

*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.


JOHN H. GIBBONS
Director

Redesigning Defense: Planning the Transition to the Future U.S. Defense Industrial Base—Advisory Panel

Walter B. Slocombe, *Chair*
Caplin & Drysdale Chartered

Richard Bohlen
Senior Vice President, Operations
Rockwell International Corp.

Robert Calaway
President
Resource Management International, Inc.

Gordon Corlew
Vice President, Production
AIL Systems, Inc.

Jacques S. Gansler
Senior Vice President
The Analytic Sciences Corp.

Julius Harwood
Consultant

William W. Kaufmann
Professor
John F. Kennedy School of Government
Harvard University

Gen. P.X. Kelley, USMC (Ret.)

James L. Koontz
President & CEO
Kingsbury Machine Tool Corp.

Thomas L. McNaugher
Senior Fellow
The Brookings Institution

William McNeill
Professor Emeritus
Department of History
University of Chicago

John Mearsheimer
chairman
Department of Political Science
University of Chicago

Joseph Nye
Director
Center for International Affairs
Harvard University

William J. Perry
Chairman & CEO
Technology, Strategies and Alliances

Donald W. Putnam
Corporate Director
Contracts and Technical Analysis
General Dynamics Corp.

Jack Ruina
Professor of Electrical Engineering
Center for International Studies
Massachusetts Institute of Technology

Howard D. Samuel
President
Industrial Union Department AFL-CIO

Wickham Skinner
Professor Emeritus
Business Administration
Harvard University

Gen. William Y. Smith, USAF (Ret.)

James Solberg
Professor
Engineering Research Center
Purdue University

Leonard Sullivan
Consultant
System Planning Corp.

Adm. Harry Train USN (Ret.)
Division Manager
Strategic Research and Management
Services Division
Science Application International Corp.

Gen. John W. Vessey, Jr. USA (Ret.)

Albert Wheelon
Consultant

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.

OTA Project Staff—Redesigning Defense: Planning the Transition to the Future U.S. Defense Industrial Base

Lionel S. Johns, *Assistant Director, OTA
Energy, Materials, and International Security Division*

Alan Shaw, *International Security and Commerce Program Manager*

Jack H. Nunn, *Project Director*

Ivan Oelrich

Jonathan B. Tucker

Administrative Staff

Jacqueline R. Boykin

Madeline Gross

Louise Staley

Contractors

Don Fowler

Arnold Levine

Henry S. Liers

David Soergel

Paul E. Taibl

Frederick Williams

The Analytic Sciences Corp.

Conventional Forces Workshop, Aug. 7, 1990

Ivan Oelrich, *Chair*
Office of Technology Assessment

Richard Barnet
Senior Fellow
Institute of Policy Studies

Richard Betts
Senior Fellow
Massachusetts Institute of Technology

Stephen Biddle
Research Staff Member
Institute for Defense Analyses

Seymour Deitchman
Senior Research Associate
Institute for Defense Analyses

Col. Marvin Floom, USMC
Warfighting Center

Randall Forsberg
Executive Director
Institute for Defense and Disarmament Studies

Robert Johnson
Senior Fellow
National Planning Association

Gen. Frederick Kroesen
USA (ret.)

Barry Pavel
Consultant
Princeton University

Barry Posen
Associate Professor
Massachusetts Institute of Technology

Col. John Warden
Headquarters, USAF
The Pentagon

Defense Industrial Base Data Workshop, Dec. 17, 1990

Jack Nunn, *Chair*
Office of Technology Assessment

Michael Austin
Chief
Mobilization Resources Requirements Division
Federal Emergency Management Agency

William Brown
Branch Chief for Information Systems & Operations
AFSC/EMNS
Wright-Patterson Air Force Base

Dee Bumbara
Fellow
Office of Senator Jeff Bingaman
United States Senate

Lt. Col. Lawrence Cardinal
Defense Communications Agency
JDSSC/JM
The Pentagon

Glenn Coplan
Office of Energy Emergency Operations
U.S. Department of Energy

John DeBreuil
Director
Office of Industrial Base Assessment
Office of the Secretary of Defense

Dan Dennison
program Analyst
Office of Industrial Base Assessment
Office of the Secretary of Defense

Ronald Early
Supervisory Economist
Macro-Economic Analysis
Energy Information Administration

Robert Fabric
Chief, Production Policy Branch
Headquarters
Defense Logistics Agency

Philip P. Foley
Senior Industrial Specialist
Philadelphia Naval Shipyard

Col. Joseph Goodbody
JCS-J4
LPD/MO&PB
The Pentagon

John W. Gowens
Division Chief
Communication Network Systems Division
U.S. Army Institute for Research Management
Information Communication and Computer Sciences

Robert B. Grant
Deputy Director
Office of Policy Analysis
U.S. Department of Commerce

Commander Bernard Grover
Office of Industrial Base Assessment
Office of the Secretary of Defense

Melissa Houghton
University of Maryland

Henry S. Liers
Technical Consultant

Joseph Muckerman
Director for Emergency Planning
ODUSD(SP)/EP
The Pentagon

Robert Nichol
HQDA (ODCSLOG)
The Pentagon

John Petrone
Chief, Industrial Preparedness Division
Industrial Engineering Activity
Rock Island Arsenal

John Richards
Deputy Assistant Secretary
Office of Industrial Resource Administration
U.S. Department of Commerce

Larry **Salkin**
Senior Policy Specialist
Mobilization Assessment Division
Federal Emergency Management Agency

Richard Samans
Legislative Assistant
Senator Donald Riegle
United States Senate

James Thomason
Research Staff Member
Institute for Defense Analyses

Observers:

Hugh Bradley
Defense Logistics Agency

Michael Chinworth
Contractor

John Crabill (AFSC/EMNS)
Wright Patterson Air Force Base

Judith Philipson
Contractor