Federal Communications Commission

14 CFR Part 91
Interpretation of the Special Rule for Model Aircraft; Final Rule
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 91

[Docket No. FAA–2014–0396]

Interpretation of the Special Rule for Model Aircraft

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of interpretation with request for comment.

SUMMARY: This action provides interested persons with the opportunity to comment on the FAA’s interpretation of the special rule for model aircraft established by Congress in the FAA Modernization and Reform Act of 2012. In this interpretation, the FAA clarifies that: Model aircraft must satisfy the criteria in the Act to qualify as model aircraft and to be exempt from future FAA rulemaking action; and consistent with the Act, if a model aircraft operator endangers the safety of the National Airspace System, the FAA has the authority to take enforcement action against those operators for those safety violations.

DATES: Effective June 23, 2014. Comments must be received on or before July 25, 2014.

ADDRESSES: You may send comments identified by docket number FAA–2014–0396 using any of the following methods:

• Federal eRulemaking Portal: Go to http://www.regulations.gov and follow the online instructions for sending your comments electronically.

• Mail: Send Comments to Docket Operations, M–30; US Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

• Hand Delivery: Take comments to Docket Operations in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• Fax: (202) 493–2251.

FOR FURTHER INFORMATION CONTACT: Dean E. Griffith, Attorney, Regulations Division, Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267–3073; email: dean.griffith@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites interested persons to submit written comments, data, or views concerning this interpretation. The most helpful comments reference a specific portion of the interpretation, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, please send only one copy of written comments, or if you are filing comments electronically, please submit your comments only one time.

The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this interpretation. The FAA will consider all comments received on or before the closing date for comments and any late-filed comments if it is possible to do so without incurring expense or delay. While this is the FAA’s interpretation of statute and regulations relevant to model aircraft, the FAA may modify this interpretation based on comments received.

Availability of This Interpretation

You can get an electronic copy using the Internet by—

(1) Searching the Federal eRulemaking Portal (http://www.regulations.gov);

(2) Visiting the FAA’s Regulations and Policies Web page at http://www.faa.gov/regulations_policies/; or


You can also get a copy by sending a request to the Federal Aviation Administration, Office of Rulemaking, ARM–1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267–9680. Make sure to identify the docket number or notice number of this proposal.

Background

The FAA is issuing this interpretation because we have received many inquiries regarding the scope of the special rule for model aircraft in section 336 of the FAA Modernization and Reform Act of 2012 and the FAA’s enforcement authority over model aircraft as affirmed by the statute. In this interpretation, we explain the history of FAA oversight of model aircraft operations and the new statutory requirements that apply to model aircraft operations, and then clarify how the FAA intends to apply its enforcement authority to model aircraft operations that endanger the safety of the National Airspace System (NAS).

Discussion of the Interpretation

I. Background of FAA Oversight of Model Aircraft Operations

Historically, the FAA has considered model aircraft to be aircraft that fall within the statutory and regulatory definitions of an aircraft, as they are contrivances or devices that are “invented, used, or designed to navigate, or fly in, the air.” See 49 U.S.C. 40102 and 14 CFR 1.1. As aircraft, these devices generally are subject to FAA oversight and enforcement. However, consistent with FAA’s enforcement philosophy, FAA’s oversight of model aircraft has been guided by the risk that these operations present. The FAA first recognized in 1981 that “model aircraft can at times pose a hazard to full-scale aircraft in flight and to persons and property on the surface,” and recommended a set of voluntary operating standards for model aircraft operators to follow to mitigate these safety risks. See Advisory Circular 91–57, Model Aircraft Operating Standards (June 9, 1981). These operating standards included restricting operations over populated areas, limiting use of the devices around spectators until after the devices had been flight tested and proven airworthy; restricting operations to 400 feet above the surface; requiring that the devices give right of way to, and avoid flying near manned aircraft, and using observers to assist in operations.

These guidelines were further clarified in 2007, when the FAA issued a policy statement regarding unmanned aircraft systems (UAS) operations in the NAS. See 72 FR 6689 (Feb. 13, 2007). In this policy statement, the FAA also recognized that UAS fall within the statutory and regulatory definition of “aircraft” as they are devices that are “used or [are] intended to be used for flight in the air with no onboard pilot.” Id.; see also 49 U.S.C. 40102; 14 CFR 1.1. The FAA noted that they can be “as simple as a remotely controlled model aircraft used for recreational purposes or as complex as surveillance aircraft flying over hostile areas in warfare.”

