



June 21, 2019

Wayne R. Monteith
Associate Administrator and
Randy Repcheck
Office of Commercial Space Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Mr. Monteith and Mr. Repcheck

Space Florida respectfully submits the following comments and concerns regarding the Federal Aviation Administration's (FAA) Notice of Proposed Rulemaking (NPRM) for Streamlined Launch and Reentry Licensing Requirements. We also specifically request on behalf of Florida and other state-chartered space transportation entities formal consultations on the proposed rule pursuant to Executive Order (EO) 13132, Federalism. We believe FAA's proposed amendment could have substantial direct effect on the states, and/or the relationship between the Federal Government and the states. We believe there are implications in the proposed regulations regarding distribution of responsibilities among the various levels of government in relation to the nation's space transportation system.

Space Florida is an independent special district and political subdivision of the State of Florida, with statutory powers and responsibilities related to the development, operation, and safety of space transportation facilities in the State, including those co-located with the federal installations of NASA and the U.S. Air Force at Cape Canaveral Spaceport. We are one of 12 FAA-licensed spaceports operating under a state's authority, and one of four state-chartered entities that participated in and concurred fully in the recommendations of the Streamlined Launch and Reentry Licensing Requirements Aviation Rulemaking Committee (ARC). Justification for State consultation pursuant to EO 13132 is provided below.

Attached to this letter for your consideration and action, as appropriate, are questions we seek a formal response to; requests for additional data and documents; and several proposed amendments we request be included in a supplemental NPRM.

Primary Comments and Concerns

1. The FAA has failed to resolve or mitigate in this NPRM the unnecessarily burdensome regulatory environment that exists due to overlapping jurisdictions and duplicative procedures imposed on commercial launch and reentry operators located on federal launch/reentry sites and federal ranges. It therefore fails to provide the regulatory relief that the U.S. Secretary of Transportation was directed by Congress to pursue in Public Law 114-90 (Section 113); and as directed by the President in Space Policy Directive (SPD) 2. Eliminating overlapping responsibilities and duplicative requirements remains a core improvement objective in streamlining U.S. launch and reentry licensing requirements for

505 ODYSSEY WAY, SUITE 300, EXPLORATION PARK, FL 32953

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current and future commercial operators. Having asked for and received a consensus recommendation from the FAA Aviation Rulemaking Committee (ARC) on this topic, the FAA did not incorporate those recommendations into the proposed amendment. We do not agree that the FAA has demonstrated its approach will “reduce operator burden to the largest extent possible” or that federal entities “establish interagency processes to manage closely related functions in as smoothly and least burdensome manner possible” as stated in the NPRM narrative discussion.

2. Contrary to the FAA’s premise the proposed amendment is a “deregulatory action” under EO 13771, the revisions actually expand FAA regulation into at least three new areas, two of which were not previously identified to industry as prospective changes to the current rules. Congressional and Presidential “streamlining” direction to FAA seemed clear: rescind or revise outdated or overly burdensome rules in order to promote economic growth; minimize uncertainty; and encourage American leadership in space commerce. However, the NPRM contains new regulatory approaches that impose unknown costs, administrative burdens, and programmatic risks. New regulations include: (a) creation of a new category of property designated as a “critical asset” which must be protected against “loss of functionality” by prescribed risk criteria limiting each designated asset’s exposure to launch or reentry hazards; (b) the establishment of a new risk analysis to be performed for every second of flight to assess the potential consequences of a launch accident regardless of its probability of occurring; and (c) the creation of a new category of “public” defined as “Neighboring Operations Personnel.” We do not agree with the FAA’s assertions in the NPRM narrative that attempt to minimize the cost, administrative burden, or programmatic risks associated with these new regulatory approaches.
3. While FAA can legitimately claim a reduction in many of the outdated, overly-prescriptive requirements contained in the existing rule set, notably in procedures documentation, paperwork requirements, and directed analytical methods; it has replaced those with rules that are overly-ambiguous and subject in many cases to subjective regulatory determinations based not on defined standards for performance but on a to-be-determined opinion on the sufficiency of the operator’s submission. Instead of representing a performance-based improvement, this will result in an unacceptable level of regulatory uncertainty. This is underscored by the absence of defined performance criteria and matured guidance documents to provide alternative acceptable approaches, including a discussion of “meets intent” approaches. Our concern is heightened by the GAO’s recent findings (GAO -19-437) that FAA’s Office of Commercial Space Transportation (AST) *“does not have a complete understanding of its current and projected workload, nor does it know the number of staff and types of staff skills and competencies necessary to meet those workload needs.”*

