

*Redesigning Defense: Planning the
Transition to the Future U.S. Defense
Industrial Base*

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REDESIGNING DEFENSE

Planning the Transition to the Future
U.S. Defense Industrial Base



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Foreword

The defense technology and industrial base (DTIB) is a crucial element of U.S. military strength because it provides the capability to develop, produce, and support military systems in peacetime and to respond to additional military requirements in crisis or war. The recent conflict in the Persian Gulf once again demonstrated the vital importance of the DTIB, even as recent changes in the international security environment have raised fundamental questions about its future size and character.

This report is the second publication responding to a request by several congressional committees and individual Members of Congress for OTA to assess what form the future base should take and what government policies can best facilitate the transition from the base's cold war configuration. A background paper published in February 1991, *Adjusting to a New Security Environment*, defined the DTIB, discussed how the United States has used its technological and industrial strength to assure its national security in the past, and outlined some of the challenges currently facing the Nation. *This Report examines emerging U.S. national security requirements, surveys the current conditions and trends in the DTIB, and proposes some desirable characteristics for the future base. The report concludes with a discussion of the broad strategic choices and tactical decisions that must be considered as the Nation moves to this future base.*

The objectives of the report are to provide a framework for the debate over the size and character of the future DTIB, and to assist Congress in selecting criteria for making the difficult policy and budget choices that will be required to facilitate the transition. The industrial base characteristics proposed in this report differ significantly from those of the current base. *Probably the most fundamental difference is the separation of the R&D process from the expectation of major production runs.* To maintain both technological development and manufacturing skills in a period of reduced defense budgets, OTA describes a process of continuous competitive prototyping that tests new concepts, incorporates new technology into fielded systems, but results in the manufacture and deployment of new systems only when required. These steps, and others examined in the Report, carry risks to both the R&D and manufacturing elements of the base. However, the new fiscal and security realities facing the Nation force difficult tradeoffs that include such risks. It is also clear that managing this change will require improved and better-integrated management in the future.

The final report of this assessment, to be delivered in the spring of 1992, will address specific policy options arising from the strategic choices and tactical decisions discussed here.

In undertaking this report, OTA sought information and advice from a broad spectrum of knowledgeable individuals and organizations whose contributions are gratefully acknowledged. As with all OTA studies, the content of the report is the sole responsibility of the Office of Technology Assessment and does not necessarily represent the views of our advisers and reviewers.



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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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