The FAA then stated its current policy regarding UAS based on the following three categories: (1) UAS used as public aircraft; (2) UAS used as civil aircraft; and (3) UAS used as model aircraft.

With respect to UAS used as model aircraft, the FAA reiterated the operating guidelines in AC 91–57, and further noted that to qualify as a model aircraft, the aircraft would need to be operated purely for recreational or hobby purposes and remain within the visual line of sight of the operator. The policy statement also clarified that AC 91–57...
II. Requirements To Qualify as a Model Aircraft Under the FAA Modernization and Reform Act of 2012 (Pub. L. 112–95, Section 336)

A. Statutory Requirements

On February 14, 2012, the President signed into law the FAA Modernization and Reform Act of 2012 (Pub. L. 112–95) (the Act), which established, in Section 336, a “special rule for model aircraft.” In Section 336, Congress confirmed the FAA’s long-standing position that model aircraft are aircraft. Under the terms of the Act, a model aircraft is defined as “an unmanned aircraft” that is “(1) capable of sustained flight in the atmosphere; (2) flown within visual line of sight of the person operating the aircraft; and (3) flown for hobby or recreational purposes.” Public Law 112–95, section 336(c). Congress’ intention to define model aircraft as aircraft is further established by section 331(8) of the Act, which defines an unmanned aircraft as “an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft.” Congress’ definition of model aircraft is consistent with the FAA’s existing definition of aircraft as “any contrivance invented, used, or designed to navigate, or fly in, the air.” 49 U.S.C. 40102; see also 14 CFR 1.1. Although model aircraft may take many forms, at a base level model aircraft are clearly “invented, used, or designed” to fly in the air. Id.

Section 336 also prohibits the FAA from promulgating “any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft” if the following statutory requirements are met:

- The aircraft is flown strictly for hobby or recreational use;
- the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;
- the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
- the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and
- when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower . . . with prior notice of the operation. . . .

Public Law 112–95, section 336(a)(1)–(5).

Thus, based on the language of the statute, we conclude that aircraft that meet the statutory definition and operational requirements, as described above, would be exempt from future FAA rulemaking action specifically regarding model aircraft. Model aircraft that do not meet these statutory requirements are nonetheless unmanned aircraft, and as such, are subject to all existing FAA regulations, as well as future rulemaking action, and the FAA intends to apply its regulations to such unmanned aircraft.

B. Model Aircraft Must Meet the Criteria in Section 336 To Be Exempt From Future Rulemaking

Congress directed that the FAA may not “promulgate any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft” if the aircraft is being operated, or being developed to be operated, pursuant to the five criteria enumerated in the statute as described above. Public Law 112–95, section 336(a). In other words, Congress has restricted the FAA from promulgating regulations, from the date when the statute was enacted, specifically regarding model aircraft that meet the terms of the statute.

However, the prohibition against future rulemaking is not a complete bar on rulemaking that may have an effect on model aircraft. As noted above, the rulemaking limitation applies only to rulemaking actions specifically “regarding a model aircraft or an aircraft being developed as a model aircraft.” Public Law 112–95, section 336(a). Thus, the rulemaking prohibition would not apply in the case of general rules that the FAA may issue or modify that apply to all aircraft, such as rules addressing the use of airspace (e.g., the 2008 rule governing VFR operations in the Washington, DC, area) for safety or security reasons. See 73 FR 46803. The statute does not require FAA to exempt model aircraft from those rules because those rules are not specifically regarding model aircraft. On the other hand, a model aircraft operated pursuant to the terms of section 336 would potentially be excepted from a UAS aircraft certification rule, for example, because of the limitation on future rulemaking specifically “regarding a model aircraft, or an aircraft being developed as a model aircraft.” Public Law 112–95, section 336(a).

The FAA interprets the section 336 rulemaking prohibition as one that must be evaluated on a rule-by-rule basis.

