



**Federal Aviation
Administration**

***55054001
EN ROUTE
RADAR ASSOCIATE
CONTROLLER TRAINING PART A:
BASIC CONCEPTS***

**Lesson 14: Special Use Airspace, ATC
Assigned Airspace, and Stationary
Altitude Reservations**

Version: 1.0 2022.08

INSTRUCTOR LESSON PLAN

PAGE INTENTIONALLY LEFT BLANK

LESSON PLAN DATA SHEET

Course Name	En Route Radar Associate Controller Training Part A: Basic Concepts
Course Number	55054001
Lesson Title	Special Use Airspace, ATC Assigned Airspace, and Stationary Altitude Reservations
Duration	1 hour, 30 minutes (includes lesson and ELT)
Version	1.0 2022.08
Reference(s)	JO 7110.65, Air Traffic Control; JO 7210.3, Facility Operation and Administration; JO 7400.10, Special Use Airspace; JO 7610.4 Special Operations; JO 7400.2, Procedures for Handling Airspace Matters; FAA-H-8083-25, Pilot's Handbook of Aeronautical Knowledge; Aeronautical Information Manual (AIM); 14 CFR Part 73, Special Use Airspace; 14 CFR 99.7, Special security instructions; 14 CFR 91.121, Altimeter settings; Exemption No. 2861A to 14 CFR Part 91.121
Prerequisites	NONE
Handout(s)	NONE
Exercise / Activity	NONE
Scenario	NONE
Assessments	☉ YES - Written (<i>Refer to ELT01_L14, print prior to class</i>)
Materials and Equipment	☉ Pencil and/or pen
Other Pertinent Information	☉ Ensure lesson materials are downloaded to the classroom computer ☉ Prepare to give examples of: • Restricted Area • Prohibited Area • Alert Area • Controlled Firing Area (CFA) • Military Operations Area (MOA) • National Security Area (NSA) • Warning Area • ATC Assigned Airspace (ATCAA) • Stationary ALTRV ☉ Course 57017 - MILITARY OPERATIONS: SPECIAL USE AIRSPACE (SUA) AND ATCAA, or current course, is available as supplemental training for this lesson ☉ This lesson is based on ERAM EAE410 ☉ The lesson has been reviewed and reflects current orders and manuals as of April 2022



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

LESSON ICON LEGEND

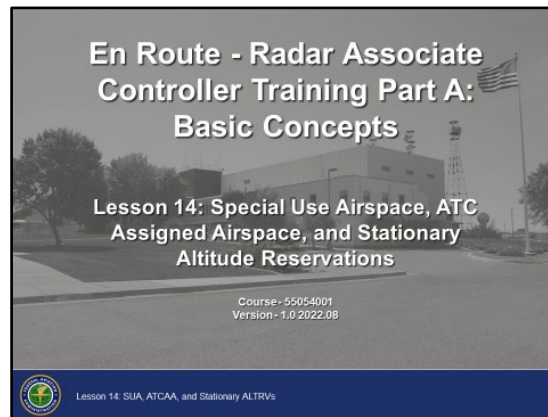
	Description
	The Activity icon indicates an exercise, lab, or hands-on activity.
	The Discussion Question icon signals a discussion question to be asked to the students.
	The Handout icon indicates a handout is to be distributed to the students.
	The Instructor Note icon is in hidden text and indicates text that is for the instructor only.
	The Multimedia icon indicates a video or audio clip is in the presentation.
	The Phraseology icon indicates that phraseology is in the content.
	The WBT icon indicates a component of web-based training.
	The Click icon indicates a PPT slide with click-based functionality to present additional information.
	The Definition icon indicates a published definition.

PAGE INTENTIONALLY LEFT BLANK

LESSON INTRODUCTION

Overview

JO 7110.65,
PCG



Overview

National airspace users are civilian and military. At times, these different groups use the same airspace and procedures. On other occasions, military and civilian users are handled very differently. As an air traffic controller you must be aware of when, where, and how these groups are treated differently. This lesson will address Special Use Airspace (SUA), ATC Assigned Airspace (ATCAA), stationary ALTRV, and procedures for handling participants and non-participants.

LESSON INTRODUCTION (CONT'D)

Objectives

Objectives

At the end of this lesson, you will be able to:

- Identify Special Use Airspace (SUA), ATC Assigned Airspace (ATCAA), and stationary ALTRV
- Recall agency and facility requirements for SUA, ATCAA, and stationary ALTRV
- Identify separation requirements for SUA, ATCAA, and stationary ALTRV



Lesson 14: SUA, ATCAA, and Stationary ALTRVs

1

Objectives



Review the lesson objectives.

- ☉ At the end of this lesson, you will be able to:
- Identify Special Use Airspace (SUA), ATC Assigned Airspace (ATCAA), and stationary ALTRV
 - Recall agency and facility requirements for SUA, ATCAA, and stationary ALTRV
 - Identify separation requirements for SUA, ATCAA, and stationary ALTRV

NOTE: There will be a graded end-of-lesson test upon completion of the lesson. The passing score is 70%. If you do not achieve a score of 70%, you will be provided study time and one retake of an alternate end-of-lesson test.

SPECIAL USE AIRSPACE (SUA)

Special Use Airspace

JO 7110.65,
PCG

Special Use Airspace

- Airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities



 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 2

Special Use Airspace



SPECIAL USE AIRSPACE (SUA) - Airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities.

