

## § 171.213

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.

### § 171.213 Reports.

The owner of each facility to which this subpart applies shall make the following reports, at the times 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 must revise the form after any major repair, modification, or re-tuning, to reflect an accurate record of facility operation and adjustment.

(b) Facility maintenance log (FAA Form 6030-1). This form is a permanent record of all equipment malfunctioning met in maintaining the facility, including information on the kind of work and adjustments made, equipment failures, causes (if determined), and corrective action taken. The owner shall keep the original of each report at the facility and send a copy to the appropriate Regional Office of the Federal Aviation Administration at the end of the month in which it is prepared.

(c) Radio equipment operation record (Form FAA-418), containing a complete record of meter readings, recorded on each scheduled visit to the facility. The owner shall keep the original of each month's record at the facility and send a copy of it to the appropriate Regional Office of the Federal Aviation Administration.

[Doc. No. 10116, 35 FR 12716, Aug. 11, 1970, as amended by Amdt. 171-10, 40 FR 36110, Aug. 19, 1975]

## 14 CFR Ch. I (1-1-06 Edition)

### Subpart I—Interim Standard Microwave Landing System (ISMLS)

SOURCE: Docket No. 14120, 40 FR 36110, Aug. 19, 1975, unless otherwise noted.

#### § 171.251 Scope.

This subpart sets forth minimum requirements for the approval and operation of non-Federal Interim Standard Microwave Landing System (ISMLS) facilities that are to be involved in the approval of instrument flight rules and air traffic control procedures related to those facilities.

#### § 171.253 Definitions.

As used in this subpart:

*Angular displacement sensitivity* (Glide Slope) means the ratio of measured DDM to the corresponding angular displacement from the appropriate reference line.

*Collocated ground station* means the type of ground station which transmits two or more guidance signals simultaneously from a common location.

*Course line* means the locus of points nearest to the runway centerline in any horizontal plane at which the DDM is zero.

*Course sector (full)* means a sector in a horizontal plane containing the course line and limited by the loci of points nearest to the course line at which the DDM is 0.155.

*Course sector (half)* means the sector in a horizontal plane containing the course line and limited by the loci of points nearest to the course line at which DDM is 0.0775.

*DDM* means difference in depth of modulation. The percentage modulation depth of the larger signal minus the percentage modulation depth of the smaller signal, divided by 100.

*Displacement sensitivity* (Localizer) means the ratio of measured DDM to the corresponding lateral displacement from the appropriate reference line.

*Facility Performance Category I—ISMLS* means an ISMLS which provides guidance information from the coverage limit of the ISMLS to the point at which the localizer course line intersects the ISMLS glide path at a height

of 200 feet or less above the horizontal plane containing the threshold.

*Glide path* means that locus of points in the vertical plane containing the runway center line at which the DDM is zero, which, of all such loci, is the closest to the horizontal plane.

*Glide path angle* ( $\theta$ ) means the angle between a straight line which represents the mean of the ISMLS glide path and the horizontal.

*Glide path sector (full)* means the sector in the vertical plane containing the ISMLS glide path and limited by the loci of points nearest to the glide path at which the DDM is 0.175. The ISMLS glide path sector is located in the vertical plane containing the runway centerline, and is divided by the radiated glide path in two parts called upper sector and lower sector, referring respectively to the sectors above and below the glide path.

*Glide path sector (half)* means the sector in the vertical plane containing the ISMLS glide path and limited by the loci of points nearest to the glide path at which the DDM is 0.0875.

*ISMLS Point 'A'* means an imaginary point on the glide path/localizer course measured along the runway centerline extended, in the approach direction, four nautical miles from the runway threshold.

*ISMLS Point 'B'* means an imaginary point on the glide path/localizer course measured along the runway centerline extended, in the approach direction, 3500 feet from the runway threshold.

*ISMLS Point 'C'* means a point through which the downward extended straight portion of the glide path (at the commissioned angle) passes at a height of 100 feet above the horizontal plane containing the runway threshold.

*Interim standard microwave landing system (ISMLS)* means a ground station which transmits azimuth and elevation angle information which, when decoded and processed by the airborne unit, provides signal performance capable of supporting approach minima for V/STOL and CTOL operations and operates with the signal format and tolerances specified in §§171.259, 171.261, 171.263, 171.265, and 171.267.

*Integrity* means that quality which relates to the trust which can be placed

in the correctness of the information supplied by the facility.

*Mean corrective time* means the average time required to correct an equipment failure over a given period, after a service man reaches the facility.

*Mean time between failures* means the average time between equipment failure over a given period.

*Reference datum* means a point at a specified height located vertically above the intersection of the runway centerline and the threshold and through which the downward extended straight portion of the ISMLS glide path passes.

*Split type ground station* means the type of ground station in which the electronic components for the azimuth and elevation guidance are contained in separate housings or shelters at different locations, with the azimuth portion of the ground station located at the stop end of the runway, and the elevation guidance near the approach end of the runway.

#### § 171.255 Requests for IFR procedures.

(a) Each person who requests an IFR procedure based on an ISMLS facility that he owns must submit the following information with that request:

(1) A description of the facility and evidence that the equipment meets the performance requirements of §§171.259, 171.261, 171.263, 171.265, 171.267, and 171.269, and is installed in accordance with §171.271.

(2) A proposed procedure for operating the facility.

(3) A proposed maintenance organization and a maintenance manual that meets the requirements of §171.273.

(4) A statement of intent to meet the requirements of this subpart.

(5) A showing that the ISMLS facility has an acceptable level of operational reliability, maintainability and acceptable standard of performance. Previous equivalent operational experience with a facility with identical design and operational characteristics will be considered in showing compliance with this paragraph.

(b) After the FAA inspects and evaluates the ISMLS facility, it advises the owner of the results and of any required changes in the ISMLS facility