

Congress of the United States
House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

2321 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6301

(202) 225-6375

www.science.house.gov

April 6, 2022

The Honorable Joseph R. Biden
President
The White House
1600 Pennsylvania Ave.
Washington, DC 20500

Dear President Biden:

As the Chairwoman and Ranking Member of the House Committee on Science, Space, and Technology, we write to express our concerns regarding the Administration's Notice of Proposed Rulemaking (NPRM) for commercial space accident investigation, as issued by the National Transportation Safety Board (NTSB).¹ Responsibilities and authorities for space accident investigation are to be determined by congressional action, as reflected in Title 51 of the United States Code, not through proposed regulations that are outside of established authorities. The NTSB's proposed rulemaking is inconsistent with statutory authorities, existing interagency agreements and regulations, and it is plainly unlawful.

Spaceflight is an area of United States national leadership and is of increasing importance to the national security and economic growth of our country. Rocketry is complex and sending spacecraft, especially humans, into space remains high risk. Ongoing improvements in the safety of such operations is foundational to the continuing growth, success, and leadership of our civil and commercial space activities.

The NTSB has contributed important skill and insight to commercial spaceflight accident investigation over previous decades. The Board's experience is an asset to such investigative processes. While we share the NTSB's desire to promote safety, we are concerned that the NTSB's proposed rulemaking on commercial space accident investigation contravenes existing

¹ <https://www.federalregister.gov/documents/2021/11/16/2021-24766/commercial-space-investigations>, Docket No. NTSB-2021-0008.

agreements and statutory authorities including those related to commercial space launch and reentry activities represented in Title 51 United States Code Chapter 509 on Commercial Space Launch Activities and on human spaceflight accident investigation under Title 51 United States Code Chapter 707, Human Space Flight Independent Investigation Commission. Please see attachment A for more information.

We insist that these are not minor issues that can be clarified with an updated proposed rule. They are fundamental conflicts that undermine the entire NPRM. If implemented, the additional duplicative and redundant requirements would confuse operators and lead to unnecessary reporting burdens that, as one commentor stated, could "...harm the national interest and stunt the growth of this emerging industry."² At a time when our national and economic security increasingly depend on space and innovation, the Federal Government should seriously assess proposals that could stifle our national progress.

As the Committee of jurisdiction,³ we look forward to working with our colleagues in Congress and in the Administration and will continue to examine the overall commercial space accident investigation framework, identify changes that may be needed to strengthen the framework, and provide appropriate direction in law under Title 51 of the U.S. Code. We reiterate that this rulemaking is plainly unlawful and we urge you to terminate any further action and rescind the proposed rule.

Sincerely,



Eddie Bernice Johnson
Chairwoman
Committee on Science, Space,
and Technology



Frank Lucas
Ranking Member
Committee on Science, Space,
and Technology

² Crutchfield, Allison, Sr. Manager, Regulatory Affairs, SpaceX; Public Comment on NTSB NPRM, NTSB-2021-0008, January 18, 2022.

³ "Astronautical research and development, including resources, personnel, equipment, and facilities" and "Outer space, including exploration and control thereof". House Rule X(1)(p)(2)&(12).

CC:

The Honorable Kamala Harris
Vice President and Chair
National Space Council
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20006

The Honorable Pete Buttigieg
Secretary
Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

The Honorable Jennifer L. Homendy
Chair, National Transportation Safety Board
490 L'Enfant Plaza, SW
Washington, D.C. 20594

Unambiguous Statutory Authority

Congress's legislative intent is abundantly clear concerning who it statutorily authorizes to conduct commercial space flight accident investigations. The President is required by law to form the Human Space Flight Independent Investigation Commission, to independently investigate any incident that results in the loss of any U.S. space vehicle carrying humans including vehicles carrying humans pursuant to a contract with the Federal Government, which extends to commercial space launch activities with this mission.⁴

Moreover, Congress specifically granted authority to conduct independent investigations related to commercial launch and reentry to the Secretary of Transportation. The relevant statute is Section 50917 of 51 U.S.C., Subtitle V, Chapter 509, "Commercial Space Launch Activities," which states,

