

The US Air Force R&M 2000 Initiative

Special Introduction

Larry D. Welch, General, USAF
Chief of Staff
Headquarters, United States Air Force

I am pleased to introduce this special issue of the *IEEE Transactions on Reliability* dedicated to the US Air Force Reliability and Maintainability (R&M) 2000 Initiative. For several years we have focused intense attention on improved combat readiness. At the very top of our list of ways to accomplish this is improved reliability and maintainability. The rationale is compelling: broken equipment and unusable systems don't deter war or prevail on the battle field. R&M improvements will translate hardware on the ramp into improved sortie rates, increased mobility, decreased manpower and lower costs. All that adds up to more warfighting capability and, hence, more deterrence.

For the R&M initiative to be fully effective, it must be understood and applied by all those involved in design, research, development, acquisition, and management of Air Force systems. R&M 2000 cuts across academic, industrial, and governmental lines to redefine system capability not only in terms of performance, but also in terms of reliability, maintainability, and producibility. The

Air Force mission is best served by systems that break less frequently, require less servicing, and need fewer support personnel to keep them operating.

R&M 2000 requires close coordination between the user, the developer, and the supporter. In particular, a developer must ensure that reliability and maintainability are incorporated into a system from inception to production and deployment. The future operational effectiveness of our systems will be determined by how well we integrate reliability and maintainability into the design process. To focus defense contractors on this goal, we have drastically altered acquisition priorities. Reliability, maintainability, and producibility now stand as the first items in the highest ranked areas for source selection.

In the Air Force, R&M factors have come of age with priority equal to or greater than such traditional factors as performance, cost, and schedule. This R&M attention is clear recognition that logistics is not just in the "nice to have" category. Logistics is the essential prerequisite for and supporter of warfighting capability. Reliability and maintainability make the modern logistics task doable. I challenge all of you in the engineering and academic communities to join me in this important initiative to build supportable Air Force capabilities.

Manuscript TR87-111 received 1986 December 15; revised 1987 April 21.

IEEE Log Number 15946

◀ TR ▶