

RA 3292 - Instrument Landing Systems Monitoring

Rationale

There is a requirement to provide a precision approach capability in poor weather conditions.

Contents

3292(1): Instrument Landing Systems Monitoring

Regulation 3292(1)

Instrument Landing Systems Monitoring

3292(1) Controllers **shall** provide Instrument Landing Systems (ILS) monitoring in accordance with (iaw) specified procedures.

Acceptable Means of Compliance 3292(1)

Instrument Landing Systems Monitoring

1. Aviation Duty Holders **should** decide when ILS approaches are to be monitored and publish this information in Local / Unit Orders.
2. When a controller is providing monitoring of an ILS, they **should**:
 - a. Set appropriate Decision Height ► / Decision Altitude ◀ as obtained from the pilot.
 - b. **Prior to Descent.**
 - (1) Obtain readback of correct altimeter setting from the pilot.
 - (2) Obtain positive confirmation that the Air System has acquired the localiser and is descending on the glidepath.
 - c. **During Descent.** Prior to obtaining a clearance, obtain a positive notification that the undercarriage is down. There is no requirement to check fixed undercarriage Air Systems, but if the controller is in any doubt a 'check gear, acknowledge' instruction **should** be given.
 - d. **Clearance.**
 - (1) Obtain a clearance from the Aerodrome Controller using the Radar Clearance Line (RCL). The clearance **should** be obtained and repeated verbatim to the pilot; the controller **should** request an acknowledgement of the clearance from the pilot. Unit orders **should** detail the range at which a clearance **should** be obtained.
 - (2) Use the RCL and the Talkdown frequency simultaneously for the readback of the clearance. If there is a failure of the RCL, the controller **should** request a clearance using the channel intercom on the Aerodrome frequency.
 - (3) In the event of the clearance being delayed, make a further attempt to obtain a clearance, or an instruction to break off the approach; this clearance or break-off instruction **should** be passed to the pilot not less than 2 nm from touchdown or the minimum specified in local / unit orders.
 - (4) Instruct the pilot to break-off the approach if a clearance has not been passed to the pilot by 2 nms or the minimum specified in Local / Unit orders.
3. **Approaching / Passing Decision Height ► / Decision Altitude. ◀** Warn the pilot that they are approaching their Decision Height ► / Decision Altitude. ◀ The pilot **should** also be informed when the Air System's radar return passes through the Decision Height ► / Decision Altitude ◀ cursor line.
4. **RN Units.** Specific methods of obtaining and passing a clearance are employed at RN units and controllers operating at these units **should** adhere to Local / Unit orders.

**Acceptable
Means of
Compliance
3292(1)**

5. **PAR Radar Fault / Failure.** When a major alert, or a Maintenance type minor alert such as "RADAR WORKING WITH ALERTS" is received, the Maintenance Personal Computer **should** be checked immediately, in order to assess the status of the PAR system and its suitability for continued use. Controllers **should** report indications other than 'Green' to the appropriate engineering service authority.
6. Where ILS monitoring is mandatory, in the event that an approach has to be terminated due to a radar fault / failure the pilot **should** be informed and the following actions **should** be taken, dependent on the stage of the approach:
- At any Stage.** Handover the Air System to the Director / Approach controller with appropriate radiotelephony instructions.
 - Early in the Procedure.** Where possible, arrange for the approach to continue as a Surveillance Radar Approach, or resume the precision approach if the fault is rectified.
 - Before a Positive Final Clearance Has Been Issued.** Instruct the pilot to contact the Tower controller for clearance to join the visual circuit, ► **make straight in approach** ◀ or break off the approach and execute the Missed Approach Procedure, or to 'fly-through dead-side' (if local procedures permit), depending upon whether the pilot is visual with the Aerodrome.
 - After a Positive Final Clearance Has Been Issued.** Instruct the pilot to continue iaw the issued clearance, or execute the Missed Approach Procedure, depending upon whether the pilot is visual with the aerodrome or not.
7. **Loss of Radar Contact.** In the majority of cases, a loss of radar contact will be accompanied with an appropriate equipment alert / fault message. If a radar contact is lost for more than 3 seconds, the pilot **should** be informed, and further action **should** be taken in the same manner as for a radar fault / failure.
8. If a radar contact is regained within 3 seconds, control of the Air System **should** be resumed provided the Air System is within 1 nm of the position that the contact was lost, is correlated and the new contact's track can be directly matched / related to that of its history trails.
9. If a radar contact is regained after 3 seconds and / or outside 1 nm of the position that the contact was lost, the ILS monitor can or cannot be resumed as follows:
- Outside 4 nms.** Outside 4 nms, control of the Air System can be only be resumed once the Air System has been formally re-identified. Identification **should** only take place if the controller considers there is sufficient time to do so. In order to effect identification, the Air System's position **should** be confirmed to the controller by the Director, or if it can be checked, a specific operation of the Air System's transponder.
 - Inside 4 nms.** If radar contact is regained within 4 nms of touchdown, action **should** be taken in the same manner as for a radar fault / failure.
10. **On Completion of the ILS.** On completion of the ILS, the controller **should** use the appropriate facility to inform Director 'Talkdown free'. Prior to conducting the next ILS, the controller **should** select the appropriate range scale.
11. Where PAR is being used for ILS monitor the Reset Default button **should not** be used to reset the display as the OBS mapping will automatically be selected. In the event of an Air System painting on the display prior to the controller stating 'Talkdown free' the controller **should** select the Air System's Data Block and state "*Talkdown free, contact ... (range of the radar return)*".

**Guidance
Material
3292(1)**

Instrument Landing Systems Monitoring

12. Nil.