"(b) GENERAL AUTHORITY.-

- (1) In carrying out this chapter, the Secretary of Transportation may –*
 - (A) conduct investigations and inquiries;*
 - (B) administer oaths;*
 - (C) take affidavits; and*
 - (D) under lawful process-*
 - (i) enter at a reasonable time a launch site, reentry site, production facility, assembly site of a launch vehicle or reentry vehicle, crew or space flight participant training site, or site at which a payload is integrated with a launch vehicle or reentry vehicle to inspect an object wo which this chapter applies or a record or report the Secretary requires be made or kept under this chapter; and*
 - (ii) seize the object, record, or report when there is probably cause to believe the object, record, or report was used, is being used, or likely will be used in violation of this chapter.*
- (2) The Secretary may delegate a duty of power under this chapter related to enforcement to an officer or employee of another executive agency with the consent of the head of the agency."⁵*

The Secretary delegated authority to investigate commercial space launch and reentry accidents to the Administrator of the Federal Aviation Administration (FAA), not the NTSB. Additionally, the FAA requires its licensees to prepare Accident Investigation Plans, to ensure the preservation of evidence and data, and to cooperate with the FAA and NTSB.⁶

Departure from Existing Agency Roles

The proposed rulemaking would also appear to complicate and possibly supplant executive branch policy on space launch and reentry accident roles and responsibilities that has been clear

⁴ 51 U.S.C. Chapter 707 – Human Space Flight Independent Investigation Commission.

⁵ 51 U.S.C 50917 (emphasis added).

⁶ See, e.g, 14 CFR 431.45(c) and 14 CFR 450.173(d). See also, old 14 CFR 417.11(g).

for decades. The current defined arrangements are laid out in a 2004 memorandum of understanding between the NTSB, the Department of the Air Force, and the FAA regarding space launch accidents,⁷ a 1975 Reimbursable Memorandum of Agreement (Agreement) between the NTSB and DOT, and a 2000 Memorandum of Understanding between the FAA and the NTSB, added as an Appendix to the 1975 Agreement, that establishes the relationships, notification procedures, coordination requirements, and reporting responsibilities of the FAA Office of Commercial Space Transportation and the NTSB in connection with accident investigations associated with commercial space launch activities.⁸ Those memoranda, to our understanding, are in the process of being updated.

NTSB's NPRM states,

*"[i]n conducting commercial space investigations, the NTSB adheres to the terms memorialized in a Memorandum of Agreement (Agreement) with the Federal Aviation Administration (FAA) and in a Memorandum of Understanding (MOU) with the FAA and the United States Air Force (USAF)."*⁹

This was reinforced by the FAA's comments in response to the NTSB's NPRM, which stated,

*"[h]istorically, the FAA and NTSB have collaborated on commercial space accident or mishap investigations. The joint relationship has been governed by a series of three reimbursable agreements and/or memoranda of understanding (MOU) between the FAA and NTSB, executed between 1975 and 2004. To date, that working relationship has effectively served U.S. Government and industry."*¹⁰

The memoranda referenced by the FAA and NTSB make clear that NTSB's authority is limited to the following areas:

- "a. Known impact of a commercial launch vehicle, its payload or any component thereof outside the impact limit lines designated by the launch range facility; or"*
- "b. A fatality or serious injury (as defined by in 49 CFR 830.2) to any person who is not associated with commercial space launch activities and who is not located on the launch range facility; or"*
- "c. Any damage estimated to exceed \$25,000 to property which is not associated with commercial space launch activities and which is not located on the launch range facility."*¹¹

⁷ Memorandum of Understanding Between the National Transportation Safety Board, Department of the Air Force and Federal Aviation Administration Regarding Space Launch Accidents. Available at:

https://www.faa.gov/space/legislation_regulation_guidance/media/mou_space_launch_accidents.pdf

⁸ U.S. Department of Transportation, Federal Aviation Administration, National Policy, Order 8020.11D, Aircraft Accident and Incident Notification, Investigation, and Reporting. Available at:

https://www.faa.gov/documentLibrary/media/Order/FAA_Order_8020.11D.pdf, pp. 57-58.

