Amendment to the Definition of Unmanned Aircraft Accident

AGENCY: National Transportation Safety Board (NTSB).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The National Transportation Safety Board (NTSB) proposes amending the definition of “Unmanned aircraft accident” by removing the weight-based requirement and replacing it with an airworthiness certificate or airworthiness approval requirement. The weight threshold is no longer an appropriate criterion because unmanned aircraft systems (UAS) under 300 lbs. are operating in high-risk environments, such as beyond line-of-sight and over populated areas. The proposed definition will allow the NTSB to be notified of and quickly respond to UAS events with safety significance.

DATES: Send comments on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, identified by Docket Number (No.) NTSB-2021-0004, by any of the following methods:

- E-mail: rulemaking@ntsb.gov.
- Fax: 202-314-6090.
SUPPLEMENTARY INFORMATION:

I. Background

The NTSB prescribes regulations governing the notification and reporting of accidents involving civil aircraft. As an independent federal agency charged with investigating and establishing the facts, circumstances, and probable cause of every civil aviation accident in the United States, the NTSB has an interest in redefining a UAS accident in light of recent developments in the industry.

For NTSB purposes, “unmanned aircraft accident” means an occurrence associated with the operation of an unmanned aircraft that takes place between the time that the system is activated with the purpose of flight and the time that the system is deactivated at the conclusion of its mission, and in which any person suffers death or serious injury, or in which the aircraft has a maximum gross takeoff weight of 300 lbs. or greater and receives substantial damage.

At the time this definition was contemplated, the weight-based requirement was necessary because defining an accident solely on “substantial damage” would have required investigations of numerous small UAS crashes with no significant safety issues. See Final Rule, 75 FR 51953, 51954 (Aug. 24, 2010). Consequently, there is no legal requirement to report or for the NTSB to investigate events involving substantial damage to UAS weighing less than 300 lbs. because these are not recognized “unmanned aircraft
accidents” under the NTSB’s regulations. While this definition ensured that the NTSB expended resources on UAS events involving the most significant risk to public safety, the advent of higher capability UAS applications—such as commercial drone delivery flights operating in a higher risk environment (e.g., populated areas, beyond line-of-sight operations, etc.)—has prompted the agency to propose an updated definition of “unmanned aircraft accident.” Moreover, in the August 24, 2010, Final Rule, the NTSB anticipated future updates of the definition given the evolving nature of UAS technology and operations. *Id.*

II. **Airworthiness Certification/Approval**

The NTSB believes that an updated definition is necessary given the changing UAS industry. Pursuant to section 44807 of the Federal Aviation Administration (FAA) Reauthorization Act of 2018 (Reauthorization Act), the FAA has recently promulgated proposed rulemaking regarding UAS. Section 44807 directed the Department of Transportation to use a risk-based approach to determine if certain UAS may operate safely in the national airspace. A number of drone delivery operations, among other applications, have begun using: (1) FAA Special Airworthiness Certificates—Experimental, or (2) approvals under the exemption processes per section 44807 of the Reauthorization Act that allows the FAA to grant exemptions on an individual basis. As drone delivery and other applications develop, airworthiness certification will become more prevalent for certain unmanned aircraft similar to that of manned aircraft.

Therefore, an unmanned aircraft—of any size or weight—used for certain activities will require airworthiness certification or approvals due to higher risk potential, such as flights over populated areas for deliveries. Moreover, a substantially-damaged delivery drone may uncover significant safety issues, the investigation of which may enhance aviation safety through the independent and established NTSB process. This proposed definition change will treat a UAS with airworthiness certification or
airworthiness approval in the same manner as a manned aircraft with airworthiness certification or airworthiness approval, thereby enabling the NTSB to immediately investigate, influence corrective actions, and propose safety recommendations.

Accordingly, the proposed definition will be flexible to account for changes in the UAS industry and will allow the NTSB to respond quickly to UAS events with safety significance, while not burdening the agency or public with unnecessary responses.

III. Unaffected Regulations

A. 49 CFR 830.2 Aircraft Accident

There is no change to the current definition of “aircraft accident” for those events in which death or serious injury occurs regardless of weight or airworthiness status.

B. 14 CFR Part 107 Small Unmanned Aircraft Systems

The proposed definition will only affect those operations under 14 CFR part 107 that apply to small UAS that weigh less than 55 lbs. and hold an airworthiness certificate. As for the remaining small UAS operated under part 107 that do not hold airworthiness certificates or approvals, the “airworthiness certificate or approval” criteria in the proposed definition will not apply; only events resulting in serious injury or death will be categorized as an “accident.”

C. Section 349 of the Reauthorization Act

This proposed definition will not affect hobbyist/modeler operations. The NTSB does not intend to investigate such accidents.

IV. Regulatory Analysis

Because the NTSB is an independent agency, this rule does not require an assessment of its potential costs and benefits under section 6(a)(3) of Executive Order (E.O.) 12866, Regulatory Planning and Review, 58 FR 51735 (Sept. 30, 1993). In addition, the NTSB has considered whether this rule would have a significant economic impact on a substantial number of small entities, under the Regulatory Flexibility Act (5
The NTSB certifies under 5 U.S.C. 605(b) that this rule would not have a significant economic impact on a substantial number of small entities.

The NTSB does not anticipate this rule will have a substantial, direct effect on state or local governments or will preempt state law; as such, this rule does not have implications for federalism under E.O. 13132, Federalism, 64 FR 43255 (Aug. 4, 1999).

This rule complies with all applicable standards in sections 3(a) and 3(b)(2) of E.O. 12988, Civil Justice Reform, 61 FR 4729 (Feb. 5, 1996), to minimize litigation, eliminate ambiguity, and reduce burden. The NTSB has evaluated this rule under: E.O. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629 (Feb. 16, 1994); E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks, 62 FR 19885 (Apr. 21, 1997); E.O. 13175, Consultation and Coordination with Indian Tribal Governments, 65 FR 67249 (Nov. 6, 2000); E.O. 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use, 66 FR 28355 (May 18, 2001); and the National Environmental Policy Act, 42 U.S.C. 4321-47. Pursuant to the Paperwork Reduction Act, the NTSB has determined that there is no new requirement for information collection associated with this proposed rule. The NTSB has concluded that this NPRM neither violates nor requires further consideration under those orders and statutes.

The NTSB has concluded that this proposed rule neither violates nor requires further consideration under the aforementioned Executive orders and acts.

**List of Subjects in 49 CFR Part 830**

Air transportation, Aircraft accidents, Aircraft incidents, Airworthiness directives and standards, Aviation safety, Drones, Investigations, Reporting and recordkeeping requirements, Safety, Unmanned aircraft systems.
Accordingly, for the reasons stated in the Preamble, the NTSB proposes to amend 49 CFR part 830 as follows:

PART 830—NOTIFICATION AND REPORTING OF AIRCRAFT ACCIDENTS OR INCIDENTS AND OVERDUE AIRCRAFT, AND PRESERVATION OF AIRCRAFT WRECKAGE, MAIL, CARGO, AND RECORDS

1. The authority citation for part 830 continues to read as follows:


§ 830.2 [Amended]

2. Amend § 830.2 in paragraph (2) of the definition of “Unmanned aircraft accident” by removing the phrase “has a maximum gross takeoff weight of 300 pounds or greater” and adding in its place “holds an airworthiness certificate or approval”.

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