This report discusses the issues surrounding more effective utilization of the civilian industrial base by the Department of Defense (DoD) and the U.S. Air Force. The first section of the report focuses on the “dual-use” nature of civilian and military technologies, and the potential for integrating the civilian and military industrial bases. The technology area studied, radar-related and other radio-frequency microwave devices, has traditionally been defense-specific. The second section of the report identifies mechanisms for minimizing the risks of inadequate product performance and excessively high cost in less-regulated commercial market environments. It discusses how well these mechanisms have worked in a defense-relevant commercial sector—the large transport aircraft industry—as well as in several experimental and pilot programs initiated by the Air Force and other defense agencies and services.

Most of the information and data for the material in this report were acquired through interviews with government and program managers and officials, and with industry officials. In addition to case studies and a wide array of published materials and other sources, the authors draw on a larger body of RAND research on the future of the defense industrial base.

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PROJECT AIR FORCE

Project AIR FORCE, a division of RAND, is the Air Force federally funded research and development center (FFRDC) for studies and analyses. It provides the Air Force with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future aerospace forces. Research is performed in four programs: Aerospace Force Development; Manpower, Personnel, and Training; Resource Management; and Strategy and Doctrine.