); wholesale logistics; and R&D scientific & super-computing. The plan also addresses the consolidation of general purpose software development into central design activities. All the data processing operations and software design will operate on a fee-for-service basis.

The biggest risk to the program is potential cuts to the investment funding provided to the Air Force. Without the investment funding, the regional processing centers cannot be established. The O&M funding of the computers (over 750) that currently provide the essential functional support has been deleted. This cut negates any flexibility should investment funding be reduced and would cause Air Force computer systems to shut down with serious impacts to any functional operations heavily reliant on ADP support.

ISSUE: Environmental Quality

The Air Force continues its strong commitment to protecting and

enhancing the environmental resources at our installations. The FY 91 budget for environmental protection reached nearly \$750 million and this figure is expected to approach \$1 billion for both FY 92 and FY 93. This increase matches the growth in Installation Restoration Program requirements as more sites transition from studies to cleanup. We expect to fund all Category 1 and 2 compliance projects listed in OMB's Circular A-106 Report.

Our focus for FY 92 and beyond will be pollution prevention, personnel training, hazardous materials/wastes reduction, and site restoration clean-ups. Additionally, we will continue to emphasize environmental compliance assessment and program audits to identify potential environmental discrepancies before they become violations. We are also continuing our highly successful Commander's Leadership Course in both FY 92 and FY 93. Its syllabus was created to educate our senior officers on the demands of environmental compliance, thus enabling them to fulfill the Air Force's commitment to the protection of our environment.

ISSUE: Reorganization at Air Logistics Centers (ALC)

In October 1990, Air Force Logistics Command implemented a new organizational structure in each of its ALCs. It represents a significantly new approach to the way ALCs operate. They changed from organizations along functional lines to product and service entities. This means the work force is structured to support various products (e.g. aircraft and commodities) and services (e.g. finan-

cial management and human resources). This is in contrast to the former functional orientation on activities like maintenance and distribution. This realignment is not a typical organization change where boxes and lines on the organizational chart are merely redrawn. It is a basic restructuring driven by the core logistics processes in each organization. It focuses on continuous streamlining by process action teams, improvements in customer support and budget/manpower savings.

ALC reorganization was not one of the top-down initiatives out of the DMR process. Rather, it was a requirement and an opportunity for improvement recognized by the ALCs as a result of a future Air Force environment characterized by smaller budgets and smaller force structures. Both its timing and thrust, however, dovetailed neatly with the DMR process that was occurring simultaneously.

ISSUE: Air Force Materiel Command

The new Air Force Materiel Command (AFMC) will be established on July 1, 1992. It will integrate functions of the Air Force Systems Command (AFSC), headquartered at

Andrews AFB, Md., and the Air Force Logistics Command (AFLC), headquartered at Wright-Patterson AFB, Ohio. The new command will be headquartered at Wright-Patterson AFB, and will be responsible for developing technology, acquiring and upgrading weapon systems, and ensuring combat readiness and sustainability.

Combining AFSC's expertise in science, technology, research, development, and testing with AFLC's expertise in life-cycle acquisition and supportability will provide a seamless and completely integrated weapon system management process. Integration is possible because the two commands have undergone significant streamlining and share a similar management philosophy. That philosophy emphasizes continuous process improvement, movement of authority and responsibility to the lowest level, and strong partnerships with operational customers and industry.

A provisional headquarters has been activated at Wright-Patterson AFB. Its mission is to manage transition activities and do the planning needed now for integrated budgets and POM submissions, personnel actions, and other immediate management requirements.

MANPOWER AND PERSONNEL

Throughout the 1990s, recruiting, training, retaining, and motivating quality people will continually challenge the Air Force. The value of our people is intrinsic to our readiness, modernization, sustainability, and force structure decisions. In a changing world and fiscal environment, we must continue to recruit and retain the best and the brightest -- more important in a smaller force. As illustrated so well by Operations Desert Shield and Desert Storm, we depend on the excellence and dedication of the Active, Guard, Reserve, and total force professionals to preserve our national security. This total force -- what President Bush has described as the finest military the nation has ever known -- represents the most important element of our warfighting capability. As changes occur, we must maintain the delicate balance of force structure, manpower and infrastructure.

Competition for labor in a market defined by a shrinking pool of 17 through 21 year olds impacts our recruiting efforts into the mid-1990s. While the Air Force continues to meet its enlisted and line officer recruiting goals, competition from the private sector is already affecting retention in some specialties. We continue to experience major difficulty retaining pilots and physicians. Therefore, we cannot relax in our efforts to provide a competitive compensation package, which includes adequate pay and allowances, satisfactory government quarters or housing allowances, full permanent change-of-station reimbursements, quality health care and other quality of life benefits.

