

Statement of

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before the

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Mr. Chairman and members of the subcommittee, thank you for the opportunity today to report some good news about the U.S. space program. When I last appeared before this Committee, much of America's launch capability was grounded. The Challenger accident and a series of ELV failures created a growing backlog of government and commercial missions both here and abroad.

Six months later, that picture is significantly brighter. Private American launch firms have moved aggressively to meet the demand for access to space. In the last sixty days, American launch firms have signed contracts with five customers to launch seven telecommunications satellites in 1989-90 and have reservations to launch fifteen to seventeen more.

This dramatic shift in climate is due, in large part, to President Reagan's decision to encourage greater reliance on the private sector for providing commercial launch services and Secretary Dole's commitment to making that initiative a success. Indeed, as this Committee foresaw when it passed the Commercial Space Launch Act in 1984, the time has clearly arrived when launch customers can look to private American companies to meet their routine needs for access to space and when the public can look to the government for assurance that they do so in a safe and responsible manner.

Status of the Commercial Launch Industry

The United States has more than a half dozen commercial launch vehicle firms, including three major aerospace manufacturers, in addition to start-up firms whose names are less well known. The economic benefits of this industry's success are significant. We estimate that commercial firms have to date made capital investments of at least \$400 million for commercial space transportation activities. And each foreign satellite launched on a U.S. launch vehicle represents revenue of approximately \$40 to \$100 million (depending on the size of the payload) that would be added to America's GNP. In addition, industry sources estimate that their combined efforts in establishing commercial launch operations will add at least 8,000 new jobs to current levels of employment already represented by launch services and spacecraft industries under contract to the government.

As representatives of these companies told this Committee earlier this week, these firms are not asking the government for funds or guarantees. They are seeking commercially reasonable policies that enhance their ability to grow, diversify, and compete aggressively both in today's launch services market and in the market that they are working to create.

In addition to the demand for transportation created by purely commercial space initiatives, the Federal government itself will meet its own mission needs, when appropriate, by relying upon commercial launch services. Planning is already under way to ensure that this can be done as efficiently as possible. U.S. Government agencies -- in particular, NASA and the Department of Commerce -- have taken steps to shift some of their payloads to expendable launch vehicles. In addition to the initiatives described today by General Rankine and Mr. Mahon, a contract for a commercial operator to launch three GOES weather satellites for the Department of Commerce will be signed in January 1988.

Some state governments -- Hawaii, Texas, and Virginia, as examples -- are encouraging private economic development in this field by encouraging the use of existing launch facilities and the development of new spaceports. DOT is working with these state governments to help create that broadly-based space industry that the Commercial Space Launch Act envisioned.

As with any transition, there remain impediments that must be addressed so that the full potential of the commercial space industry can be realized. Close cooperation and support from all appropriate agencies is critical to the continuing success of this initiative.

Federal Initiatives to Implement the Commercial Space Launch Act

I appreciate the opportunity to report to you today on the issues that we are addressing in cooperation with other agencies of government, particularly my colleagues from NASA and the Air Force.

Regulatory Activities. The Commercial Space Launch Act authorizes the Secretary of Transportation to oversee and coordinate commercial launch activities. The Secretary's mandate includes the authority to license these activities -- including launches of vehicles, the operation of commercial launch sites, and the establishment of insurance requirements -- consistent with public health and safety, the safety of property, and the national security and foreign policy interests of the United States. The Department is also charged with the responsibility to exercise this authority in a manner that encourages, facilitates and promotes a commercial space transportation industry.

The Office of Commercial Space Transportation issued an interim rule on its licensing process in February 1986, which we are

currently in the process of finalizing. We have invested a great deal of time and effort in developing these pathfinding regulations -- an effort that we anticipate will result in minimizing the regulatory burden on industry without compromising the important national interests identified in the Act.

As we've defined it, the licensing process has two components: mission review and safety review. These two reviews can be conducted separately or together, at the discretion of the company itself. The first mission review application approved this year was for Martin Marietta's proposal to launch two Intelsat payloads. Not only was it the first application of the year, but it was also the first U.S. commercial proposal to launch a payload for an international organization. This week, we received another license request from Martin Marietta -- a mission review request for the proposed launch of JCSat.

In August, the Office received its first "complete" license application when Conatec, Inc. requested that DOT conduct both mission and safety review for a proposed sounding rocket launch from White Sands Missile range. We expect to complete the Conatec licensing action in the next thirty days. An interesting aspect of this proposal is that Conatec's payload is a materials processing experiment for a foreign customer. Conventional wisdom has held that ELVs were commercially unsuitable for materials processing projects.

Based on prelicensing consultations with launch companies, we expect to receive perhaps half a dozen more applications by the close of this calendar year. Our experience has been that reviews like the ones I've described take between 30 and 60 days to complete -- well within the 180 day limit contained in the Act.

To fulfill its licensing responsibilities responsibly, the Office needs to perform and have access to the type of regulatory and

safety research that attends all government rulemaking actions affecting private industry. We have worked in close consultation with other agencies to minimize duplication of effort while addressing fundamental issues of concern. With this Committee's support, we are making substantial progress in this area.

Two months ago, the Department announced in the Commerce Business Daily that a request for proposals would be issued for a large safety analysis contract. Within the next thirty days, an announcement for a large risk management contract will be made. And, in the next week, the Office will award its first large multi-year contract for technical support.

