Could an Air Force in such splendid condition today have serious concerns about the future? Unfortunately, the answer is yes.

A Little Lower on a Little Less

BY JOHN T. CORRELL, EDITOR IN CHIEF

THE US Air Force closed out 1988 with the highest mission-capable rates in its history. Fighter forces could generate almost eighty percent more sorties than in 1980, and the readiness of the bomber force was at an all-time high. The cargo-carrying capacity of airlifters was up seventy percent since 1980.

Superlatives continue to mount about the accuracy and reliability of systems and support equipment. The replacement of Vietnam-era F-4 fighters in the active-duty force with F-15s and F-16s is almost complete. The Air National Guard and the Air Force Reserve are well along with conversion to newer aircraft. The Advanced Tactical Fighter development is essentially on track (see "Washington Watch," June '89 issue, p. 19).

The B-1B bomber is in service. The Air Force says that it is meeting or exceeding expectations in every respect except for a chronic but solvable problem with electronic countermeasures. The first fifty Peacekeeper ICBMs are on alert.

For the time being, the US Air Force is in grand shape. The fact that so many indicators are glowing so favorably might suggest that little real damage was done by the massive budget reductions of the past two years. If so, the appearance is deceiving.

Trying Times Ahead

Between 1985 and the early 1990s, the active-duty Air Force will have shrunk by about thirty operational squadrons. There will be a net loss of 116 aircraft from the fleet this year alone.

Military manpower is down, too, partly because the smaller force requires fewer personnel and partly because of a shortage of money. The enlisted force was cut by 30,000 members last year—two-thirds of them let go strictly for financial reasons. As directed by Congress, officer strength is already 6.2 percent below the 1986 level. By the end of 1991, Air Force active-duty military strength will be 566,800, its lowest level in ten years.

The cracks will begin showing up soon in readiness and the ability of the force to sustain combat. Because the procurement lead time for spare parts is three years or more, units today are consuming spares At right: A T-38 pilot, typifying the military pilots who are being lured to the airlines in greater and greater numbers. Last year, USAF was able to retain only forty-three percent of its pilots (sixty-three percent is the level necessary to sustain the flying force).



ordered in the relatively good years of 1986 and 1987. The flow of parts through the pipeline will diminish sharply about a year from now.

The strategic modernization plan is mired in political and financial muck. The compromise brokered in 1983 by the Scowcroft Commission—a combination of 100 MX Peacekeeper ICBMs and a substantial number of mobile Midgetman missiles—did not hold. The Air Force may never get the second fifty Peacekeepers. Midgetman, which the Reagan Administration tried to kill outright a year ago, is once again a live possibility.

If Midgetman is resurrected, \$24.8 billion will have to be found to pay for it. Moreover, the Air Force is asking for additional appropriations of \$1.4 billion to make modifications and corrections to the B-1B.

Losses in Revised Budget

The B-2 Stealth bomber was among the programs hardest hit in the latest budget revision. Its 1990-91 funding was cut by \$4 billion. The Bush Administration wants to slow development until its

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concerns about B-2 cost estimates and technical performance are satisfied.

The new budget also terminated the procurement of F-15E long-range interdictors at 200 rather than 392 as originally planned. The fast-moving A-16 attack aircraft, which the Air Force wanted as a replacement for its A-10s, was eliminated as well.

A further personnel strength reduction of 3,200 in 1990 will not affect net effectiveness much, because of the lower requirements that go along with drawdowns in force structure.

Declaring insufficient funds to support the National Aerospace Plane, the Air Force proposes sending the development to NASA along with a \$100 million contribution toward its continuation.

Even worse may be yet to come. Further reductions of at least \$44.3 billion must be made from the five-year defense plan by 1994. President Bush has conceded that much, but Congress may insist on cuts that go deeper still. The next big money scramble in the Pentagon will be over how to allocate these reductions.

Bombers in Controversy

Details about the B-2 have been trickling out since November, when the public was permitted its first look—from 200 feet away—at the bat-winged bomber. In April, the Air Force revealed that the B-2 has a maximum takeoff weight of more than 250,000 pounds and a range of 6,000 nautical miles at high altitude without refueling. It can carry 50,000 pounds of weapons in two side-by-side internal bays. (The payload of the B-1B is 134,000 pounds.)

Aerodynamically, the B-2's flying wing design "is almost as efficient as the high-flying U-2," according to Gen. Bernard P. Randolph, Commander of Air Force Systems Command. "It is also fifty percent more efficient than the B-1."

General Randolph further says that critical speculation about the flying wing's lack of stability is unfounded: "While a conventional aircraft gains directional stability from its horizontal and vertical tail surfaces, the tail assembly also creates undesired drag. The flying wing is

near neutrally stable." Confidence in the design is backed up by 24,000 hours of wind-tunnel testing, General Randolph says.

If need be, the B-2 could conduct such long-range operations as the Libyan raid of three years ago from a long distance and with great advantages in surprise. "With precision munitions and one or two tankers, three to four B-2s could have done the same job direct from Stateside bases," General Randolph says.

The major controversy on the B-2 is its cost. The Air Force has acknowledged sixteen percent escalation and now says that the flyaway cost per aircraft will be \$305 million (\$516 million if R&D expenses are prorated). There is some disagreement within the Pentagon on the cost estimate, and a figure of \$750 million is making the rounds of the Washington rumor mill.

