(3) A final approach fix; and

(4) Compass locator (COMLO) or marker if suitable fixes and initial approach routes are not available from existing facilities.

(c) The facility must have a reliable source of suitable primary power, either from a power distribution system or locally generated. Also, adequate power capacity must be provided for operation of test and working equipment at the SDF. A determination by the Federal Aviation Administration as to whether a facility will be required to have standby power for the SDF and monitor accessories to supplement the primary power will be made for each airport based upon operational minimums and density of air traffic.

(d) A determination by the Federal Aviation Administration as to whether a facility will be required to have dual transmitting equipment with automatic changeover for the SDF will be made for each airport based upon operational minimums and density of air traffic.

(e) There must be a means for determining, from the ground, the performance of the equipment (including antennae), initially and periodically.

(f) The facility must have the following ground-air or landline communication services:

(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