FORCE STRUCTURE ADJUSTMENTS

ISSUE: Manpower Reductions

While ensuring our capability to meet national security objectives and adjusting to the demands in the changing environment, the Air Force has made significant streamlining decisions affecting manpower. Between FY 91 and FY 92 the Air Force reduced military end strength by more than 27,000 spaces. Limited by a Congressional end strength target of 415,000 by FY 95 and direction to use the FY 90 officer-to-enlisted ratio as a guide in future restructuring, the vast majority of the reductions were accomplished by programmatically drawing down force structure; streamlining initiatives through the major com-

mands, numbered air forces, air divisions, and field operating agencies; and productivity initiatives. Current end strength levels are at a 40-year low and the downward trend continues. Air Force programmed end strength for FY 95 is 437,200. Reductions to the targeted 415,000-level could result in significant adverse personnel actions.

These end strength cuts necessitate continuing FY 91's voluntary loss programs while instituting new reduction initiatives in FY 92. These measures include constraints on officer and enlisted accessions at historically low levels, lower high-year-tenure policies for many enlisted grades, tightened reenlistment controls for first-term airmen, continuing the officer early-out program, and waiving

some time-in-grade and time-in-commissioned-service requirements for officer retirements. Programmed reductions compel us to plan additional cuts using Selective Early Retirement Boards and date of separation rollbacks.

Although Congress has allowed DOD to manage civilian levels by programming dollars vice end strength in recent years, requirements must drive civilian manpower levels. Through review of civilian manpower requirements and utilization, the use of hiring restrictions in FY 91 and FY 92, the initiatives to streamline, and resultant changes from the programmatic force structure drawdown, the Air Force identified 16,000 civilian manpower spaces for reduction. Programmed civilian end strength dropped from 230,230 for FY 91 to 222,897 for FY 92. Hiring restrictions alone in FY 92 may not achieve these reduced levels, and deeper cuts may cause adverse actions at some locations and potentially Air Force-wide.

ISSUE: Total Force

The Total Force Policy, formalized in 1973, has developed a balanced mix of active and reserve component forces that efficiently uses all available resources and ensures maximum combat strength at minimum cost. In the years to come, the proportion of the Air Reserve Component (ARC) will grow in almost every mission area as we take maximum advantage of ARC capabilities. As this occurs, we must maintain the efficient balance between active and reserve forces that can meet both peacetime and contingency taskings. The success of this balanced approach is best exemplified by Opera-

tions Desert Shield and Desert Storm where ARC fighter, tanker, airlift, medical and support units were employed. In Congressional testimony, Chairman of the Joint Chiefs of Staff General Colin Powell described the application of the Total Force Policy to Gulf War operations as follows: "To summarize, the success of the Guard and Reserve participation... cannot be overemphasized. Their participation has been a significant factor in affording us flexibility and balance and reinforces the policies and decisions made over the last 10 years to strengthen the total force concept."

As budget reductions force cuts across the spectrum of Active and Reserve components, we will continue to review force mix decisions to optimize mission and cost effectiveness. Factors reviewed include overall defense guidance, peacetime and wartime activity rates, readiness requirements, active force levels, training requirements, manpower efficiency, and unit beddown considerations. The FY 92 PB projects a 26.5 tactical fighter wing equivalent force of 15.25 active and 11.25 ARC. This balance provides for rapid contingency response and a sufficient stateside rotation base to limit extended overseas tour lengths.

The ARC proportion of our mission is in transition. The many changes created significant shifts in requirements. As a result, FY 92 overall ARC programmed growth is eliminated. While the Air National Guard strength increases over 1,000 positions, the Air Force Reserve cuts programmed growth approximately 4,000 positions. Over 1,700 of the Air Force Reserve reduction results from

identification of Individual Mobilization Augmentee positions which are in career areas where sufficient active duty/ARC positions exist to cover wartime requirement; i.e, these are excess requirements.

ISSUE: Base Closure

Air Force base closures currently consist of three separate and distinct packages. The first, the 1988 Base Closure Commission findings, identified five major stateside bases for closure. These closures were approved by the President and the Congress. They will cost \$1.4 billion, but they are expected to save approximately \$1.3 billion in FYs 92-95 and \$410 million annually thereafter.