As I mentioned earlier, the state of Hawaii has developed considerable interest in establishing a commercial launch site. We have been meeting with Hawaiian officials and various members of the industry about the criteria for evaluating the location of the site, and more importantly, the flight safety considerations. Both the state and industry want to know the approval criteria for a commercial launch site operation. Over a year ago, we initiated the research effort needed to support sound regulatory decisions in this area.

Another significant matter confronting the industry is access to radio frequencies. We are working closely with the industry, National Telecommunications and Information Administration (NTIA), Federal Communications Commission (FCC), NASA, Department of Defense, and other Federal agencies to identify which frequencies will be available to support commercial activities in an effort to manage the radio spectrum in a way that recognizes the unique needs and requirements of both government and commercial users.

Because the provisions of the National Environmental Policy Act apply to commercial launch operations, the Office of Commercial Space Transportation has been active on the environmental front as

well. The Programmatic Environmental Assessment prepared by the Department in 1986 relieved companies using existing sites, and current payload and vehicle types of the responsibility of preparing their own, individual impact assessments. But we deal with a diverse array of launch companies -- large and small. In addition to protecting the public welfare, minimizing the cost to industry of preparing these assessments is especially critical to new, start up space firms. Now that one such firm, American Rocket Company, is planning to launch a new vehicle at Vandenberg Air Force Base, we have prepared an additional programmatic environmental assessment for commercial activities conducted at that location.

Earlier this year, DOT represented its position on an EPA rulemaking related to the banning of asbestos. Elimination of asbestos in the manufacturing of launch vehicles would require U.S. industry to redesign launch vehicles, possibly affecting the reliability levels of these vehicles. At industry's request, DOT evaluated the potential impact of this rulemaking on ELV manufacturers and customers, determined that it could in fact present a problem, and then asked EPA to exempt both existing vehicles and/or existing components that might be used in future vehicles. The latter is important to both the large, established aerospace manufacturers and the smaller, entrepreneurial firms because (as is the case with Space Services, Inc. and E Prime, Inc.) some of the new companies plan to use existing components in designing new launch vehicle configurations.

Federal Initiatives to Assist Commercial Space Development

U.S. Space Policy. The Department has also been an active participant in the effort, initiated by the White House, to survey current national space policy for any redundancies or repetitions as well as any policy statements or directions that have been overtaken by other developments. DOT is actively working with

National Security Council staff to complete this effort by this Fall. In addition, the Department is participating in a series of meetings sponsored by the Economic Policy Council's Commercial Space Working Group to elicit the concerns of commercial space firms regarding government impediments to commercialization.

International Consultations on Competition in Launch Services. As part of his policy statement in August of last year concerning commercial and foreign use of the Shuttle, President Reagan directed the U.S. Trade Representative to consult with foreign providers of commercial launch services to "seek to insure an equal opportunity for the private U.S. ELV industry." Beginning last Fall, the Administration, under the leadership of the Office of the U.S. Trade Representative, conducted an extensive examination of the nature and extent of support the U.S. and other spacefaring nations provide for commercialization of their national launch systems.

We have already conducted one round of informal consultations with the European Space Agency in July and another is scheduled for early October. The information exchanged as part of these consultations has proven useful to both sides in gaining a clearer understanding of the approaches each is taking to affirm its commitment to its commercial launch industry. Following the upcoming round, the Administration will face the question of whether to pursue formal trade negotiations on agreed rules of competition.

Our concern is that American firms are confronted with foreign competitors that don't do business in quite the same way that the United States does. Our competitors receive varying degrees of support from their governments and are relying on that support to secure some share of the international launch market. Our objective is to ensure that American launch firms receive the supportive and responsive U.S. Government policies needed to create a level playing field without direct federal subsidy.

Commercial Use of Government Launch Ranges. There has been much cooperative effort among DOT, DOD and NASA and much progress in securing access to the nation's existing launch infrastructure by commercial firms over the last nine months. Since last December when our three agencies teamed up to sponsor a symposium for the commercial space industry at Patrick Air Force Base at Cape Canaveral, Florida, a critical part of our joint effort has been framing appropriate arrangements to cover commercial activities at the government's own launch facilities.

As I reported to you last Spring, DOT's commercial space transportation industry advisory committee prepared an exhaustive analysis of a draft range use agreement. The industry committee identified issues to be addressed and suggested revisions to enable firms to conduct their activities as commercial businesses, rather than as government contractors. DOT transmitted these concerns to the Air Force. Now that a model agreement has been finalized, companies are converting launch reservations into final contracts.

Clearly, other issues will come to the fore as the precise relationship between government agencies and private companies is given further definition. One such issue is allocation of risk. We feel especially strongly that launch firms should not be subjected to a multiplicity of liability requirements that may otherwise be imposed by different agencies and may not be fully consistent with one another nor with overall commercial space transportation policy. Thus, we are reviewing the need to exercise our authority to set liability and insurance standards for launches from U.S. government ranges. As with all our initiatives, any action in this area would be undertaken in consultation with the DOD, NASA, State and other involved agencies and would afford an opportunity for input by all interested parties.

Conclusion

This Committee's foresight in passing the Commercial Space Launch Act must now be matched by our reaching the goals set by the President, the Congress, and American private enterprise. To do less is to abdicate American preeminence in space to our foreign competitors. That is not an acceptable possibility, and certainly not what this Committee had in mind when it drafted and passed the Act in 1984.