Although the FAA believes the statutory definition of a model aircraft is clear, the FAA provides the following explanation of the meanings of “visual line of sight” and “hobby or recreational purpose.” terms used in the definition of model aircraft, because the FAA has received a number of questions in this area.

By definition, a model aircraft must be “flown within visual line of sight of the person operating the aircraft.” Public Law 112–95, section 336(c)(2). Based on the plain language of the statute, the FAA interprets this requirement to mean that: (1) The aircraft must be visible at all times to the operator; (2) that the operator must use his or her own natural vision (which includes vision corrected by standard eyeglasses or contact lenses) to observe the aircraft; and (3) people other than the operator may not be used in lieu of the operator for maintaining visual line of sight. Under the criteria above, visual line of sight would mean that the operator has an unobstructed view of the model aircraft. To ensure that the operator has the best view of the aircraft, the statutory requirement would preclude the use of vision-enhancing devices, such as binoculars, night vision goggles, powered vision magnifying devices, and goggles designed to provide a “first-person view” from the model. Such devices would limit the operator’s field of view thereby reducing his or her ability to see-and-avoid other aircraft in the area. Additionally, some of these devices could dramatically increase the distance at which an operator could see the aircraft, rendering the statutory visual-line-of-sight requirements meaningless.

Finally, based on the plain language of the statute, which says that aircraft must be “flown within the visual line of sight of the person operating the aircraft,” an operator could not rely on another person to satisfy the visual line of sight requirement. See id. (emphasis added). While the statute would not preclude using an observer to augment the safety of the operation, the operator must be able to view the aircraft at all times.

1 For purposes of the visual line of sight requirement, “operator” means the person manipulating the model aircraft’s controls.

2 The FAA is aware that at least one community-based organization permits “first person view” (FPV) operations during which the hobbyist controls the aircraft while wearing goggles that display images transmitted from a camera mounted in the front of the model aircraft. While the intent of FPV is to provide a simulation of what a pilot would see from the flight of a manned aircraft, the goggles may obstruct an operator’s vision, thereby preventing the operator from keeping the model aircraft within his or her visual line of sight at all times.
The statute requires model aircraft to be flown strictly for hobby or recreational purposes. Because the statute and its legislative history do not elaborate on the intended meaning of “hobby or recreational purposes,” we look to their ordinary meaning and also the FAA’s previous interpretations to understand the direction provided by Congress.3 A definition of “hobby” is a “pursuit outside one’s regular occupation engaged in especially for relaxation.” Merriam-Webster Dictionary, available at www.merriam-webster.com (last accessed June 9, 2014). A definition of recreation is “refreshment of strength and spirits after work; a means of refreshment or diversion.” Id. These uses are consistent with the FAA’s 2007 policy on model aircraft in which the Agency stated model aircraft operating guidelines did not apply to “persons or companies for business purposes.” See 72 FR at 6690.4 Any operation not conducted strictly for hobby or recreation purposes could not be operated under the special rule for model aircraft. Clearly, commercial operations would not be hobby or recreation flights.5 Likewise, flights that are in furtherance of a business, or incidental to a person’s business, would not be a hobby or recreation flight. Flights conducted incidental to, and within the scope of, a business where no common carriage is involved, generally may operate under FAA’s general operating rules of part 91. See Legal Interpretation to Scott C. Burgess, from Rebecca B. MacPherson, Assistant Chief Counsel for Regulations (Nov. 25, 2008). Although they are not commercial operations conducted for compensation or hire, such operations do not qualify as a hobby or recreation flight because of the nexus between the operator’s business and the operation of the aircraft. See, e.g., Legal Interpretation to BSTC Corporation, from Rebecca B. MacPherson, Assistant Chief Counsel for Regulations (June 22, 2009) (noting transportation of mining employees and guests appears to be incidental to and within scope of operator’s geological business); Legal Interpretation to Scott C. Burgess (Nov. 25, 2008) (noting transportation of automotive dealership employees and guests must be incidental to and within scope of operator’s real estate development business).

To provide guidance, the following are examples of flights that could be conducted as hobby or recreation flights and other types of flights that would not be hobby or recreation.