⁹ National Transportation Safety Board, *Commercial Space Investigations*, Notice of Proposed Rulemaking, 86 Fed. Reg. 63324, November 16, 2021. Accessed at <https://www.regulations.gov/document/NTSB-2021-0008-0001>

¹⁰ Letter from Hon. Steve Dickson, Administrator, Federal Aviation Administration, to Hon. Jennifer Homendy, Chair, National Transportation Safety Board, January 14, 2022. Accessed at

<https://www.federalregister.gov/documents/2021/11/16/2021-24766/commercial-space-investigations>

¹¹ Reimbursable Memorandum of Agreement Between Department of Transportation and National Transportation Safety Board, Appendix H. Accessed at

https://www.faa.gov/space/legislation_regulation_guidance/media/mou_space_launch_accidents.pdf

Note that all of the criteria listed in the memoranda that allow for NTSB involvement in commercial launch and reentry accident investigations pertain to operations that occur outside the limit lines designated by the launch range, as defined by FAA, or fatalities, injuries, or damages to third parties not associated with the activity.

Previous NTSB Investigations in Context

While the NTSB has contributed to prior space launch and reentry accident investigation, it has done it within the well-established parameters of the memoranda of understanding and agreement outlined above. Referring to its authority, the NTSB stated in its NPRM that, “[t]he NTSB has exercised this authority and both led and supported commercial space launch and reentry investigations for more than 20 years.” NTSB has, in fact, appropriately participated on many instances such as the Columbia space shuttle accident and NASA’s Genesis sample return mission, but their involvement was limited to observer and participant status. NTSB did not lead these investigations.

NTSB led a commercial space launch accident investigation once, upon invitation, when the authority was delegated by the appropriate investigating agency. As stated in NTSB’s own Special Investigation Report, the 1993 launch anomaly of a Pegasus launch vehicle “was investigated by the Safety Board, **following an invitation by the Department of Transportation**, in accordance with the Memorandum of Agreement dated June 5, 1989.”¹²

NTSB led only one investigation *related* to a commercial space launch and reentry investigation, the 2014 Scaled Composites accident.¹³ In this instance, while the NTSB’s own report claimed that it had the authority to investigate, the report also stated that “...debris landed outside of the designated landing site...”.¹⁴, which is consistent with NTSB’s role under the FAA/NTSB MOU to investigate a “[k]nown impact of a commercial launch vehicle, its payload or any component thereof outside the impact limit lines designated by the launch range facility.”¹⁵ As noted above, FAA and NTSB agreements have outlined these roles and responsibilities for decades.

Deviation from NTSB Statutory Authority

The aforementioned Memorandum between FAA and NTSB states, “[n]othing in this agreement impairs the authority of the NTSB to investigate any other commercial space launch accident which, in the judgement of the Board, is subject to Section 304(a)(1)(F) of the Independent Safety Board Act of 1997.” The citation listed corresponds to 49 U.S.C Section 1131(a)(1) which

¹² “Launch Procedure Anomaly, Orbital Sciences Corporation, Pegasus/SCD-1, 80 Nautical Miles East of Cape Canaveral, Florida,” Commercial Space Launch Incident, Special Investigation Report, NTSB/SIR-93/02, PB93-917003, National Transportation Safety Board. Accessed at <https://www.nts.gov/safety/safety-studies/Documents/SIR9302.pdf> (emphasis added).

¹³ “In-Flight Breakup During Test Flight Scaled Composites SpaceShipTwo, N339SS, Near Koehn Dry Lake, California, October 31, 2014,” Aerospace Accident Report, NTSB/AAR-15/02, PB2015-105454, National Transportation Safety Board. Accessed at <https://www.nts.gov/investigations/AccidentReports/Reports/AAR1502.pdf>

¹⁴ *Ibid.*

¹⁵ Reimbursable Memorandum of Agreement Between Department of Transportation and National Transportation Safety Board, Appendix H. Accessed at https://www.faa.gov/space/legislation_regulation_guidance/media/mou_space_launch_accidents.pdf

is also the statute that the NTSB cites in their NPRM as justification for authority.¹⁶ The statute states in full:

“(a) *General.-*

(1) The National Transportation Safety Board shall investigate or have investigated (in detail the Board prescribes) and establish the facts, circumstances, and cause or probable cause of-

(A) an aircraft accident the Board has authority to investigate under section 1132 of this title or an aircraft accident involving a public aircraft as defined by section 40102(a) of this title other than an aircraft operated by the Armed Forces or by an intelligence agency of the United States;

(B) a highway accident, including a railroad grade crossing accident, the Board selects in cooperation with a State;

(C) a railroad accident in which there is a fatality or substantial property damage, or that involves a passenger train;

(D) a pipeline accident in which there is a fatality, substantial property damage, or significant injury to the environment;

(E) a major marine casualty (except a casualty involving only public vessels) occurring on or under the navigable waters, internal waters, or the territorial sea of the United States as described in Presidential Proclamation No. 5928 of December 27, 1988, or involving a vessel of the United States (as defined in section 2101(46) of title 46), under regulations prescribed jointly by the Board and the head of the department in which the Coast Guard is operating; and

(F) any other accident related to the transportation of individuals or property when the Board decides-

(i) the accident is catastrophic;

(ii) the accident involves problems of a recurring character; or

(iii) the investigation of the accident would carry out this chapter.

