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## **STATION SOLAR ARRAY MODULES TO BE SENT TO RUSSIA**

The first set of solar array modules for the International Space Station program are ready to be shipped from the United States to Russia at the end of May, NASA announced today.

The modules of interconnected solar cells are prototypes of flight units which will be delivered in September to be incorporated into advanced solar arrays for use on Russia's Space Station Mir. NASA and Russia's Space Agency are carrying out a joint program involving flights of the U.S. Space Shuttle to Mir and Russian participation in the International Space Station. The advanced array, known as the Cooperative Solar Array, combines Russian flight proven structures and mechanisms with American advanced solar array modules to increase the available user electrical power on the station.

"This project combines the best technology from both the United States and Russia," said Randy Brinkley, manager of the International Space Station Program Office. "It represents one more milestone that shows how all the international partners are committed to building a world-class research facility in space."

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The modules will be delivered in two shipments. The first is tentatively scheduled to be sent May 30 with the second shipment tentatively set for June 15. Once they arrive in Russia, NPO-Energia will validate the design and assembly procedures prior to launch of the photovoltaic arrays to Mir on the Space Shuttle in October 1995 to support the joint Shuttle/Mir space flights. The six arrays for the International Space Station will be launched in 1998.

The Cooperative Solar Array team is structured as an Integrated Product Team (IPT) consisting of NASA's Lewis Research Center, Cleveland, Ohio; Rockwell International's Rocketdyne Division, Canoga Park, Calif.; Lockheed Missiles and Space Corporation, Sunnyvale, Calif.; and NPO-Energia, Kaliningrad. The IPT concept, which is being incorporated throughout the space station program, provides the necessary communications, flexibility and buy-in of all the team members and is critical to producing flight hardware in a reduced amount of time for lower cost. The Cooperative Solar Array project timeline will be less than two years from inception to deployment of the jointly produced array, making it one of the first pieces of hardware to be launched in the International Space Station program.

As the largest international scientific and technology development ever undertaken, the International Space Station will bring together resources from the United States, Russia, member nations of the European Space Agency, Canada and Japan. The first phase of the U.S./Russian program is a series of joint Shuttle/Mir space missions that will allow the United States to perform longer duration science experiments and verify station hardware concepts. Subsequently, the International Space Station will be assembled on-orbit with elements provided by the U.S., Russia, Europe, Japan and Canada. The first U.S. element launch will be in December 1997 with human-tended operations beginning in June 1998 after the launch of the U.S. laboratory. Assembly will be complete in 2002.

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NOTE TO EDITORS: Three photographs of Lockheed technicians inspecting the solar array modules are available in the Johnson Space Center's Still Photo Library. To order the photos, please call 713/483-4231.