



PROJECT ID:
643

Establishment of Navy Support Equipment Deployed Aviation Hazardous Materials (HAZMAT) List



The organization and tracking of hazardous materials (HAZMAT) aboard ships is a critical responsibility. The SE DAHML system will significantly reduce redundancy and minimize waste, both at sea and ashore. (U.S. Navy photo by Mass Communication Specialist 3rd Class Johnathan Meighan).

OBJECTIVE

The objective of this project is to establish a Support Equipment Deployed Aviation HAZMAT List (SE DAHML) that will be added as a new function to the existing Aviation HAZMAT List (AHML) SharePoint to forecast HAZMAT requirements for deployed Support Equipment (SE) end items onboard the ships. The SE DAHML will not only serve as a tool to keep track of what HAZMATs are used on each of the SE commodities that will lead to the updates of the NAVAIR Technical Manual (TM) 17-1-125 "Support Equipment, Cleaning, Preservation, and Corrosion Control", but will also be disseminated to the Fleet for the Fleet activities' supply departments to plan requisitioning of Intermediate (I) -level HAZMATs required for the maintenance of SE end items.

PROBLEM STATEMENT

The exclusion of Intermediate-level (I-level) HAZMAT requirements for Naval Aviation SE from the DAHML creates a significant logistical and maintenance risk. The need for this project is driven by the Naval Aviation Maintenance Program (NAMP) 4790.2E policy, which mandates the use of the DAHML for all requisitions of HAZMAT required for deployed

aviation equipment maintenance. If the SE DAHML continues to not exist, the maintainers will consequently face a critical lack of SE HAZMAT sufficiency, leading to maintenance delays, potential HAZMAT obsolescence issues, and a failure to establish necessary logistics in advance that will result in increased SE corrosion. Most critically, this situation increases the risk of using incorrect materials, which can result in severe damage to the SE, environmental noncompliance, and wasteful expenditure of material, ultimately impacting SE operational readiness required for aircraft operational readiness.

DESCRIPTION

This project will establish the SE DAHML, a critical new function within the existing AHML. The SE DAHML will provide accurate, centralized HAZMAT requirements for Naval Aviation SE to supply departments and Support Equipment Controlling Authorities (SECAs). This will not only ensure sufficient SE HAZMATs during deployment but also optimize storage space by limiting redundant items.

First, a list of 24 categorized SE commodities, including Common Support Equipment and Peculiar Support Equipment, from the SE



logisticians and SECAs will be compiled. Once compiled, the associated HAZMAT requirements will be obtained from various technical publications (i.e., NAVAIR 17-1-125, SE publication manuals, and MRCs) and the HAZMAT quantities will be obtained from afloat supply departments' historical data. Second, this list will be reviewed thoroughly to verify that the HAZMATs have active National Stock Numbers (NSNs), are shipboard-authorized, and eliminate redundant or unnecessary entries. Lastly, the finalized database will be implemented into the current AHML site in coordination with Commander Fleet Readiness Centers Fleet Support Team (COMFRC FST) HQ Patuxent River. This establishes the required allowances and planning for I-level HAZMAT requisitions.

The SE DAHML will ensure consistency across all SE publications, improve HAZMAT supply response, and reduce demand variability, ultimately enhance operational readiness by providing the right materials at the right time.

RETURN ON INVESTMENT

The project's Return on Investment (ROI) focuses on substantially boosting operational efficiency and readiness. By limiting redundant afloat HAZMAT items, we mitigate the high risk of catastrophic ship explosion (e.g., LHD-6 USS Bonhomme Richard fire, costing ~\$2.5 - \$3.2 billion). Additionally, this effort will save the Environmental Logistician 45 labor hours annually and reduce Shipboard HAZMAT List deficiencies. Critically, minimizing these deficiencies ensures material availability, preventing significant SE maintenance delays (estimated at one month per request), lowering costs, and improving compliance.

NAVY BENEFITS

By providing complete and vetted SE HAZMAT data, the SE DAHML will dramatically reduce SE maintenance delays—potentially cutting them by a month per SFR—and decrease the use of unauthorized open-market purchases, which is critical for environmental compliance across both afloat and ashore

maintenance sites. The failure to comply with environmental regulations can lead to operations shutdown and/or citation of SE maintenance operations, and increased corrosion preventative maintenance time.

TRANSITION DESCRIPTION

The project will deliver the completed SE DAHML database, providing a centralized and validated list of HAZMAT requirements for SE that Fleet maintainers across all the I-level SE maintenance sites will have access to. A Naval Message will be sent out to the maintainers via SE PMAs and SECAs. Key deliverables include the creation of the initial SE DAHML with the finalized database, creation of the SE DAHML update procedures, and plans for updating official Navy publications to ensure long-term data consistency.

CONTACT

For more specific information about this project, contact the Principal Investigator at atish.s.gupta.civ@us.navy.mil



ABOUT THE NESDI PROGRAM

The Navy Environmental Sustainability Development to Integration (NESDI) program is the Navy's environmental research and development demonstration and validation program, sponsored by Office of the Chief of Naval Operations (OPNAV) Compliance and Mission Readiness Division (N411) and managed by the Naval Facilities Engineering Systems Command (NAVFAC) from the Engineering and Expeditionary Warfare Center (EXWC) in Port Hueneme, CA.

The mission of the NESDI program is to support Fleet readiness by minimizing operational constraints associated with environmental and human health risks and to reduce cost of environmental compliance by demonstrating, validating, and integrating innovative technologies, processes, materials, and by filling knowledge gaps.

For more information, visit the program's web site at www.navfac.navy.mil/nesdi or contact the NESDI Program Managers at NESDI@us.navy.mil