

future continental defense against bomber attack. The funds requested for the "Overland radar" program in fiscal year 1968 will support continued flight testing of radar techniques for detecting and tracking airborne targets over land in the presence of severe ground clutter and provide for development of components for still more advanced radars for future generation air early warning systems. No additional funding is requested for AWACS in fiscal year 1968 inasmuch as the radar evaluation is not yet far enough along to warrant going forward with contract definition during fiscal year 1968. However, funds will be available to support continued concept formulation of the "AWACS" system and contract definition if progress on the program indicates this as the logical next step.

The next item, "Advanced avionics," is concerned with improving the night and bad weather attack capabilities of tactical aircraft. Work will be conducted on visual sensors, weapons delivery subsystems, navigation equipment (doppler, inertial, loran), and an integrated radome-radar for reconnaissance fighters.

The funds requested for "Penetration aids for tactical fighters" will support continued work on devices and techniques for existing tactical aircraft to enable them to operate successfully in hostile radar-controlled gun and surface-to-air missile environments.

The funds requested for "Tactical air-to-ground missile (Maverick)" would support contract definition and initiation of engineering development in fiscal year 1968 of a new TV-guided air-to-surface missile.

For "Conventional weapons" development, \$5 million is requested in fiscal year 1968. These funds will finance a number of projects designed to demonstrate the technical feasibility of advanced conventional munitions and air delivery systems, various carriage and release mechanisms, fuzing technology, etc.

The \$8 million requested for "Flight vehicle subsystems" in fiscal year 1968 will support advanced development effort in two areas vital to future aircraft design. The first project consists of collecting and analyzing air turbulence data with the objective of improving the design of aircraft structures and control equipment. The second project is concerned with demonstrating the ability of current flight control technology to reduce the effects of wind gusts, aircraft maneuvers, etc., particularly in low-level flight, in order to increase structural life and crew efficiency.

The \$8 million for "Advanced ASM technology" will support a program designed to provide a technical foundation for new and improved tactical air-to-surface missile guidance systems. The largest single project involves a new approach to the all-weather guidance problem.

The \$3 million requested for the "X-15 research aircraft" program will complete in fiscal year 1968 all of the Defense Department sponsored experiments now planned. Subsequently, NASA will assume full responsibility for funding the X-15 test program.

The next item, "AMSA" will require \$26 million in fiscal year 1968. (The \$11.8 million added by the Congress for fiscal year 1967 will be applied to the fiscal year 1968 program). In fiscal year 1968, we plan to carry on development of an engine that could be used in this and other advanced aircraft. Additional funds will be required for