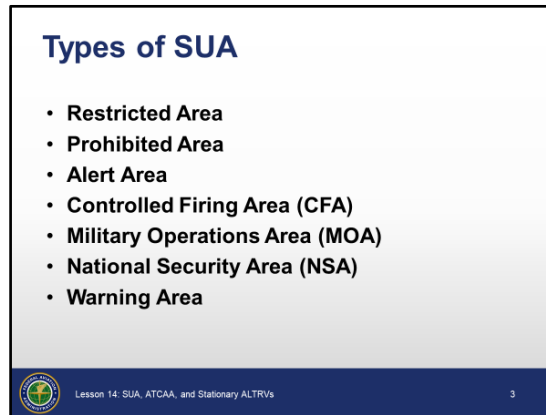
SPECIAL USE AIRSPACE (CONT'D)

Types of SUA

JO 7400.10,
Part I -
Regulatory SUA
and Part II -
Nonregulatory
SUA

AIM, par. 3-1-1;

JO 7400.2, par.
21-1-3, 21-1-12



Types of SUA

- ⦿ Restricted Area
- ⦿ Prohibited Area
- ⦿ Alert Area
- ⦿ Controlled Firing Area (CFA)
- ⦿ Military Operations Area (MOA)
- ⦿ National Security Area (NSA)
- ⦿ Warning Area

NOTE: The establishment of SUA does not, in itself, waive compliance with any part of the Code of Federal Regulations. DOD has been granted a number of waivers, exemptions, and authorizations to accomplish specific missions, e.g., the 250 knot speed restriction below 10,000' is waived for users in certain areas.

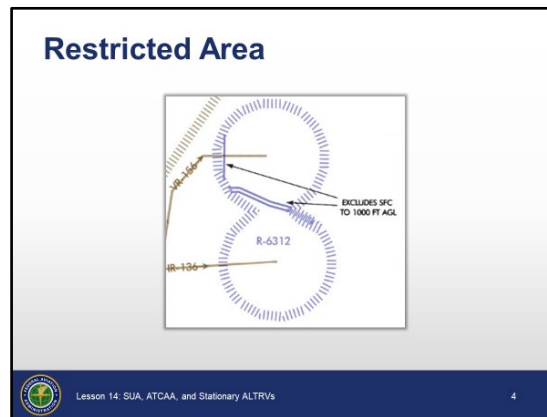
SPECIAL USE AIRSPACE (CONT'D)

Restricted Area

JO 7110.65,
PCG

14 CFR Part 73

JO 7400.2, pars.
23-1-1, 23-1-2,
23-1-5



Provide example(s) of local restricted areas from JO 7400.10 or charts.

Restricted Area

- ⦿ Permanent and temporary restricted areas are designated airspace within which the flight of aircraft, while not wholly prohibited, is subject to restriction
- ⦿ Necessary to confine or segregate activities considered hazardous to nonparticipating aircraft
- ⦿ Most restricted areas are designated joint use. IFR/VFR operations in the area may be authorized by the controlling ATC facility when it is not being utilized by the using agency.
- ⦿ Permanent restricted areas are depicted on Sectional Aeronautical, VFR Terminal Area, and applicable En Route charts
 - Where joint use is authorized, the name of the ATC controlling facility is also shown

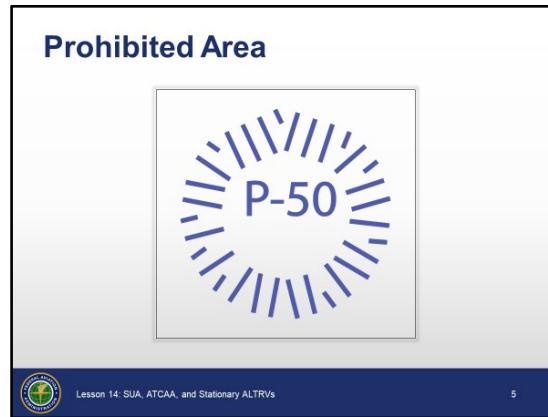
SPECIAL USE AIRSPACE (CONT'D)

Prohibited Area

JO 7110.65,
PCG

14 CFR Part 73

JO 7400.2, pars.
22-1-1, 22-1-2



Provide example(s) of prohibited areas from JO 7400.10 or charts.

Prohibited Area

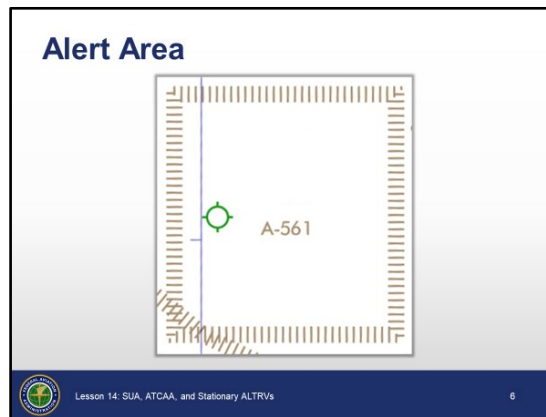
- ⦿ Designated airspace within which no person may operate an aircraft without the permission of the using agency
 - ⦿ Necessary to prohibit flight over an area on the surface in the interest of national security and welfare
-

SPECIAL USE AIRSPACE (CONT'D)

Alert Area

JO 7110.65,
PCG

JO 7400.2, pars.
26-1-1, 26-1-2,
26-1-5



Provide example(s) of alert areas from JO 7400.10 or charts.

Alert Area

- ⦿ Airspace which may contain a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft
 - ⦿ Depicted on aeronautical charts for the information of nonparticipating pilots
 - ⦿ All activities within an Alert Area are conducted in accordance with Federal Aviation Regulations, and pilots of participating aircraft as well as pilots transiting the area are equally responsible for collision avoidance
 - ⦿ All alert area activities must be conducted in accordance with visual flight rules
-

SPECIAL USE AIRSPACE (CONT'D)

Controlled Firing Area (CFA)

JO 7110.65,
PCG

FAA-H-8083-25,
Chapter 15

Controlled Firing Area (CFA)

- **Airspace wherein activities:**
 - Are controlled to eliminate hazards to nonparticipating aircraft
 - Are controlled to ensure safety of persons and property on the ground
 - Must be suspended when an aircraft might approach the area
 - Determined by spotter aircraft, radar, or ground lookout

Lesson 14: SUA, ATCAA, and Stationary ALTRVs7



Provide local example(s) of controlled firing area, if available.

