

categorize the following with regard to service assignment for development: communications satellites beyond Advent; an anti-satellite Nike-Zeus; mapping and geodetic satellites; Sea Scout; Project Hydra; Renae; Early Spring; Caleb; and sea reconnaissance satellites?

*Answer:* The current Advent satellite communication program has the principal objective of determining technical feasibility of using microwave frequencies for point-to-point communications. Management responsibility for the Advent program has been assigned by the Secretary of Defense to the Department of the Army. At such time as it becomes desirable to initiate new and follow-on programs having appreciably different objectives than that of the Advent program, the Air Force expects, in light of the 6 March 1961 directive, that the Secretary of Defense will review the matter and will determine the appropriate Service to proceed with the new program.

In the case of an anti-satellite Nike-Zeus, the Air Force considers that solution of the anti-satellite problem requires inspection of the satellite before attempting to destroy it. It is believed critically important that a foreign satellite be inspected at close range to determine the purpose and mission of the satellite. Only after inspection has been accomplished should we make a decision to destroy the satellite or allow it to continue on its mission. Further, it is felt that an anti-satellite system should have the capability to inspect multiple targets for the purpose of economy and operational flexibility.

Since the envisioned anti-satellite Nike-Zeus would not include these capabilities the Air Force would not seek this development program.

The assignment for development of the mapping and geodetic satellites is contained in the Department of Defense Directive Number 5160.34, subject: Reconnaissance, Mapping and Geodetic Programs, dated March 28, 1961 (see attachment No. 1).

The Scout vehicle is a solid propellant rocket booster initiated for development by the Air Force and later transferred to NASA. The Air Force Blue Scout is an adaptation of the NASA Scout and is being used in the Hyper-Environment Test Program. The Sea Scout is a Navy concept to adapt the NASA Scout for space activities. This Sea Scout has not been approved for development, nor has any space system been proposed which is based on the Sea Scout booster. It is presumed that if a proposal to develop the Sea Scout is forwarded to DDR&E the need for this booster will be outlined, and the capability of the Sea Scout to accomplish the proposed task will be judged in comparison with other available or proposed boosters.

The development of Early Spring by the Air Force would be dependent on its evaluation as a solution for the anti-satellite problem. This evaluation should include comparison of requirements and concepts for anti-satellite systems. If such were approved by DOD the Air Force should have the primary role for its development using the resources of the Navy, where applicable. It appears that sea launching of anti-satellite systems offers no unique advantages to an anti-satellite capability.

Hydra is a program for demonstrating feasibility of a water launching system. If this system were to be approved for development by the DOD, it would then seem to be a project falling within the purview of the national ranges. (See the answer to Question No. 3 which outlines the Air Force position.)

Renae is a satellite weather reconnaissance system. No reason is known why the development of such a system, if required, should be an exception to the 6 Mar 61 directive.

Caleb, which conceived the orbital launching of satellites from aircraft, appears to be particularly amenable to Air Force development, if such capability is required.

Sea reconnaissance satellites are presumed to mean satellites capable of reconnoitering ocean areas. The development of this capability is dependent upon achieving sensors aboard the orbital satellite. If this capability is required, the development of sea reconnaissance satellites should take advantage of the economies that can be realized from capabilities developed in other Air Force space sensor and satellite programs.

*Question 3.* Would the Air Force undertake to develop and operate a satellite launching ship, or is this an "unusual circumstance" that should be granted to the Navy? Would you support such a proposal?

*Answer:* The Air Force will continue to consider all possible solutions to the satellite launch support requirement generated by the Department of Defense or NASA space programs and will give every consideration to the use of Navy