

NASA POLICY AND GUIDELINES  
FOR  
THE USE OF FOREIGN TECHNOLOGY  
IN THE REUSABLE LAUNCH VEHICLE PROGRAM

## PURPOSE

This document establishes policy, guidelines, and implementation actions concerning the acquisition and incorporation of foreign components and technology in the Reusable Launch Vehicle (RLV) program of the National Aeronautics and Space Administration (NASA).

## BACKGROUND

The National Space Transportation Policy of 1994 states that "assuring reliable and affordable access to space through U.S. space transportation capabilities is a fundamental goal of the U.S. space program." The policy directs that the U.S. Government will foster technology development and demonstration to support future decisions on the development of next-generation reusable space transportation systems that greatly reduce the cost of access to space.

The National Space Policy of 1996 directs NASA to develop new and innovative space technologies, improve spacecraft performance and lower the cost of future space missions. It notes that "assuring reliable and affordable access to space through U.S. space transportation capabilities is fundamental to achieving national space policy goals."

To implement these policies, NASA has developed an Integrated Space Transportation Plan (ISTP) as a long-range investment strategy describing how NASA will explore new space transportation systems to increase safety and reliability, and reduce costs. Within the ISTP, the Space Launch Initiative (SLI) Program focuses on maturing the technologies necessary for developing 2nd Generation Reusable Launch Vehicles (RLV). The goal of the SLI Program is to design future space transportation systems to meet the nation's civilian, military and commercial requirements, while developing the critical technologies needed to enable these designs. This will allow NASA to decide, by the middle of the decade, on whether to proceed with development of an operational space transportation system early in the next decade. The Office of Space Flight will collaborate with the Office of Aerospace Technology on identifying investments in hardware, infrastructure and obsolescence issues that will support Space Shuttle operations. The ISTP is the roadmap for these Space Shuttle investments and the SLI Program, and also describes the longer-term investments in 3rd Generation RLV technologies and in-space transportation.

## POLICY

The National Space Transportation Policy states that the U.S. Government will seek to take advantage of foreign components or technologies in developing U.S. next-generation space transportation systems. Such activities will be consistent with U.S. nonproliferation, national

security, and foreign policy goals and commitments, as well as the commercial-sector guidelines contained in the National Space Transportation Policy. Such activities will be conducted in a manner consistent with U.S. obligations under the Missile Technology Control Regime and with due consideration given to dependence on foreign sources and national security.

Consistent with this national policy, NASA RLV programs, including SLI, may seek to take advantage of beneficial foreign components and technologies in developing U.S. next-generation space transportation systems. As a general rule, foreign participation in these activities will be conducted on a company-to-company contractual basis. NASA will make available expertise and resources as appropriate to assist U.S. companies in identifying and analyzing potential foreign participation that could clearly advance the interests of NASA RLV programs.

International cooperative, no-exchange-of-funds activities related to RLV research and technology development programs will only be undertaken on an exceptional basis with the approval of the Associate Administrator for Aerospace Technology and the Assistant Administrator for External Relations or their designees, and in all cases must be compliant with the national policy stated above. To the extent such activities are proposed, they must also demonstrate consistency with NASA policy for the initiation and development of international cooperation in space and aeronautical programs. In particular, it must be shown that they are:

- a. mutually beneficial, and in particular, of substantive benefit to NASA.
- b. consistent with NASA programmatic objectives.
- c. structured so that each partner assumes full financial responsibility for its own commitments. Proposed activities must be cost-effective for NASA.
- d. based on a clear division of responsibilities between NASA and the foreign cooperating partner. Joint development of technologies or components will not be undertaken.
- e. established in a formal written agreement.

In addition, such international cooperative activities must have specific research or project objectives, and must be limited in duration to a defined period corresponding to those objectives. International cooperative activities in this area are limited to the following:

- a. basic research into fundamental physical phenomena (Technology Readiness Level of 3 or below, i.e., basic technology research or proof-of-concept research).
- b. missions of opportunity which may involve flights of instruments or materials on U.S. or foreign technology demonstrator vehicles.

All foreign involvement in NASA RLV programs will be conducted consistent with the policy and guidelines in this document.

## GUIDELINES

U.S. companies that propose to utilize foreign systems, components, or technologies in support of NASA RLV-related activities must address/satisfy the following criteria:

1. Foreign participation must provide clear net benefits to the achievement of the program's technical and business objectives.
2. Federal funds may be used for manufacture or acquisition of existing foreign components or technology, but may not be used for foreign-based research on or development of RLV technology, unless specifically exempted by the NASA Administrator.
3. Incorporation of foreign technology must not threaten the successful execution of the program, both in its developmental and operational phases.
4. Due consideration must be given to fostering U.S. competitiveness and safeguarding national security interests throughout the life of the program.
5. Close consultation must be maintained with NASA and other appropriate U.S. Government agencies on all aspects of foreign participation.

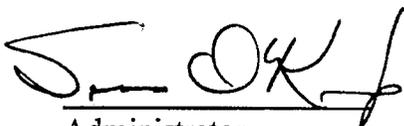
U.S. companies' proposals and business plans must address all aspects and implications of foreign participation, including the aspects outlined above.

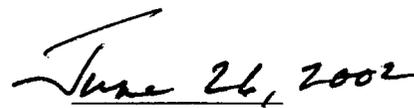
NASA will consult with other executive agencies, as required, to ensure that all national interests are sufficiently reflected in proposed activities with RLV foreign partners.

#### IMPLEMENTATION GUIDANCE

The Associate Administrator for Aerospace Technology, in conjunction with the Assistant Administrator for External Relations, shall ensure that NASA's RLV-related research and technology programs and projects are conducted in a manner consistent with this policy.

All NASA solicitations, e.g., NASA Research Announcements, Announcements of Opportunity, Cooperative Agreement Notices, etc, associated with NASA RLV programs shall include provisions that reflect this policy.

  
Administrator

  
Date