

The B-2 Is Still Flying

By Robert S. Dudley, EXECUTIVE EDITOR

The batwinged bomber, with aggressive backing from the Pentagon, maneuvered through this round of congressional review better than some expected. Further questions and more flak lie ahead.



Washington, D. C. Donald B. Rice, the new Secretary of the Air Force, is sending a surprising message to the nation in general and to the Congress in particular: All things considered, the B-2

bomber's prospects are looking rather bright.

The word from the top is that the case for building the revolutionary plane has emerged relatively intact from the summer budget wars. That certainly did not seem to be true during weeks of congressional attacks on the warplane. Some thought the batwinged B-2 had been sent into a fatal nosedive.

"My reading is more optimistic," the service's new civilian leader maintained in a talk with AIR FORCE Magazine. "I recognize that we have a lot of work to do. . . . [But] I think we're seeing the fuss and feathers of the initial reaction. . . . My sense is that, as people spend more time on the issue, they understand the need [for the B-2] and the value better."

Indeed, claims the Secretary, some skeptical lawmakers are coming around. This assertion, he adds, is based not on wishful thinking but on hard, day-to-day experience. "I've been dealing just about every day with members of Congress from both houses," says the former RAND Corp. executive. "I do think I see a trend of increased understanding of what this is all about."

Secretary Rice's cautious optimism is getting an early test this month as Congress completes work on Fiscal Year 1990 defense funding. The high-profile, radar-evading B-2 once again shapes up as the center of attention.

While the Senate has agreed to fund production of eight bombers over the next two years if they meet specific performance goals, the more skeptical House approved only four and warned that it may try to kill the program unless its \$70.2 billion cost is cut. A compromise must be worked out by October 1. Whether the final result tilts more toward the Senate or House view will say much about the B-2's future.

The outcome, though impossible to predict, is now seen as likely to favor the Senate stance, given the fact that

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Sen. Sam Nunn (D-Ga.), influential Chairman of the Armed Services Committee, has emerged as a powerful B-2 backer. Even in the House, support for the B-2 has proved more robust than had been expected.

The Air Force, for its part, is now shooting to receive a "good continuation outcome." What this means, explains Secretary Rice, is a 1990 B-2 budget that sustains research and development and "does a good job, if not a perfect job," of financing bomb-

er production. The Senate's \$4.4 billion authorization does that.

If the B-2 bomber does receive this level of short-term support—and the Secretary clearly believes that it will—the Air Force will move into the second part of its strategy to sell the B-2. This, says the Secretary, will be "to let the [B-2] system prove itself over the next six months to a year," well before the next congressional budget cycle reaches a critical decision point.

The Secretary expresses confidence that technical worries about the B-2 will be resolved. "We're now right at the beginning of the flight-test program," he explains. "The first six months of the test program will explore something like eighty percent of the envelope. I think we'll effectively lay to rest the remaining questions about the airworthiness of this air vehicle design."

Equally important is the prospect of showing that USAF has a handle on B-2 costs. Explains Secretary Rice: "During that same period, we will accumulate significantly more data on the cost of building the first few air vehicles. That'll help a lot, I think, with the confidence that [Congress] can have in our cost estimates."

Even so, Washington observers predict that the debate over the B-2 will sputter for years. On Capitol Hill, the noisy summer of arguments over the bomber—the first public debates since the B-2's inception in 1981—crystallized questions that are likely to plague the program. At least seven issues were previewed.

● **Cost:** Many lawmakers question whether any fleet of aircraft, no matter how technologically superior it may be, can be worth the \$70.2 billion cost estimated for the planned force of 132 B-2 bombers. The problem, they add, is especially great at a time of stagnant defense budgets.

In response, Secretary Rice claims that such critiques lack context and are virtually meaningless.

For example, he notes, much is made of the high cost per year—up to \$8 billion—of B-2 procurement. "That's been referred to as if it is precedent-shattering," says Secretary

Rice. "In fact, it is not. We have had, in constant dollars, higher funding years on the B-1 bomber. Peak for the Minuteman [intercontinental-range ballistic missile] was higher than any year for the B-2."

Nor, claims the Air Force leader, is the B-2 the most expensive single weapon program ever, as is frequently claimed. He points out that the Navy's Trident strategic submarine program, which includes the D5 missile program, is more costly and still "correctly enjoys wide support" in both the Pentagon and Congress.

The B-2 is not even the all-time budget-buster. By the Secretary's calculations, the percentage of relevant defense budgets devoted to procurement of the B-1 and B-52 bombers (1.6 percent and 1.4 percent, respectively) exceeds that planned for the B-2 (1.3 percent).

Especially irritating to B-2 proponents is what they view as gross misstatements of the B-2's unit cost. By dividing the full program cost by the number of B-2s, critics arrive at a per-plane price tag of about \$530 million. Excluding money already spent on R&D, however, the "fly-away" cost of each B-2 comes to just \$274 million, only about twenty percent more than that of a less capable B-1.

