



**Federal Aviation
Administration**

***55054003
EN ROUTE
RADAR ASSOCIATE
CONTROLLER TRAINING PART C:
ADVANCED CONCEPTS***

**Lesson 9: Alerts and Airspace Status
View**

Version: 1.0 2022.08

INSTRUCTOR LESSON PLAN

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LESSON PLAN DATA SHEET

Course Name	En Route Radar Associate Controller Training Part C: Advanced Concepts
Course Number	55054003
Lesson Title	Alerts and Airspace Status View
Duration	2 hours, 15 minutes (includes lesson, part-task exercise, and ELT)
Version	1.0 2022.08
Reference(s)	JO 7110.65, Air Traffic Control; JO 7110.125, Controller Pilot Data Link Communications (CPDLC) in the ERAM Environment; TI 6110.100, En Route Automation Modernization R-Position User Manual; TI 6110.101, En Route Automation Modernization RA-Position User Manual; TI 6110.108, ERAM Reference Card; AT URET User Manual
Prerequisites	NONE
Handout(s)	<ul style="list-style-type: none"> ⊙ Part-Task Exercise <i>HO01_09 (Print prior to class)</i> ⊙ TI 6110.108, ERAM Quick Reference Controller Card
Exercise / Activity	Refer to handout for: <ul style="list-style-type: none"> ⊙ Part-Task Exercise: Alerts and Airspace Status View
Scenario	⊙ Run scenario 55054003_L09_S## in TTL
Assessments	⊙ YES - Written (<i>Refer to ELT01_L09, print prior to class</i>)
Materials and Equipment	⊙ Pencil and/or pen
Other Pertinent Information	<ul style="list-style-type: none"> ⊙ Ensure lesson materials are downloaded to the classroom computer ⊙ 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.

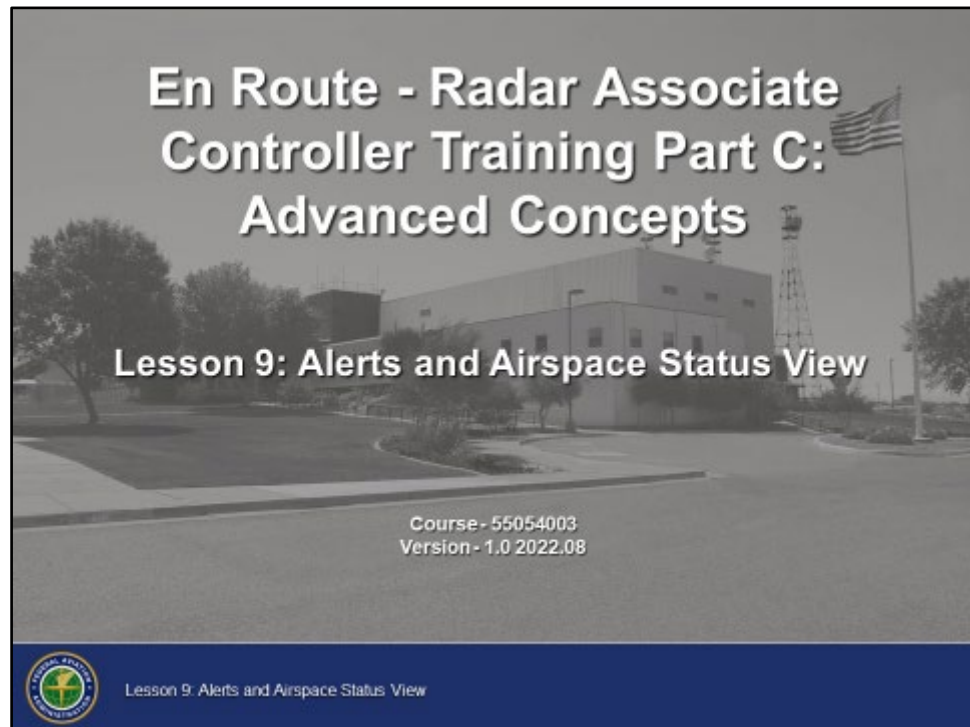
LESSON ICON LEGEND

	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.

