RA 3227 – Methods of Identification

Rationale

In order to provide a surveillance service, controllers need to identify the subject Air System.

Contents

3227(1): Methods of Identification

Regulation 3227(1)

Methods of Identification

3227(1) Controllers **shall** identify Air Systems prior to providing an Air System with a surveillance service.

Acceptable Means of Compliance 3227(1)

Methods of Identification

1. Controllers **should** identify Air Systems using one of the following methods:

a. **Turn Method.** A turn for identification does not constitute a surveillance service. However, when turning Air System for this purpose, controllers **should** take into consideration:

(1) Airspace restrictions.

(2) The terrain in the Air System's reported, estimated or observed position.

(3) Other radar returns (including permanent echoes, clutter, etc).

(4) Surveillance coverage.

b. Where possible, turns **should** be used as initial positioning turns to save time and fuel.

c. In using the turn method, a controller **should** ascertain the Air System's heading and, following a period of track observation, **should** correlate the observed movement of a particular radar return with one or more changes of heading of at least 30°, as instructed by ►them◄, by another controller, or as reported by the pilot. Where only approximate position information is available a minimum of two turns of not less than 30° **should** be used. During this procedure, a controller seeking to identify an Air System **should**:

(1) Verify that the movements of not more than one radar return correspond with those of the Air System.

(2) Exercise caution, particularly when employing this method in areas where changes of Air System heading are commonly made as a navigational routine.

(3) Take account of the type and characteristics of the surveillance equipment, eg, raw or processed radar, rate of scan, beam width, range scale of display, when deciding the amount of turn and the period of observation required to prove identification.

(4) Ensure that the manoeuvre(s) will not carry the radar return outside radar display coverage, through clutter, or into airspace, which is the subject of specific clearance.

d. **Turn Method Using Direction Finding (DF).** A controller **should** observe a turn of not less than 30° together with relevant DF indications and a period of track observation. Range information derived from DME, TACAN or similar equipment **should** be used to assist identification when it is available.

e. **Position Report Method.** This method of identification **should** consist of a period of track observation, associated with heading and position information within known radar cover based on one or more of the following:

(1) By correlating a particular radar return with a position report from the pilot that the Air System is:

Acceptable Means of Compliance 3227(1)

(a) Over an exact reporting point which **should** be displayed on the radar map.

(b) At a particular distance, not exceeding 30 nm, on a particular radial from a collocated VOR / DME or TACAN. The source facility **should** be displayed on the radar map.

(c) Over a notified visual reporting point or prominent geographical feature approved for the purpose and displayed on the radar map, provided that the flight is operating with visual reference to the surface and at a height of 3000 ft or less above the surface.

f. **By a DF Fix.** This method **should** be reinforced by an alternative method if there is any doubt about the identification because of:

(1) The close proximity of other radar returns.

(2) Inaccurate reporting from Air System's at high level or some distance from navigational facilities.

g. **Departing Aircraft Method.** An Air System can be identified, by observing the radar response of a pre-notified departing Air System. Identification **should** take place within 1 nm of the end of the runway in use at the departure aerodrome. Particular care **should** be taken to avoid confusion with Air System overflying, carrying out a low approach, or departing from an adjacent runway or with Air System holding overhead the aerodrome.

h. **SSR Data.** When using SSR►[1]◄ data to identify an Air System, one of the following methods **should** be employed:

(1) Observing the pilot's compliance with the instruction to select a discrete four digit code;

(2) Recognizing a validated four digit code previously assigned to an Air System callsign. When code / callsign conversion procedures are in use and the code / callsign pairing can be confirmed, the callsign displayed in the data block may be used to establish and maintain identity;

(3) Observing an IDENT feature when it has been requested. Caution ►**should**◄ be exercised when employing this method because simultaneous requests for transmissions within the same area may result in misidentification. Aircraft displaying the conspicuity code 7000 ►**should not**◄ be identified by this method.

i. **SSR Mode 2 / Radar Responsive Beacon (RRB) Data**. For RRB data, the use of 'Chirp Single/Code/Retain' **should** be used. However, Controllers **should** guard against the risk of mis-identification, which might result from simultaneous RRB identification instructions from adjacent ships to different Air Systems in close proximity.

j. When using Mode 2 for identification, the controller **should** clearly recognize the designated four digit Mode 2 Code individually assigned to the Air System. If any doubt exists due to garbling etc, an alternative method of identification **should** be used.

2. When providing a surveillance service to an Air System, controllers operating at SSR equipped units **should** allocate that flight with a discrete code in accordance with the SSR assignment plan. Unless otherwise directed by an ATC unit, Mode C will be selected in conjunction with Mode 3/A. Controllers ►**should**◄, therefore, verify the accuracy of the Mode C readout when assigning discrete codes to Air Systems.

3. Identification **should** be maintained for the period the Air System is in receipt of a surveillance service and the pilot **should** be informed whenever identification is lost and subsequently re-established.

[1] ►Throughout this RA, any reference to SSR is equally applicable to Wide Area Multilateration and Automatic Dependant Surveillance Broadcast.◄

Acceptable Means of Compliance 3227(1)

4. **Failure to Locate an Aircraft**. If a surveillance controller is unable to locate a primary radar return or SSR response which relates to the pilot's reported position:

a. **The Air System is outside radar cover.** In which case the pilot **should** be instructed to climb to a higher level, call later, or call another nominated radar agency.

b. **The Air System return is obscured by clutter or is presenting a poor aspect to the radar aerial.** If available, an alternative radar can be selected, or the pilot **should** be instructed to change heading or call another nominated radar agency.

c. **The pilot's reported position is incorrect.** A further position check **should** be requested and, if the situation is still unresolved, the pilot **should** be instructed to obtain a fix from the UK Emergency Fixer Service and to pass the notified position to the controller.

Guidance Material 3227(1)

Methods of Identification

5. Nil.

Intentionally Blank for Print Pagination