

Statement of

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before the

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I want to thank the Chairman and members of the Subcommittee for this opportunity to appear before you today to report on the progress of the Department of Transportation in streamlining Federal regulation of commercial space transportation in ways which promote, encourage and facilitate launch activities by the private sector.

Mr. Chairman, one of the factors that has made our job at the Office of Commercial Space Transportation much easier is the careful attention Congress has paid to this issue and the clear direction it has given to our efforts. Working to develop licensing procedures and other appropriate regulations to implement intent the of the Commercial Space Launch Act provisions has served only to increase our appreciation for the very real achievement of this Subcommittee and its staff, in cooperation with the House Committee on Science and Technology. Despite the unusually brief time available to develop the bill, the Subcommittee can take justifiable pride in having fashioned a regulatory structure that both protects legitimate interests of the United States and at the same time is responsive to the industry's needs.

In the four months that have passed since enactment of this legislation we have witnessed a number of developments in commercial space transportation that indicate confidence in the commercial launch industry and in its potential. I doubt that anyone can predict with certainty either the nature of the contribution that private commercial launch firms will eventually make to America's space effort or the amount of time that will

pass before the extent of that contribution becomes fully apparent. Nonetheless, the determined commitment of private launch firms to establish themselves in the exciting field of space commercialization provides testimony to the fact that commercial ELVs can play an important role in providing this Nation with access to space.

As part of my report to you this morning, I would like to focus on how the Department of Transportation is acting to fulfill Congress' intent, as embodied in the 1984 Act and our progress in meeting the objectives that have been set in this regard.

Industry Developments

Despite the regulatory obstacles recognized by the President and this Committee at the outset and the relatively short period of time since the ELV commercialization effort started in earnest, private launch firms have already begun to make some significant gains. US ELV firms have been making serious and sustained efforts to promote their products and services in domestic and international markets. Transpace Carriers, Inc. (TCI), and General Dynamics have been marketing their launch services to potential launch customers around the world. SSI, one of the smaller and newer entrants to the industry, has been successful in attracting customers whose payloads requirements are typically smaller than those serviced by existing ELVs and the Shuttle.

Interagency Activities

The Office of Commercial Space Transportation has participated in various policy making forums, both as a member of the Senior Interagency Group on Space, chaired by the National Security Council, and the Cabinet Council on Commerce and Trade. Its role has been to contribute to the establishment of a space strategy and to evaluate initiatives that promote and encourage private sector participation in commercial space endeavors,

approved by the President on July 17, 1984. In addition, we have worked successfully with other executive agencies to establish a pricing policy for the commercial use of national range facilities and services. The direct cost pricing policy that has been adopted by the Department of Defense implements the intent of the National Security Decision Directive to promote the use of national ranges and sets charges for such use at a level comparable to that assessed government users. We are also working with the Departments of State and Commerce, the U.S. Trade Representative, and NASA to develop policies to increase the competitiveness of U.S. commercial ELVs on the world market.

Advisory Committee on Commercial Space Transportation

Mr. Chairman, I am also pleased to be able to report, that Secretary Dole convened the first meeting of the Department's Advisory Committee on Commercial Space Transportation in October of last year. We feel especially fortunate that industry leaders in all phases of private commercialization of space have agreed to contribute their time and expertise to assist the Department's efforts to adopt policies that will encourage the growth and development of this industry. The committee's membership has been designed to include representatives from both large and small, new and established launch firms. Members have also been drawn from the investment banking, insurance, and satellite industries, and from public groups with an interest in space commercialization.

We believe that the advisory committee's expertise and insights will provide an invaluable complement to the work of our own staff in the Office of Commercial Space Transportation. The committee will hold its second meeting March 25-26 to discuss the launch licensing process and pricing issues.

Regulatory Program

Much of our activity during the past four months has been directed to developing regulatory procedures to implement the licensing requirements specified in the Act. Among the purposes Congress articulated in the Act was the directive to DOT, as lead agency within the Executive Branch, to:

- o oversee and coordinate the conduct of commercial launch operations;
- o issue and transfer commercial launch licenses authorizing these activities; and
- o protect public safety and the national security and foreign policy interests of the United States.

Our initial efforts to comply with this mandate are concentrated upon giving the industry a clear indication of the Federal Government's primary interests and concerns in the area of private commercial space transportation -- that is, the specific regulations agencies will apply to commercial space launches -- as well as an explanation of when and how those interests will be asserted. To this end, we have concentrated on areas in which current and potential industry activities are most numerous or significant and where the need for clear procedural guidance is most clearly evident. These areas involve expeditious consideration of launch license applications and specification by DOT of minimum liability insurance requirements for space launches.