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LESSON INTRODUCTION

Overview



This lesson introduces Alerts and Airspace Status View.

The EDST includes conflict probe planning tools to help avoid conflicts between two or more aircraft and between aircraft and protected airspace.

This lesson explains the colors and indicators for these alerts, how to display the indicators on the GPD, and how conflicts are processed.

The lesson also covers how airspace is configured to provide alerts between aircraft and airspace.


LESSON INTRODUCTION (CONT'D)

Lesson Objectives

Lesson Objectives

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

- Alert indicators and colors
- Alerts on the Graphic Plan Display (GPD)
- Automated Problem Detection (APD)
- Rules for conflict notification
- Stop Probe functionality
- Airspace Status View functionality

 Lesson 9: Alerts and Airspace Status View 1

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

- Alert indicators and colors
- Alerts on the Graphic Plan Display (GPD)
- Automated Problem Detection (APD)
- Rules for conflict notification
- Stop Probe functionality
- Airspace Status View functionality

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.

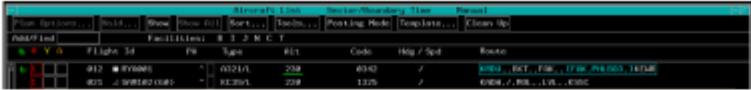
ALERT INDICATORS AND COLORS

Alert Indicators


TI 6110.101,
sec. 3

Alert Indicators


ACL




Plans Display



Graphic Plan Display





Lesson 9: Alerts and Airspace Status View

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- ⦿ Aircraft List (ACL), Plans Display, and Graphic Plan Display (GPD) all display alerts which result from conflict probe processing of aircraft trajectories
 - Color coding and indicators are similar on all three displays
- ⦿ ACL alerts are displayed in the alert boxes to the left of each FLID

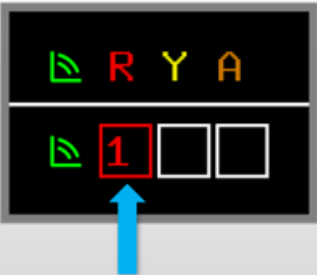
ALERT INDICATORS AND COLORS (CONT'D)

Alert Indicators - Red


TI 6110.101,
sec. 5.2.2

Alert Indicators - Red

- **When two aircraft are predicted to have less than 5 miles lateral separation**
 - Alert box changes to red
 - Red number indicates total conflicts



The diagram shows a rectangular alert indicator box divided into two horizontal sections. The top section contains four colored icons: a green 'D', a red 'R', a yellow 'Y', and an orange 'A'. The bottom section contains a green 'D', a red '1', and two empty white boxes. A blue arrow points upwards to the red '1'.



Lesson 9: Alerts and Airspace Status View

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- ⦿ When two aircraft are predicted to have less than 5 miles lateral separation
 - Alert box changes to red
 - Red number indicates the total number of conflicts of this type


ALERT INDICATORS AND COLORS (CONT'D)

Alert Indicators - Muted Red


TI 6110.101,
sec. 5.2.2

Alert Indicators - Muted Red

- **When two aircraft are predicted to have less than 5 miles lateral separation and where an altitude change is planned but not issued**
 - Alert box changes to muted red
 - Muted red number indicates total conflicts
 - Highest level alert is always shown in the alert box



The diagram shows a rectangular alert box divided into two horizontal sections. The top section contains three colored letters: a green 'A', a red 'R', and a yellow 'A'. The bottom section contains a green 'A' icon, a red box with the number '2', and two empty white boxes. A blue arrow points from the top left towards the red box containing the number '2'.



