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May 16, 1983

#### COMMERCIALIZATION OF EXPENDABLE LAUNCH VEHICLES

#### I. INTRODUCTION

The United States Government encourages domestic commercial exploitation of space capabilities, technology, and services for U.S. national benefit. The basic goals of U.S. space launch policy are to (a) ensure a flexible and robust U.S. launch posture to maintain space transportation leadership; (b) optimize the management and operation of the STS program to achieve routine, cost-effective access to space; (c) exploit the unique attributes of the STS to enhance the capabilities of the U.S. space program; and (d) encourage the U.S. private sector development of commercial launch operations.

#### II. POLICY FOR COMMERCIALIZATION OF EXPENDABLE LAUNCH VEHICLES

The U.S. Government fully endorses and will facilitate the commercialization of U.S. Expendable Launch Vehicles (ELVs).

The U.S. Government will license, supervise, and/or regulate U.S. commercial ELV operations only to the extent required to meet its national and international obligations and to ensure public safety. Commercial ELV operators must comply with applicable international, national and local laws and regulations including security, safety, and environmental requirements.

The U.S. Government encourages the use of its national ranges for U.S. commercial ELV operations. Commercial launch operations conducted from a U.S. Government national range will, at a minimum, be subject to existing U.S. Government range regulations and requirements. Consistent with its needs and requirements, the U.S. Government will identify and make available, on a reimbursable basis, facilities, equipment, tooling, and services that are required to support the production and operation of U.S. commercial ELVs.

The U.S. Government will have priority use of U.S. Government facilities and support services to meet national security and critical mission requirements. The U.S. Government will make all reasonable efforts to minimize impacts on commercial operations.

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The U.S. Government will not subsidize the commercialization of ELVs but will price the use of its facilities, equipment, and services consistent with the goal of encouraging viable commercial ELV launch activities in accordance with the attached guidelines.

The U.S. Government will encourage free market competition among the various systems and concepts within the U.S. private sector. The U.S. Government will provide equitable treatment for all commercial launch operators for the sale or lease of government equipment and facilities consistent with its economic, foreign policy, and national security interests.

The U.S. Government will review and approve any proposed commercial launch facility and range as well as subsequent operations conducted therefrom. Near-term demonstration or test flights of commercial launch vehicles conducted from other than a U.S. Government national range will be reviewed and approved on a case-by-case basis using existing licensing authority and procedures.

#### III. RELATIONSHIP OF STS AND COMMERCIAL ELVS

Notwithstanding the U.S. Government policy to encourage and facilitate private sector ELV entry into the space launch market, the U.S. Government will continue to make the Space Shuttle available for all authorized users -- domestic and foreign, commercial and governmental -- subject to U.S. Government needs and priorities. Through FY 1988, the price for STS flights will be maintained in accordance with the currently established NASA pricing policies in order to provide market stability and assure fair competition. Beyond this period, it is the U.S. Government's intent to establish a full cost recovery policy for commercial and foreign STS flight operations.

#### IV. IMPLEMENTATION

An interim SIG(Space) Working Group on Commercial Launch Operations will be formed and co-chaired by the Department of State and NASA. The Working Group will be composed of members representing the SIG(Space) agencies and observers as well as other affected agencies. Additional membership, at a minimum, will include the Federal Aviation Administration and the Federal Communications Commission. This group will be used to (a) streamline the procedures used in the interim to implement existing licensing authority, (b) develop and coordinate the requirements and process for the licensing, supervision, and/or regulations applicable to routine commercial launch operations from commercial ranges, and (c) recommend the appropriate lead agency within the U.S. Government to be

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responsible for commercial launch activities. Until a final selection of the lead agency is made, the Department of State will serve as the U.S. Government focal point for all inquiries and requests relative to commercial ELV activities.

