- (1) At facilities outside of and not immediately adjacent to controlled airspace, there must be ground-air communications from the airport served by the facility. The utilization of voice on the SDF should be determined by the facility operator on an individual basis.
- (2) At facilities within or immediately adjacent to controlled airspace, there must be ground/air communications required by paragraph (b)(1) of this section and reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communications facility.

Compliance with paragraphs (f) (1) and (2) of this section need not be shown at airports where an adjacent Federal Aviation Administration facility can communicate with aircraft on the ground at the airport and during the entire proposed instrument approach procedure. In addition, at low traffic density airports within or immediately adjacent to controlled airspace, and where extensive delays are not a factor, the requirements of paragraphs (f) (1) and (2) of this section may be reduced to reliable communications (at least a landline telephone) from the airport to the nearest Federal Aviation Administration air traffic control or communications facility, if an adjacent Federal Aviation Administration facility can communicate with aircraft during the proposed instrument approach procedure down to the airport surface or at least down to the minimum approach altitude.

- (g) At those locations where two separate SDF facilities serve opposite ends of a single runway, an interlock must insure that only the facility serving the approach direction in use can radiate, except where no operationally harmful interference results.
- (h) At those locations where, in order to alleviate frequency congestion, the SDF facilities serving opposite ends of one runway employ identical frequencies, an interlock must insure that the facility not in operational use cannot radiate.
- (i) Provisions for maintenance and operations by authorized persons only.

(j) Where an operational advantage exists, the installation may omit a back course.

[Doc. No. 10116, 35 FR 12711, Aug. 11, 1970, as amended by Amdt. 171–16, 56 FR 65664, Dec. 17, 1991]

§ 171.115 Maintenance and operations requirements.

- (a) The owner of the facility shall establish an adequate maintenance system and provide qualified maintenance personnel to maintain the facility at the level attained at the time it was commissioned. Each person who maintains a facility shall meet at a minimum the Federal Communications Commission's licensing requirements and show that he has the special knowledge and skills needed to maintain the facility, including proficiency in maintenance procedures and the use of specialized test equipment.
- (b) The SDF must be designed and maintained so that the probability of operation within the performance requirements specified is high enough to insure an adequate level of safety. In the event out-of-tolerance conditions develop, the facility shall be removed from operation, and the designated control point notified.
- (c) The owner must prepare, and obtain approval of, and each person operating or maintaining the facility shall comply with, an operations and maintenance manual that sets forth procedures for operations, preventive maintenance, and emergency maintenance, including instructions on each of the following:
- (1) Physical security of the facility. This includes provisions for designating critical areas relative to the facility and preventing or controlling movements within the facility that may adversely affect SDF operations.
- (2) Maintenance and operations by authorized persons only.
- (3) Federal Communications Commission requirements for operating personnel and maintenance personnel.
 - (4) Posting of licenses and signs.
- (5) Relation between the facility and Federal Aviation Administration air traffic control facilities, with a description of the boundaries of controlled airspace over or near the facility, instructions for relaying air traffic

§171.117

control instructions and information (if applicable), and instructions for the operation of an air traffic advisory service if the facility is located outside of controlled airspace.

- (6) Notice to the Administrator of any suspension of service.
- (7) Detailed and specific maintenance procedures and servicing guides stating the frequency of servicing.
- (8) Air-ground communications, if provided, expressly written or incorporating appropriate sections of Federal Aviation Administration manuals by reference.
- (9) Keeping of station logs and other technical reports, and the submission of reports required by §171.117.
 - (10) Monitoring of the facility.
- (11) Names, addresses, and telephone numbers of persons to be notified in an emergency.
 - (12) Inspection by U.S. personnel.
- (13) Shutdowns for routine maintenance and issue of "Notices to Airmen" for routine or emergency shutdowns, except that private use facilities may omit "Notices to Airmen."
 - (14) Commissioning of the facility.
- (15) An acceptable procedure for amending or revising the manual.
- (16) An explanation of the kinds of activities (such as construction or grading) in the vicinity of the facility that may require shutdown or certification of the facility by Federal Aviation Administration flight check.
- (17) Procedure for conducting a ground check of SDF course alignment, width and clearance.
- (18) The following information concerning the facility:
- (i) Facility component locations with respect to airport layout, instrument runway, and similar areas;
- (ii) The type, make, and model of the basic radio equipment that will provide the service;
- (iii) The station power emission and frequencies of the SDF, markers and associated COMLOs, if any;
 - (iv) The hours of operation;
- (v) Station identification call letters and method of station identification and the time spacing of the identification:
- (vi) A description of the critical parts that may not be changed, adjusted, or repaired without a Federal Aviation

Administration flight check to confirm published operations.

- (d) The owner shall make a ground check of the facility each month in accordance with procedures approved by the Federal Aviation Administration at the time of commissioning, and shall report the results of the checks as provided in §171.117.
- (e) If the owner desires to modify the facility, he shall submit the proposal to the Federal Aviation Administration and may not allow any modifications to be made without specific approval.
- (f) The owner's maintenance personnel shall participate in initial inspections made by the Federal Aviation Administration. In the case of subsequent inspections, the owner or his representatives shall participate.
- (g) Whenever it is required by the Federal Aviation Administration, the owner shall incorporate improvements in SDF maintenance. In addition, he shall provide a stock of spare parts, of such a quantity, to make possible the prompt replacement of components that fail or deteriorate in service.
- (h) The owner shall provide Federal Aviation Administration approved test instruments needed for maintenance of the facility.
- (i) The owner shall close the facility by ceasing radiation and shall issue a "Notice to Airmen" that the facility is out of service (except that private use facilities may omit "Notices to Airmen"), upon receiving two successive pilot reports of its malfunctioning.

§171.117 Reports.

The owner of each facility to which this subpart applies shall make the following reports, at the time indicated, to the Federal Aviation Administration Regional Office for the area in which the facility is located:

(a) Record of meter readings and adjustments (Form FAA-198). To be filled out by the owner or his maintenance representative with the equipment adjustments and meter readings as of the time of commissioning, with one copy to be kept in the permanent records of the facility and two copies to the appropriate Regional Office of the Federal Aviation Administration. The owner shall revise the form after any