Lesson 9: Alerts and Airspace Status View

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- ⦿ When two aircraft are predicted to have less than 5 miles lateral separation and where an altitude change is planned but not issued
 - Alert box changes to muted red
 - The muted red number indicates the total number of conflicts of this type
 - The highest level alert is always shown in the box

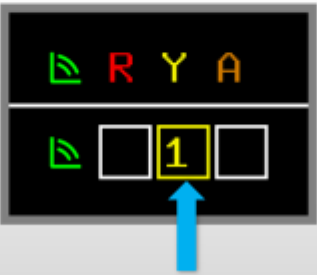
ALERT INDICATORS AND COLORS (CONT'D)

Alert Indicators - Yellow


TI 6110.101,
sec. 5.2.2

Alert Indicators - Yellow

- When two aircraft are predicted to have between 5 and 12 miles lateral separation
 - Alert box changes to yellow
 - Yellow number indicates total conflicts



The diagram shows a rectangular alert indicator box divided into two horizontal sections. The top section contains four colored letters: a green 'D', a red 'R', a yellow 'Y', and an orange 'A'. The bottom section contains a green 'D' on the left, followed by three square boxes. The middle box contains a yellow number '1', and a blue arrow points to it from below. The entire box is set against a light gray background.



Lesson 9: Alerts and Airspace Status View

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- ⦿ When two aircraft are predicted to have between 5 and 12 miles lateral separation
 - Alert box changes to yellow
 - Yellow number indicates the total number of conflicts of this type


ALERT INDICATORS AND COLORS (CONT'D)

Alert Indicators - Muted Yellow

TI 6110.101,
sec. 5.2.2

Alert Indicators - Muted Yellow

- When two aircraft are predicted to have between 5 and 12 miles lateral separation where an altitude change is planned but not issued
 - Alert box changes to muted yellow
 - Muted yellow number indicates total conflicts



FAA Logo Lesson 9: Alerts and Airspace Status View 6

- ⦿ When two aircraft are predicted to have between 5 and 12 miles lateral separation where an altitude change is planned but not issued
 - Alert box changes to muted yellow
 - Muted yellow number indicates the total number of conflicts of this type


ALERT INDICATORS AND COLORS (CONT'D)

Alert Indicators - Orange


TI 6110.101,
sec. 5.2.2

Alert Indicators - Orange

- **Aircraft-to-airspace violation predicted within 3 miles of active or scheduled Special Activity Airspace (SAA)**
 - Alert box changes to orange
 - Orange number indicates total conflicts



The screenshot shows a digital display with two rows. The top row contains four colored letters: a green 'D', a red 'R', a yellow 'Y', and an orange 'A'. The bottom row contains a green 'D', two white squares, and an orange square containing the number '1'. A blue arrow points to the orange square with the number '1'.



Lesson 9: Alerts and Airspace Status View

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- ⦿ When an aircraft-to-airspace violation is predicted within 3 miles of active or scheduled Special Activity Airspace (SAA)
 - Alert box changes to orange
 - Orange number indicates the total number of conflicts of this type


ALERT INDICATORS AND COLORS (CONT'D)


Alert Boxes - Brown X

TI 6110.101,
sec. 5.2.2

Alert Boxes - Brown X

- **Brown X in all three alert boxes with brown flight ID signifies that entry is not being probed by system**
- **Flights not probed:**
 - VFR
 - OTP
 - ABV
 - Untracked





Lesson 9: Alerts and Airspace Status View

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- ⦿ A brown X in all three alert boxes with a brown flight ID signifies that the Aircraft List entry is not being probed by the system
- ⦿ Flights not probed:
 - VFR
 - OTP
 - ABV
 - Untracked


ALERT INDICATORS AND COLORS (CONT'D)

Alert Boxes- Brown S


TI 6110.101,
sec. 5.2.2

Alert Boxes - Brown S

- Brown S in all three alert boxes signifies stop probe is in effect for flight



The diagram shows a rectangular box divided into two horizontal sections. The top section contains a green 'D' icon followed by the letters 'R', 'Y', and 'A' in red, yellow, and orange respectively. The bottom section contains a green 'D' icon followed by three white 'S' boxes. A blue arrow points to the rightmost 'S' box.



