



DEPUTY SECRETARY OF DEFENSE

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WASHINGTON, DC 20301-1010



JUL 23 2001

Honorable Robert L. Stump
Chairman, Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515-6035

Dear Mr. Chairman:

On April 16, 2001 the Department sent your office a Report on Legal Impediments to Non-Federal Funding of Spacelift Range Improvements and Maintenance in accordance with the request by the House Armed Services Committee in House Report 106-616, (pages 257-258), accompanying the National Defense Authorization Act for Fiscal Year 2001. Enclosed is a supplemental report capturing the range of comments we received from industry, as requested by the Committee, as a result of a Commerce Business Daily announcement released by the Air Force, in consultation with the Federal Aviation Administration and the Department of Commerce.

The views from industry represent a clear division among state officials and private industry regarding the future direction of Federal spacelift ranges: those from organizations operating on federal ranges opposed shifting costs to commercial users; those from organizations operating from competing ranges advocated that range users should pay all direct and indirect costs for use of launch property and services. The Department is aware of the necessity for a competitive domestic launch service industry and will continue to explore options for enhancing partnerships with commercial industry and state spaceport authorities. Given our common interest in maintaining a healthy and robust commercial space industry, we look forward to working with your committee to address these challenges in the future.

A similar letter has been sent to the Ranking Minority Member of your Committee and the Chairman and Ranking Minority Member of the Senate Armed Services Committee.

Sincerely,

Enclosure:
Supplemental Report on Legal Impediments
to Non-Federal Investment for Spacelift
Range Improvements and Modernization

cc:
Secretary, Department of Commerce
Administrator, National Aeronautics and Space Administration
Administrator, Federal Aviation Administration

Supplemental Report on Legal Impediments to Non-Federal Investment for Spacelift Range Improvements and Modernization

Industry Response to Commerce Business Daily Announcement, “Nonfederal Participation at Federal Launch Ranges”

The House Armed Service Committee (HASC) requested that the Department of Defense (DoD) identify legal impediments to non-federal funding of spacelift range improvements and maintenance, and the changes required to eliminate these impediments.¹ The Deputy Secretary of Defense transmitted a report in response to this request to the specified House and Senate Committees on April 16, 2001. Pursuant to the HASC request for input from state officials and private industry, the Air Force, in consultation with the Department of Commerce and the Federal Aviation Administration, posted an electronic Commerce Business Daily (CBD) announcement on December 20, 2000 requesting industry input on the issue of non-federal funding of spacelift range improvements and maintenance. This supplemental report summarizes the responses received from industry.

Background

The primary Air Force spacelift mission is to assure access to space for DoD, intelligence community, and civil government payloads. Consistent with that mission priority, the Air Force supports the commercial space industry to the fullest extent possible under applicable law and regulation. Accordingly, pursuant to the Commercial Space Launch Act (49 United States Code Chapter 701, as amended (hereafter referred to as the CSLA)), the Air Force makes available to commercial industry launch property and launch services which are either excess or, for the time being, not needed for public

¹ HASC Report 106-616, p. 258, *Spacelift range system*:

The Air Force continues to have responsibility for funding operations at the Eastern and Western Ranges, even though commercial launches and other government launches now far outnumber Air Force launches. The Air Force funds the modernization, management, and operation of the launch ranges, while recovering only about five percent of direct incremental costs and none of the indirect support costs of a commercial launch.

The committee believes that the funding burden of modernizing, managing and operating the spacelift ranges should be shared more equitably by the range users. Such an arrangement would more accurately reflect the costs and benefits to each of the users and allow the Air Force to meet its legitimate priorities more fully. At the same time, the committee recognizes that the Air Force must be responsible for sustaining the ranges until satisfactory alternative funding and management arrangements that meet civil, national security and commercial requirements can be established.

The committee notes that the February 2000 report of the interagency working group on ‘The Future Management and Use of the U.S. Space Launch Bases and Ranges’ supports maximizing the use of ‘non-federal’ funding sources ‘for the continued maintenance and modernization’ of the launch bases and ranges. The report also points to restrictions imposed by in the Commercial Space Launch Act (Public Law 98-575) that limit reimbursement to the Air Force for costs incurred in supporting commercial launch activities and the Air Force ability to accept privately financed range improvements. Therefore, **the committee directs the Secretary of Defense, with appropriate consultation with other federal and state officials and private industry, to identify the legal impediments to such non-federal funding of range improvements and maintenance, and the changes required to eliminate these impediments.** The Secretary shall submit a report on his findings to the House Committee on Armed Services and the Senate Committee on Armed Services by January 15, 2001. (Emphasis added.)

use and that therefore may be used for commercial launch purposes without interference to the Air Force primary mission. In doing so, the Air Force coordinates and cooperates with other Federal and state agencies and with the commercial sector to maximize the availability and efficient use of launch services and launch property by the commercial sector.