With respect to NTSB’s statutory authority in subsections (A) through (E), Congress specifically referred to aircraft, highway, railroad, pipeline, and marine vessels, however the statute does not include commercial space launch or reentry. Congress is very clear and unambiguous when it defines modes of transportation and has never declared or defined space launch and reentry as modes of transportation. To the contrary, 49 U.S.C. 111(g) directs NTSB to:

“establish distinct and appropriately staffed bureaus, divisions, or offices to investigate and report on accidents involving each of the following modes of transportation: (1) aviation; (2) highway and motor vehicle; (3) rail and tracked vehicle; (4) pipeline; and (5) marine.”

Space is not a mode of transportation. Furthermore, Section 305(b)(5) of the Independent Safety Board Act of 1974 only listed four modes of transportation: aviation, highway and motor vehicle, railroad and tracked vehicle, and pipeline.¹⁷ Nonetheless, Congress affirmatively added “marine” in 2006, demonstrating that Congress speaks clearly when it defines modes of transportation.¹⁸

¹⁶ National Transportation Safety Board, *Commercial Space Investigations*, Notice of Proposed Rulemaking, 86 Fed. Reg. 63324, November 16, 2021. Accessed at <https://www.regulations.gov/document/NTSB-2021-0008-0001>

¹⁷ Independent Safety Board Act of 1974, Pub. L. No. 93-633. Accessed at <https://www.govinfo.gov/content/pkg/STATUTE-88/pdf/STATUTE-88-Pg2156.pdf>

¹⁸ National Transportation Safety Board Reauthorization Act of 2006, Pub. L. No. 109-443. Accessed at <https://www.congress.gov/109/plaws/publ443/PLAW-109publ443.pdf>

Returning to NTSB’s statutory authority, subsection (F), grants NTSB authority to investigate, “any other accident related to the transportation of individuals or property when the Board decides-...” As previously discussed, commercial space launch is not a mode of transportation. Not only does the Federal Government not deem these activities modes of transportation, commercial launch and reentry statutes are codified in U.S. Code at Title 51. “NATIONAL AND COMMERCIAL SPACE PROGRAMS”, not Title 49. “TRANSPORTATION.” NTSB similarly claimed in its 2015 memo that “Congress explicitly has addressed whether commercial space activity should be considered transportation when it determined that ‘space *transportation* ... is an important element of the transportation system of the United States ‘51 U.S.C. § 50901(a)(8)’”¹⁹ (emphasis in original). This also is an incorrect interpretation of the statute.

The provision cited by NTSB was a finding in an amendment to the Commercial Space Launch Act that was included in P.L. 101-611, the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1991.²⁰ The NASA Authorization Act, Fiscal Year 1991 amends the Commercial Space Launch Act with additional “findings” regarding how the private sector could support the Nation and NASA’s “space transportation” system and infrastructure. It is important to note that Congressional “findings” provisions are nonbinding and, when asserted alone, cannot be independently operative statutory language. Therefore, Congress did not intend for the “finding” to authorize NTSB to usurp the Secretary of Transportation’s clearly established statutory authority in 51 U.S.C. 50917.

The phrase “related to the transportation of individuals or property” in NTSB’s statutory authority may, indeed, allow for NTSB to investigate non-transportation activities like commercial launch and reentry accidents that impact specifically defined modes of transportation (listed in subsections (A) through (E) of 49 U.S.C Section 1131(a)(1)), but the phrase certainly does not give NTSB the authority to deem any activity “transportation.” The phrase simply allows NTSB to investigate accidents that affect defined modes of transportation.