Lesson 9: Alerts and Airspace Status View

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- ⦿ A brown S in all three alert boxes signifies that a stop probe is in effect for the flight


ALERT INDICATORS AND COLORS (CONT'D)

Alert Boxes - Brown H

TI 6110.101,
sec. 5.2.2

Alert Boxes - Brown H

- **Brown H in all three alert boxes signifies aircraft is in hold status**
 - Flight is not probed



Lesson 9: Alerts and Airspace Status View

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- ⦿ A brown H in all three alert boxes signifies that an aircraft is in a hold status
 - Flight is not probed


ALERT INDICATORS AND COLORS (CONT'D)

Alert Boxes - Brown F

TI 6110.101,
sec. 5.2.2

Alert Boxes - Brown F

- A brown F in all three alert boxes signifies that a flight is frozen with a QH F command
 - Flight is not probed



Lesson 9: Alerts and Airspace Status View

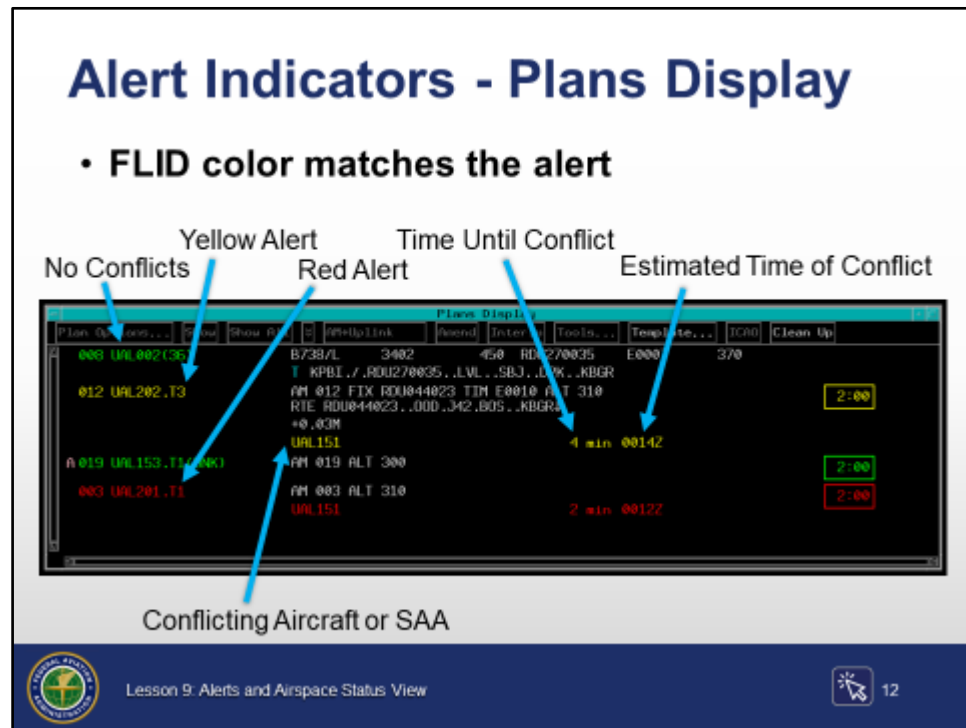
11

- ⦿ A brown F in all three alert boxes signifies that a flight is frozen with a QH F command
 - Flight is not probed

ALERT INDICATORS AND COLORS (CONT'D)

Alert Indicators - Plans Display

TI 6110.101,
sec. 3.2



Slide is animated, 4 clicks. Click where indicated by click icon.