Also in accordance with the provisions of the CSLA, the Air Force charges commercial users only the “direct costs” of their use of Air Force launch property and launch services. As defined in the CSLA, direct costs are those actual costs that can be unambiguously associated with a commercial launch or reentry effort and would not be incurred by the government in the absence of that commercial launch or reentry effort. Commercial users pay only the additional costs incurred by their use of government launch property and launch services. The Air Force must pay all other range costs. The result is that the majority of the costs of range operation and modernization are funded by the Air Force. As a result, commercial users are not charged a share of routine maintenance, modernization, and operation costs that the government incurs.

The DoD report submitted on 16 April 01 noted that the global market for international launch services is increasingly competitive and commercial launch providers are competing for a stagnating demand of satellite customers. This observation was based on the 2000 Commercial Space Transportation Forecasts published by the Federal Aviation Administration (FAA). The most recent forecast reinforces this conclusion. The FAA’s May 2001 forecast is 22 percent lower than the 2000 projections, marking the second straight year of declining projections. This weakening of global launch demand heightens the conclusion that cost is a key driver determining the ability of the U.S. commercial industry to capture a healthy share of the international market. However, it also illustrates that the U.S. government will remain the dominant user of spacelift range services for the foreseeable future, a conclusion contrary to expectations at the time of the HASC report’s issuance.

Industry Views

Ten organizations responded to the AF Commerce Business Daily announcement. They were: the Aerospace Industries Association of America, Washington, DC; Command and Control Technologies Corporation, Titusville, FL; Computer Sciences Corporation, Falls Church, VA; DynSpace, Reston, VA; the Gulf Coast Regional Spaceport Development Corporation, Angleton, TX; the Industry Sector Advisory Committee, Washington, DC; Kistler Aerospace Corporation, Kirkland, WA; Lockheed Martin Astronautics, Denver, CO; the Nevada Test Site Development Corporation, Las Vegas, NV; New Mexico’s Office for Space Commercialization, Las Cruces, NM; and the Virginia Commercial Space Flight Authority, Norfolk, VA. No responses were received from any other entity in the launch industry such as the Boeing Corporation, Orbital Sciences Corporation or any other spaceport.

While the issue of legal impediments to non-federal investment was not the primary focus of the inputs, those who responded articulated clear but disparate views on the issue of allocating range costs to commercial users. Responses generally fell into two categories: those which oppose shifting any additional range costs to commercial users; and those which advocate

that commercial users should pay all direct and indirect range costs. Predictably, responses that opposed shifting any additional range costs to commercial users came from beneficiaries of the status quo: current users or organizations who represent users of the spacelift ranges (the Aerospace Industries Association, Computer Sciences Corporation, DynSpace, Lockheed Martin, and the Virginia Commercial Space Flight Authority). Responses that were in favor of shifting additional range cost to commercial users were received from those opposed to the status quo: competitors or those representing entities who provide alternatives to Federal spacelift ranges in the form of non-federal launch bases and test facilities (the Industry Sector Advisory Committee, the Gulf Coast Regional Spaceport Development Corporation, Kistler Aerospace Corporation, the Nevada Test Site Development Corporation, and New Mexico's Office for Space Commercialization).

The following is a representative sample of comments that were received from the private sector, organized into sections addressing general comments, industry's investment to date, commercial range usage, impact on the U.S. launch market, and industry's specific recommendations.² Note: Many of the comments and recommendations are contradictory. The Department does not endorse or reject any of the views listed here. This supplemental report provides a summary of the views articulated by industry with respect to non-federal funding of space launch ranges.

General Comments

- “We disagree with the intent, as expressed in the report language, to shift substantial range costs onto the commercial space launch industry...the U.S. Government (USG) has a fiduciary responsibility to maintain and modernize them [ranges].”
- “...the transfer of significant range costs to commercial launch providers--will render the U.S. commercial Space Launch Industry uncompetitive...it will result in a decrease in commercial launches, reduction in the number of providers, and, ultimately, higher costs to the USG.”
“It [Commercial Space Launch Act, CSLA] does not prevent voluntary contributions by a non-Federal entity for those purposes [maintenance, modernization, and improvement]. We therefore see no ‘legal impediment’ to non-federal investment into space launch infrastructure for non-government or government purposes (dual-use)...”