The last of the B-1Bs was delivered on schedule in April 1988, but the furor about the system goes on. The Air Force says that the most critical electronic countermeasures do work, but that a design deficiency precludes full performance by the defensive avionics system. The plan is to develop a separate radar warning receiver for the B-1B while efforts to improve the existing ALQ-161 ECM suite continue.

The independent radar warning receiver would cost \$489 million. The Air Force will also ask new appropriations of \$250 million for ECM support equipment, \$485 million for capabilities (such as adapting the B-1B to employ SRAM II missiles) not in the original program baseline, and \$202 million for anticing equipment for the engine intake system, new antennas, and other improvements.

If approved, this spending would finally take the B-1B program cost over the cap (\$20.5 billion in 1981 dollars) established eight years ago. Correction of the core system would be covered by \$476 million previously appropriated.

Missiles and Politics

All of the facts and arguments on ICBM modernization are familiar. From here on, it's a matter of which approach the Administration will accept and who has the votes in Congress.

Going into this year's round, fifty Peacekeepers were on alert in silos, having achieved full operational capability in December 1988. The fate of a second fifty Peacekeepers was uncertain, as was the future of the Small ICBM, Midgetman. The proposal at year's end was to put the second contingent of Peacekeepers on rail cars at military bases, moving them onto the rail network in time of crisis.

Support for the small missile remains strong in Congress. The roadmobile Midgetman, carrying a single warhead, is seen as less provocative as well as more survivable than Peacekeeper. A major drawback with the small missile is cost. Midgetman requires 500 missiles to provide 500 warheads, whereas the multiple-warhead Peacekeeper does it with fifty missiles.

After some intramural confusion, the Bush Administration decided that its preferred approach would be to take the first fifty Peacekeepers out of their silos and redeploy them in the rail-garrison mode, then push

on with Midgetman.

"Instead of trying to do both simultaneously, we'll sequence them," Secretary of Defense Richard B. Cheney said. "That is, we'll do [Peacekeeper] rail garrison first, put a little bit of money in the budget next year for the Small ICBM, and then as we get the rail garrison deployed, we'll start to ramp up on the Small ICBM." The ICBM modernization plan is far from decided, though, and promises to be a hotly contested issue in this term of Congress.

Operations and Maintenance

Operations and Maintenance the account that pays for training, spare parts, munitions, and everyday running of the force—lost \$777.5 million in the 1990–91 budget revision.

This O&M allocation will be sufficient to sustain 19.5 hours of flying per month for pilots in the tactical air forces. Most other readiness training—including Red Flag exercises at Nellis AFB, Nev.—can proceed as well.

This, however, is not altogether attributable to generous funding. Flying hours per crew remain the same as before, but the total flying time for the force will decrease by The average USAF facility is more than thirty-one years old, with some of the physical plant dating back to World War II. By 1992, the real property maintenance backlog will be \$1.5 billion.

94,000 hours between 1989 and 1991. This is the result of the deactivation of three B-52 squadrons, the transfer of a KC-135 squadron to the Air National Guard, retirement of SR-71 reconnaissance aircraft, deactivation of an F-15 interceptor squadron, and drawdown of the tactical forces by three fighter wings. The Air Force of 1990 will have 6,008 aircraft, compared to the 6,368 it had in 1978.

Of some concern in the O&M area are base operating support functions—everyday services, supplies, and equipment—and upkeep of facilities. Base operating support has been kept to a level described as "extremely austere" for the past two years and, with the latest reductions, will now be held down for two more years.

The average Air Force facility is more than thirty-one years old. Some of the physical plant dates from World War II and the Korean War. Money is not available, and has not been for some time, for adequate care of these facilities. By the end of 1991, the backlog in real

property maintenance will have risen to \$1.5 billion.

People

There are a few major problems pilot retention the worst of them by far—but overall, the Air Force personnel system is in pretty good condition. As always, however, when money is short and numbers are going down, personnel turbulence is making a mess of force configuration.

Last year's enlisted force cut of 30,000 provides a good example. Had the Air Force chosen to achieve the total reduction by limiting the number of new people it recruited, the 1988 group would have started out with fewer than 30,000 members. That would have created a thin layer in the force structure that would have carried forward until the class of 1988 reached retirement age twenty years later. At every point in between, the 1988 group would have posed a skill shortage at its level.

Instead, the Air Force spread out the reduction, but most of the loss was in first-term airmen anyway. As a consequence, the ratio of first-termers to career airmen changed. Forty-eight percent of the enlisted force today is in the top five grades—two percent higher than authorized. Grade authorizations are a function of total force size, which dropped suddenly by 30,000. One consequence of this is that last year's promotion rates were the lowest in ten years, and this year will not be much better.

The personnel problem of greatest concern is that pilot retention last year was forty-three percent. It was the fourth year in a row that the Air Force failed to reach sixty-three percent retention, the level necessary to sustain the flying force. In all, 2,263 pilots left the Air Force in 1988. That was 750 more than the total coming out of undergraduate pilot training.

If this trend continues, the Air Force says it will be short 2,500 pilots by 1994. One factor obviously contributing to the decline is the lure of the airlines, which pay better and which continue to hire pilots at more than triple the rate they did before 1983—a year, coincidentally, in which Air Force pilot retention was seventy-eight percent.