Requested State Consultation

We do not agree with FAA’s Executive Order Determination for EO 13132 Federalism, as published in the NPRM. Space Florida, and most other state-authorized spaceports, would have standing as state entities as defined in this EO. The roles and responsibilities of states in space transportation are clearly addressed in the statute FAA cites as authority for this rulemaking (Title 51 Chapter 509) which states: *“the participation of State governments in encouraging and facilitating private sector involvement in space-related activity, particularly through the establishment of a space transportation-related infrastructure, including launch sites, reentry sites, complementary facilities, and launch site and reentry site support facilities, is in the national interest and is of significant public benefit.”*¹

¹ §50901 (9)

Further, the Secretary of Transportation is encouraged in §50919 to “consult with a State to simplify and expedite the approval of a space launch or reentry activity.”

Finally, in Section 115 of the “Commercial Space Launch Competitiveness Act” of 2015 (Pub. L. 114-90) the Congress declared that: “State involvement, in the development, ownership, and operation of launch facilities can enable growth of the Nation’s commercial suborbital and orbital space endeavors and support both commercial and Government space programs; State launch facilities and the people and property in the affected launch areas of those facilities may be subject to risks resulting from an activity carried out under a license under chapter 509 of title 51, United States Code.”

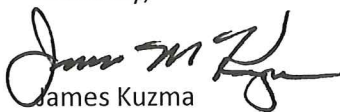
Clearly, there are Federalism implications in the broad revisions and new regulatory requirements of the draft rule published by FAA in the NPRM, in our view. Here are just some examples:

- The new requirements published in the NPRM (e.g. critical assets and the conditional estimated casualty analysis) have unknown and potentially significant impacts on state assets, state operations, and state competitiveness in growing a state’s commercial space transportation-based economy;
- FAA’s definition of neighboring operations personnel and the role of state launch site operators as drafted is substantially different from what was recommended by the ARC, as well as the perspectives of states on the appropriate definition of “public”;
- Concerns that the licensing amendments, as drafted, could actually impede, not advance, innovation and competitiveness of the U.S. industry, advantaging overseas competitors, and therefore undermining the substantial investments that have been made by the states.

The GAO in their May 2019 Report to Congressional Requesters on Commercial Space Transportation² found that funding for infrastructure at active U.S. launch sites has shifted from Federal to state, local, and private sources. The vast majority of that non-federal funding has been in Florida at the Cape Canaveral Spaceport, and Florida is therefore a major stakeholder in the consequences of the proposed rule. We believe Virginia, Alaska, California, Texas, and New Mexico may be similarly affected.

We concur with many of our colleagues that this streamlining action is critical to the nation’s space leadership. It will impact affected states and commercial operators in their combined efforts to meet the launch and reentry demand of both U.S. Government and global markets. It is essential that FAA takes whatever time is needed to get this right. Space Florida looks forward to your response and FAA’s continuing engagement with the states and the industry in this rulemaking process.

