Federal Aviation Administration

EN ROUTE - STAGE IV

Refresher Unit 09
Radar Controller Scan

Course 55055

OK-09-5106

FOREWORD

Purpose. This Air Traffic Refresher Unit provides for the systematic review of current Air Traffic Control operational procedures.

This publication is for use in the technical training of FAA Air Traffic Control Specialists. It does not replace, substitute for, or supersede official regulations, procedures, or directives.

Review. Training programs established under the Government Employees Training Act are based on actual needs, and a review of these training needs is conducted at least once every three years.

Recommended Changes. Suggested changes and corrections to this training material should be forwarded to:

DOT, FAA, Mike Monroney Aeronautical Center
En Route Training Section, AMA-511
P.O. Box 25082
Oklahoma City, OK 73125

PREFACE

This refresher unit replaces all previous versions of ER-11-9, Radar Controller Scan, and reflects the latest technical changes found in the referenced source documents through February 2010, including FAA Order JO 7110.65. See “Stage IV Changes 02/11/10” on the lesson materials download page. The contents of this unit are current as of the date shown on the cover. The material herein will be kept current through unit replacement. This unit is not to be used as a Standard Operating Procedure (SOP). In all cases, a controller’s good judgment is uppermost in applying the procedures advocated.

INSTRUCTIONS

1. Write your answers to the questions in the Question Section on a separate piece of paper. This will allow the unit to be reused.

2. Compare your answers with those in the Answer and Discussion Section.

3. If you answer any questions incorrectly, study the discussion paragraph(s).

4. Review the references given in the Answer and Discussion Section.

5. An informal discussion of this unit with other specialists may help clarify any ambiguities.

RADAR CONTROLLER SCAN
Question Section

DIRECTIONS: ITEM 1 IS COMPLETION. WRITE YOUR ANSWER USING THE APPROPRIATE WORD(S) OR PHRASE(S). ITEMS 2 THROUGH 8 ARE MULTIPLE CHOICE. INDICATE YOUR SELECTION BY WRITING THE APPROPRIATE LETTER FOR EACH ITEM.

1. Scanning the radar display and correlating flight progress strip information with observed radar data is a primary responsibility of the _____ position.

2. The radar controller has clearly defined responsibilities when it comes to scanning the position and should **NOT** perform the scanning functions of any other team members.

   A. True

   B. False

3. Overall sector operations, including scanning for traffic conflicts and ensuring aircraft separation, are the responsibility of the Radar Coordinator position.

   A. True

   B. False

4. If the position is staffed, the Radar Coordinator assumes the responsibility for managing the _____.

   A. overall sector operations

   B. separation of aircraft

   C. flight progress strips

   D. traffic flow

5. Procedures developed to enhance controller performance in the area of scanning can be found in the _____.

   A. Supervisor Position Binder

   B. Position/Sector Binder

   C. Letters of Agreement

   D. Status Information Area(s)

RADAR CONTROLLER SCAN

Question Section *(Continued)*

6. The radar controller, in addition to scanning the radar display, is also required to ensure that the Radar Associate position can observe the radar data.

   A. True

   B. False

7. The radar controller should scan the radar display _____.

   A. at least once every minute

   B. more frequently when the Radar Coordinator position is **NOT** staffed

   C. unless the Radar Associate position assumes that responsibility

   D. on a continuous basis

8. What would you scan to determine if FL180 is a usable altitude?

   A. DSR Keyboard

   B. Category Keys

   C. Main Display Module

   D. Radar Computer Readout Device

RADAR CONTROLLER SCAN
Answer and Discussion Section

1. Scanning the radar display and correlating flight progress strip/User Request Evaluation Tool (URET) information with observed radar data is a primary responsibility of the _____ position.

   ANSWER: Radar

   REFERENCE: JO 7110.65, par. 2-10-1

   DISCUSSION: One of the primary responsibilities of the Radar position is to scan the radar display and correlate it with the flight progress strip/URET information. The controller should also monitor the RCAG light panel to ensure frequency continuity. In addition, scan the R-CRD for amended altimeter settings.

2. The radar controller has clearly defined responsibilities when it comes to scanning the position and should **NOT** perform the scanning functions of any other team members.

   ANSWER: B. False

   REFERENCE: JO 7110.65, par. 2-10-1

   DISCUSSION: There are no absolute divisions of responsibilities regarding position operations. The tasks to be completed remain the same whether one, two, or three people are working positions within a sector. The team, as a whole, has the responsibility for the safe and efficient operation of that sector.

3. Overall sector operations, including scanning for traffic conflicts and ensuring aircraft separation, are the responsibility of the Radar Coordinator position.

   ANSWER: B. False

   REFERENCE: JO 7110.65, par. 2-10-1

   DISCUSSION: The Radar position, not the Radar Coordinator position, has the responsibility for managing the overall sector operations, including aircraft separation.

4. If the position is staffed, the Radar Coordinator assumes the responsibility for managing the _____.

   ANSWER: D. traffic flow

   REFERENCE: JO 7110.65, par. 2-10-1

   DISCUSSION: When the Radar Coordinator position is staffed, the Radar Coordinator assumes responsibility for managing traffic flows, while the Radar position retains responsibility for aircraft separation.

RADAR CONTROLLER SCAN
Answer and Discussion Section *(Continued)*

5. Procedures developed to enhance controller performance in the area of scanning can be found in the _____.

   ANSWER: A. Supervisor Position Binder

   REFERENCE: 7210.3, par. 2-1-3

   DISCUSSION: The Supervisor Position Binder shall address procedures that will enhance controller performance in areas such as scanning, coordination, use of proper phraseology, and proficiency/remedial training. A copy of this binder shall be in a location easily accessible to each position/sector.

6. The radar controller, in addition to scanning the radar display, is also required to ensure that the Radar Associate position can observe the radar data.

   ANSWER: A. True

   REFERENCE: JO 7110.65, par. 2-10-1

   DISCUSSION: A primary responsibility of the Radar Controller position is to adjust equipment at the Radar position to be usable by all members of the team. One of the reasons for this is that a primary responsibility of the Radar Associate position is to correlate the flight progress strips and/or URET CCLD data with radar data.

7. The radar controller should scan the radar display _____.

   ANSWER: D. on a continuous basis

   REFERENCE: JO 7110.65, par. 2-10-1

   DISCUSSION: To scan is to look over quick but thoroughly, moving from one point to another. Since scanning the radar display is a primary responsibility of the Radar position, it should be accomplished on a continuous basis. Each radar controller must develop a scanning procedure that works for him/her.

RADAR CONTROLLER SCAN

Answer and Discussion Section *(Continued)*

8. What would you scan to determine if FL180 is a usable altitude?

ANSWER: D. Radar Computer Readout Device

REFERENCE: EM-12, par. 8.2.6

DISCUSSION: In addition to updated altimeter settings being displayed on the Radar Computer Readout Device (R-CRD), the following information is also displayed and should be included in the ongoing scanning procedure used by the radar controller:

- *MDM Code Selection list*
- *Altitude Limits*
- *Computer-originated area*
  - *Accept message*
  - *Reject message*
  - *Code overflow*
  - *Beacon code assignment*
  - *Flight plan readout*
- *Auto Handoff Inhibit list*
- *Preview Area*

The R-CRD should be scanned occasionally for any updated information.

THIS PAGE INTENTIONALLY LEFT BLANK