The Secretary believes that such facts are sinking in on Capitol Hill, with beneficial effect. "When we get away from the focus on the grand total, with all the inflation in," he says, "and recognize that a significant amount already is expended, and we've gotten a great deal of return on that large R&D investment, and that that return is embodied not only in this special system, then all these factors will help the Members begin to understand the cost numbers, in a better context, to make these figures less scary than they seemed."

● **Numbers:** Even at the more realistic unit cost of \$274 million, lawmakers say, the B-2 is not cheap. In turn, they question whether the Air Force truly needs all 132 bombers it plans to buy for a full-fledged force. They are searching for ways to reduce the fleet's numerical size.

The Senate, even though it has given strong support thus far to the B-2, voted to require the Pentagon to report by early next year on the financial and military consequences of cutting back the B-2 fleet from 132 bombers to as few as sixty. The House, spurred by Rep. Les Aspin (D-Wis.), the Armed Services Committee Chairman, goes even further. It wants the Air Force to recast the B-2 plan so that the US

does not end up buying the full fleet. "The big question," says Representative Aspin, "is how many B-2s you need."

Air Force leaders seem to be hardening their stance on this question. They say the US needs all, or nearly all, of the 132 B-2s originally planned.

Without the planned complement, warn service officials, the United States might wind up by the turn of

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the century with a penetrating bomber force containing as few as 200 aircraft, compared to 350 today. By that time, only about ninety B-1 and 100 B-52H bombers are to be in service, plus whatever number of B-2s may be built.

The more telling point, Secretary Rice suggests, is that cutting B-2 numbers won't really save much money.

"The problem," he notes, "may be that, at a smaller quantity, it will still make sense to accomplish that procurement on something like the same schedule laid out now. We will then have the problem that this smaller quantity [of B-2s] will be divided into the sunk costs and the costs of production, and the unit cost will be even higher."

● **Mission:** To many in Congress, the Air Force has not made a compelling case that the B-2 has a specific mission—or at least not one that it alone can perform. Some charge that USAF has contrived missions on the fly to justify production.

Rep. Ronald V. Dellums, a California Democrat and prominent B-2 foe, put the case forcefully in a recent issue of the *Washington Post*: "The Pentagon initially said the B-2's prime missions were to serve as a deterrent and to strike Soviet fixed-site installations and 'relocatable' targets. . . . When evidence surfaced that the B-2

could not accomplish these missions, the Pentagon redefined its role." Thus was born "a new mission for the B-2: attacking Third World targets of opportunity, such as Libya."

Actually, asserts Secretary Rice, the prime mission of the B-2 has always been clear: The aircraft will provide enduring penetration capability for the nuclear bomber force so that it will be able to reach targets in the Soviet Union in the future, despite heavy Soviet investment in air defense fighters and SAMs. The bomber's role in the Single Integrated Operational Plan is paramount.

Harder to resolve is the secondary question of attacking "relocatable targets"—in particular, mobile nuclear missiles in the Soviet Union. In a 1987 report, the Joint Chiefs of Staff stated that the B-2 would be able to attack "the full range of . . . relocatable targets." This year, however, the Air Force conceded that this won't be possible for a long time.

The reality, Air Force insiders insist, is that the story has gotten garbled. They claim the service itself never advanced the concept of attacking relocatable targets as *the* B-2 mission, or even argued that this was possible in the near term. What USAF did claim, and continues to claim, is that the B-2 offers the "best potential" in the future for carrying out this difficult and demanding operation.

● **Utility:** Apart from responding to these criticisms, the Air Force finds itself obliged to answer a fundamental question about the B-2: Why, in an age of fast-flying, superaccurate land-based and seaborne missiles, does the US need a bomber force at all? Other than to provide robustness to the US nuclear triad, does it have any unique utility?

Secretary Rice points out that the manned bomber can cover about sixty percent of the current SIOP targets and that it is by far the most versatile of the nation's long-range nuclear weapons.

In addition, the bomber provides a devastating combination of accuracy and weapons yield, and thus is effective against very hard targets, such as command and control centers. It is also the best weapon the US has for hitting such area targets as rail yards and dispersed forces.

Its operational benefits aside, Secretary Rice goes on, the slower-flying bomber provides another vital element of US strategy-crisis stability. The Secretary's words:

"The penetrating bomber is well-recognized as *the* most stabilizing

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element of the strategic force structure. That is because it is the system that best deters an attacker without raising fear of a first strike. It promises assured, devastating retaliation without itself having any believable potential as a first-strike system. That is almost the very definition of a stabilizing system."

With this factor in mind, negotiators at the START talks have emphasized counting rules that greatly enhance the value of the penetrating bomber and tend to penalize reliance on ballistic missiles.

