SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

Subcommittee on Space and Science
"Government Promotion of Safety and Innovation in the New Space Economy"
December 13, 2023

REPUBLICAN QUESTIONS FOR THE RECORD
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COVER PAGE

SENATOR TED CRUZ (R-TX)

1. Commercial entities have discussed how greater information sharing could be a useful tool. Should the Federal Aviation Administration (FAA) have a public webpage where applicants and the public could get real-time updates on the status of license applications?

   FAA Response:
   The Federal Aviation Administration (FAA) recognizes the importance of information sharing with applicants and is already committed to making licensing information directly available to applicants in a timely manner. The FAA does provide the public with data through a dashboard on our website that outlines active licenses and licensed launches and reentries. The website can be found at https://www.faa.gov/data_research/commercial_space_data.

   Further, the FAA is in the process of developing a Licensing Electronic Application Portal (LEAP) system for operators, which will be used to accept, modify, exchange, and approve licensing materials under Part 450. LEAP is expected to enhance our ability to identify, track, and resolve questions and issues with operators, which will enhance information sharing.

2. Is there a benefit to greater transparency throughout the licensing process?

   FAA Response:
   Yes. Transparency is beneficial for both operators and the FAA as the trend of launches continues upward. LEAP will lead to improved transparency in the application process for individual applicants.

3. In October, members from industry testified on these same issues. Mr. Gerstenmaier, a former NASA Associate Administrator, testified regarding the Office of Commercial Space Transportation's (AST) role in commercial space launches and its "co-mingling" with FAA's broader priorities. He stated this co-mingling creates confusion regarding AST's role. Is there tension between the broader FAA culture, which regulates for reliable operations in aviation, and AST's mission, which is focused on the safety of people on the ground and in the airspace, not necessarily reliable rocket operations?

   FAA Response:

   We respectfully disagree with Mr. Gerstenmaier's statement that there is tension or confusion between the broader FAA culture and the Office of Commercial Space Transportation's (AST) statutory mission. AST undertakes its statutory responsibilities with a clear understanding that its mission and primary responsibilities are solely focused on protecting the public health and safety, safety of property, and national security and

foreign policy interests of the United States. AST's execution of these responsibilities does not conflict with the broader FAA culture.

4. The National Space Council proposal suggests a two-track system where an applicant goes to multiple agencies for specific licenses. There are concerns that this system would muddy the waters for industry rather than streamline the process. What is the benefit to a one-stop shop for licensing?

FAA Response:
Commercial space regulatory authority is currently split among the Department of Transportation (DOT), the Department of Commerce (DOC), and the Federal Communications Commission (FCC) based on the expertise of each Federal agency, so a true one-stop-shop would not capture the strengths of this current distribution of authority. However, while commercial space regulatory authority is currently split among various agencies, those authorities are not exercised in isolation. For example, during the DOT licensing process, we are required to consult with our interagency partners in an established and process-driven manner to leverage the applicable expertise of the United States Government as a whole.

The regulatory framework laid out in the Administration's legislative proposal titled the "Authorization and Supervision of Novel Private Sector Space Activities Act" (legislative proposal) will provide clear and predictable authorization and supervision for novel U.S. private sector in-space activities and help to ensure the U.S. remains the world's preeminent commercial space country of choice while imposing minimal regulatory burdens on U.S. private sector actors in space. This proposal was developed to provide each in-space activity with a single regulatory agency responsible for licensing the activity. For example, the human spaceflight industry would work exclusively with DOT for launch, reentry, and in-space activities. This will allow for a single, streamlined license approach. The administration's proposal will allow DOT to authorize, under a single in-space transportation license, the operation of a space transportation vehicle whose sole purpose is to conduct in-space transportation activities regardless of where they occur.

The Administration's legislative proposal preserves current authorities vested in the DOC and FCC, so to the extent that a novel operation includes activities that would require an FCC or DOC license, the operator would have to obtain these licenses in addition to a DOT license.

5. Given current launch and reentry licensing responsibilities and challenges at AST, how would AST ensure its increased responsibilities on mission authorization do not negatively impact core launch and reentry responsibilities?

FAA Response:
AST's current launch and reentry responsibilities and the mission authorization authorities sought by the legislative proposal carry different risk profiles. Consequently,

the nature of activities that AST would be responsible for under the legislative proposal will not require the same level of resources that are currently necessary for the reviews of launches and reentries. Therefore, the increased responsibilities under the legislative proposal will not have a negative impact on AST's current launch and reentry responsibilities.

However, as reflected in the President's budget request for fiscal year 2025, we have identified additional resource needs that correspond to the increased growth in demand for our services under our existing authorities.

6. Should launch providers "pay into the system," just as airlines pay into the FAA Airport and Airway Trust Fund?

FAA Response:
The FAA actively supports the expanding commercial space industry through licensing of launch and reentry vehicles, licensing of launch and reentry sites, and the efficient integration of commercial space operations into the National Airspace System. However, unlike commercial air carriers and the general aviation industry, the commercial space industry generally does not pay fees or excise taxes that directly support the FAA. Section 50920 of Title 51, United States Code (51 U.S.C.), relates to user fees and permits the Secretary of Transportation to collect a user fee for a regulatory or other service conducted under Chapter 509 of 51 U.S.C. only if specifically authorized by Chapter 509. Currently, there are no user fees authorized by Congress under Chapter 509. We recognize the need to sufficiently resource the services that support the commercial space industry, and we stand ready to work with Congress on determining an appropriate approach for this growing industry.

