

§ 171.257

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or in the maintenance manual or maintenance organization. The owner must then correct the deficiencies, if any, and operate the ISMLS facility for an inservice evaluation by the FAA.

§ 171.257 Minimum requirements for approval.

(a) The following are the minimum requirements that must be met before the FAA approves an IFR procedure for a non-Federal ISMLS facility:

(1) The performance of the ISMLS facility, as determined by flight and ground inspection conducted by the FAA, must meet the requirements of §§ 171.259, 171.261, 171.263, 171.265, 171.267, and 171.269.

(2) The installation of the equipment must meet the requirements of § 171.271.

(3) The owner must agree to operate and maintain the ISMLS facility in accordance with § 171.273.

(4) The owner must agree to furnish periodic reports as set forth in § 171.275 and agree to allow the FAA to inspect the facility and its operation whenever necessary.

(5) The owner must assure the FAA that he will not withdraw the ISMLS facility from service without the permission of the FAA.

(6) The owner must bear all costs of meeting the requirements of this section and of any flight or ground inspection made before the ISMLS facility is commissioned, except that the FAA may bear certain costs subject to budgetary limitations and policy established by the Administrator.

(b) If the applicant for approval meets the requirements of paragraph (a) of this section, the FAA approves the ISMLS facility for use in an IFR procedure. The approval is withdrawn at any time that the ISMLS facility does not continue to meet those requirements. In addition, the ISMLS facility may be de-commissioned whenever the frequency channel is needed for higher priority common system service.

§ 171.259 Performance requirements: General.

(a) The ISMLS consists of the following basic components:

(1) C-Band (5000 MHz–5030 MHz) localizer equipment, associated monitor system, and remote indicator equipment;

(2) C-Band (5220 MHz–5250 MHz) glide path equipment, associated monitor system, and remote indicator equipment;

(3) VHF marker beacons (75 MHz), associated monitor systems, and remote indicator equipment.

(4) An ISMLS airborne receiver or a VHF/UHF ILS receiver modified to be capable of receiving the ISMLS signals. This modification requires the addition of a C-Band antenna, a converter unit, a microwave/ILS mode control, and a VHF/UHF receiver modification kit.

(b) The electronic ground equipments in paragraph (a)(1), (2), and (3) of this section, must be designed to operate on a nominal 120/240 volt, 60 Hz, 3-wire single phase AC power source.

(c) ISMLS ground equipment must meet the following service conditions:

(1) AC line parameters, DC voltage, elevation, and duty:

120 V nominal value, 102 V to 138 V (± 1 V).*

208 V nominal value, 177 V to 239 V (± 2 V).*

240 V nominal value, 204 V to 276 V (± 0.2 V).*

AC line frequency (60 Hz), 57 Hz to 63 Hz (± 0.2 Hz).*

DC voltage (48 V), 44 V to 52 V (± 0.5 V).*

*NOTE: Where discrete values of the above frequency or voltages are specified for testing purposes, the tolerances given in parentheses indicated by an asterisk apply to the test instruments used to measure these parameters.

Elevation, 0 to 10,000 ft. above sea level.

Duty, continuous, unattended.

(2) Ambient conditions for localizer and glide path equipment:

Temperature, -10°C to $+50^{\circ}\text{C}$.

Relative humidity, 5% to 90%.

(3) Ambient conditions for marker beacon facilities and all other equipment installed outdoors (for example, antennae, field detectors, and shelters):

Temperature, -50°C . to $+70^{\circ}\text{C}$.

Relative humidity, 5% to 100%.

(4) All equipment installed outdoors must operate satisfactorily under the following conditions:

Wind velocity, 0–100 MPH (not including gusts).

Hail stones, $\frac{1}{2}$ " diameter.