Sincerely,



James Kuzma
Senior Vice President and
General Manager, Cape Canaveral Spaceport
Space Florida

(1 attachment)

² GAO-19-437, May 2019

ATTACHMENT

SPACE FLORIDA REQUEST FOR INFORMATION & PROPOSED AMENDMENTS REGARDING FAA PROPOSED REVISIONS TO 14 CFR PART 400, *et seq.* (DOCKET NO. FAA-2019-0229)

1. Reference Section III D. Launch from a Federal Launch Range

- The revised FAA rules cannot be evaluated for their consequences without viewing them in the context of other USAF and/or NASA requirements applicable to the commercial site and launch operators located on federal launch/reentry sites and ranges. The FAA has not adequately explained how these new rules will meet the intent and letter of the NDAA, CSCLA, and National Space Council directives regarding duplicative rules and overlapping federal responsibilities.
- Please provide as a document added to the docket that interagency MOU referenced in FAA's Section 113 first annual Report to Congress in response to the reporting requirement in Pub. L. 114-90.
- Please provide to the docket the Secretary's subsequent Section 113 report(s) to Congress on regulatory streamlining progress as are required in Section 113 of Pub. L. 114-90 since the FAA concedes that duplicative requirements still exist and that "this proposal does not include language to eliminate duplicative approvals" (pg. 15305, Federal Register/Vol. 84, No. 72.)
- Please provide as documents added to the docket any updated MOAs with other federal agencies detailing coordination of duplicative or similar functions and associated requirements on commercial operators located on federal launch/reentry sites and ranges
- The FAA appears to be saying it has no statutory authority to establish more streamlined, less burdensome rules for licensed activities from a Federal Launch Range. We believe the FAA has a statutory obligation to reconcile jurisdictional overlaps and duplicative rules in favor of less burdensome requirements. FAA can and should amend the current rules to facilitate that objective or provide a clearer justification of why it cannot provide such regulatory relief in documented processes with other federal agencies as a section within its licensing regulations.

2. Reference Section III – Process Improvements, E. Environmental Reviews

- FAA's description of its approach to streamlining includes revisions to the licensing process allowing a single license for multiple versions of a vehicle, and for multiple sites. However, the FAA is clear that an operator that does so will have to show compliance with environmental requirements to include such flexibility within a single license (Pg. 15303). The proposed amendment includes revisions to "consolidate" environmental review into a single proposed section: 450.47. We believe that while FAA's National Environmental Policy Act (NEPA) review processes may not have changed, it appears that policies and practices are now going to be codified in the regulations, notably that FAA may request, and operators will pay the cost of, new or supplemental environmental analyses that FAA deems are necessary for compliance BEFORE it makes a determination to add multiple vehicle configurations, operational parameters, or launch site locations to an operator's single license. FAA has not analyzed or estimated the potential cost and administrative burdens associated with the environmental review aspects of the new rule.

- FAA's approach in the NPRM fails to address how it may seek to improve and streamline its NEPA and other environmental processes to assist the single license concept to achieve the benefits envisioned by the National Space Council.

4. Reference Section III – Discussion of the Proposal, Draft Advisory Circulars (ACs)

- While there is a published table of Advisory Circulars which are currently in development, only one draft AC is posted to the docket. The notation on the supporting document entitled "Subpart C – Accepted Means of Compliance Table" states the following: "The ACs listed in this table are currently under development, and the FAA plans to release these with the Final Rule." Only a single draft AC (AC 450.115-1) is provided in the docket.
- Elsewhere the NPRM (pg. 15304 Federal Register/Vol. 84, No. 72) it is represented that the FAA has developed ACs and placed these in the docket for public review and comment, yet the table as a supporting document and the draft AC are labelled "comments not accepted." Also, the GAO Report highlighted that draft guidance documents were released by FAA with the NPRM.
- FAA needs to address these inconsistencies, especially since a core premise of flexible, performance-based revisions to current rules relies on clearly defined standards and ACs. The industry stakeholders cannot effectively evaluate whether the proposed amendment truly achieves the benefits FAA is identifying. A supplemental NPRM should be published AFTER all of the performance standards and ACs are developed and included in draft form with the NPRM.

