



ACQUISITION,  
TECHNOLOGY  
AND LOGISTICS

## THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

JUL 21 2008

### MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENT DIRECTORS OF THE DEFENSE AGENCIES DEPUTY UNDER SECRETARY OF DEFENSE (A&T)

SUBJECT: Reliability, Availability, and Maintainability Policy

In recent years, there has been an increasing trend within the Department of weapon systems not achieving the required reliability during developmental testing and subsequently being found unsuitable during Initial Operational Test and Evaluation. Also, higher than anticipated ownership costs point to insufficient reliability engineering activities and logistics planning during the program acquisition phase. This trend indicates that reliability, availability, and maintainability (RAM) were not adequately designed into systems.

The Defense Science Board Task Force on Developmental Test and Evaluation recommended that RAM, including a robust reliability program with an established reliability growth approach, be a mandatory contractual requirement and be addressed at every major program review. Furthermore, the DoD Reliability Improvement Working Group identified the need for the Components to develop an associated implementing reliability policy.

Therefore, the Secretaries of the Military Department and the Directors of the Defense Agencies are directed to establish a reliability improvement acquisition policy to address the problem of inadequate system RAM. Each policy shall implement RAM practices that:

- Ensure effective collaboration between the requirements and acquisition communities in the establishment of RAM requirements that balance funding and schedule while ensuring system suitability and effectiveness in the anticipated operating environment.
- Ensure development contracts and acquisition plans evaluate RAM during system design.
- Evaluate the maturation of RAM through each phase of the acquisition life cycle.
- Evaluate the appropriate use of contract incentives to achieve RAM objectives.



The Secretaries of the Military Department and the Directors of the Defense Agencies will report back to me within 30 days with their plan to implement these policies.

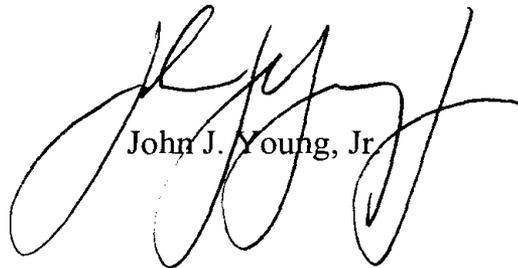
Further, effective immediately, it is Department policy for programs to be formulated to execute a viable RAM strategy that includes a reliability growth program as an integral part of design and development. Additionally, RAM shall be integrated within the Systems Engineering processes, documented in the program's Systems Engineering Plan and Life Cycle Sustainment Plan, and assessed during technical reviews, test and evaluation, and Program Support Reviews. This policy will be included in the DoD Instruction 5000.2.

The Deputy Under Secretary of Defense for Acquisition and Technology will:

- a. Within 30 days, prepare a Manual for use by requirements managers and program managers to develop and document better their sustainment requirements.
- b. Develop supporting guidance to be included in the Defense Acquisition Guidebook, which reflects the above Manual.
- c. Report any additional recommendations resulting from the Reliability Improvement Working Group to me not later than July 31.

Establishing reliability improvement policy, with appropriate oversight, will support effective implementation of the mandatory Materiel Availability Key Performance Parameter, and Materiel Reliability and Ownership Cost Key System Attributes. The implementation of these policies will result in reliable and maintainable systems that are of high quality and readily available to satisfy user requirements in meeting mission capability and operational objectives.

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John J. Young, Jr.

cc:  
Service Acquisition Executives  
Component Acquisition Executives