Also, 49 U.S.C. Chapter 11, which defines NTSB’s authority, clarifies that “...the term ‘accident’ includes damage to or destruction of vehicles in **surface or air transportation or pipelines...**” (emphasis added). It is worth noting that this definition of “accident” in NTSB’s authority does not explicitly include space. While NTSB argues that the definition simply “includes” the above clause, and that it does not exclude other domains, such an interpretation ignores the breadth of positive, and unequivocal, declarations of authority in relevant statutes that grant other agencies authority to conduct space launch and reentry accident investigations.²¹

Deviating from clearly established statutory authority, existing interagency memoranda of understanding and agreement, and procedures for accident investigation under the FAA AST’s

¹⁹ Memorandum from David K. Tochen, General, SUBJECT: THE NATIONAL TRANSPORTATION SAFETY BOARD’S AUTHORITY TO INVESTIGATE COMMERCIAL SPACE LAUNCH ACCIDENTS, July 1, 2015. Attached as Appendix A to Aerospace Accident Report, NTSB/AAR-15/02 PB2015-105454, “In-Flight Breakup During Test Flight Scaled Composites SpaceShipTwo, N339SS Near Koehn Dry Lake, California,” National Transportation Safety Board, October 31, 2014. Accessed at <https://www.nts.gov/investigations/AccidentReports/Reports/AAR1502.pdf>

²⁰ National Aeronautics and Space Administration Authorization Act, Fiscal Year 1991, Pub. L. No. 101-611. Accessed at <https://www.congress.gov/101/statute/STATUTE-104/STATUTE-104-Pg3188.pdf>

²¹ See 51 U.S.C. 50917.

licensing regime, discussed above, creates duplication and confusion that could have significant implications for safety.

Critical Distinctions and Specialized Expertise

Commercial space launch and reentry are not modes of transportation, nor are they forms of common carriage. The NTSB NPRM fails to appreciate the inherent risk of space operations by incorrectly implying that that safety is assumed in launch and reentry operations. NTSB's NPRM states:

“[b]y codifying its investigative role in commercial space transportation, the NTSB anticipates that Subpart F will enhance transportation safety by enabling the agency to carry out its statutory mission of conducting safety investigations, identifying necessary corrective actions, and preventing future space transportation accidents and incidents.”

In contrast, Congress crafted laws that appreciate this risk. Understanding the engineering challenges involved in space launch and reentry, Congress adopted a regulatory regime to protect the uninvolved public. Activities involving crew and space flight participants are conducted separately under an informed consent regime.²² This means their involvement is conditioned upon participants and crew being made aware of the inherent risks associated with the activities. Congress reinforced this concept in 51 U.S.C. 50905 (b)(4)(B), which states, “the United States Government has not certified the launch vehicle as safe for carrying crew or space flight participants.” This informed consent mechanism is meant to ensure transparency and fully disclose to the participant that there is an inherent risk in spaceflight and that government has not certified the activities as safe for the general public.²³

Congress's assessment of space launch and reentry risk is informed by the investigations of several tragic accidents. The Columbia Accident Investigation Board (CAIB) commented on whether the nation should expect levels of safety for space launch similar to common modes of transportation. Its report found:

“[i]t is unlikely that launching a space vehicle will ever be as routine an undertaking as commercial air travel – certainly not in the lifetime of anybody who reads this. The scientists and engineers continually work on better ways, but if we want to continue going into outer space, we must continue to accept the risks.”²⁴

The CAIB report continued:

“[b]ecause of the dangers of ascent and re-entry, because of the hostility of the space environment, and because we are still relative newcomers to this realm, operation of the Shuttle

²² Under 51 U.S.C. 50905(b)(5), the holder of a license or permit under Chapter 509 of Title 51 United States Code is required to inform space flight participants of the risks of the launch and reentry and the space flight participant is required to provide written informed consent to participate in the launch and reentry.

²³ H. Rept. 114-1119 accompanying H.R. 2262, “Spurring Private Aerospace Competitiveness and Entrepreneurship Act of 2015, May 18, 2015. Accessed at <https://www.congress.gov/congressional-report/114th-congress/house-report/119>

²⁴ Report of the Columbia Accident Investigation Board, August 26, 2003. Accessed at https://www.nasa.gov/columbia/home/CAIB_Vol1.html

and indeed all human spaceflight must be viewed as a developmental activity. It is still far from a routine, operational undertaking. Throughout the Columbia accident investigation, the Board has commented on the widespread but erroneous perception of the Space Shuttle as somehow comparable to civil or military air transport. They are not comparable; the inherent risks of spaceflight are vastly higher, and our experience level with spaceflight is vastly lower...The Board urges NASA leadership, the architects of U.S. space policy, and the American people to adopt a realistic understanding of the risks and rewards of venturing into space.”²⁵ [emphasis added]

As Congress has consistently found, and independent investigators have warned, space launch and reentry are developmental activities that are not comparable to modes of transportation as the inherent risks are vastly higher and our experience is vastly lower. Adopting the NTSB’s position that space launch and reentry are akin to common carriage sends the wrong message to the general public that space operations are conducted with an expectation of safety.