Attachment

Implementing Guidelines for Commercialization of Expendable Launch Vehicles for U.S. Government National Ranges

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IMPLEMENTING GUIDELINES FOR COMMERCIALIZATION
OF EXPENDABLE LAUNCH VEHICLES FROM U.S. GOVERNMENT NATIONAL RANGES

#### A. Required U.S. Government Actions

NASA and DOD, for those functions over which they respectively have cognizance, will:

- identify data, documentation, processes, procedures, tooling, ground support equipment and facilities that are available for commercial use;
- identify the support services and facilities necessary for commercial launches from the U.S. Government national ranges;
- identify the joint-use tooling, ground support equipment and facilities that the U.S. Government can make available for commercial launch operations;
- determine the transition means, schedules, conditions, and costs for making available appropriate U.S. Government equipment, facilities and properties;
- to the extent practical, provide, on a reasonable reimbursable basis, technical advice and assistance in operations;
- negotiate and contract for, on a reasonable reimbursable basis, their portion of the U.S. Government services, facilities and equipment requested by the private sector for commercial launch operations.
- as required, conduct environmental analyses necessary to ensure compliance with the National Environmental Policy Act.

#### B. Government Pricing Guidelines:

The price for the use of U.S. Government facilities, equipment, and services, will be based on the following principles:

- price services based on those additional costs incurred by the U.S. Government;
  - the U.S. Government will not seek to recover ELV design and development costs or investments associated with facilities to which the U.S. Government retains title.

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3. tooling, equipment and residual ELV hardware on hand at the completion of the U.S. Government's program will be priced on a basis that is in the best overall interest of the U.S. Government, taking into consideration that these sales will not constitute a subsidy to the private sector operator.

#### C. Commercial ELV Operator Requirements

The commercial ELV operator shall:

- maintain all facilities and equipment leased from the U.S. Government to a level of readiness and repair specified by the U.S. Government;
- provide adequate insurance to cover the loss of or damage to U.S. Government owned systems, equipment, facilities used by the private sector ELV operators.
- provide adequate insurance and agreements to indemnify and hold harmless the U.S. Government against liabilities for damage to both domestic and foreign persons. and property;
- abide by all required U.S. Government safety criteria and not hold the U.S. Government liable for damage incurred by the operator resulting from U.S. Government flight safety actions.
- agree not to hold the U.S. Government liable for losses resulting from scheduling delays related to joint-use facilities and support services.



## Announcement of United States Government Support for Private Sector Commercial Operations of Expendable Launch Vehicles

### May 16, 1983

The President today announced that the U.S. Government fully endorses and will facilitate commercial operations of Expendable Launch Vehicles (ELV's) by the U.S. private sector. This policy applies to both those ELV's previously developed for U.S. Government use, as well as new space launch systems developed specifically for commercial applications. This policy is consistent with the President's National Space Policy and represents a positive step toward encouraging U.S. private sector investment and involvement in civil space activities.

The basic goals of U.S. space launch policy as stated in the President's Directive on Commercialization of Expendable Launch Vehicles are to: (a) ensure a flexible and robust U.S. launch posture to maintain space transportation leadership; (b) optimize the management and operation of the Space Transportation System (STS) program to achieve routine, cost-effective access to space; (c) exploit the unique attributes of the STS to enhance the capabilities of the U.S. space program; and (d) encourage the U.S. private sector development of commercial launch operations. The policy specifies that:

- The U.S. Government fully endorses and will facilitate the commercialization of U.S. Expendable Launch Vehicles (ELV's).
- The U.S. Government will license, supervise, and/or regulate U.S. commercial ELV operations only to the extent required to meet its national and international obligations and to ensure public safety. Commercial ELV operators must comply with applicable international, national, and local laws and regulations including security, safety, and environmental requirements.
- The U.S. Government encourages the use of its national ranges for U.S. commercial ELV operations. Commercial launch operations conducted from a U.S. Government national range will, at a minimum, be subject to existing U.S. Government range regulations and requirements. Consistent with its needs and requirements, the U.S. Government will identify and make available, on a reimbursable basis, facilities, equipment, tooling, and services that are required to support the production and operation of U.S. commercial ELV's.
- The U.S. Government will have priority use of U.S. Government facilities and support services to meet national security and critical mission requirements. The U.S. Government will make all reasonable efforts to minimize impacts on commercial operations.
- The U.S. Government will not subsidize the commercialization of ELV's but will price the use of its facilities, equipment, and services consistent with the goal of encouraging viable commercial ELV launch activities.

