The Honorable Chapman B. Cox  
Assistant Secretary of the Navy  
Manpower and Reserve Affairs  

Dear Mr. Cox:

Subject: Comments on Navy's Manpower, Personnel, and Training Planning Process (GAO/NSIAD-84-6)

In March 1983 GAO began surveying the effectiveness of Navy's manpower, personnel, and training (MPT) planning process for new systems. Specifically, we looked at how and when the Navy developed MPT requirements and whether these influenced systems' design or maintenance and operational concepts to minimize life cycle costs. Accordingly, we examined two Navy systems currently in the fleet, the SLQ-32 electronic warfare system and the Tomahawk cruise missile. Unfortunately, much of the documentation we needed had either not been developed, was not specific enough, had been destroyed, or was not readily accessible. Additionally, many original program people no longer worked with the systems, so the "corporate memory" was unavailable. Given this absence of a clear audit trail, we concluded that we could not readily determine the effectiveness of Navy's past planning for these systems.

The Navy has recognized the above and other problems in MPT planning and has developed the Military Manpower versus Hardware Procurement (HARDMAN) Methodology to address them. The HARDMAN methodology is designed to help project managers analyze potential hardware/manpower trade-offs by (1) identifying system design characteristics, operational/support concepts, and/or service policies which cause a significant demand for MPT resources, (2) evaluating resource-design trade-offs in relation to their costs, (3) identifying total quantity and quality of personnel and training needed to support each design option, and (4) estimating the cost of MPT over the systems life for each alternative design. Among other things, the HARDMAN Office has developed standard procedures to consider MPT implications during concept exploration. Hence, Navy should be able to identify MPT requirements before Milestone I (the Development and Validation phase) of the Weapon System Acquisition Process (WSAP) and consider how they affect supportability and life cycle costs. Navy intends to pilot HARDMAN on six systems in Fiscal Year 1984.
Given Navy's effort to improve MPT planning, we deferred our evaluation. Instead, we plan to monitor HARDMAN's progress and review its design and implementation after it has had time to influence planning. Having long emphasized the need for sound front-end analysis, GAO supports Navy's efforts to strengthen MPT planning.

Our survey did, however, identify two matters deserving your attention. First, we noted a continuing resistance to MPT planning among some Navy people responsible for systems development and related activities. Second, more than 80 directives, instructions, and notices govern Navy acquisitions and related MPT planning. Several do not reflect current Department of Defense (DOD) policy, procedures, and emphasis on MPT, while others are inconsistent. We will detail these matters below.

RESISTANCE TO MPT PLANNING

The requirement to address MPT early in the WSAP has existed since the early 1960's. And since 1978 DOD policy has increasingly emphasized controlling and forecasting the effects of weapons systems on manpower needs. Despite these long standing requirements for planning and increased emphasis, evidence indicates that MPT analysis is still not being done early in systems development. Several Defense studies support this. For example, according to

- the Navy's 1976 HARDMAN study, MPT analysis was reactive rather than participatory, occurring at or near Full Scale Development in the WSAP, too late to influence system design.

- a 1982 Defense Science Board Study on training, a gap exists between system designers and individuals identifying MPT requirements. New weapons systems' operators and maintainers need skills beyond the ability of the available and projected manpower pool.

- a 1983 DOD Inspector General report (No. 83-115), Navy still does not always adequately assess manpower effects early in WSAP.

The Navy HARDMAN Study identified several reasons why early MPT analysis did not occur. For example, hardware design and development decisions suited mission requirements, while support considerations only came later. Program managers also lacked the standard analytical tools necessary to develop manpower and training requirements early in systems' development. In addition, the program manager had no incentive to identify significant manpower/training expenditures, the largest part of operation and maintenance costs, because program approval is less likely as costs increase.
Resistance to MPT planning continues. It seems to be treated as a necessary evil, secondary to hardware development. Typical comments from systems development officials support our belief:

- MPT's not a problem, it's an inconvenience;
- instructions requiring up-front MPT planning have existed for years, and no one's doing it anyway; and
- our system is high priority and the people will be there when needed.

Although our survey was not all-encompassing and this response may not be pervasive, it does indicate that continued resistance to MPT planning could hinder HARDMAN's implementation.

Another illustration of this problem emerged when we discussed MPT planning for weapons systems and were directed to the people who prepare Navy Training Plans. Although these plans are part of system development, they are generally not prepared until the full-scale development stage of the acquisition and basically document prior system decisions. MPT planning must begin much earlier in the WSAP to affect system design, and thus optimize personnel requirements and minimize life cycle costs.