Controlled Firing Area (CFA)

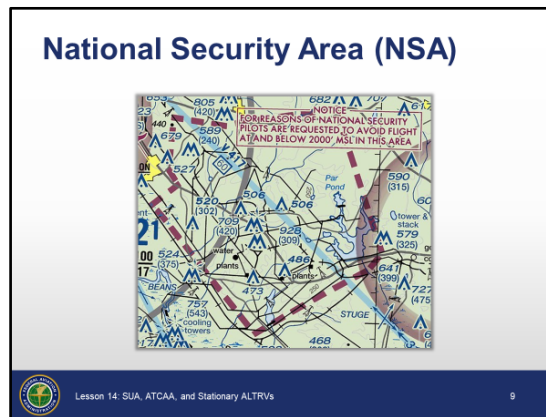
- ⦿ Airspace wherein activities:
 - Are controlled to eliminate hazards to nonparticipating aircraft
 - Are controlled to ensure safety of persons and property on the ground
 - Must be suspended when an aircraft might approach the area
 - Determined by spotter aircraft, radar, or ground lookout
 - ⦿ CFAs are not charted, as they do not cause nonparticipating aircraft to change their flight path
-

SPECIAL USE AIRSPACE (CONT'D)

National Security Area (NSA)

JO 7400.10,
Subpart E

14 CFR, Section
99.7



Provide example(s) of NSA from JO 7400.10 or charts.

National Security Area



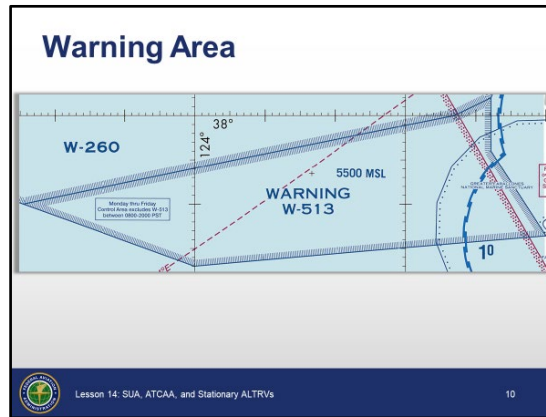
NATIONAL SECURITY AREA (NSA) - Consists of airspace of defined vertical and lateral dimensions established at locations where there is a requirement for increased security of ground facilities. The purpose of such national security areas is to request pilot cooperation by voluntarily avoiding flight through the NSA.

- ⦿ When circumstances dictate a need for a greater level of security, flight in an NSA may be temporarily prohibited
 - Such prohibitions will be issued by FAA Headquarters and disseminated via the U.S. NOTAM System
-

SPECIAL USE AIRSPACE (CONT'D)

Warning Area

JO 7110.65,
PCG



Provide example(s) of warning area from JO 7400.10 or charts.

Warning Area

- ⦿ Airspace of defined dimensions extending from 3 miles outward from the coast of the United States
 - ⦿ Contains activity that may be hazardous to nonparticipating aircraft
 - ⦿ Purpose is to warn nonparticipating pilots of the potential danger
 - ⦿ May be located over domestic or international waters or both
 - ⦿ Depicted on Sectional Aeronautical, VFR Terminal Area, and applicable En Route charts
-

SPECIAL USE AIRSPACE (CONT'D)

Knowledge Check

Knowledge Check

Which SUA is shown on IFR En Route charts?

- A. CFA
- B. Temporary Restricted Area
- C. Warning Area

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  11

Question: Which SUA is shown on IFR En Route charts?



Answer: C. Warning Area

SPECIAL USE AIRSPACE (CONT'D)

Knowledge Check

Knowledge Check

Which is true of Controlled Firing Areas (CFAs)?

- A. Pilots are briefed on CFA activity prior to flight
- B. Activities conducted are controlled to eliminate hazards to nonparticipating aircraft
- C. Activities conducted are also within another SUA which protects nonparticipating aircraft

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  12

Question: Which is true of Controlled Firing Areas (CFAs)?



Answer: B. Activities conducted are controlled to eliminate hazards to nonparticipating aircraft

SPECIAL USE AIRSPACE (CONT'D)

Knowledge Check

Knowledge Check

Which SUA extends from 3 miles outward from the coast of the United States?

- A. Warning Area
- B. Restricted Area
- C. National Security Area

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  13

Question: Which SUA extends from 3 miles outward from the coast of the United States?



Answer: A. Warning Area

ATC ASSIGNED AIRSPACE (ATCAA)

ATC Assigned Airspace (ATCAA)

JO 7110.65,
PCG

ATC Assigned Airspace (ATCAA)

- Airspace of defined vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic
 - ATCAA is similar to SUA, some exceptions:
 - Not depicted on IFR En Route or VFR Charts
 - Not described in JO 7400.10, Special Use Airspace

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 14



Provide example(s) of local ATCAA from controller charts.

ATC Assigned Airspace



ATC ASSIGNED AIRSPACE (ATCAA) - Airspace of defined vertical/lateral limits, assigned by ATC, for the purpose of providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic.

- ⦿ ATCAA is similar to SUA, but some exceptions are:
 - Not depicted on IFR En Route or VFR charts
 - Not described in JO 7400.10, Special Use Airspace
-

ATC ASSIGNED AIRSPACE (CONT'D)

Knowledge Check

Knowledge Check
Which airspace is not depicted on IFR En Route charts?

A. Permanent Restricted Areas
B. Warning Areas
C. ATC Assigned Airspace (ATCAA)

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  15

Question: Which airspace is not depicted on IFR En Route charts?



Answer: C. ATC Assigned Airspace (ATCAA)

STATIONARY AND MOVING ALTRVs

Definitions

JO 7110.65,
PCG

JO 7610.4, par.
3-1-2

Definitions

- **ALTITUDE RESERVATION (ALTRV)** - Airspace utilization under prescribed conditions normally employed for the mass movement of aircraft or other special user requirements which cannot otherwise be accomplished. ALTRVs are approved by the appropriate FAA facility and are classified as either moving or stationary.
- **STATIONARY ALTRV** - An altitude reservation which encompasses activities in a fixed area. Stationary ALTRVs may include activities such as special tests of weapons systems or equipment; certain U.S. Navy carrier, fleet, and anti-submarine operations; rocket, missile, and drone operations; and certain aerial refueling or similar operations.
- **MOVING ALTRV** - An altitude reservation which encompasses en route activities and advances with the mission progress, i.e., the reservation moves with the aircraft or flight.

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  16



This slide is animated, 2 clicks.

