



FAA
Commercial Space Transportation
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COMSTAC

July 11, 2023

Questions can be sent in through: YouTube Live
Stream Chat

<https://youtube.com/live/h0Ktv73XPVo>

- This meeting is being held pursuant to a notice published in the Federal Register on June 20, 2023. The agenda for the meeting was announced in that notice, with details as set out in the agenda posted on the COMSTAC website. I am the Designated Federal Officer responsible for compliance with the Federal Advisory Committee Act, under which the meeting is conducted. It is my responsibility to see to it that the agenda is adhered to and that accurate minutes are kept. I also have the responsibility to adjourn the meeting should I find it necessary to do so in the public interest. Only Commercial Space Transportation Advisory Committee (COMSTAC) members may participate in any discussions and vote on matters put to a vote by the Chair. There are some updates to the agenda which have been posted. I have approved those changes at the request of the Chair.



Agenda

- 1:00 – 1:02 Welcome remarks by DFO, James Hatt.
- 1:02 – 1:04 COMSTAC Chair Introduction of FAA Deputy Associate Administrator
- 1:04 – 1:14 FAA Deputy Associate Administrator Remarks
- 1:14 – 2:40 **Part 450 Discussion**
 - Identify any requirements in 14 CFR part 450 that COMSTAC believes require additional clarification by the FAA or a regulation change. If regulation changes are recommended, provide recommendations on how the FAA should prioritize a part 450 rulemaking in comparison to rulemakings?
- 2:40 – 2:50 **Public Comment Period**
- 2:50 – 2:55 Closing Remarks by DFO
- 2:55 – 3:00 Closing Remarks by COMSTAC Chair and Vice-Chair
- 3:00 Adjournment by DFO James Hatt

Next COMSTAC meeting is scheduled for November 7 and 8, 2023, in person. Location TBD.





Part 450 Discussion

COMSTAC
Regulatory
Working Group
RWG Task #2

July 11, 2023



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RWG Task #2

Identify any requirements in 14 CFR Part 450 that COMSTAC believes require additional clarification by the FAA or a regulation change. If regulation changes are recommended, provide recommendations on how the FAA should prioritize a part 450 rulemaking in comparison to rulemakings on financial responsibility (part 440) and the operation of launch or reentry sites (part 420 and 433).



Background

- The FAA published the final rule, *Streamlined Launch and Reentry License Requirements*, adopting the Part 450 regulations, on Dec. 10, 2020 (85 Fed. Reg. 79739).
- The effective date for the rule was March 10, 2021. Existing license holders were given until March 10, 2026, to convert to a Part 450 license.
- Part 450 was drafted to replace “many prescriptive regulations with performance-based rules, giving industry greater flexibility to develop means of compliance that meet their objectives while maintaining public safety.”



Observations

- Four Vehicle Operators Licenses (VOLs) have been issued to date.
- The FAA licensed and permitted 74 launches and reentries in 2022; only 1 was under Part 450.
- The FAA has issued 15 Advisory Circulars (ACs) providing guidance on Part 450 compliance.
- Dozens of applications are under review by the FAA.



Observations

- FAA has exceeded the 180 statutory timeframe for license issuance under Part 450 despite using its tolling authority.
- Vehicle operators identified a variety of issues with the requirements in Part 450 and its implementation.
- The FAA is requesting \$42 million for FY 2024, a \$4.4 million increase over FY 2023 enacted. The budget request includes funding for 20 additional full time employees (FTEs).



Findings

- The publication of Advisory Circulars is important to applicants' understanding and compliance with Part 450.
- No vehicle can launch or reenter at a spaceport without a vehicle operators license. A spaceport license does not authorize launch or reentry operations.
- Applicants report that instead of allowing for diverse approaches that were tailored to the vehicle or operations, FAA has applied Part 450 in a manner that has driven applicants toward strict requirements and, in some cases, placed limits on their operations with no public safety benefit.



Findings

- Applicants report that Part 450 subjects reentry applicants to numerous requirements that are not applicable or appropriate to reentry operations.
- The FAA and licensees would benefit from process improvements that reduce application review timeframes and increase transparency.
- As the FAA receives an increasing number of applicants and existing licenses transition from existing licenses to Part 450, delaying the perfection of Part 450 will be damaging to operators' ability to deliver capabilities for their customers and contribute to the growing US space economy.




Recommendations

- Ensure that Advisory Circulars are accurate and accommodate variations in vehicle complexity and prevent regulatory burdens with no public safety benefit.
- ACs should make distinctions between launch and reentry when differences exist.
- The FAA should clarify and as needed amend Part 450 to address challenges with requirements that are distinct to launch or reentry.
- Similarly, ACs should distinguish between launch vs. reentry license requirements or at least include distinct sections discussing the difference in applicability of many of the regulations.
- The FAA should provide more transparency into the software and analysis tools that have been accepted for use. That information would offer new applicants the ability to efficiently develop a plan for developing their means of compliance for Flight Safety Analysis, toxic release analysis, etc.



Recommendations

- The FAA should also develop and implement a change control process for technical standards. That process should account for the impact of changing technical standards during an ongoing licensing effort.
- A review of Part 450 implementation should include identification of key roles and expertise within the FAA required to evaluate license applications in a performance-based framework.
- The FAA should prioritize Part 450 clarification through guidance and policy balanced with reforms to ensure that it is prepared to efficiently and effectively manage an increasing number of applicants and existing licenses transitioning from existing licenses to Part 450.

A composite image of Earth from space, showing the planet's curvature and a bright sun in the background. A crescent moon is visible in the upper right. The image is overlaid with a grid of white lines.

Closing Remarks (including Lessons Learned Information System)

July 11, 2023



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Lessons Learned Information System

- The LLIS is envisioned to be an information system which provides de-identified safety lessons learned which are common across the industry gained from licensing, inspections, and mishap investigations.
- The FAA would also provide an opportunity for the industry to voluntarily submit lessons learned to the FAA to be included in the LLIS via an OMB-approved form.
- The FAA would plan to make this information available to the public via our website.



Lessons Learned Information System

Historical and Future Timeline

- 2015 – initiated an implementation plan but put it on hold
- Summer 2023 – updating the previous plan to include updating the form to be used by industry to submit lessons learned and developing the format for web-presentation (security, GUI, etc.)
- August 2023 – providing the draft plan to COMSTAC for review, advice and recommendations on implementation
- CY 2024– implement the LLIS



Lessons Learned Information System

- FAA is developing a plan to initiate an LLIS database
 - Initially, the database would be populated with items from AST – from licensing inspections, and mishap investigations. This information would be de-identified and provide broadly applicable lessons learned.
 - Industry will be invited to voluntarily submit their own lessons learned, in a manner that protects proprietary information via an OPM approved form.



Closing Remarks

- Next COMSTAC
 - November 7 & 8, 2023, in person.
 - Location: Washington DC

