

UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

NATIONAL SECURITY AND INTERNATIONAL AFFAIRS DIVISION

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Admiral Steven A. White Chief of Naval Material Naval Material Command



Dear Admiral White:

Subject: Suggestions for Improving

Navy Logistics Reviews (GAO/NSIAD-83-24)

We have examined the Navy's process of reviewing the adequacy of integrated logistics support (ILS) planning for its systems as they progress through acquisition milestone decision points. These ILS reviews play an important role in ensuring system readiness and sustainability. Through these reviews, potential support problems can be identified and corrected before systems are fielded. These reviews also help ensure that resources to achieve readiness receive the same emphasis as those required to achieve schedule and performance objectives.

The objective of our review was to evaluate the adequacy of the Navy's policies, practices and procedures for conducting its independent logistics reviews. We met with Navy officials responsible for carrying out the reviews, examined the reports and other documents integral to the review process and reviewed pertinent Defense and Navy regulations and directives. We made our review at the Naval Material Command and the Office of the Chief of Naval Operations in Washington, D.C. Our review was performed in accordance with generally accepted government auditing standards.

In general, the Navy's logistics review process seems to be working well, particularly for major systems. Also, the basic process of identifying, recommending solutions for, and following up on logistics problems is a sound one. We do, however, have several suggestions for improvements. These include (1) improving the timeliness of program offices' status reports on the actions they have taken to address problems identified by the logistics reviews, (2) augmenting the current practice of conducting ILS reviews close to the production milestone with earlier reviews, and (3) developing a comprehensive inventory of all Navy systems for use by the ILS review groups.

BACKGROUND

During recent years, the Department of Defense (DOD) has revised its regulations on systems acquisition to place increased emphasis on readiness and sustainability. DOD directive 5000.39 (Jan. 17, 1980) establishes overall Defense policy and responsibilities for accomplishing ILS planning. It requires that ILS reviews be made of the adequacy of logistics plans, resources, and support-related parameters at each acquisition milestone. The Department of the Navy is implementing this requirement through logistics reviews by the Naval Material Command and its subordinate systems commands—Air, Sea, and Electronic. Detailed guidance on the policy and procedures for ILS reviews is contained in Naval Material Command Instruction 4105.3A and individual implementing regulations of the systems commands.

The Navy divides its systems into four acquisition categories (ACATs) based on cost and combat mission. ACAT I and II systems are commonly referred to as major systems. Acquisition milestone decisions for ACAT I systems are made by the Secretary of Defense, and ACAT II milestone decisions are made by the Secretary of the Navy or the Chief of Naval Operations. ACATs III and IV are commonly referred to as less than major systems. Acquisition milestone decisions for ACAT III systems are made by the sponsoring Deputy Chief of Naval Operations, and the milestone decisions for ACAT IV systems are made by the Chief of Naval Material or his designee.

The Naval Material Command initiated its logistics reviews of major systems in December 1977. The command's review process begins with its Logistics Programs and Assessments Division scheduling systems for review and forming a team of command loqistics element specialists. The team reviews a system's ILS planning and prepares a report which addresses each ILS element and provides recommendations for correcting any logistics deficiencies. This report is then formally presented before the Logistics Review Group, which is chaired by the Deputy Chief of Naval Material for Logistics. Other members include the Vice Commander of Naval Supply Systems, the Vice Commander of Naval Facilities Engineering, and other officials of the Material Command and the Supply Systems Command. After the review group meeting, the Deputy Chief of Naval Material for Logistics submits the review team's report and makes a recommendation to the Chief of Naval Material to certify or not certify the adequacy of the system's ILS planning. The Chief of Naval Material uses the logistics review report at subsequent Navy review councils.

For less than major systems, the Naval Sea, Air, and Electronic Systems Commands perform the ILS review. In each command an ad hoc team, made up of ILS element specialists,

reviews system logistics plans and prepares a report which is reviewed by command officials. Formal review meetings are generally not held, and final decision authority on the adequacy of logistics planning rests with the Deputy Commander of the Life Cycle Engineering and Platform Integration Directorate in the Electronic Systems Command, with the Assistant Commander for Logistics and Fleet Support in the Air Systems Command, and with the Assistant Deputy Commander for Logistics in the Sea Systems Command.

THE TIMELINESS OF STATUS REPORTS COULD BE IMPROVED

An effective review process should identify problems, recommend corrective actions, and ensure that they are carried out in a timely manner. Ensuring timely corrective action is particularly important because system acquisition programs are seldom delayed while logistics problems are being corrected. Instead, a decision is generally made to correct problems as the acquisition continues. Without effective monitoring, the potential exists that problems may not be adequately resolved, which could ultimately result in readiness and supportability shortcomings when a system is fielded.

