



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

3500 DEFENSE PENTAGON
WASHINGTON, DC 20301-3500

SUSTAINMENT

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE FOR
LOGISTICS AND PRODUCT SUPPORT, OFFICE OF THE
ASSISTANT SECRETARY OF THE AIR FORCE FOR
ACQUISITION, HEADQUARTERS U.S. AIR FORCE

SUBJECT: Addressing Electronics Intermittence Across DoD's Sustainment Enterprise

Reference: (a) Memo from DASD(MR) Titled "Addressing Electronics Intermittence Across DoD's Sustainment Enterprise," dated April 11, 2019

In April 2019, reference (a) requested each Military Service provide recommendations regarding the best practices used to address intermittence as an electronics failure mode and provide overarching strategic plans to widely and rapidly field intermittent fault detection and isolation (IFDI) capabilities. Your responses were greatly appreciated.

To assess progress in this area, the Joint Intermittent Testing (JIT) Working Group used the DoD's Maintenance and Availability Data Warehouse (MADW) algorithms to reveal current effects of electronics intermittence as a failure mode on availability and cost (Attachment 1). Results indicate that no-fault-found (NFF) caused by intermittent electronic failures drive over 383,254 non-mission-capable days and nearly \$5.5B in non-value-added cost to DoD weapon systems annually. These updated results indicate a significant increase from those stated in reference (a). The MADW analysis also identifies weapon systems and components within your Military Service that present the greatest potential for the application of available IFDI test capabilities when undergoing Depot-level maintenance (Attachment 2).

In a continuing effort to improve intermittent fault detection and drive down sustainment costs, request your Military Service provide the following:

- An updated list of best candidate components to address eliminating NFF failures where electronics intermittence is the suspected cause. This list should be the result of root cause analyses based on data and your subject matter expertise. Additional MADW data that may support your analysis is available in Attachment 3.
- An overarching plan of action to reduce electronics NFF effects across your Military Service and a Concept of Operations for integrating IFDI capabilities into Depot-level electronics repair and overhaul. Attachment 4 provides some factors to consider when assessing the best potential applications of IFDI capabilities that meet MIL-PRF-32516.

Please reply to this request by June 15, 2022. My point of contact and the chair of the DoD JIT Working Group is Mr. Steve McKee, (571) 969-0662, stephen.e.mckee.civ@mail.mil.

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Vic S. Ramdass, Ph.D.
Deputy Assistant Secretary of Defense
(Materiel Readiness)

Attachments:

- TAB A - Maintenance and Availability Warehouse (MADW) Information
- TAB B - MADW IFDI Application Candidates (Air Force Aviation)
- TAB C – Air Force Aviation IFDI Non-NIIN Summary with Work Unit Code
- TAB D - IFDI Candidate Additional Information to Consider