4. Reference Section III – Additional Technical Justification and Rationale, C. Changes to Parts 401,413, 414, 420, 437, 440; and Section IV B. Regulatory Flexibility Determination

- In its Statement of the Legal Basis and Objectives (pg. 15408 Federal Register/Vol. 84, No. 72) the FAA states: "The FAA is authorized to regulate only to the extent necessary (our emphasis) to protect the public health and safety, safety of property, and national security and foreign policy interests of the United States." This statement is required by Pub. L. 96-354 which also requires an agency to solicit and consider flexible regulatory proposals, explain their regulatory action rationale, and assure such proposals are given serious consideration." We believe that FAA has not adequately demonstrated the necessity for some of the new regulations contained within the proposed amendments, or seriously considered some of the alternative proposals presented in the report of the ARC. Examples are summarized below.
- New definition and regulations regarding Critical Assets. This is a totally new FAA regulatory requirement (see Property Protection, pg. 15310 Federal Register/Vol. 84, No. 72.) While FAA asserts this new regulation would be consistent with current practices at Federal launch ranges, it does not explain why it is necessary for the FAA to codify this beyond those current practices, or to expand the concept to all FAA-licensed launches "whether to or from a Federal launch range or a non-Federal launch or reentry site." The FAA states it coordinated this new requirement with NASA, the Department of Defense, and the Intelligence Community, but it did not coordinate it with the states or the industry operators prior to its publication as a proposed amendment. Beyond its obligation to explain why this substantial expansion of regulatory oversight by FAA is necessary, the discussion of how this rule would be implemented is ill-defined in the NPRM. Exactly what does "loss of functionality" mean? It appears

from the narrative that FAA will accept a designation of an asset – “property, facilities, or infrastructure necessary to maintain national defense or assured access to space for national priority missions” — by Federal agencies and property owners, launch site operators, and perhaps launch operators themselves. Risk criteria to assure “a high probability for continued functionality” would be codified and serve as a flight safety constraint, and a constraint on ground operations as well. Who designates an asset as critical, and through what process does the FAA accept the designation and impose the new requirements on a launch operator? Can another federal agency, or state entity, that disagrees with the FAA’s determination impose its requirements independently of FAA? Who arbitrates the potential conflicts between neighboring operations that each have assets designated as critical? Is common use infrastructure critical? What implications does the designation have, if any, for the MPL calculation and resultant insurance and liability aspects of a launch? What limits, if anything, the types and numbers of assets that may be designated by multiple parties within proximity to a licensed launch activity, therefore imposing extraordinary analysis requirements, unknown costs, and program risks on an operator to comply? We believe all of these issues must be considered, and addressed in a supplemental NPRM, informed by state consultations and industry inputs, well before becoming a Final Rule.

- FAA approach to Neighboring Operations Personnel (NOP). The ARC responded to FAA’s questions regarding the advisability of changing the regulatory definition of “public.” As there is no statutory definition of “public” or “public health and safety” in Title 51 Chapter 509, the ARC proposed consideration of a new definition that would establish a clear distinction between the general public population uninvolved in the activities of a launch or reentry site (generally, a spaceport that includes one or multiple licensed launch operators and may or may not be co-located with federal launch or reentry operations) and the population of authorized and trained workers (both resident and transient) who are required to perform functions on a day-to-day basis within the boundaries of such a spaceport. The appropriate protections for the various categories of workers engaged in space transportation operations and support on spaceports could, and should, be managed and regulated at the installation level, in our opinion. A more detailed discussion for why this could be a “deregulatory” action by the FAA was provided in the ARC report (pgs. 35-36.) The ARC suggested, and we reiterate, the benefits of such a change would be to reduce regulatory burden and costs on both operators and the FAA. Instead, the FAA’s revised rules creates a new definition that incorporates “neighboring operations personnel” as a distinct class of public treated as third parties for purposes of FAA safety and financial responsibility regulations. The “necessity” of the FAA’s approach versus that which was recommended by the ARC is not well defended or explained by FAA in the NPRM. There are unclear implications to how FAA will treat its implementation of this new regulation both in regard to FAA’s determination of Most Probable Loss (MPL) calculation and resultant insurance requirements. The ARC had identified a potential to exclude NOP from the MPL calculation and definition as public third parties through allocation of risk and liability arrangements between site operators and/or between neighboring operators (e.g. cross waivers of liability.)
- The FAA identifies the categories of personnel that can be designated as NOP as those required to perform safety, security, or critical tasks. The definition of NOP in 401.5 of the proposed amendment reads that the determination of which personnel meet those classifications is assigned to “the Federal or licensed launch and reentry site operator.” Can FAA confirm it will by this definition allow a Federal installation operator – e.g. NASA KSC or USAF CCAFS – or a state or local entity licensed by FAA as a launch or reentry site operator the sole discretion to determine which personnel and at what numbers to treat as NOP? Will FAA be amending Part 420 and Part 433 to reflect this responsibility? It does not appear, a revision to Part 420 or Part 433 is included in the draft amendment for this purpose.

