

DOCUMENT RESUME

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Navy Operational Test and Evaluation: A Valuable Tool Not Fully Utilized (Unclassified Digest of a Classified Report).
PSAD-78-77. March 29, 1978.

Report to the Congress; by Elmer B. Staats, Comptroller General.

**Issue Area: Federal Procurement of Goods and Services (1900);
Federal Procurement of Goods and Services: Engineering
Development Before Producing (1903).**

Contact: Procurement and Systems Acquisition Div.

Budget Function: National Defense: Weapon Systems (057).

**Organization Concerned: Department of Defense; Department of the
Navy.**

Congressional Relevance: Congress.

The Navy's Operational Test and Evaluation Force tests and evaluates Navy weapon systems in an operational environment and develops procedures and tactics for their use. The Test Force is separate and independent of developing, procuring, and using commands and reports results of operational tests and evaluations directly to the Chief of Naval Operations.

Findings/Conclusions: The Navy has made considerable progress in planning and conducting tests and reporting test results. However, in some instances, Navy officials made procurement decisions before sufficient operational test and evaluation was completed, and some systems entered production before it was known whether they could perform their missions under combat conditions. Operational test and evaluation results completed on some weapon systems after production began showed significant performance problems. Deviations from prescribed testing procedures should be made only when the need for the system is critical or the risk of performance problems is minimal. In some cases, a complete operational test and evaluation could not be made because of limited test resources.

Recommendations: The Secretary of Defense should demonstrate through operational testing that weapon systems can perform their missions in typical combat environments before they are approved for production and see that the Navy's Operational Test and Evaluation Force is given adequate resources to perform the necessary test and evaluation. (RRS)

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a report containing classified security information

CONTROLLER GENERAL'S
REPORT TO THE CONGRESS

NAVY OPERATIONAL TEST AND
EVALUATION--A VALUABLE TOOL
NOT FULLY UTILIZED

D I G E S T

The Navy's Operational Test and Evaluation Force tests and evaluates Navy weapon systems--ships, aircraft, and other equipment--in an operational environment. It also develops procedures and tactics for their use. The Test Force is separate and independent of developing, procuring, and using commands and reports results of operational test and evaluation directly to the Chief of Naval Operations. (See p. 2.)

The Navy has made considerable progress in establishing, defining, and implementing policies and procedures for effective operational test and evaluation; these policies and procedures have existed since October 1975. (See pp. 5 to 7.) GAO concluded that generally the Navy's Test Force has effectively planned and conducted tests and reported test results. (See p. 8.)

However, in some instances Navy officials made procurement decisions before sufficient operational test and evaluation was completed or started. The result was that some systems entered production before it was known whether they could perform their missions under combat conditions. (See pp. 8 to 12.)

Operational test and evaluation results completed on some weapon systems after production began showed significant performance problems. Limited and untimely testing can result in costly retrofits and/or systems that are unable to carry out their missions. Therefore, deviations from prescribed testing procedures should be made only when the need for the system is critical or the risk of performance problems is minimal. (See pp. 8 to 12 and 17.)

In some cases, a complete operational test and evaluation could not be made because test resources were limited. In some of

have done, the Navy plans additional operational test and evaluation, either before or after the decision to produce. (See pp. 11 to 14.)

To improve the Navy's procurement of weapon systems, GAO recommends that the Secretary of Defense:

- Demonstrate through operational testing that weapon systems can perform their missions in typical combat environments before they are approved for production. Exceptions should be limited to conditions of extreme necessity or where there is specific evidence, such as risk analysis, of a low chance of failure. (See p. 17.)

- See that the Navy's Operational Test and Evaluation Force is given adequate resources to perform the necessary test and evaluation. If adequate resources cannot be provided, the Test Force should inform decisionmakers of how the absence of such resources will affect operational test results. (See p. 17.)

The Department of Defense generally agreed with the information in this report but noted that it discussed several weapon systems that were produced before current directives were put into effect. Defense stated that additional testing is planned and will be completed before production is authorized in some of the cases discussed. (See app. II.) In some of these cases, however, additional testing will not affect the production decision since it will be done after the decision is made or will not reduce or eliminate the problem of test limitations cited by GAO. (See p. 8.)