Industry's Investments to Date

- “While Congress asserts that commercial launch providers are being subsidized by the Air Force, the facts indicate otherwise: Private investments totaling over \$2.5 Billion to date directly benefit the U.S. Government through lower prices for EELV launch services.”
- “...the Air Force is not recovering any modernization costs from the commercial sector. This is a fact and it should be recognized as a positive not a negative issue.”
- “...the Air Force does not acknowledge the substantial investment that industry has already made over the years and is currently making in the Launch Ranges...the [EELV]”

² The full text of the CBD responses is available upon request.

launch providers are building new launch pads, launch control centers and vehicle processing facilities.”

Commercial Range Usage

- U.S. Commercial launches accounted for only 11% of range use in 2000. Optimistic projections for commercial use in the EELV-era do not exceed 30%.
- “The report language misstates that ‘...commercial AND OTHER GOVERNMENT LAUNCHES (emphasis added) now far outnumber Air Force Launches... We believe that the Air Force response to Congress must clarify the record, not only with regard to range usage, but also high range operations costs.”
- Commercial users “...pay 15% of the cost of the operation, even though commercial activity accounts for 40% of the launches.”
- Based on annual Air Force summaries of space launch activities, U.S. commercial launches accounted for 16 of 38 (42%) launches in 1997, 15 of 36 (42%) launches in 1998, 15 of 32 (47%) launches in 1999, and 8 of 38 (21%) launches in 2000. During the period of 1999-2000, five commercial payloads were launched from the Pacific Ocean by Sea Launch.

Impact on U.S. Launch Market

- “Any increase in the costs of launching from any U.S. site, military or commercial, will have a devastating effect on the U.S. share of the market.”
- “Last year, most of the satellites put in orbit were made in this country, but less than 35% were launched from the U.S.”
- “...the major operators at the Air Force launch ranges are not really concerned about the loss of market share because they have cooperative arrangements with foreign-owned launch vehicles and services.”
- “In the past ten year period the U.S. has gone from the leader in the non-government space launch market with over 95% of the global launch business to having only a 26% share of the global market share.”
- “Without support from the Government, U.S. launch operators will not be competitive with their foreign counterparts...Smaller and emerging launch operators would almost immediately cease to be viable. Asking the state and privately operated spaceports to bear the burden would have the same result...”
- “Launch contractors have sold launches well into the future, committing to firm-price agreements...It will be problematic for the contractors to renegotiate all the affected agreements...A change in launch costs is likely to change the portion of the commercial launch market they could capture, and thus change this financial model.”
- “...the future competitiveness of the American launch industry is dependent upon establishing commercial launch operations at nonfederal launch sites...Such systems are expected to yield more flexible launch schedules...launch-on-demand capability...greater launch availability throughout the year. Advantages such as these stand to make the American launch industry more competitive long term.”

“...to the extent that the Air Force cannot or does not recoup direct and indirect costs associated with commercial launches, the Air Force is skewing the competition and discouraging new developments...”

Industry’s Specific Recommendations

- Accelerate funded modernization efforts.
- The Air Force should significantly reduce USG manpower and operating costs.
- The leading industry users of the ranges (Lockheed Martin and Boeing) should have a key role in reorganizing the ranges to operate in a commercial business approach.
- Use the Virginia Spaceport as a model of future industry-government partnerships for launch ranges.
- Establish a central agency to set policies across commercial, civil, and military space. Some federal space launch assets which are not safety related could be considered for privatization.”
- The issue of support to the space launch ranges should be given a national priority with policy established by an interagency committee with membership from the Departments of Defense, Transportation, and Commerce.
- The Government should adopt standard business practices at the ranges, including evaluation of long-term capital costs, amortization, depreciation and alternative financing approaches.
- The Air Force should pursue multiyear appropriations for the ranges which would allow for long-term capital improvements.
- The Commercial Space Launch Act should be revised to allow the Air Force to be reimbursed for indirect costs and the Air Force should revise their accounting system to properly identify the indirect costs.
- “Commercial users at the national ranges should be liable for all direct and indirect costs associated with their launch operations.”
“Commercial spaceports at the national ranges should be required to reimburse the federal government fair market value for any facilities received from the government.”
- “Any new shared facilities or facility modernization should be funded on a projected use basis by the Air Force and commercial users.”
- “The Air Force should only fund directly those improvements it sees as necessary to its primary mission.”

Conclusion

The above views from industry represent a clear division among state officials and private industry regarding the future direction of Federal spacelift ranges. The Department is aware of the necessity for a competitive domestic launch service industry and will continue to explore options for enhancing partnerships with commercial industry and state spaceport authorities. These inputs from commercial industry will be addressed by the National Security Council’s Policy Coordinating Committee Working Group on Space Transportation. In addition, as stated in the DoD report of 16 Apr 01, many of these issues are being addressed by on-going space launch range modernization programs.