A key part of the Navy's monitoring process is the periodic status report on corrective actions, required to be sent by the system program office to the review group. In most cases the program offices comply with the requirement. However, some status reports on both major and less than major systems are not being submitted in a timely manner.

Major systems

The logistics review group reports for major systems recommend specific corrective actions for and milestones by which the program officials are to report their corrective action plan to the Logistics Programs and Assessments Division. After this initial report is received, individual milestones are established for status reports on each recommendation. We reviewed the status reports on recommendations from 14 of the 15 logistics review group reports issued in 1981 on major systems and found that more than one-third were overdue an average of 5.7 months. For example:

- --The report on the AN/SAR-8 Infrared Search and Track System program contained 11 recommendations which had been open for over a year. Status reports were 2 months overdue.
- --The report on the Joint Tactical Information Distribution System program had 13 recommendations which had been open for nearly a year, and the program office was over 9 months late in submitting status reports.

--The report on the DDGX surface combat ship contained five recommendations which had been open for over a year and the program office had never submitted status reports.

Logistics Programs and Assessments Division officials acknowledged that program offices do not always respond in a timely manner, but stated that from September 1981 to February 1982, their division did not have personnel assigned to monitoring the submission of these reports. In February 1982, the division assigned one person full time to this function and, as part of a reorganization in December 1982, the division manager assigned an additional person. He believed that this action would improve report timeliness. Because our audit work was completed at the time of the reorganization, we did not assess whether the situation had improved.

Less than major systems

The systems commands have also established procedures for monitoring the correction of problems identified in logistics review reports for less than major systems. In general, the procedures require that weapon system program offices establish milestones and provide the review group with periodic status reports on actions taken to correct logistics deficiencies. The Air Systems Command requires status reports every 30 days; the Sea Systems Command requires them every 90 days; and the Electronic Systems Command sets status update milestones on an individual program basis.

We reviewed the status reports on a randomly selected group of 27 of the 57 ILS reviews conducted by the systems commands during 1981. In most cases the reports were submitted when required. However, at the time of our review, nine system program offices were overdue in submitting the reports, as shown in the following table.

Systems Command	Number of systems	Number of recommenda- tions open	Required days between responses	Average days since last response
SEA	4	16	90	187
AIR	3	8	30	159
ELECTRONI	C <u>2</u>	19	(a)	150
Total	9	43		

a/Milestones for responses are established on a program-by-program basis.

Certain program offices were particularly overdue. For example:

- --The Naval Sea Systems Command's AN/SPS-48 radar (New Threat Upgrade) program had 13 recommendations which had been open for 419 days and a status report had not been submitted for over 6 months.
- -- The Naval Air Systems Command's Helicopter Night Vision ANVIS program had 3 recommendations open for 318 days and a status report had not been submitted for over 7 months.
- --The Naval Electronic Systems Command's Low Cost Link 11 program had 17 recommendations open for 409 days and a status report had not been received in about 5 months.

The personnel responsible for monitoring the follow up actions in each of the commands stated that while most program offices are timely in their responses, when problems do arise with overdue status reports, the review offices try to work them out informally rather than raise them to higher management levels in the command. However, based on the above information, this approach is not always successful. In our opinion, the timeliness of reports could be improved by alerting senior command officials when program offices are overdue in submitting reports to the review offices.

EARLY REVIEWS WOULD BE BENEFICIAL

The greatest opportunity to achieve cost effective support savings occurs in the conceptual and early development phases of an acquisition. Then efficient and effective logistics support can become an integral part of system design. Consequently, assuring the adequacy of ILS planning during these early phases is extremely important.

Naval Material Command guidance requires that systems be reviewed at key milestones of the acquisition process. However, nearly all ILS reviews of less than major systems are being held only as the systems are approaching the production decision. By making reviews this late in the process, opportunities may be missed to influence logistics planning at critical phases. The 72 systems command reviews held in 1981, and a sample of 34 reviews scheduled in 1982 were performed at or near the following milestones:

		Number of reviews		
	Milestone	1981 (actual)	1982 (planned)	
0	(concept)	-	-	
I	(predemonstration/validation)	-	-	
II	(pre-full-scale development)	9	2	
III	(preproduction) or later	63	32	

When reviews are conducted late in the acquisition process, findings, in some cases, document only that certain logistics planning tasks were not accomplished. Of the 218 findings in 23 randomly selected logistics review reports issued by the systems commands in 1981, 42 dealt with problems which resulted from not completing tasks which should have been accomplished earlier. For example:

- --The Naval Sea Systems Command's Precise Integrated Navigation System (AN/SSN-2) program awarded its full-scale development contract in November 1980, and the program's ILS planning was reviewed in March 1981. The review identified logistics planning tasks which should have been accomplished earlier so that the logistics requirements in the contract could have been better defined. The report stated that
 - "* * the project office established no maintenance concept, constraints, or guidance in the contract specification or statement of work other than the preference to have modular replacement at the organizational level for corrective maintenance to the extent possible".