Definitions



ALTITUDE RESERVATION (ALTRV) - Airspace utilization under prescribed conditions normally employed for the mass movement of aircraft or other special user requirements which cannot otherwise be accomplished. ALTRVs are approved by the appropriate FAA facility and are classified as either moving or stationary.



Click to reveal the stationary ALTRV definition.



STATIONARY ALTITUDE RESERVATION (STATIONARY ALTRV) - An altitude reservation which encompasses activities in a fixed area. Stationary ALTRVs may include activities such as special tests of weapons systems or equipment; certain U.S. Navy carrier, fleet, and anti-submarine operations; rocket, missile, and drone operations; and certain aerial refueling or similar operations.



Click to reveal the moving ALTRV definition.

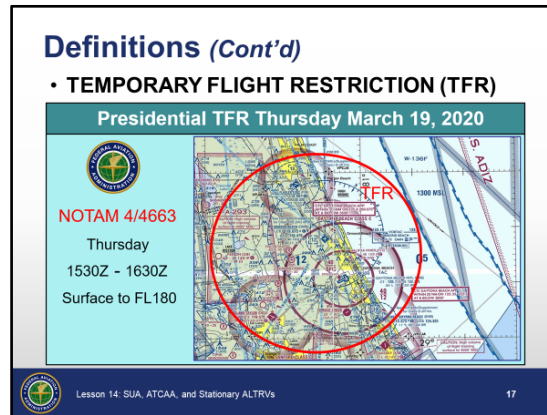


MOVING ALTRV - An altitude reservation which encompasses en route activities and advances with the mission progress, i.e., the reservation moves with the aircraft or flight.

STATIONARY AND MOVING ALTRVs (CONT'D)

Definitions (Cont'd)

JO 7110.65,
PCG



TEMPORARY FLIGHT RESTRICTION (TFR) - A regulatory action which is issued via the U.S. NOTAM system within the sovereign airspace of the United States and its territories to restrict certain aircraft from operating within a defined area on a temporary basis to protect persons or property in the air or on the ground.

Example: An example of a TFR is indicated on the slide with a red circle.



AIRCRAFT HAZARD AREA (AHA) - Used by ATC to segregate air traffic from a launch vehicle, reentry vehicle, amateur rocket, jettisoned stages, hardware, or falling debris generated by failures associated with any of these activities. An AHA is designated via NOTAM as either a Temporary Flight Restriction (TFR) or stationary ALTRV. Unless otherwise specified, the vertical limits of an AHA are from the surface to unlimited.



TRANSITIONAL HAZARD AREA (THA) - Airspace normally associated with an Aircraft Hazard Area within which the flight of aircraft is subject to restrictions.

STATIONARY AND MOVING ALTRVs (CONT'D)

Knowledge Check

Knowledge Check

Which airspace, not depicted on charts, may contain activities such as special tests of weapons systems or equipment; certain U.S. Navy carrier, fleet, and anti-submarine operations; rocket, missile, and drone operations?

- A. Permanent Restricted Areas
- B. Stationary ALTRV
- C. National Security Area

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  18

Question: Which airspace, not depicted on charts, may contain activities such as special tests of weapons systems or equipment; certain U.S. Navy carrier, fleet, and anti-submarine operations; rocket, missile, and drone operations?



Answer: B. Stationary ALTRV

AGENCY/FACILITY REQUIREMENTS

Military Radar Unit (MRU)

JO 7610.4, pars.
13-1-1, 13-1-2,
and Appendix 2



Military Radar Unit



MILITARY RADAR UNIT (MRU) - Any fixed or mobile ground-based unit under the operational jurisdiction of the military services excluding commissioned ATC facilities.

⦿ An MRU

- Will provide services in accordance with the Letter of Agreement (LOA) with the appropriate ATC facilities
 - Must not provide ATC services
 - Will be in communication with participating aircraft
 - May be used for radar monitoring in planned exercises or daily training under the following conditions:
 - Assists aircraft under its jurisdiction to remain within the SUA/ATCAA released to the unit by ATC
 - The use of an MRU and the associated SUA/ATCAA must be fully coordinated with the affected ATC facilities
 - Radar correlation checks and two-way communication with ATC must be accomplished prior to providing services in released airspace
-

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Airborne Radar Unit (ARU)

JO 7610.4, par. 13-1-3, and Appendix 2



Airborne Radar Unit



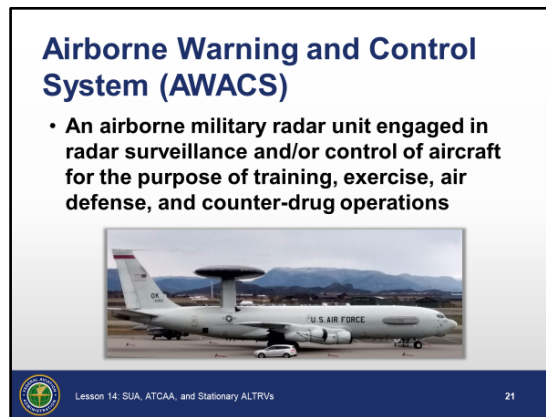
AIRBORNE RADAR UNIT (ARU) - An extension of a military radar unit during planned exercises and daily training missions.

- ⦿ An ARU must meet the following conditions:
 - Assists aircraft under its jurisdiction to remain within the SUA/ATCAA
 - The use of an ARU and the associated SUA/ATCAA must be fully coordinated between the MRU and the affected ATC facilities
-

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Airborne Warning and Control System (AWACS)

JO 7610.4, par.
13-1-4, and
Appendix 2



Airborne Warning and Control System



AIRBORNE WARNING AND CONTROL SYSTEM (AWACS) - An airborne military radar unit engaged in radar surveillance and/or control of aircraft for the purpose of training, exercise, air defense, and counter-drug operations.