NASA, FAA, and DoD have considerable expertise in space operations. Unlike NTSB, DoD and NASA have conducted space operations since the beginning of the space era. We remain concerned that, despite NTSB’s experience conducting transportation accident investigations, expansion of NTSB’s role in space accident investigations could compromise safety.

Notable Stakeholder Concerns

In addition, comments submitted to the NPRM clearly outline stakeholder concerns about confusion, uncertainty, and duplication created by the NPRM:

- *“If the proposed rule is published as written, it would create a confusing regulatory overlay that is both inconsistent with and duplicative of existing FAA safety regulations”²⁶*
- *“The proposed rule would introduce uncertainty and confusion into what is an already proven and safe investigation process. It would also add duplicative requirements to current licensing requirements overseen by the FAA’s Office of Commercial Space Transportation (AST)”²⁷*
- *“[The] proposed rule would introduce uncertainty and confusion into what is an already proven and safe investigation process.”²⁸*

By walking away from the long-standing MOU and MOA process that informed the relationship between NTSB and federal agencies, operators and agencies are presented with uncertain roles and responsibilities. For instance, the NTSB’s NPRM hinges on the assumption that NTSB has the authority to deem anything “transportation,” potentially including national security and intelligence community commercial launch mishaps. Under the current process, these missions are excluded from NTSB investigations for understandable reasons. But the NPRM raises

²⁵ *Ibid.*

²⁶ Crutchfield, Allison, Sr. Manager, Regulatory Affairs, SpaceX; Public Comment on NTSB NPRM, NTSB-2021-0008, January 18, 2022.

²⁷ Marrotta, Thomas, Principal Launch Licensing Manager, Astra Space, Inc; Public Comment on NTSB NPRM, NTSB-2021-0008, January 10, 2022.

²⁸ Kfir, Sagi, Senior Managing Counsel, Blue Origin; Public Comment on NTSB-2021-0008, January 18, 2022.

significant questions about what role NTSB would play in future national security and intelligence community commercial accidents.

To complicate matters further, the NTSB NPRM would expand the scope of investigations beyond accidents to “incidents” and “mishaps.” This is exemplified in comments in the NPRM docket. One of which states:

“...the proposed rule features obsolete and problematic definitions for ‘launch or reentry accident,’ ‘launch or reentry incident,’ and ‘mishap’ that were replaced by an expanded definition of ‘mishap’ in the FAA’s Streamlined Launch and Reentry Licensing Requirement rulemaking. In addition, the NPRM’s inclusion of ‘launch or reentry incident’ improperly expands NTSB’s authority as compared to the Agreement and MOU that govern NTSB participation in investigations today. The definition of ‘mishap,’ which is partially defined in the proposed rule as ‘failure to complete a launch or reentry as planned,’ is vague enough to trigger required NTSB notification even if such mishap had no bearing on public safety. In effect, NTSB as proposed new authorities that would permit it to involve itself in the mission assurance process when quite clearly such authority does not exist in law (and, in fact, is inconsistent with law).²⁹

As highlighted earlier, NTSB’s authority under 49 U.S.C. 1101 pertains to “accidents,” not “incidents,” and not “mishaps” as detailed in NTSB’s NPRM. Similarly, NTSB’s general authority under 49 U.S.C. 1131(a)(1)(F) only refers to “accident,” not “incidents” or “mishaps.” Such terms are well known in the space community, are clearly defined, and are not interchangeable. The differences are also important to understand in the context of research, development, and exploration activities. NTSB’s attempt to expand its investigatory authority beyond *transportation* and beyond *accidents* would fundamentally alter not only NTSB, but also the nation’s entire space enterprise, including civil, commercial, and national security space activities.

²⁹ Crutchfield, Allison, Sr. Manager, Regulatory Affairs, SpaceX; Public Comment on NTSB NPRM, NTSB-2021-0008, January 18, 2022.