Federal Aviation Administration

Initial En Route Qualification Training

Instructor Lesson 42 Team Responsibilities

Course 50148001

LESSON PLAN DATA SHEET

COURSE NAME:	INITIAL EN ROUTE QUALIFICATION TRAINING
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REFERENCE(S):	FAA ORDER JO 7110.65, AIR TRAFFIC CONTROL; FAA ORDER JO 7110.311C, PROCEDURAL GUIDANCE FOR FAA ORDER JO 7110.65 FOLLOWING EN ROUTE AUTOMATION MODERNIZATION (ERAM) IMPLEMENTATION
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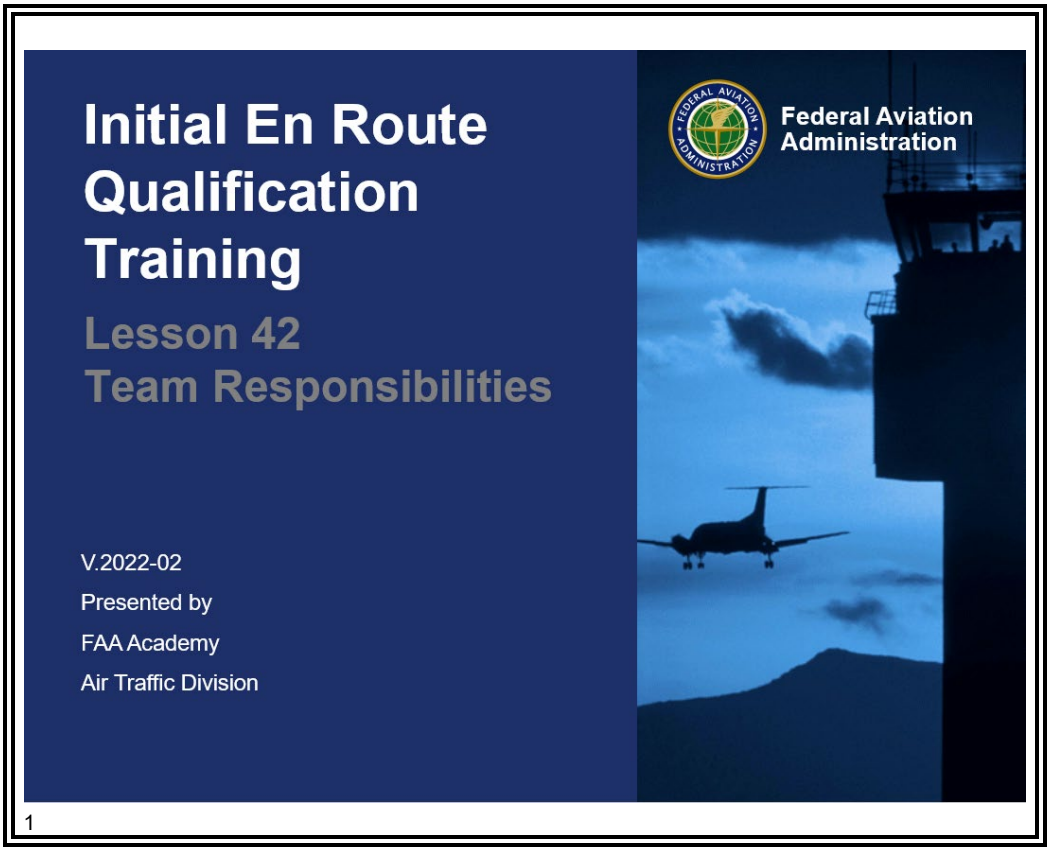
EXERCISE(S)/ ACTIVITY(S):	NONE
END-OF-LESSON TEST:	NONE
PERFORMANCE TEST:	NONE
MATERIALS:	NONE
OTHER PERTINENT INFORMATION:	NONE

☞***NOTE:*** *As you prepare for this lesson, recall and be prepared to talk about examples and personal experiences that illustrate or explain the teaching points in the lesson.*

INTRODUCTION

Gain Attention



In previous lessons you learned the technical requirements for being an Air Traffic Controller. In this lesson, you will learn about the composition of an En Route Sector team as well as the importance of teamwork in your job.