- ⦿ An AWACS may be used as an MRU under the following conditions:
 - Assists aircraft under its jurisdiction to remain within the airspace released to the unit by ATC
 - Use of AWACS and the associated SUA/ATCAA is fully coordinated with affected air traffic control facilities
-

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Non-ATC Facilities

JO 7610.4, pars.
13-1-2, 13-1-3,
13-1-4, 13-1-9,
13-1-14



Non-ATC Facilities

- ⦿ MRU/ARU/AWACS are not commissioned ATC facilities
 - ⦿ Must not be authorized nor requested to provide ATC services
 - ⦿ Military command and control functions, including traffic advisories, will be provided to participating military/military contract aircraft operating within active airspace
 - ⦿ The activated airspace will be released to the non-ATC facility by the appropriate ATC facility in accordance with Letters of Agreement (LOA)
 - ⦿ Only ATC facilities may accept point outs
 - The only way MRU, ARU, and AWACS can accommodate nonparticipants is to return airspace
-

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Fleet Area Control and Surveillance Facility (FACSFAC)

JO 7610.4, pars. 2-6-1, 2-6-2, and Appendix 2



Fleet Area Control and Surveillance Facility



FLEET AREA CONTROL AND SURVEILLANCE FACILITY

(FACSFAC) - A U.S. Navy fixed ground Air Traffic Control facility which manages offshore and inland operating areas including warning areas, restricted areas, and other assigned airspace.

⊙ Some of the services they normally perform:

- Scheduling, coordinating, and monitoring of surface, sub-surface, and airborne units operating within and transiting between offshore operating areas and the National Airspace System (NAS)
 - Scheduling and coordinating airborne units operating within assigned airspace of inland operating areas
 - Scheduling of Military Training Routes (MTRs)
 - Providing SUA control services to participating military units, other government aircraft, government contract aircraft and, on a not-to-interfere basis, civil aircraft as delineated in letters of agreement with applicable FAA and military activities
 - Assistance during Search and Rescue (SAR) and Medical Evacuation (MEDEVAC)
-

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Knowledge Check

Knowledge Check
What must be done before a nonparticipating IFR aircraft enters an active MOA released to an MRU?

A. MRU returns airspace
B. Point out aircraft to MRU
C. MRU is unable to assist

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  24

Question: What must be done before a nonparticipating IFR aircraft enters an active MOA released to an MRU?



Answer: A. MRU returns airspace

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Knowledge Check

Knowledge Check

Which entity may provide services to civil aircraft as spelled out in letters of agreement?

- A. Airborne Radar Unit (ARU)
- B. Military Radar Unit (MRU)
- C. Fleet Area Control and Surveillance Facility (FACSFAC)

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  25

Question: Which entity may provide services to civil aircraft as spelled out in letters of agreement?



Answer: C. Fleet Area Control and Surveillance Facility (FACSFAC)

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Using Agency

JO 7610.4, par.
9-2-2, and
Appendix 2

JO 7110.65, par.
9-3-1

Using Agency

- **The military unit or other organization whose activity established the requirement for the SUA/ATCAA/stationary ALTRV**

NOTE: An ATC facility may be the using agency for joint use areas when the facility is specified in a letter of procedure as having priority for use of the area.

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 26

Using Agency



USING AGENCY - The military unit or other organization whose activity established the requirement for the SUA/ATCAA/stationary ALTRV.

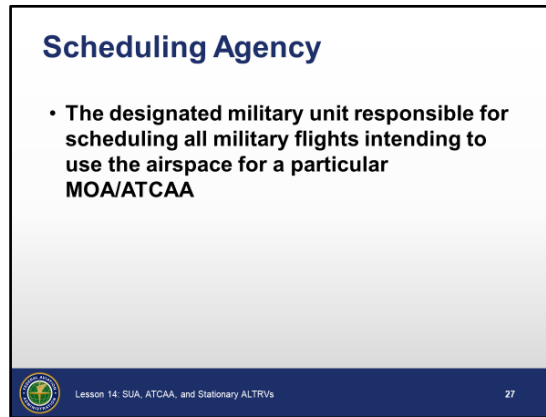
- ⦿ The using agency is responsible for ensuring that:
 - The airspace is used only for its designated purpose, as specified in an LOA
 - Proper scheduling procedures are established and utilized
 - The controlling agency is kept informed of changes in scheduled activity, to include the completion of activities for the day
 - A point of contact is made available to enable the controlling agency to verify schedules, and coordinate

NOTE: An ATC facility may be the using agency for joint use areas when the facility is specified in a Letter of Procedure (LOP) as having priority for use of the area.

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Scheduling Agency

JO 7610.4, par.
9-2-1



Scheduling Agency



SCHEDULING AGENCY - The designated military unit responsible for scheduling all military flights intending to use the airspace for a particular MOA/ATCAA.

- ⦿ MOAs/ATCAAs must not be used for military training, research, development, test and evaluation unless scheduled by the scheduling agency
 - ⦿ Procedures governing operations within MOAs and ATCAAs must be specified in letters of agreement
-

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Controlling Agency

JO 7610.4, par.
9-2-3, and
Appendix 2

JO 7110.65, par.
9-3-1

Controlling Agency

- **The FAA ATC facility that exercises control of the airspace when an SUA area is not activated**
 - A military ATC facility may be assigned as the controlling agency, subject to the concurrence of the service area office and the concerned ARTCC
 - A controlling agency must be designated for each joint-use SUA/ATCAA/stationary ALTRV

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 28

Controlling Agency



CONTROLLING AGENCY - The FAA ATC facility that exercises control of the airspace when an SUA area is not activated.

- ⦿ A military ATC facility may be assigned as the controlling agency, subject to the concurrence of the service area office and the concerned ARTCC
- ⦿ A controlling agency must be designated for each joint-use SUA/ATCAA/stationary ALTRV
- ⦿ Responsibilities
 - Originate a NOTAM for MOA activity for other than published times
 - NOTAM must be issued at least 2 hours prior to the beginning of the planned activity

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Knowledge Check

Knowledge Check

Can you point out a nonparticipating aircraft to an MRU?

A. Yes
B. No

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  29

Question: Can you point out a nonparticipating aircraft to an MRU?



Answer: B. No

AGENCY/FACILITY REQUIREMENTS (CONT'D)

Knowledge Check

Knowledge Check

When an SUA is no longer in use, to which agency does the airspace return?

