

[Docket No. 6247; Amdt. 91-21]

**PART 91—GENERAL OPERATING
AND FLIGHT RULES****Flight Test Areas**

A notice of proposed rule making was published in the FEDERAL REGISTER (29 F.R. 14368) on October 17, 1964, stating that the Federal Aviation Agency proposed to eliminate the requirement of obtaining an approved flight test area for the flight testing of aircraft. The period for the submission of comments was extended from November 23, 1964, to December 31, 1964 (29 F.R. 15959), at the request of the Aerospace Industries Association of America (AIA) which stated that it was unable to consolidate serious differences of opinion among its members with respect to the proposal.

The AIA and the Society of Experimental Test Pilots objected to the prohibition of flight tests over "any congested area of a city, town, or settlement, or over any open air assembly of person," in that these terms require further clarification and may be stringently interpreted as applying to any accident resulting in injury to persons or property on the ground. Because recognition and avoidance of congested areas may be difficult while conducting flight tests of a high-performance aircraft at high altitudes, they contend that this terminology may make administration of the rule impractical and raise the probability of finding a violation of the rule when damage to nonparticipating parties occurs. It is necessary that flight tests should be performed to assure safety of flight; and it is recognized that, in extreme cases, parts may impact at considerable distances from a projected flight path.

The object of this regulation is not to provide a convenient means of finding violations for accidents involving nonparticipating parties but to confine flight test operations to areas whereby the least number of persons and property may be subjected to possible injury from this hazardous operation. It is expected that an operator will select an area and plan a flight path therein to achieve this object. It is, therefore, determined to revise the wording of § 91.93 to prohibit flight tests except over open water or sparsely populated areas. This revision will retain substantially the same relevant terminology that was adopted and defined in the original rule in 1957 (22 F.R. 1277, 2576).

Both of these commentators objected to proposed § 91.93(b), regarding potential impact areas, as being indefinite and arbitrary. This objection has merit and § 91.93, as revised, will more simply state a requirement of the regulation, while leaving the responsibility for avoiding operations hazardous to persons and property on the ground upon the aircraft operator.

These commentators and the Pacific Airmotive Corp. suggested that the Agency should continue to approve flight test areas for operators who so desire. As stated in the notice, the Agency sees no benefit to be derived from the continuation of formally approved areas. The

public is not adequately informed of the existence of an approved area, and the confinement of operations therein does not in itself enhance safety or alter the responsibility arising from injury to nonparticipating parties. The Agency will continue to work with the operators to develop procedures and to help them locate areas suitable for flight testing. Additionally, the Agency may impose any necessary operating restrictions, including locality, of flight tests in the interest of safety in particular instances. Therefore, the Agency will be available for assistance in the operator's selection of suitable areas but will not designate or approve flight test areas.

The AIA also recommended that the definitions of "flight test" and "basic airworthiness" as contained in the current § 91.93, be incorporated in Part 1. The Agency presently determines when a flight test is required and so stipulates on the appropriate certificate or production schedule. Military regulations are specific as to when flight tests are required. Section 91.167, as amended, differentiates between a flight test and an operational check applicable to aircraft which have been repaired, or overhauled. Therefore, the retention of the definitions, as recommended by AIA, would serve no useful purpose and they are omitted.

The Air Transport Association commented that because of the location of airports and maintenance facilities from which they operate, air carriers must conduct flight tests, in part, over congested areas and in high density traffic areas. "Flight tests" conducted by the air carriers are more in the nature of operational checks performed in accordance with § 91.167 after overhaul or maintenance, to which § 91.93 is not applicable.

The Hiller Aircraft Co. suggested that the term "high density air traffic" was too indefinite, and that a takeoff and landing at an airport may necessarily involve flight through substantial air traffic. The Airline Pilots Association made a similar comment and additionally suggested that flight tests be prohibited in the vicinity of designated airways or terminal areas. It therefore appears that the confinement of flight test operations to areas having light air traffic may better convey the intent of the regulation. A prohibition of flight tests in designated airways or terminal areas, however, appears to be too restrictive and unrealistic of the necessity to make landings and takeoffs at airports.

The Aircraft Owners and Pilots Association suggested that the responsibility for the operational flight check of an aircraft after repairs or alteration should be with the person authorized to return the aircraft to service and the requirement for this check should be placed in Part 43. Another comment suggested that the operational flight check should involve a check of the parts which have been altered or repaired. The purpose of § 91.167 is to require an operational check of the aircraft before it is used to carry passengers (other than crewmembers) and therefore should remain in Part 91

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as an operating rule; however, this section has been reworded to clarify the relationship of the operational check to the repairs or alterations performed in accordance with Part 43.

One commentator suggested the consideration of a provision limiting flight tests to VFR conditions, daytime only. It is the Agency's practice to specify these limitations when granting an experimental certificate; however, these limitations may be omitted in subsequent test flights, as appropriate, when it may be desirable to conduct the flight test under other conditions. Inclusion of these limitations in the rule is neither necessary or desirable, and will therefore be omitted.

Section 91.93 has been revised to better convey the original intent of requiring flight tests to be conducted in a manner that will minimize the danger to other aircraft and to persons and property on the ground. Section 91.167 has been revised to clarify the differences between a flight test and an operational check, and the relationship of the operational check to the repairs or alterations necessitating the check. These revisions are not intended to alter the substantive content of the rule as proposed in the notice.

Approximately 85 percent of the comments concurred with the proposal without suggesting major changes thereto and one commentator opposed any amendment to the current rule.

Interested persons have been afforded an opportunity to participate in the proposed rule making through the submission of comments. Due consideration was given to all comments received.

In consideration of the foregoing, effective July 31, 1965, §§ 91.93 and 91.167 of Chapter I of Title 14 of the Code of Federal Regulations are amended to read as follows:

§ 91.93 Flight test areas.

No person may flight test an aircraft except over open water, or sparsely populated areas, having light air traffic.

§ 91.167 Carrying persons other than crewmembers after repairs or alterations.

(a) No person may carry any person (other than crewmembers) in an aircraft that has been repaired or altered in a manner that may have appreciably changed its flight characteristics, or substantially affected its operation in flight, until it has been approved for return to service in accordance with Part 43 and an appropriately rated pilot, with at least a private pilot's certificate, flies the aircraft, makes an operational check of the repaired or altered part and logs the flight in the aircraft records.

(b) Paragraph (a) of this section does not require that the aircraft be flown if ground tests or inspections, or both, show conclusively that the repair or alteration has not appreciably changed the flight characteristics, or substantially affected the flight operation of the aircraft.

(Secs. 307 and 313(a), Federal Aviation Act of 1958; 49 U.S.C. 1348 and 1354)

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N. E. HALABY,
Administrator.

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