INTRODUCTION *(Continued)*

Opening Scenario

TEAM RESPONSIBILITIES

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As a controller you will be part of a team that ensures the safety and efficiency of the National Airspace System (NAS). Good technical skills alone will **not** make you a good controller. You **must** also be able to work with others in a team environment. Working as a team on an air traffic control position requires communication and close interaction with team members. Performance as a cohesive team will result in the continuous safe and efficient operation of your sector.

Purpose

This lesson explains the roles of a sector team and emphasizes the significance of teamwork within the ATC community.

INTRODUCTION *(Continued)*

Lesson Objectives

LESSON OBJECTIVES

At the end of this lesson, you will be familiar with:

- Sector team positions
- Primary responsibilities of a sector team
- The role of teamwork within the ATC community
- Best practices used in the field today

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☞ ***NOTE:*** *Teach from graphic.*

SECTOR TEAM

Team Composition

TEAM COMPOSITION

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⊙ The en route sector team is defined as:

- Radar Position (R)
  - That position which is in direct communication with the aircraft and which uses radar information as the primary means of separation
- Radar-Associate (RA)
  - That position sometimes referred to as "D-Side" or "Manual Controller"
- Radar Coordinator Position (RC)
  - That position sometimes referred to as "Coordinator," "Tracker," or "Handoff Controller" (En Route)
- Radar Flight Data (FD)
  - That position commonly referred to as "Assistant Controller" or "A-Side" position

SECTOR TEAM *(Continued)*

A Good Sector Team

⊙ A good sector team has:

- Knowledge
- Professional attitude
- Communication
- Situational awareness
- Judgment

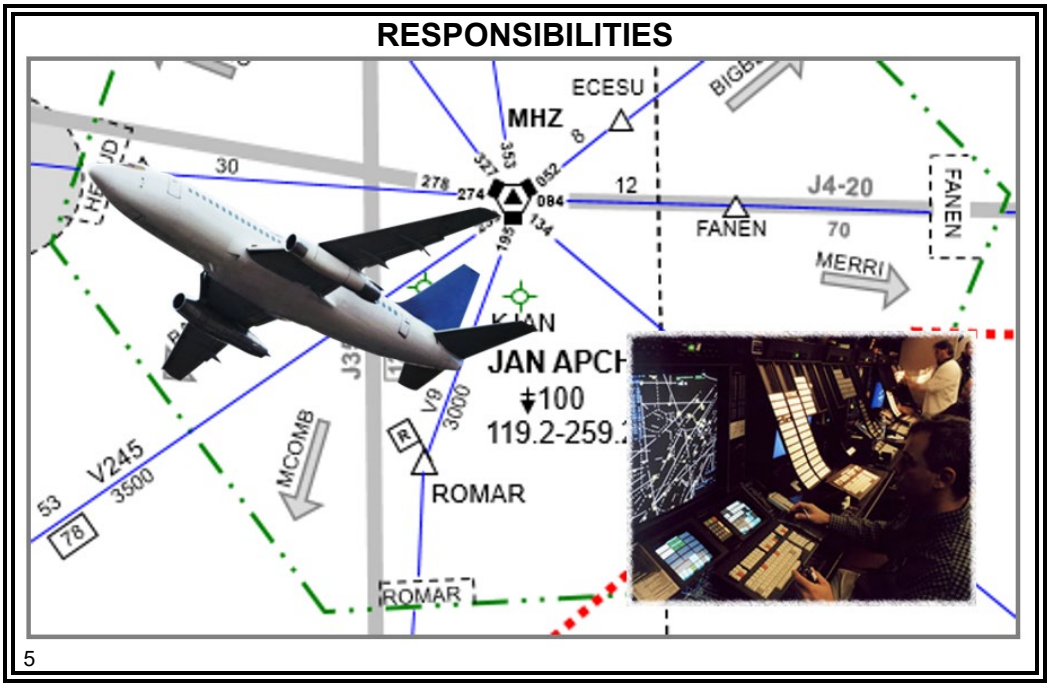
Good Sector Management

⊙ Good sector management should:

- Promote safety and operational efficiency
- Promote the team concept
- Provide better service to the users
- Reduce operational errors and deviations

RESPONSIBILITIES

Overview
JO 7110.65,
pars. 2-10-1, 2-1-1



⊙ The en route sector team provides ATC service within the ATC system.

