
OTA Gets \$2 Million

After months of delay, the legislative branch's new Office of Technology Assessment (OTA), is finally materializing out of the mists of congressional committees and procedures. Both houses of Congress have approved \$2 million for the OTA as part of a \$605.2 million legislative appropriation for fiscal 1974. The funds were included in a conference report which passed the House on 16 October and the Senate on 18 October. This measure has not yet been signed by the President, but it is not one he is likely to veto.

The sum appropriated is less than the \$3.98 million originally requested for the first year of OTA's operation. But since the \$2 million will be spent over a period of 8 months (from now until the end of the fiscal year next 30 June) instead of a full year, informed sources consider it a respectable sum. It will pay for the expenses of its board (which resembles a joint congressional committee), plus those of the OTA and its advisory panels. The OTA may have a staff of from 30 to 40 people. The board is expected to name a director at its 1 November meeting. Once hired, the director, together with the board, will go about selecting a deputy and then a staff from files of approximately 3500 applicants.—D.S.

Congress killed the program in 1971 and sent the Army back to the drawing board. While the chief irritant to Congress was the tank's extraordinary cost, some, including Senator Thomas F. Eagleton (D-Mo.), urged a broader rethinking of tank development, with an eye to rapidly evolving antitank technology. "The role of tanks is becoming more restricted and the tank itself is becoming far more vulnerable," Eagleton said in November 1971, and he added that "there are now mobile, accurate, and inexpensive anti-tank weapons capable of destroying the most sophisticated and expensive tank now deployed or on the drawing boards."

The House Armed Services Committee, meanwhile, reported that its decision to kill the MBT-70 had been influenced by expressions of concern—from within the Army and from independent analysts—"that the tank is nearing the end of its era of combat capability" and that "new antitank weapons, including missiles, have brought about this obsolescence."

The tank's epitaph, however, was premature. The Army has since bounced back with the XM-1, a second-generation offspring of the MBT-70 featuring computerized fire control and thermal imaging for nighttime vision. The Army says it can hold the unit cost of this tank to \$730,000, but Eagleton failed in an attempt this September to give this ceiling the force of law through an amendment to the Defense appropriations bill.

Next year, though, things may be different. There are rumors in military circles that the Army has developed a

new form of armor plating that could substantially increase the "survivability" of its present main battle tank, the M-60, at far less than the cost of a new tank.

"At the least," said one congressional staffer on the House side, "we can trot out these horrible casualty figures [the Israelis are estimated to have lost roughly 500 tanks, a quarter of its combat force] and ask them how they can justify spending so much on tanks that are so vulnerable."

The relevance of the latest Arab-Israeli war to tank development and other weapons R & D in the United States stems partly from its technical sophistication. But beyond this, in its ferocity and overall character—in the massive and mutual deployment of armor, tactical aircraft, missileery, and electronic countermeasures—this conflict came closer than the Vietnam experience to the scenario of warfare in Central Europe which military planners for both NATO and Warsaw Pact forces hold uppermost in mind in developing new weapons systems.

The value of the Middle East as a proving ground for both the United States and the Soviet Union was also enhanced by Soviet willingness to furnish Egypt and Syria with key defensive weapons known previously in the West mainly—and in some cases exclusively—through intelligence, and by watching May Day parades in Moscow. Thus, the Snapper and Sagger antitank missiles, the SAM-3, the highly mobile SAM-6 antiaircraft missiles, and the T-62 tank had never appeared in combat—in Vietnam or anywhere else—even though all are integral parts of

Warsaw Pact defense units.* (Why the Soviets waited as long as they did to battle-test weapons deployed in Europe since the late 1960's is the subject of a great deal of mostly fruitless speculation. Some of these weapons probably were of questionable value to North Vietnam's style of warfare. Soviet reluctance to supply air defense missiles more modern than the SAM-2 may have stemmed from a desire to keep such technology out of Chinese hands.)

The proving-ground benefits of the Middle East war worked both ways, of course, although the Soviet Union trotted out far more new weapons than the United States did; the U.S. appears to have limited itself to letting Israel give the Rockeye bombs and Maverick missiles their first combat tests.

The war also gave the United States its first opportunity to watch the performance (under conditions of more "classical" warfare) of exotic new weapons and munitions developed to meet the special needs of Vietnam. High on this list were laser- and television-guided "smart bombs" and antiradar missiles, both stockpiled by Israel before the war. Moreover, the war provided the United States with an important check on the accuracy of its (and Israel's) electronic surveillance of Soviet weaponry. Accurate knowledge of SAM radar tracking and guidance frequencies, for example, is essential to electronic warning, jamming, and deception.

There is conflicting evidence as to how fair a test of U.S. ECM technology the 17-day war provided, although on balance the test was probably more telling than any in Vietnam. According to military observers in Washington, the Soviet Union not only gave Egypt and Syria more sophisticated SAM's than those supplied to North Vietnam, but also deployed them in a more sophisticated way: Whereas SAM sites in Vietnam tended to be isolated, independent facilities, tracking and guidance systems in Egypt were interconnected to provide a kind of self-sealing umbrella for troops advancing across the Suez Canal. SAM-2 missiles provided high-altitude coverage, SAM-3's covered medium and low altitudes, and the highly mobile SAM-6—a triad of

* The SAM-7, a small, heat-seeking antiaircraft missile used in limited numbers by the North Vietnamese toward the end of that war appeared in quantity in the hands of Arab troops. The SAM-7 can be fired from the shoulder, but U.S. pilots learned that it could be decoyed by ejecting burning flares. Evidently on the theory that one can't fool all of the missiles all of the time, SAM-7's given to Arab troops were fired both individually and in clusters.