- A. Scheduling agency
- B. Controlling agency
- C. Using agency

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  30

Question: When an SUA is no longer in use, to which agency does the airspace return?



Answer: B. Controlling agency

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV

Nonparticipat- ing Aircraft

JO 7110.65,
pars. 9-3-1, 9-3-
2

Nonparticipating Aircraft

- **Separate nonparticipating aircraft from:**
 - Prohibited Area
 - Restricted Area
 - Warning Area
 - MOA
 - ATCAA
 - Stationary ALTRV
- **No separation is required for nonparticipating aircraft from:**
 - Alert Area
 - Controlled Firing Area
 - NSA

Lesson 14: SUA, ATCAA, and Stationary ALTRVs 31



This slide is animated, 1 click.

Nonparticipating Aircraft

⦿ Separate nonparticipating aircraft from:

- Prohibited Area
- Restricted Area
- Warning Area
- MOA
- ATCAA
- Stationary ALTRV
 - Aircraft Hazard Area (AHA)
 - Transitional Hazard Area (THA)

Clearance of nonparticipating aircraft in/through/adjacent to an SUA may be provided for in an LOA or LOP.

NOTE: Nonparticipating aircraft refers to those aircraft for which you have separation responsibility and which have not been authorized by the using agency to operate in/through the special use airspace, ATCAA, or stationary ALTRV.

VFR traffic is not prohibited from transiting warning areas, MOAs, stationary ALTRVs, or THAs.

Continued on next page

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Nonparticipat- ing Aircraft (Cont'd)



Click to reveal airspace for which no separation requirements exist.

JO 7110.65,
pars. 9-3-1, 9-3-
2

JO 7400.10,
Subpart E

☉ There is no separation requirement for nonparticipating aircraft from:

- Alert Area
- Controlled Firing Area
- NSA
 - Flights through NSA may be prohibited by NOTAM

NOTE: Such prohibitions will be issued by FAA Headquarters and disseminated via the U.S. NOTAM System.

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Vertical Separation Minima

JO 7110.65,
pars. 4-5-2, 4-5-
3, 9-3-2, 9-3-3

**Vertical Separation Minima -
SUA/ATCAA/Stationary ALTRV**

- **IFR operations**
 - Assign an altitude which is at least 500' (above
FL290 - 1,000') above/below the upper/lower limit of
the airspace
- **VFR-on-top operations**
 - Inform the pilot to conduct flight VFR-on-top at least
500' above the upper limit or below the lower limit of
the airspace

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 32

Vertical Separation Minima - SUA/ATCAA/Stationary ALTRV

⦿ IFR operations

- Below FL290
 - Assign an altitude which is at least 500' above/below the
upper/lower limit of the airspace
- FL290 and above
 - Assign an altitude which is at least 1,000' above/below the
upper/lower limit of the airspace

⦿ VFR-on-top operations

- Inform the pilot to conduct flight VFR-on-top at least 500' above the
upper limit or below the lower limit of the airspace

NOTE: Separation of nonparticipating aircraft from Alert area and NSA
airspace is not required.

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Lateral Separation Minima

JO 7110.65,
pars. 9-3-2,
9-3-3

**Lateral Separation Minima -
SUA/ATCAA/Stationary ALTRV**

- **IFR operations**
 - Clear aircraft on airways or routes whose widths or protected airspace do not overlap the peripheral boundary
 - Provide radar separation of 3 miles (FL600 and above - 6 miles) from the airspace
- **VFR-on-top operations**
 - Clear the aircraft via a routing which provides approved separation from the airspace

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 33

Lateral Separation Minima - SUA/ATCAA/Stationary ALTRV

- ⦿ IFR operations
 - Clear aircraft on airways or routes whose widths or protected airspace do not overlap the peripheral boundary
 - Below FL600
 - Provide radar separation of 3 miles from the airspace
 - FL600 and above
 - Provide radar separation of 6 miles from the airspace
 - ⦿ VFR-on-top operations
 - Clear the aircraft via a routing which provides approved separation from the airspace
-

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Separation Minima Exceptions

JO 7110.65, par.
9-3-2

JO 7210.3, par.
2-1-18

Separation Minima Exceptions

- **Vector nonparticipating aircraft to remain clear of the peripheral boundary of:**
 - Prohibited/restricted/warning areas when:
 - Established for security reasons, or containment of hazardous activities not involving aircraft operations, and
 - Facility management has identified these areas
 - Stationary ALTRV issued for the purpose of space launch or reentry operations

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 34

Separation Minima Exceptions

- ⦿ Vector nonparticipating aircraft to remain clear of the peripheral boundary of:
 - Prohibited/restricted/warning areas when:
 - Established for security reasons, or containment of hazardous activities not involving aircraft operations, and
 - Facility management has identified these areas

Examples: Explosives detonation
Ground firing of various types
 - Stationary ALTRV issued for the purpose of space launch or reentry operations

NOTE: Remaining clear of the peripheral boundary means vertically as well as laterally. Aircraft must only remain clear of the active airspace (i.e., no added buffer).

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

What is the lateral separation minima for an active Controlled Firing Area in use surface through FL230?

A. 3 miles
B. 6 miles
C. None

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  35

Question: What is the lateral separation minima for an active Controlled Firing Area in use surface through FL230?



Answer: C. None

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

What is the vertical separation minima above and below an active warning area in use FL180 through FL280?

- A. 500'
- B. 1,000'
- C. None

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  38

Question: What is the vertical separation minima above and below an active warning area in use FL180 through FL280?



Answer: A. 500'

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

What is the lateral separation minima for an active restricted area in use surface through FL230?

- A. 3 miles
- B. 6 miles
- C. Remain clear

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  37

Question: What is the lateral separation minima for an active restricted area in use surface through FL230?



Answer: A. 3 miles

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

A restricted area has been identified by facility management as containing hazardous activities not involving aircraft operations. What is the lateral separation minima at FL600?

- A. 3 miles
- B. 6 miles
- C. Remain clear

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  38

Question: A restricted area has been identified by facility management as containing hazardous activities not involving aircraft operations. What is the lateral separation minima at FL600?