Development of the maintenance concept is one of the initial tasks required in the ILS process. As noted in the review, the early establishment of the maintenance concept is essential to the conduct of the Logistic Support Analysis which establishes the maintenance requirements and the most efficient logistics support.

- --The Naval Air Systems Command's Inertial Measurement Unit Test Set II program's initial production contract was awarded in 1977 and its logistics planning was reviewed in March 1981. The report pointed out a number of logistics tasks which should have been, but were not, completed, and it stated that the program represented a classic example of equipment being deployed to the fleet in advance of necessary logistics support. For example, the review noted that the technical publications were being developed based on an unapproved maintenance plan and that this situation might lead to costly publication changes.
- --The Naval Electronic Systems Command's Programmable Indicator Data Processor entered production in May 1979, and its logistics planning was reviewed in May 1981. The Air Force is the principal developer of the system, and the Navy is procuring the system under an option in the Air Force contract. The review showed that because Navy provisioning input was late, it was not incorporated into initial requirements for the system. Consequently, the Navy had not procured spares and repair parts to stock

the first three Navy sites. The report stated that the supply shortage was averted only by procuring spares from the Air Force. The Air Force was able to do this because it had made a large buy to reduce its spares costs.

Systems command officials responsible for conducting the ILS reviews agreed that it would be beneficial to conduct reviews early in the acquisition process. However, they stated that not all systems can be reviewed at each milestone with their current resources. They further stated that reviews just prior to production are beneficial because at this point they can ensure that production contracts contain adequate logistics requirements. In addition, they stated it was the last opportunity to review ILS planning prior to fielding. The head of the Acquisition and Logistics Planning division of the Electronic Systems Command stated that policy in his command prohibits logistics review of systems during the early research and development phases.

We recognize that there are resource constraints within each systems command; however, there are significant benefits to be derived from reviewing programs during the early phases of acquisition. To the degree that the systems commands can augment or modify the existing practices to also provide for reviews at earlier stages in the acquisition process, it could materially contribute to more effective ILS planning and support for Navy systems.

MORE COMPLETE MANAGEMENT INFORMATION IS NEEDED

In order for the logistics review offices within the systems commands to ensure that all systems are being considered for review and to manage their workload, they need specific information on each program, including its ACAT level and its phase in the acquisition process. Currently, no single document exists which provides the necessary information. Consequently, the review offices must devote scarce time to gathering the information from several sources, and even after doing this, they are not certain they have a complete inventory of every system being acquired.

Each review office uses various existing information sources to identify programs for review and to prioritize its workload. For example, documents used by the Naval Sea Systems Command review group include (1) the command's acquisition program index, (2) the command's quarterly report of systems scheduled for operational evaluation, and (3) the Operational Test and Evaluation Command's monthly status report. Review group officials in each systems command stated that their ability to efficiently identify and prioritize review workload would be improved if they had a single comprehensive information source. They also expressed concern that some programs may not be

considered for review because they are not included on any of the documents currently being used to identify programs. An office within the Naval Electronics Systems Command was trying to develop a comprehensive single source document by contacting individual program offices; however, this task was proving to be difficult and very time consuming. Also, the office of the Deputy Chief of Naval Operations for Logistics was working on developing similar information for all programs. However, the official responsible for the effort stated that due to limited resources, progress has been slow. We believe that a comprehensive information report identifying all programs in the acquisition process would help the systems commands' review offices in scheduling and prioritizing their workload, and we encourage you to emphasize its development.

While we are not making formal recommendations to you at this time, we believe that effectively dealing with the issues raised in this report would contribute to a more effective process for reviewing ILS planning in the Navy and ultimately the supportability of Navy systems. We, therefore, request that you seriously consider them, and we would appreciate receiving your comments on the matters discussed in this report.

Copies of this report are being sent to the Secretaries of Defense and the Navy.

Sincerely yours,

Henry W. Connor

Senior Associate Director