- Ground Safety and Hazards Mitigation. The FAA has proposed replacing many of the current prescriptive regulations for ground safety with a “qualitative” analysis of ground operations that an operator would be required to submit, using “industry or government standards” in proposing how to mitigate risks to the public, including neighboring operations personnel. This is one of many examples where there is no clear guidance on what standards are specifically acceptable, or how the FAA will judge the sufficiency of the analysis. In addition, proposed sub-section 450.185 details what must be included in this analysis, the definition of mitigation measures, and associated requirements. FAA notes “any part of the ground hazard analysis could be reviewed during inspection” (pg. 15362 Federal Register/Vol. 84, No. 72.) This approach imparts substantial regulatory uncertainty, both in terms of how a regulator will “qualitatively assess” the operator’s submission, and how an FAA inspector will evaluate ground operations against an interpretation of the analysis and planned mitigation methods. This is another area where the ARC proposed a reliance on local spaceport authorities instead of FAA regulation. The ARC recommended: *“Federal ranges and licensed commercial spaceports should have authority to evaluate risk and compliance with public safety requirements for operations conducted on their facilities. This would eliminate duplicative management of ground safety by the facility operator and the FAA and would lessen the administrative burden of operators providing mission specific ground operations data to the FAA when such materials are already provided to, or even generated by, the facility operator... Allowing the site (Federal range or spaceport) to manage public safety for ground operations is most efficient as they best understand their surrounding area and any unique constraints. Requiring operators to maintain ownership of ground safety and demonstrating that compliance to the FAA results in unnecessary costs and ignores the role of the site.”*

5. Reference Section IV – B. Regulatory Flexibility Determination

- Under the Regulatory Flexibility Act of 1980 (Pub. L. 96-354), the FAA is required in its proposed rule to “state all federal rules that may duplicate, overlap, or conflict.” Agencies are required to solicit and consider flexible regulatory proposals.
- FAA definitively states “no other federal rules duplicate, overlap, or conflict with FAA’s launch and reentry licensing requirements” (pg. 15408, Federal Register/Vol. 84, No. 72.)
- How can FAA reach that determination given its concession that duplicative rules and requirements exist on the federal ranges as discussed above? Please provide the basis and rationale for why rules and process imposed by both FAA and USAF do not constitute duplication and/or overlap?
- In relation to Space Florida’s request for consultation regarding Federalism implications, we believe the states that participated in the FAA’s ARC joined with industry in proposing a more flexible regulatory approach to handling ground safety and the concurrent operations requirements of other spaceport operators. A majority of the ARC proposed a less expansive definition of “public” than is currently reflected in the FAA rules.
- Space Florida and other state-chartered entities operating as special districts or in combination with local airport authorities should qualify as small governmental jurisdictions for purposes of the RFA. Accordingly, we do not agree with the FAA’s determination and estimate for the number of small entities that may be directly affected by this proposed rule. Limiting the analysis to only two companies which have engaged in pre-application consultation ignores the larger body of small entities which may reasonably be expected to seek licenses in the future, including launch or reentry site licenses.

6. Reference Section VI – The Proposed Amendment

- Space Florida is continuing its review of the specific proposed language contained in its proposed amendments to existing rules and expects to submit additional comments prior to the deadline for comments.
- We have at this point seen the inputs formally submitted by SpaceX and Blue Origin and concur with the need for responses to each of their questions, and with the concerns they have expressed in those submissions.