Answer: C. Remain clear

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Transiting Active SUA/ATCAA

JO 7110.65, par.
9-3-4

Transiting Active SUA/ATCAA

- If an LOA/LOP has been coordinated with the Using Agency and permission has been granted to transit the area:
 - Comply with the instructions/clearances issued by the Using Agency
 - Provide the applicable separation minima between aircraft when two or more aircraft are transiting the area

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 39

Transiting Active SUA/ATCAA

- ⦿ If an LOA/LOP has been coordinated with the Using Agency and permission has been granted to transit the area:
 - Comply with the instructions or clearances issued by the Using Agency
 - Provide the applicable separation minima between aircraft when two or more aircraft are transiting the area
 - If unable to comply with instructions or clearances, clear aircraft in accordance with applicable separation minima
-

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Transiting Stationary ALTRV

JO 7110.65, par.
9-3-2



Transiting Stationary ALTRV

- ⦿ For stationary ALTRVs and temporary flight restrictions (TFRs) issued for the purpose of space launch or reentry operations to protect an Aircraft Hazard Area (AHA):
 - Do not allow nonparticipating aircraft to operate in an AHA unless real-time notifications of the actual start of activity and end of activity of the AHA is provided
 - Do not provide ATC services to aircraft at airports that lie within an AHA unless real-time notifications of the actual start of activity and end of activity of the AHA is provided
 - ⦿ For NOTAMs issued for the purpose of space launch or reentry operations to protect Transitional Hazard Areas (THAs):
 - Aircraft may enter provided they are not holding, loitering, or hovering and are cleared on routing approved by the ATCSCC
 - Do not provide ATC services to aircraft at airports that lie within a THA unless real-time notifications of the actual start of activity and end of activity of the THA is provided
-

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

Which is true of an active warning area?

- A. Nonparticipating aircraft must always remain clear by the appropriate separation minima
- B. Nonparticipating aircraft never have to remain clear
- C. Nonparticipating aircraft may be cleared through, if provided for in an LOA

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  41

Question: Which is true of an active warning area?



Answer: C. Nonparticipating aircraft may be cleared through, if provided for in an LOA

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Priority Over SUA/ATCAA - Open Skies

JO 7110.65, par.
9-2-22



Priority Over SUA/ATCAA - Open Skies

- ⦿ Open Skies Treaty permits any participating country to conduct short-notice, unarmed, observation flights over other participating countries to collect data on military forces and activities
- ⦿ Aircraft in Open Skies missions are equipped with sensors that enable them to identify significant military equipment, such as artillery, fighter aircraft, and armored combat vehicles
- ⦿ Some Open Skies Treaty flights must have priority over activities in SUAs/ATCAAs and require additional coordination between the controlling agency and using agency
 - Open Skies aircraft will be identified by the call sign OSY followed by the flight number and a one-letter mission suffix
 - Mission suffixes of "F" or "D" have priority over activities in SUA/ATCAA

Example: OSY520D

- ⦿ If the controlling agency is unable to confirm with the using agency that all conflicting activities in the SUA/ATCAA have ceased, the Open Skies aircraft must not be permitted access to the SUA/ATCAA.
-

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

Which Open Skies flight does not have priority over SUA/ATCAA?

- A. OSY524D
- B. OSY987T
- C. OSY100F

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  43

Question: Which Open Skies flight does not have priority over SUA/ATCAA?



Answer: B. OSY987T



“T” suffix flights are Transit Flights, which are nonpriority.

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

What should you do as the controller of an Open Skies aircraft if you are unable to confirm with the using agency that all conflicting activities in the SUA/ATCAA have ceased?

- A. The aircraft must not be permitted access to the SUA/ATCAA
- B. The aircraft is permitted access to the SUA/ATCAA
- C. The aircraft is permitted access to the SUA/ATCAA after notifying the pilot of the activity

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  44

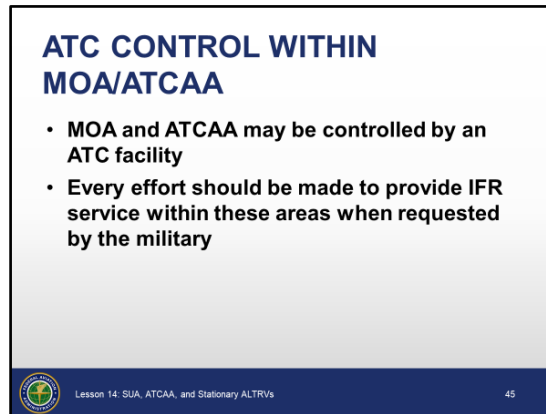
Question: What should you do as the controller of an Open Skies aircraft if you are unable to confirm with the using agency that all conflicting activities in the SUA/ATCAA have ceased?



Answer: A. The aircraft must not be permitted access to the SUA/ATCAA

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

ATC Control Within MOA/ATCAA



ATC Control Within MOA/ATCAA

- ⦿ MOA and ATCAA may be controlled by an ATC facility
- ⦿ Every effort should be made to provide IFR service within these areas when requested by the military:
 - When IFR service is provided by the ATC facility within the area, the separation within the area is the responsibility of the ATC facility unless Military Authority Assumes Responsibility for Separation of Aircraft (MARSA) is established
 - The pilot is responsible for remaining within the area
 - The ATC facility should assist the pilot when the aircraft is under its control

NOTE: The using agency, MRU, ARU, or AWACS may be unable to provide service to aircraft requesting MOA/ATCAA for any number of reasons (e.g., radar and frequency outages).

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

MARSA

JO 7110.65,
pars. 2-1-11, 9-
2-13, and PCG
JO 7610.4, par.
10-5-3



Military Authority Assumes Responsibility for Separation of Aircraft (MARSA)



MARSA - A condition whereby the military services involved assume responsibility for separation between participating military aircraft in the ATC system. It is used only for required IFR operations which are specified in LOAs or other appropriate FAA or military documents.

- ⦿ MARSA may only be applied to military operations specified in a LOA or other appropriate FAA or military document



For most MARSA operations, controllers will probably be unaware of the documents authorizing its use.