- The primary purpose of the ATC system is to prevent a collision between aircraft operating in the system and to provide a safe, orderly and expeditious flow of traffic
- In addition to its primary function, the ATC system has the capability to provide (with certain limitations) additional services
  - The provision of additional services is **not** optional on the part of a controller, but rather is required when work situation permits

NOTE: The requirement to prevent a collision between two aircraft applies to **any** two aircraft—IFR, VFR, or two VFR aircraft.

- There are **no** absolute divisions of responsibilities regarding position operations
- Tasks remain the same whether one, two, or three people are working positions within the sector
- Team as a whole has responsibility for the safe and efficient operation of that sector
- Do **not** assume the Radar Controller sees all problems—communicate!

RESPONSIBILITIES *(Continued)*

Primary Responsibilities
JO 7110.65, par. 2-10-1

⊙ Ensure Separation

- Ensure Altitude Assignments are issued with correct altitude
  - Most commonly mistaken Altitude Assignments/Read backs
    - → 10,000 and 11,000
    - → FL200 & FL220
    - → FL300 & FL330
    - → FL320 when requested and FL230 is assigned as an interim

      Example: Aircraft that descend to 10,000 when the controller intends to assign 11,000 results in an operational deviation. Radar-Associate controllers are responsible for listening to altitude assignments when **not** completing other required duties.

NOTE: Listen to ensure that when traffic information is issued, the altitude of the traffic is **not** issued as an assigned altitude to the other aircraft. This is a common operational error.

- Ensure altitude assignments:
  - Provide positive separation
  - Are issued to the correct aircraft
  - Are read back correctly by the pilot
  - Are read back by the correct aircraft
  - Are entered accurately into the full data block (FDB)
  - Are entered into the correct FDB

NOTE: This is often referred to as failure to see displayed traffic.

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RESPONSIBILITIES *(Continued)*

Primary Responsibilities (Cont'd)
JO 7110.65, par. 2-10-1

- Ensure altitude – Mode C readout
  - **No** two targets will merge at the same altitude, including two VFR targets
  - Climb/descent rate will be sufficient to ensure positive separation
- Ensure Holding
  - Correct altitude assignments
  - Sufficient space in the holding stack for the volume of aircraft that will be entering your sector
  - Information is accurately entered into the EDST
- Ensure flight data
  - Route amendments you enter are issued by the Radar Controller or properly coordinated
  - The aircraft is flying the route contained in the flight plan
- Ensure that flashing is investigated promptly and appropriate action taken
  - Flashing on the radar display is designed to get the controllers attention
- Ensure EDST notifications are investigated and appropriate action taken

☞ ***NOTE:*** *There are many different types of alerts and notifications.*

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RESPONSIBILITIES *(Continued)*

Primary Responsibilities (Cont'd)
JO 7110.65, par. 2-10-1 ; JO 7110.311C, par. 2-10-1

- Sequencing (miles-in-trail)
  - Monitor trailing aircraft's speed
  - Maximum indicated airspeed is less as aircraft climb
  - Monitor read backs
  - Scan for separation from other aircraft being sequenced and other aircraft in your sector when vectoring
  - Scan other areas of your display for handoffs, etc.
- Accept and initiate handoffs
  - Ensure **no** conflicts will occur or that all conflicts are resolved
  - Check route, speed, and altitude prior to accepting
  - Ensure automation is updated and any coordination is accomplished prior to handoff
- Ensure stripmarking and/or electronic flight data entries are completed on instructions or clearances you issue or receive.
- Adjust equipment to be usable by all members of the team.
- Request/receive and disseminate weather, NOTAMs, NAS status, traffic management, and Special Use Airspace status messages.
- Ensure the situation display accurately reflects the status of all SAAs that impact your area of control responsibility.

TEAMWORK

Definitions

📖 A **team** is a group of people with a common purpose and who work together in an interdependent, collaborative way in order to produce quality results.

📖 **Teamwork** is a cooperative effort by the members of a group or team to achieve a common goal.