- ⦿ The FLID color matches the alert
 - The alert will also display under the flight plan with the following data:
 - ✎ Conflicting aircraft or SAA
 - ✎ Time until the conflict
 - ✎ Estimated time of the conflict
- ⦿ ✎ A FLID displayed in green indicates no potential conflicts

ALERT INDICATORS AND COLORS (CONT'D)


Alert Indicators - GPD Data Block


TI 6110.101,
secs. 3.1.1,
5.2.2

Alert Indicators - GPD Data Block

- Line 0 contains a number for each alert type designator assigned to the sector
 - Red/muted red
 - Yellow/muted yellow
 - Orange

Alert Indicators →





Lesson 9: Alerts and Airspace Status View

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- ⦿ Line 0 contains a number for each alert type assigned to the sector
 - Red/muted red
 - Yellow/muted yellow
 - Orange
- ⦿ Route line color indicates:
 - The most critical alert when GPD is opened by:
 - TBP on ACL Show button or Show ALL button
 - TBE on call sign of ACL entry
 - The alert selected by TBE on the specific alert type number in Line 0 of GPD data block or ACL entry
- ⦿ Other symbols that may be shown in Line 0 include:
 - FFF - Frozen
 - HHH - Holding
 - SSS - Stop Probe
 - XXX - Not being probed

ALERT INDICATORS AND COLORS (CONT'D)

Knowledge Check

Knowledge Check

What color alert indicates that two aircraft are predicted to have less than 5 miles lateral separation?

- A. Red
- B. Yellow
- C. Muted red



Lesson 9: Alerts and Airspace Status View



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Question: What color alert indicates that two aircraft are predicted to have less than 5 miles lateral separation?



Answer: A. Red



ALERT INDICATORS AND COLORS (CONT'D)

Knowledge Check

Knowledge Check

What color alert indicates that an aircraft is predicted to come within 3 miles of scheduled Special Activity Airspace?

- A. Red
- B. Yellow
- C. Orange

 Lesson 9: Alerts and Airspace Status View  15

Question: What color alert indicates that an aircraft is predicted to come within 3 miles of scheduled Special Activity Airspace?



Answer: C. Orange

ALERT INDICATORS AND COLORS (CONT'D)

Knowledge Check

Knowledge Check

What color indicates that a conflict between 5 and 12 miles is predicted during a portion of the flight where an altitude change is planned, but the aircraft has not yet been cleared for the change?

- A. Muted red
- B. Muted yellow
- C. Orange



Lesson 9: Alerts and Airspace Status View



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Question: What color indicates that a conflict between 5 and 12 miles is predicted during a portion of the flight where an altitude change is planned, but the aircraft has not yet been cleared for the change?



Answers: B. Muted yellow

ALERT INDICATORS AND COLORS (CONT'D)

Knowledge Check

Knowledge Check

What does a brown H in all three alert boxes on the ACL indicate?

- A. Aircraft is in handoff status
- B. Aircraft is commanded frozen
- C. Aircraft is in a hold status



Lesson 9: Alerts and Airspace Status View



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Question: What does a brown H in all three alert boxes on the ACL indicate?



Answers: C. Aircraft is in a hold status


ALERT INDICATORS AND COLORS (CONT'D)

Knowledge Check


Knowledge Check

The route line color on the GPD indicates the most critical conflict unless _____?

- A. an aircraft is in hold
- B. alerts are suppressed
- C. a lesser alert is selected in Line 0



Lesson 9: Alerts and Airspace Status View



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Question: The route line color on the GPD indicates the most critical conflict unless _____?

