



Designation: F2851 – 10 (Reapproved 2018)

Standard Practice for UAS Registration and Marking (Excluding Small Unmanned Aircraft Systems)¹

This standard is issued under the fixed designation F2851; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice prescribes guidelines for the display of marks to indicate appropriate UAS registration and ownership for all Unmanned Aircraft Systems (UAS) except those categorized as small UAS (sUAS) by regulatory authorities. The FAA is developing a Special Federal Aviation Regulation (SFAR) to define the term small UAS and provide regulations for these aircraft.

1.2 This practice will allow determination of nationality in cases where UAS may cross international boundaries.

1.3 This practice does not apply to sUAS. The International Civil Aviation Organization (ICAO) has left the designation of sUAS to each state and the states will develop rules and regulations for sUAS.

1.4 This practice does not apply to model aircraft.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

¹ This practice is under the jurisdiction of ASTM Committee F38 on Unmanned Aircraft Systems and is the direct responsibility of Subcommittee F38.01 on Airworthiness.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

F2395 Terminology for Unmanned Aircraft Systems (Withdrawn 2014)³

2.2 Federal Aviation Regulations:⁴

14 CFR 45 Identification and registration marking

14 CFR 47 Aircraft registration

2.3 Other Standard:

Annex 7 to the Convention on International Civil Aviation Aircraft Nationality and Registration Marks⁵

3. Terminology

3.1 No new terminology required. See Terminology F2395 for terminology relating to unmanned aircraft systems.

4. Significance and Use

4.1 Aircraft flying in national airspace are required by the ICAO Chicago Convention and national regulatory rules to have visible markings to determine nationality and registration. UAS shall comply with these rules, although small UAS will have unique rules or exemptions from existing rules due to their small size. This standard is designed to allow UAS to comply with these marking requirements in Annex 7 to the Convention on International Civil Aviation as amended by state regulatory rules.

4.2 Many ICAO states are assigning UAS to different classes and categories to define the rules UAS must operate under. The ICAO Annex 7 Standards and Recommended Practices (SARPS) apply to UAS Aircraft with the exception of small UAS. The classification of what constitutes a small UAS (sUAS) has been left to ICAO states and the rules under which sUAS operate are dictated by each state.

4.3 This practice follows ICAO Annex 7 SARPS except in areas where the unique aspects of UAS may not allow compliance. In these cases, this document will address the issue and recommend the need for an alternate compliance method.

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

⁵ Available from International Civil Aviation Organization (ICAO), 999 University Street, Montréal, Quebec H3C 5H7, Canada, <http://www.icao.int/index.html>.