The Office of Commercial Space Transportation is now in the process of issuing specific regulatory guidance in each of these areas. On February 25, we published a Notice of Policy explaining the application process for launch licenses and the interagency coordination process for reviewing license applications. The Notice also indicates the nature and timing of further regulatory guidance the Office will be issuing. A copy of the Notice is attached to the testimony I have submitted.

Because of the Subcommittee's interest, I intend to briefly outline the general nature of the licensing process we have proposed. Beyond doing so, however, I think it important to describe the additional regulations the Office will shortly issue. In this way, Mr. Chairman, I can give you and the other Subcommittee members a more complete picture of the actions now under way

Licensing Process for Private Commercial Launches

We have devoted a great deal of thought and effort to developing a statement of policy which addresses clearly the questions launch firms and other interested parties have concerning the policies and procedures that DOT and other Federal agencies intend to apply in authorizing and supervising private commercial launch activities.

The basis of the licensing policy we propose to adopt is Congress' injunction that commercial launch activities be conducted in a manner fully consistent with the requirements of public safety (including the safety of property), national security and foreign policy. Equally, the policy would be to impose Federal licensing and other regulatory requirements only to the extent necessary to protect those interests. Thus, the central goal of the policy is to realize these objectives within a framework which responds to this emerging industry's needs for both regulatory flexibility and certainty.

The regulatory framework we have designed to accomplish these requirements encompasses two specialized review processes: Mission Review and Launch Safety Review. These reviews may be conducted independently of each other and in the order (either sequential or concurrent) that is more appropriate to the nature of a specific launch.

Mission Review is the mechanism for considering the proposed launch activity in the context of the United States' international obligations as well as our national security and foreign policy interests. DOT is responsible for ensuring that a proposed launch activity, (including the launch of a vehicle, the placement of a payload in space or both) does not constitute a hazard to public health or safety and is not adverse to either U.S. foreign policy or national security interests. DOT has devised the mission review process as the means for addressing these factors.

In the course of a mission review, DOT and other agencies will examine the objective of the proposed launch and the means by which the launcher proposes to accomplish that objective. When we speak of "objective" we mean the reason for having a launch, such as to test a new vehicle or to place a telecommunications satellite in geostationary orbit. When we speak of the "means" for accomplishing the objective, our interest is in elements of the proposal such as the flight plan or the design of the payload. If the payload is one for which a prior Federal approval is required, for example an FCC license, our statute requires us to avoid duplicating the evaluation made of the payload by the responsible Federal Agency.

On the other hand, if the launch activity is directed toward placing a payload in space for which no prior Federal approval is required, DOT and other agencies would have to assess the proposed mission to determine whether the launch should be prevented because the launch of the payload in question would be hazardous to public health or safety or adverse to U.S. foreign policy or national security interests. The proposed launches by Space Services, Inc. of payloads containing cremated remains were reviewed in this manner before mission approval was granted.

The other component of the launch licensing process involves the Launch Safety Review. This inquiry addresses the range and vehicle safety resources an applicant can assemble to guarantee

safe launch operations. Specifically, the review will focus on such factors as the suitability of the proposed launch site and flight path, the safety expertise of range personnel, ground and flight safety process and procedures, range tracking and instrumentation capability, vehicle safety systems (including flight termination mechanisms), and proposed vehicle design.

It should be noted that an applicant's choice of the site from which it proposes to conduct a launch can effectively reduce the number of safety issues DOT must address.

If an applicant proposes, for example, to launch from an established national range, where safety requirements governing equipment, personnel qualifications and launch procedures developed by the government operator of the range are already in place, many of the launch safety requirements will be satisfied simply by a statement of intention to launch from that range. The launch license would be conditioned by the requirement that the applicant comply with all applicable safety requirements and procedures of the range. Similarly, once DOT has developed requirements and procedures for licensing private launch sites, an applicant will be able to secure prompt launch safety approval by indicating an intention to utilize such a licensed commercial site.

When a firm has obtained both mission and launch safety approval, DOT will issue a license incorporating certain necessary and appropriate conditions pertaining to the license holders' activities from the time of license issuance through the actual launch. These conditions can be expected to include requirements that the licensee adhere strictly to range safety regulations and procedures that specific safety measures be undertaken, that airspace restrictions be observed, that a specified amount of liability insurance be obtained, and that Federal inspection, verification and enforcement requirements be complied with.

