Science in the News

Missiles vs. Bombers: Congressional Committees Express Some Doubt

The Congressional Armed Services committees, both of which issued their reports on aircraft and missile authorizations last week, went pretty much down the line with Kennedy's defense budget, with the single significant exception of manned bombers. Neither the Eisenhower budget, nor Kennedy's revisions, asked for any new money to buy bombers. Defense Secretary McNamara told the committees that no firm decision had been made to buy *only* missiles in the future. He said that, under orders already placed, bomber production would continue into the fall of 1962, and that therefore a definite decision about shutting down the factories could be postponed until next year.

Both House and Senate committees, nevertheless, authorized several hundred million extra dollars, earmarked for bombers that the Defense Department, so far, has no intention of buying. Both committees offered the same three arguments for not shifting too quickly to sole reliance on missiles, two of which were curious.

The basic argument for bombers in the age of missiles has centered on the greater flexibility of manned aircraft: it can seek out targets, it can bring back reconnaissance reports, it can be recalled, and so forth. The basic argument against them has been that within a few years it will be exceedingly difficult for a bomber to fly over enemy territory without being shot down. The useful life of the planes can be extended beyond this point by the development of long-range missiles that can be carried by the planes and which will make it unnecessary for the bombers to fly over enemy territory. But this eliminates some of the major advantages of the manned plane, since it no longer could seek out targets or bring back damage reports. The airborne ballistic missiles then, are not being developed because they are so valuable in themselves, but mainly because they will prolong the usefulness of the expensive fleet of existing bombers. It is doubtful that, once bombers have lost their usefulness as bombers, the Defense Department would buy any more merely to serve as airborne missile launchers.

Such considerations seriously weaken the basic argument for manned bombers, and perhaps because of this, the Armed Services committees emphasized two new arguments in favor of more bombers. "Is it not entirely possible, indeed hopeful," said the House committee, "that nuclear weapons might by international agreement be outlawed at some time in the future? Would not at that time the nation who possesses a conventional capability be in a virtually absolute position with respect to his enemies? Also—and this is a thought which to the knowledge of the committee has not been stressed in the past—who knows whether an intercontinental ballistic missile with a nuclear warhead will actually work? Each of the constituent elements has been tested, it is true. Each of them, however, has not been tested under circumstances which would be attendant upon the firing of such a missile in anger.

"By this the committee means an intercontinental ballistic missile will carry its nuclear warhead to great heights, subjecting it to intense cold. It then will arch down and upon reentering the earth's atmosphere subject the nuclear warhead to intense heat. Who knows what will happen to the many delicate mechanisms involved in the nuclear warhead as it is subjected to these two extremes of temperature?

"The scientists may say that all of these things are determinable by extrapolation. Perhaps this is so. To the committee, however, it seems that our only knowledge of the actual workability of an ICBM fired in anger is in textbooks and in laboratories. The committee is unwilling to place the safety of this country in a purely academic attitude, and for this reason has added to the bill authorization for bombers."

The Senate committee, less emphatically, made substantially the same points. Defense officials were generally unimpressed by either argument. What if a non-nuclear general war were to develop after it had become highly improbable that a significant part of a bomber fleet could get through enemy defenses; how useful would bombers carrying conventional weapons be, where to cause any significant damage large numbers of bombers would have to reach their targets, survive the flight, and return to reach their targets again? Or, more to the point, how useful, considering the likelihood of such a situation arising, would an extra 50 bombers be compared to something else that might be bought for half a billion dollars or so?

The Defense Department officials were even less impressed by the argument questioning whether we could rely on missiles merely because the scientists assured the country they would work.

They pointed out that the detonating mechanism had been repeatedly tested in actual launchings, with inert material substituted for fissionable material, and that it was strange that at this late date anyone should wonder whether an atomic weapon really would go off once the detonating mechanism had worked properly. They suggested that since Commander Shephard had survived the "intense cold" above the atmosphere and the "intense heat" of the re-entry without being either frozen or fried, it was strange that anyone should seriously question the ability of a mechanical device to do as well. Indeed the whole argument was strange, including the final warning about the House committee's unwillingness "to place the safety of this country in a purely academic attitude."

Air Force Position

The report was a paraphrase of the points that the Air Force witnesses had made in questioning the tendency of the Defense Department to write off manned bombers. The cancellation of the atomic airplane project and the sharp cutback on the development of B-70 bombers were other reflections of this tendency.

But neither the Air Force generals

nor the committee members really attach much importance to the argument stressed in the report questioning whether the scientists' "academic" judgments were to be trusted. What has happened is that the manned-bomber supporters, having arrived at an intuitive feeling that we may be writing off the bombers prematurely, have offered any explicit arguments that came to mind to support this conviction.

