



Course Description

ATT2823 | Air Traffic Control (ATC) NON-Radar | 3.00 credits

In this course, future air traffic controllers will acquire an understanding of air traffic control practices, policies and procedures and their application in a non-radar air traffic environment. Throughout this course, (Non-Radar Procedures) appropriate real-life examples are used to illustrate the reasoning behind procedures used by air traffic controllers utilizing the non-radar methods. The liberal use of figures and example phraseology is used to assist the student in achieving an overall understanding of the air traffic control system. Prerequisites: ATT 2820, ASC 1210.

Course Competencies:

Competency 1: The student will demonstrate knowledge and understanding of subject matter relating to ATC Non-Radar operations by:

1. Recalling the requirements of the initial separation of successive departing aircraft, including minimums on diverging courses and same courses
2. Stating the requirements for initial separation of departing and arriving aircraft, including separation minimums
3. Describing requirements for longitudinal aircraft separation, including minimums in same, converging, crossing, or opposite courses, DME arc, other than established airways or routes, and RNAV on diverging/crossing courses
4. Identifying vertical separation requirements, including vertical separation minimums, their application and exceptions, separation by pilots, and RNAV along VOR airway/routes
5. Listing lateral separation requirements, including minimums on diverging radials, DME arcs other than established airways or routes, and RNAV on diverging/ crossing courses
6. Discussing timed approaches, including application, approach sequence, sequence interruption, level flight restrictions, interval minimums, time checks, and missed approaches
7. Using standard ATC communications in non-radar operations
8. Analyzing ATC clearances in non-radar operations

Competency 2: The student will demonstrate the ability to analyze and interpret the following ATC documentation by:

1. Applying low-altitude & high altitude
2. Instrument flight rules (IFR) charts
3. Utilizing instrument approach procedures (IAP), departure procedures (DP), and standard instrument arrivals (SIA)
4. Identifying flight data center notices to airmen (FDC NOTAMS)
5. Reporting pilot reports (PIREP)
6. Providing strip markings f. Producing aircraft position reports

Competency 3: The student will demonstrate proficiency in non-Radar ATC communications and operations by:

1. Completing control tower simulation exercises in a simulated ATC environment (simulator) using FAA standards, multiple traffic and weather scenarios will be utilized, including alerts, emergencies, and conflict situations, including runway incursions
2. Issuing clear, concise commands to aircraft in various situations to resolve or prevent conflict.
3. Providing a detailed, standard position relief briefing during training exercises
4. Exhibiting reasoned, decisive procedures in emergency/abnormal situations
5. Receiving and logging non-radar aircraft position reports.
6. Adapting communications to purpose, audience, and occasion

Learning Outcomes

- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively