
PREFACE

The transitioning of complex development programs from one agency to another—as well as from development and test to production—constitutes a major management challenge. This challenge takes on an added dimension when a program’s acquisition strategy is highly innovative. The High-Altitude Endurance Unmanned Aerial Vehicle (HAE UAV) Advanced Concept Technology Demonstration (ACTD) program incorporated a number of innovative elements into its management approach. As a condition of conducting this ACTD, Congress required that an independent third party study its implementation. RAND was chosen for this role and has been following the HAE UAV ACTD program since its inception.¹

Initial research was sponsored by the Defense Advanced Research Projects Agency (DARPA); the current research was sponsored by the U.S. Air Force. The core objective of the research was twofold: to understand how the innovative acquisition strategy used in the HAE UAV ACTD program affected program execution and outcomes, and to draw lessons from this experience that would be applicable to the wider acquisition community.

The HAE UAV ACTD program transitioned from DARPA to Air Force management during the ACTD portion of the program. The Global

¹See Geoffrey Sommer, Giles K. Smith, John L. Birkler, and James R. Chiesa, *The Global Hawk Unmanned Aerial Vehicle Acquisition Process: A Summary of Phase I Experience*, MR-809-DARPA, Santa Monica: RAND, 1997; and Jeffrey A. Drezner, Geoffrey Sommer, and Robert S. Leonard, *Innovative Management in the DARPA High Altitude Endurance Unmanned Aerial Vehicle Program: Phase II Experience*, MR-1054-DARPA, Santa Monica: RAND, 1999.

Hawk element of the HAE UAV program subsequently transitioned from an ACTD to a Major Defense Acquisition Program (MDAP). This report addresses these transitions and their associated management issues. Specifically, we assess which elements of the acquisition strategy facilitated the transitions and which aspects led to problems. This report is one of three supporting documents resulting from the current research effort; the other two documents address activity content and program outcome issues and analyze the flight test program. A separate executive summary draws broad lessons from the HAE UAV experience.

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Reports in this series are:

MR-1473-AF, *Innovative Development: Global Hawk and DarkStar—Their Advanced Concept Technology Demonstrator Program Experience, Executive Summary*, Jeffrey A. Drezner, Robert S. Leonard

MR-1474-AF, *Innovative Development: Global Hawk and DarkStar—HAE UAV ACTD Program Description and Comparative Analysis*, Robert S. Leonard, Jeffrey A. Drezner

MR-1475-AF, *Innovative Development: Global Hawk and DarkStar—Flight Test in the HAE UAV ACTD Program*, Jeffrey A. Drezner, Robert S. Leonard

MR-1476-AF, *Innovative Development: Global Hawk and DarkStar—Transitions Within and Out of the HAE UAV ACTD Program*, Jeffrey A. Drezner, Robert S. Leonard

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