Both committees arrived at their decision unanimously, something which was comparatively easy to do under the circumstances, since a decision to authorize the money is a long way from a decision to spend the money. The Appropriations committees must first appropriate the money authorized; then the Administration must decide to spend the money. Congress' only recourse if the Administration refuses to buy bombers despite an appropriation is to impeach the President for misconduct, which is merely a theoretical possibility. As a practical matter the Administration does not have to spend the money, and the effect of the budget change is to remind the Administration that Congress is sufficiently impressed with the case for bombers to make money available in advance, in case the Administration should have a change of heart.

Committee View

The views of the individual committee members ranged from a strong conviction that the money ought to be spent to a feeling that there was no real harm done in making the money available. As a result neither report urged the President to spend the money. The House report came close to implying this, but the Senate report merely spoke of giving the Administration the "option" to spend the money.

On another phase of the bomber-vs.-missile debate the division within the committees was sufficiently sharp so that both committees avoided the question. The Administration had ordered the research and development effort on the 2000 mile an hour B-70 bomber cut in half.

This would mean about a year's delay (until 1969) in case the Defense Department decided it wanted the bomber, but would save $1.5 billion if, as seems more likely, the plane is not wanted after all. (It was the Democrats, including Kennedy, who pressed Eisenhower to raise spending on the project; Kennedy has now cut Eisenhower's budget recommendation, and Barry Goldwater has become the most outspoken advocate of the plane.)

Until this year the authorization bills for the armed services have been written in very general language. ("The Secretary of the Air Force may procure and construct guided missiles.") Last year, to give the Armed Services committees more authority to review what the Defense Department is doing, a law was passed requiring more specific authorizations for aircraft, missiles, and ships. The Air Force chose to interpret this very broadly and submitted its budget for research and development of aircraft and missiles, in addition to actual procurement. This enabled the Air Force to put its case for the B-70 bomber before the committee. Both the civilian secretary of the Air Force and the chief of staff opposed the decision to cut back work on the bomber, but both committees declined the opportunity to add a specific authorization for more work on the B-70. On the other hand, both committees made it clear that they had chosen to consider the matter outside the scope of authorization required under the new law; this left the Appropriations committees still free to add extra money for the B-70 anyway.

The controversy over the bombers extends into the Air Force itself. The Air Force's civilian operations analysts at the Rand Corporation have shown little sympathy for the bombers, and there is a faction in the Air Force which agrees with the easily encountered view of Air Force critics that the predilection for bombers is in good part a psychological quirk.

Barring the development of manned weapons in space, which appears to be a long way off, the Air Force, in regard to its major mission, the maintenance of the strategic deterrent force, will be grounded within a few years. Its greatest responsibility, after the bombers are gone, will be to sit on the ground waiting to push buttons which everyone hopes will never be pushed. Of course, everyone hopes the bombers will never be used to bomb anything. But the routine of keeping ready when you have bombers involves a good deal of flying around, which comes closer to the Air Force's idea of what an air force ought to be doing than sitting in a hole in the ground keeping a close eye on the buttons.

On the other hand, there is no indication that the Air Force has let its concern about becoming a "static service" seriously interfere with the business at hand. General White, the Air Force chief of staff, was asked whether he felt strongly enough about the bombers to cut out some missiles to make room for them within the recommended budget. He promptly answered that the Air Force would like some extra money for bombers, not a substitution of bombers for missiles. To a good many Air Force officers concern over becoming a static service has been allayed by the decision, over the opposition of the Army and Navy, to give the Air Force responsibility for future Defense Department space projects.

Oil Pollution

The Senate last week was asked to ratify a treaty signed 7 years ago to control the pollution of the sea by freighters and tankers dumping oil. The 7 years seem to have been taken up while the State Department carried on leisurely negotiation within the country to win the approval of any group that might oppose the treaty. Since, even with the delay, the United States is the 13th out of 42 signers to ratify, and since this type of pollution in American waters is already controlled by laws stricter than the treaty, the Foreign Relations committee expressed curiosity but not annoyance at the delay. But the State Department had been efficient in quieting whatever opposition there may have been. The treaty was ratified 92 to 0.

Summit Talk

The first hint of Kennedy meeting with Khrushchev appeared in a column by James Reston in the New York *Times*. Reston reported that despite the heavy pressure to concentrate his attention on current crises, such as Cuba and Laos, the President had not forgotten the more important issues.

"The great turning point of history now," Reston wrote, "is not Cuba or Laos, important and troubling as they both are, but the control of nuclear armament and the movement toward unity in this hemisphere, in the Atlantic, and in the free world."

The inevitable pressure to hand the Russians an ultimatum to come to terms on the test ban has developed. Senator Dirksen, the minority leader, called for such an ultimatum last week, and a resumption of underground testing if it is not fulfilled.

Kennedy, Reston reported, was rejecting this advice. "It can be said with some confidence that he is determined to have a personal talk with Premier Khrushchev before he reaches so crucial a decision."