#### **INSTRUMENT NUMBER DASR 4/1994**

## Civil Aviation Act 1988

#### Civil Aviation Regulations

I, COLIN TORKINGTON, Acting Director, Directorate of Aviation Safety Regulation, a delegate of the Civil Aviation Authority, under regulation 177 of the Civil Aviation Regulations, issue the instructions set out in the Schedule.

# **SCHEDULE**

## Part 1—Radio communication equipment

1.1 (1) An aircraft operating under the I.F.R. and engaged in an operation specified in column 2 of an item in the Table must, subject to this clause, be equipped with the radio communication equipment set out in column 3 of the item.

#### Table

Column 1 Item No.	Column 2 Operation	Column 3 Equipment required
1.	Regular public transport operations	<ul> <li>(a) 1 VHF and 1 HF system;</li> <li>OR</li> <li>(b) 2 VHF systems</li> </ul>
2.	Charter operations other than operations referred to in item 3	1 VHF system
3	Charter operations outside VHF range of an air traffic control unit or flight service unit	1 VHF system and 1 HF system
4	Operations in remote areas other than operations referred to in items 1, 2 and 3	1 HF system

(2) A HF system must be fitted to an aircraft referred to in item 1 of the Table if the aircraft will be operating in an area where the pilot in command cannot maintain continuous radio contact with Air Traffic Control or Flight Service on VHF frequencies.

(3) Subclause (2) does not apply to an aircraft engaged in regular public transport operations if the aircraft carries equipment that enables continuous radio communication with an appropriately-trained representative of the aircraft's operator.

(4) An aircraft referred to in item 3 does not have to be fitted with a HF system if the aircraft carries equipment that enables continuous radio communication with an appropriately-trained representative of the aircraft's operator.

- (5) A HF system must be fitted with frequencies:
- (a) appropriate to the area of operation; and
- (b) sufficient to enable continuous communication with Air Traffic Control or Flight Service during the flight including ground operations.

# Part 2—Radio navigation systems

## Aircraft operating under I.F.R.

- 2.1 (1) An aircraft:
  - (a) engaged in regular public transport operations: and
  - (b) that is operating under I.F.R.; and
  - (c) that is operating on a route served by VHF omni-directional radio range;

must be equipped with:

- (d) either:
  - (i) 2 VHF omni-directional radio range systems; or
  - (ii) a VHF omni-directional radio range system and an automatic direction finding system; and
- (e) distance measuring equipment.
- (2) An aircraft:
- (a) engaged in regular public transport operations: and
- (b) that is operating under I.F.R.; and
- (c) that is operating on a route which is not served by VHF omnidirectional radio range;

must be equipped with:

- (d) either:
  - (i) 2 automatic direction finding systems; or
  - (ii) a VHF omni-directional radio range system and an automatic direction finding system; and
- (e) distance measuring equipment.
- (3) An aircraft:
- (a) engaged in charter operations or aerial work operations; and
- (b) having a maximum take-off weight of more than 5700 kilograms; and
- (c) that is operating under I.F.R.; and
- (d) that is operating on a route served by VHF omni-directional radio range;

must be equipped with:

- (e) either:
  - (i) 2 VHF omni-directional radio range systems; or
  - (ii) a VHF omni-directional radio range system and an automatic direction finding system; and
- (f) distance measuring equipment.
- (4) An aircraft:
- (a) engaged in charter operations or aerial work operations; and
- (b) having a maximum take-off weight of more than 5700 kilograms; and
- (c) that is operating under I.F.R.; and
- (d) that is operating on a route which is not served by VHF omnidirectional radio range;

must be equipped with:

- (e) either:
  - (i) 2 automatic direction finding systems; or
  - (ii) a VHF omni-directional radio range system and an automatic direction finding system; and
- (f) distance measuring equipment.
- (5) An aircraft:
- (a) operating outside uncontrolled airspace; and
- (b) engaged in charter operations, or aerial work operations, or private operations; and
- (c) having a maximum take-off weight of 5700 kilograms or less; and
- (d) that is operating under I.F.R.;

must be equipped with either:

- (e) an automatic direction finding system; or
- (f) a VHF omni-directional radio range system.
- (6) An aircraft:
- (a) operating in controlled airspace; and
- (b) engaged in charter operations, or aerial work operations, or private operations; and
- (c) having a maximum take-off weight of 5700 kilograms or less; and

(d) that is operating under I.F.R.;

must be equipped with:

- (e) 2 automatic direction finding systems; or
- (f) an automatic direction finding system and a VHF omni-directional radio range system; or
- (g) an automatic direction finding system and distance measuring equipment; or
- (h) 2 VHF omni-directional radio range systems; or
- (i) a VHF omni-directional radio range system and distance measuring equipment.
- (7) An aircraft that:
- (a) is operating under the I.F.R.; and
- (b) is carrying out an approach at an aerodrome that has an instrument landing system;

must be equipped with a 75 MHZ marker beacon.

- (8) Subclause (7) does not apply if the aircraft:
- (a) is engaged in CAT 1 operations; and
- (b) is fitted with distance measuring equipment that enables the glideslope accuracy to be checked.

#### Part 3—Other equipment

#### Aircraft or pilot must carry a timepiece

3.1 (1) An aircraft operating under the I.F.R. must be equipped with a timepiece that is accurate to within 30 seconds.

(2) Subclause (1) does not apply if the pilot in command of the aircraft is carrying a time piece that is accurate to within 30 seconds.

# Airborne weather radar

3.2 (1) An aircraft that:

- (a) is operating under the I.F.R.; and
- (b) requires a crew of 2 or more members; and
- (c) is engaged in regular public transport operations or charter operations;

must be fitted with an airborne weather radar system.

- (2) Subclause (1) does not apply to the following aircraft:
- (a) an unpressurised turbine engine aircraft that has a maximum take-off weight of 5,700 kilograms or less;
- (b) an unpressurised piston engine aircraft.

### Secondary surveillance radar transponders

3.3 (1) An aircraft operating under the I.F.R. must not start operations:

(a) in controlled airspace; and

(b) within radar coverage of Air Traffic Control;

unless the aircraft is fitted with a serviceable secondary surveillance transponder capable of Mode A and Mode C operation.

(2) Subclause (1) does not apply if the aircraft is operating in general aviation aerodrome procedures control zones and associated lanes of entry.

# [Signed Colin Torkington]

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6 January 1994