Procedures for the second part of stateside closures are addressed in the Defense Base Closure and Realignment Act of 1990. Fourteen bases were recommended for closure and one base was recommended for realignment and partial closure in the April 1991 submission to the Commission. Projected annual savings from these closures/realignments is approximately \$635 million with an approximate \$1.1 billion one-time cost to implement. However, funding to capitalize the new Base Closure Account will be required before any of the closures can begin. In July the Commission forwarded to the President their recommendation to accept all but one of the Air Force actions. The President approved the Commission Report and sent it on to Congress.

The final part of the base closures effort focuses on overseas forces. Since overseas installations are

owned by the host nation, overseas actions are actually withdrawals of US personnel and equipment rather than closures. We have programmed withdrawals from 10 major, 13 minor and two support-site installations overseas. These withdrawals will result in planned net savings of approximately \$2.9 billion in FYs 92-97.

RECRUITING AND RETENTION

ISSUE: Military Pay

A principle underlying implementation of the volunteer force of the early 1970s was that military pay must be kept competitive with private sector wages. Comparable wages are fundamental to attracting sufficient numbers of high quality volunteers, protecting the investment in training and retaining a highly technical and skilled force. The growing inflation gap erodes the standard of living and encourages members to seek employment opportunities elsewhere. Therefore, unless future pay raises better offset private sector wage growth and inflation, the stage is being set for serious retention problems, even in the face of a force drawdown.

Among other more specific legislation we support, we seek to restore Variable Housing Allowances and Basic Allowances for Quarters to levels specified and implicit in statute to reduce members' out-of-pocket housing costs.

ISSUE: Aviator Retention

Studies have shown that it takes about \$1 million to produce a mission-ready pilot. Many more millions of dollars are spent giving our pilots experience and retaining suffi-

cient numbers to fill our line, staff, and supervisory positions. The economic comparisons favor funding retention incentives (i.e., Aviator Continuation Pay and Aviation Career Incentive Pay) and maintaining a balanced pilot force over reacquiring, training, and upgrading new pilots.

We have worked with Congress over the past several years on possible solutions to the pilot retention problem. The Aviation Career Improvement Act, implemented by the FY 90 Authorization Act, is a comprehensive package that addressed this issue. While welcoming most of the Act's provisions, we have since developed a legislative proposal to amend current statutes to deal with continued low pilot retention. For FY 93 we are requesting authority to do three things. One, increase the bonus to \$20,000 per year (hoping to pay \$15,000 per year while adding flexibility for future years); two, extend contract lengths two years to counter increasing potential for separations after 14 years of service; and, three, make a non-contract option available for those pilots reluctant to accept an increased service obligation.

We are also continuing to work retention challenges through a variety of other initiatives which, like the pilot bonus, are being used to meet immediate retention needs. We need to focus on long-term programs to improve the core of military and family life, benefiting not only pilots, but all our personnel. With the impending force drawdown, future program changes must consider the potential impact on retention of quality people.

ISSUE: Medical Professionals Retention

The Air Force and Congress have been increasingly concerned with the serious decline in retention rates of health care professionals. We have a chronic problem attracting physicians, and have recently been unable to meet the demand for many other health care professionals. Many factors, both monetary and non-monetary, make it difficult for the Air Force to compete with the private sector for highly qualified health professionals.

Special pays better enable us to attract and retain qualified health professionals by making military salaries more competitive with, but not necessarily comparable to, salaries in the civilian sector. Most recently, the FY 91 National Defense Authorization Act replaced the temporary Medical Officer Retention Bonus with a multi-year bonus for physicians (MSP). We are concerned this authority as implemented will not have the desired effect on physician retention. The consecutive nature of the obligation incurred for accepting an MSP contract and the bonus structure itself (which reduces compensation for some specialties) may actually have a negative impact on retention.

The authorization act also expanded Incentive Special Pay authority to additional nurse specialties, extended Board Certification Pay to more non-physician health professionals and created retention pay for optometrists. Although conceptually we support these initiatives, our goal

is to implement them in such a way as to provide some form of retention/incentive pay to all allied health specialties in which we face significant shortages and retention problems.

We continue to pursue non-monetary initiatives to improve physician retention. A recent survey noted that in addition to inadequate pay, lack of support personnel was another primary reason physicians left the Air Force. In an effort to redress this situation, Congress appropriated \$20 million to hire additional civilian medical support personnel in FY 90. This program is expected to have a positive effect on retention and is appreciated. However, when the authorizations are spread out over all of our facilities, facility level impact becomes minimal.