"The whole thrust of the arms-control effort," notes Secretary Rice, "has been to reduce reliance on the fast flyers, on the ballistic missiles, and shift, relatively speaking, to the slower flyers. . . . It would be hard to see how we could pursue the type of arms-control strategy that we have if we could not count on having the penetrating bomber as one element of the strategic force posture."

● **Standoff bombers:** Even among those who accept the need for a robust bomber force, there are questions about whether the B-2 is the variety of bomber required.

They maintain that, with the advent of long-range, precision-guided, nuclear-armed cruise missiles, the need actually to penetrate Soviet airspace has declined. A force of bombers equipped with this type of "standoff" weapon, they say, would be adequate and far less expensive than penetrating aircraft.

Secretary Rice's answer to this charge: "If we did that [gave up the penetrator], we would not be a very long step away from giving up the bomber force itself."

The reason, he explains, is simple. If the Soviet Union were relieved of the need to defend against attacks of all types and from all directions, Moscow could focus its attention on stopping the remaining, standoff portion of the air threat.

"What they would do in that case would be to go after the carrier. The main focus would be on reaching out and getting the carrier," says Secretary Rice. "After all, they would have enough warning that, if they concentrated on that mission, and developed systems oriented to that, they could engage cruise missile carriers far enough out to catch large numbers

before they reached a launch point."

The result, the Secretary concludes, is that the standoff bomber force would be driven further and further back, eventually being forced to launch weapons from the environs of North America.

"I don't mean to be predicting easy success for the Soviets," says Secretary Rice, "but we would make their job very much easier. In time, that could undermine our confidence in the bomber force altogether."

● **The B-1B:** For how many more years will the current force of ninety-seven B-1B bombers be able to pierce heavy Soviet air defenses effectively? Five years? Ten years? More? Might it be kept effective long enough—perhaps fifteen years—to obviate altogether the need to build the B-2 fleet as the nation's prime penetrating force?

For some experts, Representative Aspin prominent among them, this is the gut issue, and its central mystery is the true pace of Soviet air defense improvements. "If you ask, what is the single piece of information that you would really want to have in order to make this [B-2] decision," says the



Wisconsin Democrat, "you would want to know where Soviet air defenses are going to go over the next fifteen years.

"The case for the B-2 rests very heavily on [predicted] improvements in Soviet air defenses. If Soviet air defenses are increasing, as those . . . Air Force briefings say that they are, that's one thing. If not, well. . . ."

Representative Aspin suspects that the Air Force may be providing inflated estimates of the progress of Soviet air defenses in order to promote the B-2. He wants the Pentagon to impanel a committee of outside experts to analyze Soviet defenses and determine whether the B-1, suitably updated, can fill the bill for a longer period.

Secretary Rice's answer to Representative Aspin's implied question is unequivocal: No, the B-1 can't do the B-2's job.

"An independent, unbiased, technically competent outside group," he claims, "would conclude . . . that the advance in air defense capability is real, that you can see the new capabilities embodied in new systems that the Soviets are deploying, and that the culmination of those improvements in a capability that would significantly diminish the ability of the

B-1 to penetrate can be confidently predicted."

Exactly when that point will occur, he concedes, cannot be determined with precision, but it will happen soon enough. "In my own mind," says Secretary Rice, "and in the judgment of Air Force leadership, we need to hedge against that date being as early as just beyond the mid-1990s to as far as just beyond the year 2000. It's in that range of uncertainty."

As a result, he claims, the B-2 is the *only* option available for coping with Soviet air defenses in the late 1990s and beyond.

● **Stealthiness:** Though the B-2 is billed as the plane that will be virtually invisible to radar sensors, there are doubters who claim that the technology of low-observables is being oversold.

A number of experts—within and outside Congress—are suspicious of Air Force claims that the B-2's radar-foiling shape and radar-absorbing surfaces can make obsolete the Kremlin's \$350 billion air defense network.

Anthony R. Battista, a recently retired senior staff member of the House Armed Services Committee and a certified defense heavyweight,

is not shy about publicizing such misgivings. "This entire claim about radar obsolescence [in light of the B-2's capabilities] is simply not true," Battista wrote in a letter to his former bosses on the panel. "The B-2 does not render Soviet air defense systems obsolete." He provided few details but suggested that existing radar and other types of detection systems could cause problems for the B-2.

The Air Force is close-mouthed about the details of the B-2's stealthiness, other than to say that the B-2 design will give it a radar cross section of less than one square foot. Air Force documents note that seventy percent of the B-2's radar-signature testing will be completed in two years. Actual tests proving its stealthiness against radars will not be completed until 1993.

Air Force confidence, however, shows no sign of wavering. That was illustrated in the words of Gen. Larry Welch, the Air Force Chief of Staff, at a hearing last July: "We are not saying there is no possible future counter to stealth. I am saying that, in spite of all our efforts and consultations with everyone we know of who has suggested a technical approach to do that, we have found no such way." ■

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