Liability Insurance

Let me turn now to the other elements of our regulatory program. We plan to issue an Advance Notice of Proposed Rulemaking concerning liability insurance issues. The Notice explains -- and requests public comment on -- issues we have identified in the area of liability insurance that we believe the Office will have to address in the process of setting minimum amounts of liability insurance, as required under Section 16 of the Act for specific space launches or for the operation of private launch sites.

We are especially concerned with the area of third party liability for damage caused to persons or property that are not involved with the launch or other space-related activity for which the Office issues a license. Our primary objective here is to ensure that insurance levels are set at a level sufficient to compensate third parties for damage and adequate to cover any liability the United States may incur as a result of the international obligations it has assumed under the 1972 Liability Convention.¹ At the same time, however, we want to be able to set insurance levels that will neither impose inordinate economic burdens on launch firms nor prevent firms from obtaining insurance at reasonable rates. Thus, we will be examining in this rulemaking proceeding the central question of whether DOT should undertake its own analyses of the risks associated with individual space launches or whether we should direct -- as NASA has done for commercial payloads on the Shuttle -- that launch firms purchase the maximum amount of insurance commercially available, or some combination thereof.

¹ Convention on International Liability for Damage Caused by Space Objects, 24 U.S.T. 2389 (1972).

As the Subcommittee is well aware, liability insurance is only one of many issues the Office of Commercial Space Transportation must consider in the process of licensing nongovernmental space launches. Like the policy statement itself, launch licensing regulations will serve as interim guidance to applicants concerning the requirements for obtaining licenses and the procedures the Office will follow in evaluating their requests for launch approvals.

Licensing Commercial Launch Sites

The other major licensing responsibility committed to the Department involves the operation of private commercial launch sites. The issues presented here are numerous and in many ways more complex. I say this primarily because government and industry are only beginning to identify their respective interests in the operation of commercial launch sites. The Administration has demonstrated and justified its interest in encouraging commercial launch firms to utilize the excellent facilities and extensive expertise available at U.S. Government ranges. Indeed, both NASA and the Air Force are making sincere and significant efforts to assure launch operators that their commercial needs -- especially their near term needs -- can be met effectively on national ranges. While commercial launch firms have been receptive to using these government facilities, some have indicated that private launch sites may suit their needs as well.

My primary concern with regulation of commercial launch sites is that the Federal Government not commit itself to a rigid regulatory approach too far in advance of actual development of this segment of the industry. We believe that a more responsible approach is to explore and evaluate a variety of regulatory steps that can accommodate operational flexibility and yet ensure safe operations.

With this goal in mind, the Office of Commercial Space Transportation will initiate studies of regulatory alternatives which will support our licensing operations at private launch sites. We in cooperation with other Federal Government agencies, are considering issuing performance standards for private launch site operations and challenging the industry to develop appropriate procedures for meeting these standards. We are also paying a great deal of attention to methods for encouraging the development of launch safety expertise in the private sector. These include possible certification of launch safety inspectors as well as personnel capable of monitoring launch vehicle assembly and payload integration.

For the reasons stated both here and in the Notice of Policy attached to this statement, we do not believe that issuance of even interim regulations governing operations at private launch sites is an objective we can responsibly achieve within the 180 day period contemplated by the Act. We hope, nonetheless, to be able to publish within that period a formal document on this subject. This document will specify the issues we believe must be addressed before specific regulations can be drafted. It also will identify the regulatory alternatives we think are available to us to fulfill Congress' intent that commercial launch sites are operated responsibly.

Resource Issues

Let me turn now to the resources I believe will be required to support the work of the Office of Commercial Space Transportation. As I testified before this Subcommittee last year, the Department has made available the necessary resources to support the activities of this Office within the budget request for the Office of the Secretary.

A core staff has been assembled to carry out the provisions of the President's Executive Order and the Commercial Space Launch Act. Eleven full time permanent positions have been officially

assigned to this office, with extensive participation by the staff of the General Counsel's office. In addition, two detailees from the Air Force have been assigned to the Office of Commercial Space Transportation in order to provide technical support in the areas of ELV launch operations and their regulation.

The Department is also enlisting contractor support in the areas of regulatory requirements development, research and alternatives analysis, and the competitive posture of domestic and foreign launch capabilities.

Conclusion

Mr. Chairman, this Committee's leadership assistance has been and will continue to be of critical importance in our efforts to implement the goals articulated in the Commercial Space Launch Act. We view the facilitation of the commercial launch industry as an important component of America's space transportation program. We look forward to your continued interest and support. I will be happy to answer any questions you may have.