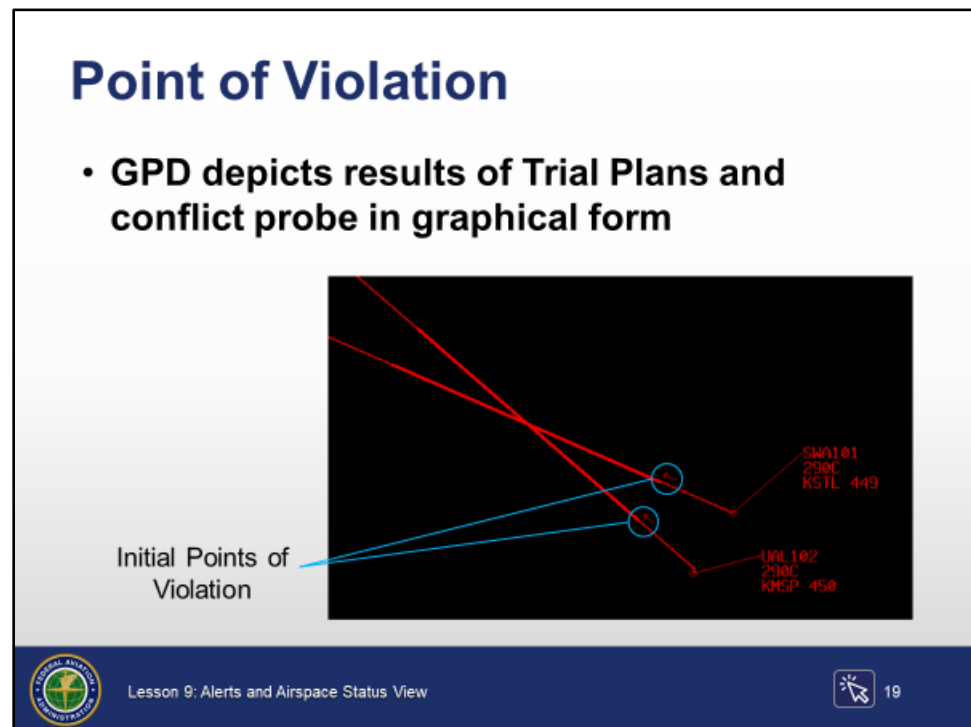


Answer: C. a lesser alert is selected in Line 0

ALERTS ON THE GPD

Point of Violation

AT URET User
Manual Ver. 5.0,
p. 7-27



Slide is animated, 2 clicks. Click where indicated by click icon.

⦿ The GPD depicts the results of Trial Plans and conflict probe in graphical form

- Lines extending from data blocks indicate the direction of flight of aircraft
- The route line is color coded to match the alert it represents
- The line is thicker when there is less than:
 - 12 miles for aircraft-to-aircraft alerts
 - 3 miles for aircraft-to-airspace alerts
- At the initial point of violation, an arrow indicates the direction of flight

NOTE: Conflict probe alerts are based on standard radar separation. Conflict probe does not account for instances in which greater separation may be needed (e.g., non-standard formations, A380) or where reduced separation is permitted (e.g., 3 mile airspace).



Click to show yellow aircraft-to-aircraft alert graphic.



Click to show the aircraft-to-airspace alert graphic.


ALERTS ON THE GPD (CONT'D)

Green Route of Flight


AT URET User
Manual Ver. 5.0,
Table 7-8

Green Route of Flight

- Aircraft is not predicted to have any violations



SWA101
290C
KBHT 450



Lesson 9: Alerts and Airspace Status View

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- ⦿ A green route of flight shows that the aircraft is not predicted to have any violations

ALERTS ON THE GPD (CONT'D)

Special Activity Airspace

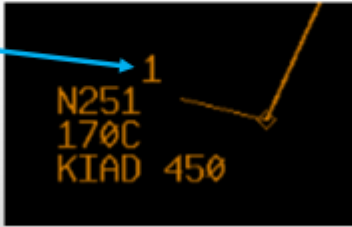
TI 6110.101,
secs. 3.1.1, 5-2-
2


AT URET User
Manual Ver. 5.0,
Table 7-8

Special Activity Airspace

- **Orange alert indicator displayed in Line 0 when aircraft is predicted to fly within 3 miles of active or scheduled Special Activity Airspace**

Alert Indicator





Lesson 9: Alerts and Airspace Status View

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- ⦿ An orange alert indicator is displayed in Line 0 when an aircraft is predicted to fly within 3 miles of active or scheduled Special Activity Airspace