ISSUE: Civilian Personnel

In recent years, civilian personnel reductions have corresponded to military reductions, and have included reductions-in-force due to base closures and other programmatic actions. With constrained budgets and Defense Management Review Decisions, we expect to see continued changes as force reductions and realignments mandate further reductions in civilian personnel strength.

DOD is committed to programmatically reducing the civilian work force based on mission and force requirements. To posture the work force for reductions, DOD imposed a hiring freeze in January 1990 which was extended through March 28, 1991. On March 29, 1991, DOD revised the hiring limitation policy to allow the Services to appoint two employees

from outside DOD for every five that separate from the rolls after that date. Air Force was allocated 4,000 positions. In addition to hiring limitations, some involuntary separations may be required to achieve lower manpower levels. We are trying to minimize the impact of these reductions-in-force on employees. As the two commands that have a high percentage of civilian employees, AFLC and Air Force Systems Command, are integrated into a new streamlined Air Force Material Command, funding for the remaining civilian positions will become more critical.

ISSUE: Foreign National Pay

Congress continues to impose nonprogrammatic reductions to Foreign National (FN) compensation, in support of host country burdensharing, without regard to mission requirements and existing law (Foreign Service Act of 1980, the Defense Cooperation Agreements, NATO Status of Forces Agreements and other country-to-country agreements). Because FN employees are crucial to our mission, reductions must be taken programmatically to ensure mission readiness and maintain quality of life for troops and their families.

QUALITY OF LIFE

ISSUE: Availability of Health Care

The military health services system is comprised of two components -- the direct care system and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). In 1966, Congress implemented the CHAMPUS Program to

augment the resources of the direct care system.

The availability of quality health care is one of the major concerns of our families. Over the past 10 years, the number of Air Force beneficiaries has risen to approximately three million. These beneficiaries are placing increased demands on our finite direct care resources. Difficulties in providing timely care for these people are aggravated by a number of conditions, but the major factor affecting the availability of timely medical appointments continues to be health care provider shortages.

In recognition of the need to improve access to care, the Chief of Staff transferred 2,000 manpower resources from the line of the Air Force to the Medical Service. This transfer was time-phased (1,000 in FY 91 and 1,000 in FY 92) to allow the lead time needed to recruit providers and support staff.

In addition, we have implemented a number of programs to improve patient accessibility while maximizing direct care resources and decreasing overall costs. Some of these initiatives are the Alternate Use of CHAMPUS Funds Program, the Air Force Management Efficiencies Program, the Partnership Program, the Department of Veterans Affairs (VA) and DOD Health Resources Sharing Program, and the Health Care Finders Program.

The Alternate Use of CHAMPUS Funds Program and the Air Force Management Efficiencies Program provide funding to allow medical facility commanders to develop the

most efficient method of providing care to their beneficiaries. The Partnership Program allows the integration of health care resources between the civilian and military health care communities using CHAMPUS funds. Each of these programs offer improved access to health care services to beneficiaries within the direct care system. The VA and DOD Health Resources Sharing Program enables our medical facility commanders and VA directors to share their excess health care resources at minimum cost with each other. Each of these programs maximize the use of the direct care system.

The Health Care Finders Program helps beneficiaries locate appropriate civilian health care providers who agree to participate in the CHAMPUS Program and file all the necessary paperwork. It also improves access to civilian health care under the CHAMPUS Program and minimizes the cost sharing impact on our beneficiaries.

These activities are tied to our future movement into managed health care. Managed health care focuses on three things: one, enrolling beneficiaries; two, ensuring beneficiaries receive timely, appropriate and coordinated health care services to maximize patient care within available resources; and three, improving awareness of needs and fostering healthful behavior through health promotion and education. We are currently involved in a demonstration involving managed health care called Catchment Area Management (CAM). Under CAM, medical facility commanders are given the authority and funding to provide or arrange health care for

beneficiaries across both the direct care system and the CHAMPUS program.

ISSUE: Dependent Dental Care

Availability of adequate dental care is another concern of our family members. Because of the limited amount of space-available appointments for our dependents, the Dependents Dental Plan (DDP) was created

by Congressional mandate in 1987. Because the law specifically restricts the type of authorized care, dependents of active duty members receive only basic dental care under DDP. The recent "Survey of Air Force Life '90," indicated that members expectations have not been met by DDP. Expectations were for full coverage of all dependent dental needs rather than the basic care which had been provided by clinics in the past.