SENATOR J.D. VANCE (R-OH)

Interagency Processes

I am concerned the Administration's mission authorization proposal does not provide sufficient regulatory clarity for future commercial space operations. One topic I raised during the hearing covered which agency or entity should be tasked with making the final determination of issuing a license when certain space activities do not fit neatly within one agency's jurisdictional remit.

At the hearing, Director DalBello suggested there would be an interagency discussion in situations where jurisdictional boundaries are opaque or overlapping. I appreciate Director DalBello's commitment to ensuring these discussions will be timely. As numerous commercial space entities in Ohio seek to comply with the Administration's framework, I believe any interagency decision on final licensing authorization should be made swiftly and with as much consistency as possible.

1. Can you commit that, after timely interagency dialogue, these decisions will be as final as possible?

FAA Response:
Yes. We commit to working with our interagency partners to determine which agency is the appropriate authorizing agency in instances where jurisdictional boundaries may be unclear and to ensure license determinations are as final as possible. We also commit to working closely with our interagency partners to ensure the application of consistent standards.

2. Would the concerns and challenges laid out in the prompt above be solved by placing this new regulatory framework under a single existing agency?

FAA Response:
The framework laid out in the Administration's legislative proposal will provide clear and predictable authorization and supervision for novel U.S. private sector in-space activities and help to ensure the U.S. remains the world's preeminent commercial space country of choice while imposing minimal regulatory burdens on U.S. private sector actors in space. A novel space mission would require either a DOT license or a DOC license, but not both. Should the Administration's legislative proposal be enacted, we will work with DOC to align our efforts closely as the regulatory framework is implemented and guidance is laid out to ensure there is sufficient regulatory clarity for future commercial space operations.

Department of Transportation's Expertise of Licensing In-Space Flight

Under the Administration's mission authorization proposal, the Department of Transportation would be tasked with licensing novel in-space transportations. Associate Administrator Coleman described the differences, particularly in the risk profile, between licensing launch and reentry activities and these novel in-space missions. As I understand it, the Department of Transportation has experience licensing launch and reentry of commercial space activities but does not have experience licensing in-space vehicles.

1. What expertise currently exists within the Department of Transportation to license commercial human spacecraft in orbit?

FAA Response:
The FAA currently licenses commercial human spaceflight during launch and reentry. The Administration's proposal to grant authority to DOT for licensing of commercial human spaceflight for activities in addition to launch or reentry is a logical, common-sense extension of DOT's current human space flight responsibilities. No other U.S. space regulatory agency, aside from the FAA, has experience regulating commercial human space flight. The FAA has already licensed nearly 40 safe commercial human spaceflight missions, both orbital and suborbital, and this number will continue to increase.

Further, the FAA's Civil Aerospace Medical Institute is actively conducting human space flight research to broaden and extend the agency's expertise in this area. Application of

the results of this research will be critical once the current learning period regulatory moratorium on commercial human spaceflight sunsets and the FAA begins more extensive regulation of the sector. Additionally, the FAA has published recommended practices for human space flight occupant safety and has supported the industry's efforts to develop human space flight voluntary consensus standards. Lastly, many of the FAA's public safety skill sets can be used to support human space flight occupant safety, such as system safety, software safety, and the design and analysis of safety-critical systems.

Space Situational Awareness

The FAA plays a vital role in monitoring assets flying within U.S. airspace to lower the likelihood of a collision. The Department of Commerce is currently developing a space situational awareness (SAA) capability and a Traffic Coordination System for Space (TraCSS). The Office of Space Commerce was appropriated $70 million in FY 2023 to deliver initial operating capability by the end of FY 2024 and NASA announced its intent to set up a test site in 2023.

1. How would the lessons learned from monitoring U.S. airspace by the FAA be applied to support and enhance the management of assets beyond Earth's Lower Earth Orbit? Geosynchronous equatorial orbit? Atmosphere?

FAA Response:
The FAA operates and manages the safest airspace system in the world. The FAA's history of licensing launch and reentry operations provides it with the experience, expertise, and processes that can be utilized in the authorization and supervision of novel in-space transportation activities. In-space transportation in Earth orbit will utilize the important service that the DOC will provide through its TraCSS system.

Training for Civilian Space Travelers

As the promise of commercial space tourism expands, more non-NASA astronauts will go to space.

1. What is the U.S. government doing to meet the training needs for non-NASA astronauts and space travelers?

FAA Response:
The FAA does not offer training to government astronauts, space flight participants, or crew. However, FAA regulations require that crew and space flight participants receive appropriate training by the launch service provider prior to flight. Some commercial vendors provide some aspects of human space training, and the FAA can issue "Safety Element Approvals" for the services they provide. For example, the Environmental Tectonics Corporation National Aerospace Training and Research Center is an FAA-approved center that meets the training requirements for commercial human spaceflight under part 460.5 of Title 14, Code of Federal Regulations.