<table>
<thead>
<tr>
<th>Hobby or recreation</th>
<th>Not hobby or recreation</th>
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<tbody>
<tr>
<td>Flying a model aircraft at the local model aircraft club.</td>
<td>Receiving money for demonstrating aerobatics with a model aircraft.</td>
</tr>
<tr>
<td>Taking photographs with a model aircraft for personal use.</td>
<td>A realtor using a model aircraft to photograph a property that he is trying to sell and using the photos in the property’s real estate listing.</td>
</tr>
<tr>
<td>Using a model aircraft to move a box from point to point without any kind of compensation.</td>
<td>A person photographing a property or event and selling the photos to someone else.</td>
</tr>
<tr>
<td>Viewing a field to determine whether crops need water when they are grown for personal enjoyment.</td>
<td>Delivering packages to people for a fee.6</td>
</tr>
<tr>
<td>Additional, model aircraft are limited to 55 pounds or less. The statutory language does not specify whether it applies to 55 pounds.</td>
<td>Determining whether crops need to be watered that are grown as part of commercial farming operation.</td>
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Operations that meet the section 336 definition of “model aircraft” must also meet the five additional criteria for model aircraft established in section 336(a) to be exempt from future rulemaking regarding model aircraft. These criteria, with the exception of the hobby and recreation standard that was previously addressed, are explained below.

Section 336(a)(2) requires model aircraft to be operated within a community-based set of safety guidelines and within the programming of a nationwide community-based organization. Congress explained that it intended “nationwide community-based organization” to mean, in part, a “membership based association that represents the aeromodeling community within the United States; [and] provides its members a comprehensive set of safety guidelines that underscores safe aeromodeling operations within the National Airspace System and the protection and safety of the general public on the ground. . . .” U.S. House, FAA Modernization and Reform Act of 2012, Conference Report (to Accompany H.R. 658), 112 H. Rpt. 381 (Feb. 1, 2012) (discussion of special rule for model aircraft). Based on this language, which provides context to Congress’ use of the term “nationwide community-based organization,” the FAA expects that model aircraft operations conducted under section 336(a) will be operated according to those guidelines.7 Additionally, model aircraft are limited to 55 pounds or less. The statutory language does not specify whether it applies to 55 pounds.

6 In construing statutory language, agencies should assume that the ordinary meaning of the language accurately expresses the legislative purpose of Congress. Agencies are also permitted to presume that Congress was aware of the agencies’ administrative or adjudicative interpretations of certain terms and intended to adopt those meanings. See Bedrock Ltd. v. U.S., 541 U.S. 176, 183 (2004); see also Haig v. Agee, 453 U.S. 280, 300 (1981); Lorillard v. PA-os, 434 U.S. 575, 580–581 (1978).

7 The FAA has also addressed recreational use of aircraft by pilots in the Sport and Recreational Pilot Certificate rules, which prohibit those pilots from acting as pilot in command of an airplane carrying passengers or property for compensation or hire, or in furtherance of a business, 14 CFR 61.101(e), 61.315(c). As discussed in the Sport Pilot final rule, those prohibitions are designed to limit those pilots to “sport and recreational flying only.” 69 FR 44772, 44839 (July 27, 2004).

8 A commercial operator is a “person, who, for compensation or hire, engages in the carriage by aircraft in air commerce of persons or property.” 49 CFR 1.1. The FAA would therefore not consider a commercial operation to be "flown strictly for hobby or recreation purposes" because it would be conducted for compensation or hire.

9 If an individual offers free shipping in association with a purchase or other offer, FAA would construe the shipping to be in furtherance of a business purpose, and thus, the operation would not fall within the statutory requirement of recreation or hobby purpose.
by heavier aircraft is demonstrated by the more stringent requirements for aircraft heavier than 55 pounds in the statute which are discussed below. Accordingly, the FAA interprets this provision to mean the weight of the aircraft at the time of the operation must not exceed 55 pounds, including the weight of any payload and fuel.

The statute creates an exception for model aircraft that exceed the 55-pound weight limit if the aircraft is “certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization.” Public Law 112–95, section 336(a)(3). If a nationwide community-based organization has provided its members with a set of safety guidelines that define a design, construction, inspection, flight test, and operational safety program then model aircraft constructed in accordance with that program may exceed 55 pounds and operate in accordance with section 336(a).