- ⦿ ATC facilities do not invoke or deny MARSA. Their sole responsibility concerning the use of MARSA is to provide separation between military aircraft engaged in MARSA operations and other nonparticipating IFR aircraft.
 - The military pilot or flight leader will declare MARSA

Example: MARSA Initiated -

Controller -	“COPER10 ADVISE ACCEPTING MARSA WITH TACO21”
Pilot -	“COPER10 ACCEPTING MARSA WITH TACO21”

Example: MARSA Terminated -

Controller	“COPER10 TACO21 MARSA TERMINATED”
------------	-----------------------------------

Continued on next page

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

MARSA (Cont'd)

JO 7110.65,
pars. 2-1-11, 9-
2-13, and PCG
JO 7610.4, par.
10-5-3

- ⊙ DOD must ensure that military pilots requesting SUA/ATCAAs have coordinated with the scheduling agency, have obtained approval for entry, and are familiar with the appropriate MARSA procedures
 - ATC is not responsible for determining which military aircraft are authorized to enter SUA/ATCAA
-

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

ATC is providing service within a MOA. Who is responsible for providing separation within the MOA?

- A. ATC, until you declare MARSAs
- B. MRU, until radar contact is established
- C. ATC, unless MARSAs are established

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  47

Question: ATC is providing service within a MOA. Who is responsible for providing separation within the MOA?



Answer: C. ATC, unless MARSAs are established

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

Who may not invoke or deny MARSA?

A. ATC facility controller
B. Military fighter pilot
C. Military tanker pilot

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  48

Question: Who may not invoke or deny MARSA?



Answer: A. ATC facility controller

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

DOD Single Altimeter Setting

JO 7110.65, par.
2-7-2

Exemption
2861A to 14
CFR Part
91.121

DOD Single Altimeter Setting

- Some Department of Defense (DOD) aircraft are authorized to operate in restricted areas, MOAs, and ATCAAs on single altimeter settings
 - These aircraft conduct high speed tactical maneuvers that include frequent transits of FL180
 - The pilot will use standard altimeter 29.92 or a current station altimeter

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 49

DOD Single Altimeter Setting

- ⦿ Some Department of Defense (DOD) aircraft are authorized to operate in restricted areas, MOAs, and ATCAAs on single altimeter settings
 - These aircraft conduct high speed tactical maneuvers that include rapid transits of FL180
 - The pilot will use standard altimeter 29.92 or a current station altimeter
-

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

DOD Single Altimeter Setting Responsi- bilities

JO 7110.65, par.
2-7-2

Exemption
2861A to 14
CFR Part
91.121

DOD Single Altimeter Setting Responsibilities

- The DOD is responsible for conducting all single altimeter setting operations within the boundaries of MOAs, restricted areas, and ATCAAs
- Under a LOA, the DOD provides safe altitude clearance between DOD aircraft and other aircraft operating within, above, and below the MOAs, restricted areas, and ATCAAs with appropriate clearance of terrain

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs 50

DOD Single Altimeter Setting Responsibilities

- ⦿ The DOD is responsible for conducting all single altimeter setting operations within the boundaries of MOAs, restricted areas, and ATCAAs
 - ⦿ Under an LOA, the DOD provides safe altitude clearance between DOD aircraft and other aircraft operating within, above, and below the MOAs, restricted areas, and ATCAAs with appropriate clearance of terrain
-

SEPARATION REQUIREMENTS FOR SUA/ATCAA/STATIONARY ALTRV (CONT'D)

Knowledge Check

Knowledge Check

Who is responsible for ensuring that aircraft conducting single altimeter setting operations remain within a restricted area, MOA, or ATCAA?

- A. En Route Controller
- B. Department of Transportation
- C. Department of Defense

 Lesson 14: SUA, ATCAA, and Stationary ALTRVs  51

Question: Who is responsible for ensuring that aircraft conducting single altimeter setting operations remain within a restricted area, MOA, or ATCAA?



Answer: C. Department of Defense

CONCLUSION

Lesson Summary

Lesson Summary

This lesson covered:

- Special Use Airspace (SUA), ATC Assigned Airspace (ATCAA), and stationary ALTRV
- Agency and facility requirements for SUA, ATCAA, and stationary ALTRV
- Separation requirements for SUA, ATCAA, and stationary ALTRV



Lesson 14: SUA, ATCAA, and Stationary ALTRVs

52



Review and elaborate briefly on the following topics. Ask students if they have questions about any of the concepts covered in the lesson.

Summary

- ⦿ Special Use Airspace, ATC Assigned Airspace, and stationary ALTRV
 - Definition: Special Use Airspace
 - Types of SUA
 - Restricted Area
 - Prohibited Area
 - Alert Area
 - Controlled Firing Area (CFA)
 - Military Operations Area (MOA)
 - National Security Area (NSA)
 - Warning Area
 - ATC Assigned Airspace (ATCAA)
 - Definitions
 - ALTRV
 - Moving ALTRV
 - Stationary ALTRV
 - Temporary Flight Restriction (TFR)

Continued on next page

CONCLUSION (CONT'D)

Lesson Summary (Cont'd)

- Aircraft Hazard Area (AHA)
- Transitional Hazard Area (THA)
- ⊙ Agency and facility requirements for SUA, ATCAA, and stationary ALTRVs
 - Military Radar Unit (MRU)
 - Airborne Radar Unit (ARU)
 - Airborne Warning and Control System (AWACS)
 - Fleet Area Control and Surveillance Facility (FACSFAC)
 - Using agency
 - Scheduling agency
 - Controlling agency
- ⊙ Separation requirements for SUA, ATCAA, and stationary ALTRVs
 - Nonparticipating aircraft
 - Separate nonparticipating aircraft from: Prohibited Area, Restricted Area, Warning Area, MOA, ATCAA
 - Vertical separation minima
 - Lateral separation minima
 - Separation minima exception
 - Transiting active SUA/ATCAA
 - Transiting stationary ALTRVs
 - Priority over SUA/ATCAA - Open Skies
 - ATC control within MOA/ATCAA
 - MARSA
 - DOD single altimeter setting



Hand out and administer the End-of-Lesson Test. Provide feedback on missed items, including why particular answers are correct, as well as why some responses are incorrect.
