

United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

B-252243

March 5, 1993



148632

The Honorable William V. Roth, Jr. Ranking Minority Member Committee on Governmental Affairs United States Senate

The Honorable David H. Pryor Chairman, Subcommittee on Federal Services, Post Office, and Civil Service Committee on Governmental Affairs United States Senate

As you requested, we have been reviewing the results of the operational testing of the Navy's Airborne Self-Protection Jammer (ASPJ). We have also been surveying alternative systems that the Navy could conceivably use instead of ASPJ to protect its fighter and attack aircraft from threat weapons. This correspondence summarizes the results of our work.

The Commander of the Navy's Operational Test and Evaluation Force on August 17, 1992, and DOD's Director of Operational Test and Evaluation (DOT&E) on December 4, 1992, reported the results of ASPJ testing. The conclusions were that ASPJ failed to meet both the effectiveness and suitability criteria developed by the Navy, validated by the Joint Requirements Oversight Council, and included in the test plan approved by DOT&E.

The Navy testers concluded that when using current tactics, ASPJ did not perform significantly better than the Navy's currently fielded jammer, the ALQ-126B. Furthermore, both the Navy testers and DOT&E concluded that due to built-in test deficiencies, human factors, and for other reasons, ASPJ was "not operationally suitable."

Subsequently, on December 11, 1992, DOD's Under Secretary of Defense for Acquisition directed the Navy to comply with provisions of the Fiscal Year 1993 National Defense Authorization Act. As a result, the Navy terminated the production of ASPJ.

GAO/NSIAD-93-142R Electronic Warfare

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The Navy has been receiving briefings on alternatives from a number of contractors, including ITT/WEC, Lockheed/Sanders, Loral, Marconi, Northrop, and Raytheon. However, as of February 1993, the Navy had not determined how it plans to meet F/A-18 and F-14 tactical aircraft self-protection requirements.

In the past, the services have developed or procured alternatives to ASPJ for other aircraft. For example, in the 1980s the Navy planned to use ASPJ, ALQ-156A missile approach warning system, and the Raytheon ALE-50 decoy system in its Integrated Defensive Avionics Program for the A-6 Intruder. Now, this program will use the Lockheed/Sanders ALQ-126B jammer instead of ASPJ.

Furthermore, the pod version of the ASPJ for the Marine Corps' AV-8B Harrier was terminated. The AV-8B will be equipped with both the Northrop ALQ-162 and Lockheed/Sanders ALQ-126B jammers combined in an external pod called an ALQ-164. A number of U.S. allies, including Canada, Australia, and Spain use the ALQ-126B and/or ALQ-162 on their F/A-18 aircraft.

The U.S. Air Force has also decided against ASPJ for its F-16 aircraft, although it spent hundreds of millions of dollars on the ASPJ program. The Air Force decided in 1990 that its F-16 self-protection requirement could be met with continued use of external pod jammers such as the Raytheon ALQ-184 and Westinghouse ALQ-131 Block II while it develops a classified system. U.S. allies flying the F-16 such as Israel and Turkey have selected the Loral ALQ-178 jammer. Greece has opted for the Raytheon ALQ-187 jammer on its F-16s.

As described above, alternative systems to ASPJ have been identified. Thus, the Navy now has several alternatives it could consider for its F/A-18 and F-14 aircraft. The above systems are not an exclusive list of possible alternatives and we did not make an effort to determine the capabilities of each relative to ASPJ.

In support of objective decision-making, however, DOD could implement the recommendation included in our report, Electronic Warfare: Radar Jammer Proliferation Continues (GAO/NSIAD-92-83, Feb. 1992). This report recommends that DOD conduct a cost and operational effectiveness analysis to determine the most cost-effective jammer for maximum common use on existing Navy and Air Force aircraft. Furthermore,

regardless of the alternative selected, we believe that premature production such as occurred on ASPJ could be prevented if DOD required demonstration of satisfactory performance before authorizing production.

As agreed with your staff, we have now concluded our efforts with regard to ASPJ testing and alternatives. If you have any questions regarding the results of the assignment please contact me on (202) 512-4841, or Mr. Jack Guin, Assistant Director, on (205) 895-4423.

Louis J. Rodrigues

Director, Systems Development

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