



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

[Docket No.: FAA-2025-2323]

#### Advisory Circular No. 450.131-1, *Probability of Failure*

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of availability, request for comments.

**SUMMARY:** The Federal Aviation Administration (FAA) invites public comments on draft Advisory Circular (AC) 450.131-1 *Probability of Failure*. The draft AC provides guidance to launch and reentry vehicle operators for performing a probability of failure analysis for the purpose of vehicle operator license applications.

**DATES:** Written comments should be received by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Please send comments identified with “AC 450.131-1 *Probability of Failure*,” and [Enter docket number] to the email address, 9-ast-asz210-directives@faa.gov.

FAA will consider all the comments and recommendations received while developing the final version of the AC. The final version will be published on FAA Website ([www.faa.gov/regulations\\_policies/advisory\\_circulars](http://www.faa.gov/regulations_policies/advisory_circulars)).

**Privacy:** The Department of Transportation’s complete Privacy Act Statement can be found in the *Federal Register* published on April 11, 2000 (65 FR 19477), as well as at [DocketsInfo.dot.gov](http://DocketsInfo.dot.gov).

**FOR FURTHER INFORMATION CONTACT:** James Hatt, Space Policy Division Manager, Office of Commercial Space Transportation, Federal Aviation Administration, 800 Independence Avenue, S.W., Washington DC 20591-0001; [James.A.Hatt@faa.gov](mailto:James.A.Hatt@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Background**

The Commercial Space Launch Act of 1984, as amended and codified at 51 U.S.C. 50901 through 50923 (“the Act”), authorizes DOT and FAA through delegation,<sup>1</sup> to oversee, license, and regulate commercial launch and reentry activities, and the operation of launch and reentry sites as carried out by United States citizens or within the United States. The Act’s requirements are implemented in parts 400 through 460 of title 14 of the Code of Federal Regulations (14 CFR).

Under 14 CFR 450.113, an applicant for a vehicle operator license must perform and document a flight safety analysis for all phases of flight of a launch or reentry vehicle, with limited exception. In accordance with 14 CFR 450.131, the flight safety analysis must account for vehicle failure probability for each hazard and phase of flight. Draft AC 450.131-1 provides guidance to vehicle operator license applicants on how to perform a probability of failure analysis in accordance with 14 CFR 450.131 and contains an example means of compliance for a simplified probability of failure analysis for a reentry capsule.

### **Comments Invited**

FAA invites the public to submit comments on the draft AC, as specified in the **ADDRESSES** section. Commenters should include the subject line “AC 450.131-1 *Probability of Failure*” and Docket Number 2025-2323 on all comments submitted to FAA. The most helpful comments will reference a specific portion of the draft document, explain the reason for any recommended change, and include supporting data. Public comments submitted in accordance with the process set forth in this *Federal Register* notice will be considered for the purpose of the final version of this draft AC. However,

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<sup>1</sup> See 49 CFR 1.83(b).

even following the release of the final version of this draft AC, members of the public will continue to have the ability to submit feedback and suggestions pertaining to the AC in accordance with the process outlined in the AC.

You may examine the draft AC on the agency's public website and in the docket as follows:

- At [www.regulations.gov](http://www.regulations.gov) in Docket [enter docket number].
- At the "Commercial Space Draft Advisory Circulars (ACs)" page of the

agency's public website, which is located at

[https://www.faa.gov/space/legislationregulationguidance/draft\\_docs/ac](https://www.faa.gov/space/legislationregulationguidance/draft_docs/ac).

Issued in Washington, DC.

James A. Hatt

Manager, Space Policy Division

Office of Commercial Space Transportation

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