Advantages

⊙ Teams can:

- Provide many different perspectives and ideas which sometimes lead to higher quality decisions
- Handle complex tasks and learn from experience more effectively than individuals
- Identify and correct errors better than individuals
- Provide back-up and support to each other
- Out-perform individuals

Disadvantages

⊙ Teams can:

- Take longer to make decisions
- Make poor decisions due to “group think” - pressure to agree in order to avoid conflict - or other interpersonal problems within the team
- Have other problems, such as:
  - Personal conflict
  - Individuals **not** feeling responsible for the team’s work
  - Uneven workload

TEAMWORK *(Continued)*

Communication

📖 **Communication** is any verbal or nonverbal behavior that is perceived by another person. Effective communication occurs when the individual on the receiving end of a message interprets the message in the same way the sender intended.

⊙ Communication is important because it is the basis for all human interaction and all team functioning.

⊙ Communication is vital to reducing errors and accidents.

⊙ Team members **must** listen effectively and communicate well with other members of the team.

⊙ Controllers **must** focus on the exact words spoken, since a single misunderstanding can have drastic effects.

⊙ To avoid problems and errors caused by communication:

- Use standard phraseology
- Ask for clarification when necessary
- Keep instructions and requests brief
- Ensure position relief briefings are complete and recorded
- Follow procedures—do **not** take shortcuts

TEAMWORK *(Continued)*

Obstacles to Effective Teamwork

- ⊙ Factors that may impact a controller's ability to function effectively include:
  - Talking too fast or too slowly
  - Taking procedural shortcuts to keep up with workload
  - Loss of situational awareness
  - Daydreaming or inattentiveness
  - Physical (e.g., health, fatigue)
  - Distractions (e.g., noise within control room, activity, or maintenance at other sectors)
  - Emotional (e.g., confidence, attitude, stress, conflict with coworkers, family problems)
- ⊙ How a team works together significantly effects how the team's goal is accomplished.
  - Examples of ineffective teamwork which could cause a sector to cease functioning as a team, include:
    - Personalities
    - Behaviors
    - Attitudes
    - Intimidation
    - Lack of discipline
    - A "that's not my job" mindset

BEST PRACTICES

Best Practices

- Do **not** get fixated on the same event that the Radar Controller is currently working.
- Assist the Radar Controller in making automated handoffs and offsetting data blocks rather than racing to be first.
  - You are **not** in competition to complete tasks
- Relay information exactly as it is received.
  - Details are extremely important
- Scan for other traffic before advising the Radar Controller to change the heading or altitude of an aircraft.

  Example: In recognizing a confliction between two aircraft, ensure your proposed solution does **not** cause additional conflicts.
- Be specific when requesting control. The request should be in line with the control action you are planning.

  Example: "…request control for descent to flight level two zero zero."
- Think before you key the mike or engage the line.
- When communicating with the Radar Controller, first ensure they are **not** talking to another controller, airplane, or attempting to resolve a situation.
- Promptly record required information in your status information area (SIA).
  - Otherwise, it will be just a question of time before you forget to pass along the information during a position relief briefing
- Know everything you can about your job, the rules, and the equipment.
  - Within months of arriving at your facility, you will be trained and certified on your first Radar-Associate position; that means you are responsible for **your** actions

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BEST PRACTICES *(Continued)*

Best Practices (Cont'd)

- ⊙ Avoid distractions while on position.
  - Many operational errors happen during periods of light traffic
- ⊙ Combine coordination whenever possible.
  - That means you should look for other items before you engage the line
- ⊙ Ask for help when you anticipate you might fall behind.
  - Do **not** freeze
  - Make sure you are heard
  - Take a deep breath and then start to address issues one at a time
    - First, check for aircraft at the same altitude
    - Check for aircraft that need to be handed off, etc.

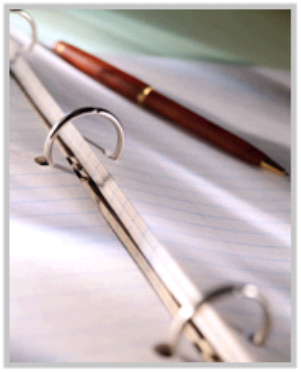
IN CONCLUSION

Lesson Review

LESSON REVIEW

The following topics were covered in this lesson:

- Sector team positions
- Sector team primary responsibilities
- Role of teamwork
- Best practices



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☞ ***NOTE:*** *Teach from graphic. Review and elaborate briefly on the topics covered in this lesson.*