Although not a panacea, HARDMAN seeks to (1) influence systems design by ensuring early consideration of the manpower and training resources needed to support equipment under development, and (2) bridge the gap between required and actual up-front planning. But HARDMAN by itself cannot counter resistance to overall MPT planning.

OUTDATED AND INCONSISTENT DIRECTIVES

From a mass of more than 80 directives (not including system command directives), project managers must decide which requirements must be met and in which sequence in order to have his/her project approved. According to the HARDMAN Study, Navy directives and instructions guiding the WSAP are piecemeal and don't reflect a systematic statement of procurement policy and guidance. From program initiation to fleet deployment, program managers must struggle through a maze of guidelines that would discourage even the most dedicated. In reviewing much of this material, we noted that some directives did not reflect the current DOD emphasis on MPT and some were inconsistent.

Several current DOD Directives and Instructions emphasize the importance of early MPT planning. These include DOD Directives 5000.1 and 5000.39 and Instruction 5000.2. Yet
o NAVMAT Instruction 4000.20B, dated June 1975, stresses that Integrated Logistics Support planning must begin during program initiation but does not emphasize MPT's importance during this planning. This Instruction also references several cancelled or superseded Instructions.

o OPNAVNOTE 5000 (dated May 3, 1983), an interim notice dealing with program initiation, completely eliminated reference to MPT. This note was just recently superseded by OPNAV Instruction 5000.42B.

o OPNAV Instruction 5000.42B, signed in August 1983, identifies, in the body of the Instruction, integrated logistics support as a factor in program initiation without specifying MPT as a factor within integrated logistics.

Examples of inconsistencies are

o OPNAV Instruction 1000.16E (dated March 2, 1981), the Manual of Navy Total Force Manpower Policies and Procedures, which requires Deputy Chief of Naval Operations' (Manpower, Personnel and Training) (OP-01) assurance that Decision Coordinating Papers adequately address manpower and training implications. However, the recently signed OPNAV Instruction 5000.42B states simply that the Navy Decision Coordinating Paper format will follow that defined by SECNAV Instruction 5000.1B, but neither instruction provides a standard distribution for review and approval.

o OPNAV Instruction 5000.49 (dated Oct. 22, 1982) which states the Logistic Review Group within the Naval Material Command (NAVMAT) is the primary means for evaluating and certifying logistics planning and execution. But the draft NAVMAT Instruction 4105.3A, which establishes the Group as well as its policies and procedures, only requires that the Group review and certify Acquisition Category I and II projects.1/ System Commands must review and certify those Category III and IV projects not selected for optional Group review. Yet according to a recent GAO report2/, most System Command reviews occur just before the Production/Deployment decision point. At this point in WSAP, it's too late to

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1/ The Navy divides its systems into four Acquisition Categories based on cost and combat mission. Category I and II systems are commonly referred to as major systems; Categories III and IV as less than major systems.

2/ "Suggestions for Improving Navy Logistics Reviews" (NSIAD-83-24, dated August 5, 1983).
influence system design and MPT requirements. Thus, while the OPNAV Instruction delegates responsibility to the Logistics Review Group, the corresponding NAVMAT Instruction does not guarantee early review of Acquisition Categories III and IV. Therefore, it does not ensure adequate MPT planning in these categories.

OPNAV Instruction 5000.42B which gives OP-01 review and comment authority on program initiating paperwork for all acquisitions, stipulating that decisions for Acquisition Categories III and IV will be based on the Test and Evaluation Master Plan. This plan, however, does not cover adequacy or major concerns of MPT planning but only MPT requirements for test and evaluation. Consequently, there is no assurance that Navy adequately addresses these requirements for less than major systems early in WSAP.

While not making formal recommendations, we believe that addressing the issues raised in this report would improve MPT planning. Basically, Navy has the opportunity currently to update directives and instructions to eliminate inconsistencies and reflect current DOD emphasis on the importance of early MPT analysis.

We have discussed the issues in this letter with members of your staff and OP-01’s. They agree with these issues and the need for improvement. In fact, the Manpower Requirements Division in OP-01 told us they too recognized a problem in the Navy directives and were reviewing them for their effects on MPT planning. We encourage their continued work.

We would appreciate receiving your comments and hearing about any planned corrections.

Sincerely,

John Landicho
Senior Associate Director

cc: Assistant Secretary of the Navy
(Shipbuilding and Logistics)
Assistant Secretary of the Navy
(Research, Engineering and Systems)