Model aircraft must not interfere with and must give way to any manned aircraft. This requirement needs no further explanation, and the FAA would expect that model aircraft operators abide by it.8 We note that model aircraft interfering with, or that do not give way to, manned aircraft would be subject to enforcement action under section 336(b), as further explained in section III below.

Finally, the statute sets a requirement for model aircraft operating within 5 miles of an airport to notify the airport operator and control tower, where applicable, prior to operating.10 If the model aircraft operator provides notice of forthcoming operations which are then not authorized by air traffic to be flown over open water and in sparsely populated areas. 14 CFR 91.119(c). Such operations may not be conducted “closer than 500 feet to any person, vessel, vehicle, or structure.” Id. Therefore, although such low-altitude operations may pose a lower risk to aircraft flying much higher, the operation may still pose a risk to persons and property on the ground warranting enforcement action when conducted unsafely. See, e.g., Adm’r v. Kachalsky, NTSB Order No. EA–4847, 2000 WL 1072332 (July 24, 2000) (affirming a violation of § 91.119(c) for operating within 500 feet of a dwelling in a sparsely populated area); Adm’r v. Beissel, NTSB Docket No. SE–19436, 2013 WL 7809754 (Dec. 11, 2014) (ordering suspension of a pilot certificate when pilot flew a helicopter less than 40 feet above the surface of a lake).

Reading the broad reference to the NAS, along with Congress’ clear interest in ensuring that model aircraft are safely operated, we conclude that Congress intended for the FAA to be able to rely on a range of our existing regulations to protect users of the airspace and people and property on the ground. Therefore, regardless of whether a model aircraft satisfies the statutory definition and operational requirements described above, if the model aircraft is operated in such a manner that endangers the safety of the NAS, the FAA may take enforcement action consistent with Congress’ mandate.

IV. Examples of Regulations That Apply to Model Aircraft

The FAA could apply several regulations in part 91 when determining whether to take enforcement action against a model aircraft operator for endangering the NAS. The FAA’s general operating and flight rules are housed in part 91 of the FAA’s regulations. These rules are the baseline rules that apply to all aircraft operated in the United States with limited exceptions,14 and are the appropriate rules to apply when evaluating model aircraft operations. See 14 CFR 91.1.

Rules relevant to these operations fall generally into three categories: (1) How the aircraft is operated; (2) operating rules for designated airspace; and, (3) special restrictions such as temporary flight restrictions (TFRs) and notices to airmen (NOTAMs). These rules are discussed in greater detail below.

Rules addressing operation of the aircraft may include prohibitions on careless or reckless operation and dropping objects so as to create a hazard.
to persons or property. See 14 CFR 91.13 through 91.15. Additionally, § 91.113 establishes right-of-way rules for converging aircraft.15 Model aircraft that do not comply with those rules could be subject to FAA enforcement action.

Rules governing operations in designated airspace are found in §§ 91.126 through 91.135. In general, those rules establish requirements for operating in the various classes of airspace, and near airports in non-designated airspace to minimize risk of collision in higher traffic airspace. Generally, if an operator is unable to comply with the regulatory requirements for operating in a particular class of airspace, the operator would need authorization from air traffic control to operate in that area. See, e.g., 14 CFR 91.127(a), 91.129(a). Operations within restricted areas designated in part 73 would be prohibited without permission from the using or controlling agency. Accordingly, as part of the requirements for model aircraft operations within 5 miles of an airport set forth in section 336(a)(4) of Public Law 112–95, the FAA would expect modelers operating model aircraft in airspace covered by §§ 91.126 through 91.135 and part 73 to obtain authorization from air traffic control prior to operating.

The third category of rules relevant to model aircraft operations are rules relating to operations in areas covered by temporary flight restrictions and NOTAMs found in §§ 91.137 through 91.145. The FAA would expect that model aircraft operations comply with restrictions on airspace when established under these rules.

Other rules in part 91, or other parts of the regulations, may apply to model aircraft operations, depending on the particular circumstances of the operation. The regulations cited above are not intended to be an exhaustive list of rules that could apply to model aircraft operations. The FAA anticipates that the cited regulations are the ones that would most commonly apply to model aircraft operations.

Issued in Washington, DC, on June 18, 2014.

Michael P. Huerta,
Administrator.

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