U.S.-Soviet Cooperation in Space

July 1985

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U.S.-SOVIET **COOPERATION IN** SPACE

A TECHNICAL MEMORANDUM

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Foreword

Space holds a fascination for all of us. For many, it represents a final physical frontier—a place to explore the very essence of knowledge, to experiment with new technology, and to seek new levels of human adaptation and change. As the major spacefaring nation on our planet, the United States has taken special pride in our achievements in space.

Discoveries in space science have already added immensely to our fund of knowledge. U.S. scientists have moved quickly to take advantage of new opportunities for learning, and the future of scientific work in space is virtually unlimited.

Given the promise of space, an additional issue comes to the fore. How can the United States proceed in space in relation to the other principal spacefaring nation and superpower—the Soviet Union? What is to be gained or lost by working together in space? With regard to science in particular, can the two countries benefit from joint efforts? Can the two countries cooperate as well as compete?

Since the beginning of the space age, the two countries have been examining these questions. This study was requested by Senators Matsunaga, Mathias, and Pen as a means to shed light on the subject at the time of the I0th anniversary of the major U. S.-Soviet cooperative endeavor, the Apollo-Soyuz Test Project.

OTA is pleased to be able to provide this technical memorandum, outlining the principal issues of the debate, the history of cooperation, and the experience of France, another country involved in space cooperation with the U.S.S.R. Additional OTA documents that may be of interest include *Civilian Space Stations and the U.S. Future in Space, Salyut: Soviet Steps Toward Human Presence in Space,* and *International Cooperation and Competition in Civilian Space Activities,* OTA studies in the areas of technology transfer are cited in the text.

JOHN H. GIBBONS Director

Related OTA Reports

Civilian Space

- International Cooperation and Competition in Civilian Space Activities. OTA-ISC-239, July 1985. GPO stock #052-003-00958-7.
- Civilian Space Stations and the U.S. Future in Space. OTA-STI-241, November 1984. GPO stock #052 -003-00969-2.
- Civilian Space Policy and Applications. OTA-STI-177, June 1982. GPO stock #052 -O03-O0878-5.
- Ž Radio frequency Use and Management: Impacts From the World Administrative Radio Conference of 1979. OTA-CIT-163, January 1982. GPO stock #052-O03-O0863-7.
- Solar Power Satellite Systems and Issues. OTA-E-144, August 1981. NTIS order #PB 82-108846.

Technical Memoranda

- Remote Sensing and the Private Sector: Issues for Discussion. OTA-TM-ISC-20, March 1984. GPO stock #052 -003-00945-5.
- Ž Salyut: Soviet Steps Toward Permanent Human Presence in Space. OTA-TM-STI-14, December 1983. GPO stock #052 -003-00937-4.
- UNISPA CE '82: A Context for International Cooperation and Competition. OTA-T'IM-ISC-26, March 1983. GPO stock #052 -O03-O0962-5.
- Space Science Research in the United States. OTA-TM-STI-19, September 1982. NTIS order #PB 83-166512.

Military Space

"Anti-Satellite Weapons, Countermeasures, and Arms Control" (scheduled for publication summer 1985)

"Ballistic Missile Defense Technologies" (scheduled for publication summer 1985).

- Arms Control in Space— Workshop Proceedings. OTA-BP-ISC-28, May 1984. GPO stock #052 -003-00952-8.
- Directed Energy Missile Defense in Space —Background Paper. OTA-BP-ISC-26, April 1984. GPO stock #052 -O03-O0948-0.

Technology Transfer

- Technology and East-West Trade: An Update. OTA-I!X-209, May 1983. GPO stock #052-003-00908-1.
- Technology and Soviet Energy Availability. OTA-ISC-153, November 1981. NTIS order #PB 82-133455.
- Technology and East-West Trade. OTA-ISC-101, November 1979. NTIS order #PB 80-119381.

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During the course of this study, a large number of individuals assisted the OTA staff by providing information from their own research and experience, reviewing draft documents, arranging interviews, providing photographs, and giving their time and energy in many ways. The project staff deeply appreciates this willing and thoughtful help from our colleagues. All responsibility for the document itself rests with OTA.

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