Office of the Press Secretary. "Announcement of United States Government Support for Private Sector Commercial Operations of Expendable Launch Vehicles." Ronald Reagan Presidential Library. 16 May 1983. http://www.reagan.utexas.edu/archives/speeches/1983/51683c.htm.

- The U.S. Government will encourage free market competition among the various systems and concepts within the U.S. private sector. The U.S. Government will provide equitable treatment for all commercial launch operators for the sale or lease of government equipment and facilities consistent with its economic, foreign policy, and national security interests.
- The U.S. Government will review and approve any proposed commercial launch facility and range as well as subsequent operations conducted therefrom. Nearterm demonstration or test flights of commercial launch vehicles conducted from other than a U.S. Government national range will be reviewed and approved on a case-by-case basis using existing licensing authority and procedures.

Notwithstanding the U.S. Government policy to encourage and facilitate private sector ELV entry into the space launch market, the U.S. Government will continue to make the space shuttle available for all authorized users -- domestic and foreign, commercial and governmental -- subject to U.S. Government needs and priorities. Through FY 1988, the price of STS flights will be maintained in accordance with the currently established NASA pricing policies in order to provide market stability and assure fair competition. Beyond this period, it is the U.S. Government's intent to establish a full cost recovery policy for commercial and foreign STS flight operations.

#### Implementation

An interim working group under the Senior Interagency Group (SIG) for Space on Commercial Launch Operations will be formed and co-chaired by the Department of State and NASA. The Working Group will be composed of members representing the SIG (Space) agencies and observers as well as other affected agencies. Additional membership, at a minimum, will include the Federal Aviation Administration and the Federal Communications Commission. This group will be used to (a) streamline the procedures used in the interim to implement existing licensing authority, (b) develop and coordinate the requirements and process for the licensing, supervision, and/or regulations applicable to routine commercial launch operations from commercial ranges, and (c) recommend the appropriate lead agency within the U.S. Government to be responsible for commercial launch activities. Until a final selection of the lead agency is made, the Department of State will serve as the U.S. Government focal point for all inquiries and requests relative to seeking U.S. Government approval for commercial ELV activities.

#### Background

The National Space Policy identified the STS as the primary launch system for the U.S. Government. The U.S. Government is in the process of phasing out its current ELV operations (i.e., Delta, Atlas, and Titan launch systems) as the capabilities of the STS become sufficient to meet its needs and obligations. Increasing private sector interest in continuing these ELV systems has resulted in requests for a U.S. Government policy on such activities. In addition, an increasing number of new enterprises have been established with the express purpose of developing commercial space launch capability.

The SIG (Space) was asked to review these issues and make recommendations to the President. This 4-month interagency study concluded that a U.S. commercial ELV capability would offer substantial benefits to the Nation and would be consistent with the goals and objectives of the President's space policy.

The existence of a viable commercial ELV industry would add to the general economic vitality of the United States and provide the United States with a more robust space launch capability.

The creation of a domestic ELV industry would also maintain a high technology industrial base unequaled in the free world and provide jobs for thousands of workers while adding to the Federal tax base of the U.S. and a number of States. Each commercial launch conducted in the U.S., rather than by foreign competitors, would strengthen our economy and improve our international balance of payments. Further, continuing commercial ELV operations are expected to spawn numerous spinoffs and supporting activities and strengthen the U.S. position in what is projected to be a growing commercial market, thereby providing substantial long-term economic benefits to the United States.

In addition to the general economic benefits, both NASA and the Department of Defense would benefit from continuing commercial ELV production and launch. It would provide a more robust U.S. launch capability and offer a domestic backup for the shuttle at essentially no cost to the U.S. Government. The private sector would assume all costs of ELV production now borne by the U.S. Government. There would also be a market for U.S. Government facilities and equipment that would otherwise be underutilized or no longer required. This would also reduce or eliminate U.S. Government close-out costs for discontinuing its ELV operations. It would provide a potential market for excess flight hardware, special purpose tooling and test equipment, as well as propellants which will become excess as the Air Force deactivates the Titan II ICBM's.

In summary, partnership between the U.S. private sector and the U.S. Government will strengthen the U.S. space launch capability, develop a major new industry, contribute favorably to the U.S. economy, and maintain U.S. leadership in space transportation.