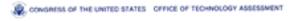
New Technology for NATO: Implementing Follow-On Forces Attack

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IMPLEMENTING FOLLOW-ON FORCES ATTACK



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Foreword

The North Atlantic Treaty Organization (NATO) has been wrestling with a fundamental dilemma: how, within the confines of a strategy constrained by politics and geography, to maintain deterrence against the numerically superior and increasingly technically sophisticated forces of the Warsaw Pact. Nuclear weapons underpin NATO's deterrent, but Alliance military planners are uncomfortable with the prospect of a conventional defense that could be overwhelmed so rapidly as to require early resort to nuclear weapons. Under the leadership of the Supreme Allied Commander, Europe (SACEUR), General Bernard W. Rogers, NATO has sought to remedy this situation by exploiting a broad range of emerging technologies to enable it to effectively attack the follow-on forces of a Warsaw Pact offensive—those ground forces that would extend and support the successes of the initial attackers against NATO's defenders—and thus help even the odds on those fronts where armies are actually engaged.

The adoption of the Follow-On Forces Attack (FOFA) concept has raised a number of serious, complicated, and interrelated issues for the United States and the other members of NATO. The range of issues is broad—encompassing political, military, and technological questions—although no single issue is dramatic enough to garner headlines in any but the most specialized press. To help them make decisions on this matter, the House Committees on Foreign Affairs and Armed Services, with the support of the Senate Armed Services Committee, asked OTA to help bring some insight to this array of problems, so that the United States can more clearly understand and effectively support agreed NATO policy. This is the second report of that study effort. Complementary material can be found in an earlier report "Technologies for NATO's Follow-On Forces Attack Concept," published in July 1986.

Because technology, military concept development, and political thinking have all been evolving, the preparation of this report has been much like boarding a moving train. The information in it is current as of February 1987. It begins from the premise that NATO has officially adopted FOFA, and the United States has supported that decision. Although some still question the wisdom of adopting FOFA, the current debate is really over how best to implement that decision. The report briefly reviews what FOFA is and how it fits into NATO strategy, but is primarily concerned with the outstanding technical issues, how our Allies view FOFA, how the Soviets might respond to it, and how the various technical developments might be brought together into "packages" of systems to support specific operational concepts.

OTA gratefully acknowledges the help and cooperation of the United States Army and Air Force, the Departments of Defense and State, NATO civilian and military staffs, the governments and Parliaments of our European Allies, companies, and numerous individuals who assisted the research and writing of this report.

JOHN H. GIBBONS

Director

Preface

Volume II of this report consists of classified appendices that elaborate on some of the material contained in this volume. It may be requested by writing to:

Congress of the United States Office of Technology Assessment International Security and Commerce Program (ATTN: Program Manager) Washington, DC 20510

providing full name and social security number and the agency or office that can certify a SECRET security clearance and U.S. citizenship. For Congressional requests a need-to-know must be certified by a member of Congress. For other requests, need to know must be briefly explained.

The reader should be aware that the OTA staff did not have access to so-called "black" programs that may be relevant. It is unknown whether the results of such highly classified research could alter some of the technical discussions contained in this report. Interested members of Congress are referred to the Department of Defense for further information.

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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.