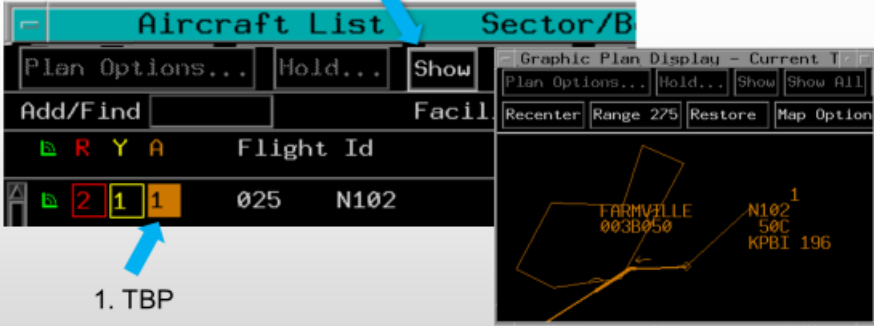
ALERTS ON THE GPD (CONT'D)

Show Alert Using ACL

TI 6110.101,
secs. 2.5.7,
3.2.3.20, 5.2.2

Show Alert Using ACL

- The ACL Show button displays the aircraft's current route and any alert(s) assigned to your sector



1. TBP


2. TBP

Lesson 9: Alerts and Airspace Status View

22



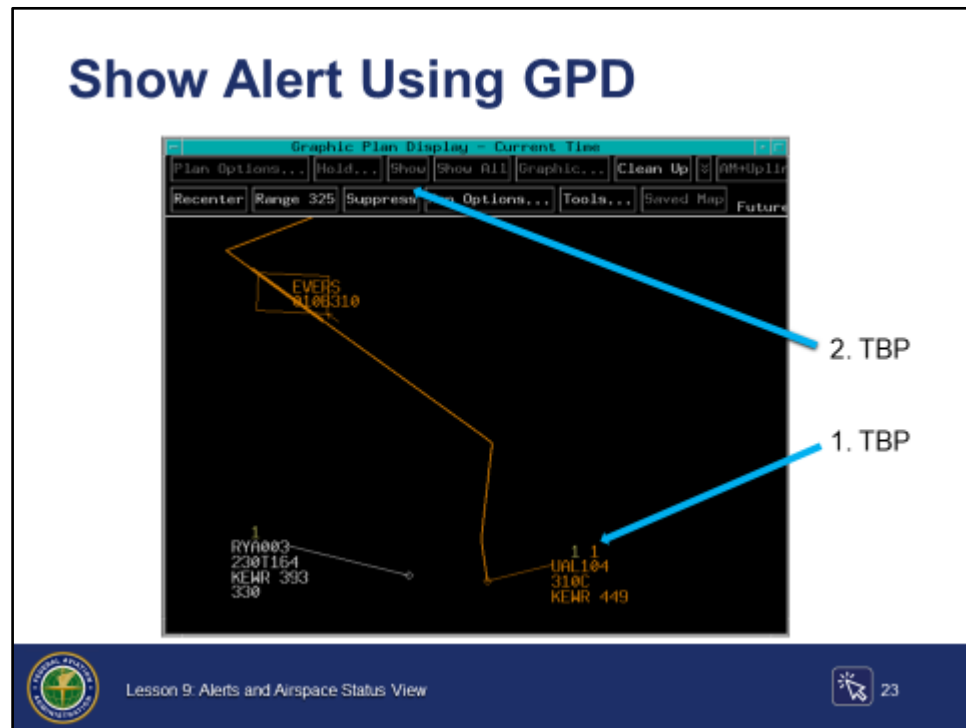
Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ The ACL Show button displays the aircraft's current route and any alert(s) assigned to your sector on the GPD
- ⦿ To graphically display select alert(s) on the GPD:
 -  TBP on the alert number in the ACL, then TBP the Show button
 - TBP the Show button again to remove displayed alert(s)
 - TBE on the alert number in the ACL to automatically open the GPD with the alert(s) displayed
 - TBE on the alert number again to remove displayed alert(s)



ALERTS ON THE GPD (CONT'D)

Show Alert Using GPD

TI 6110.101,
secs. 2.5.7,
3.2.3.21, 5.2.2



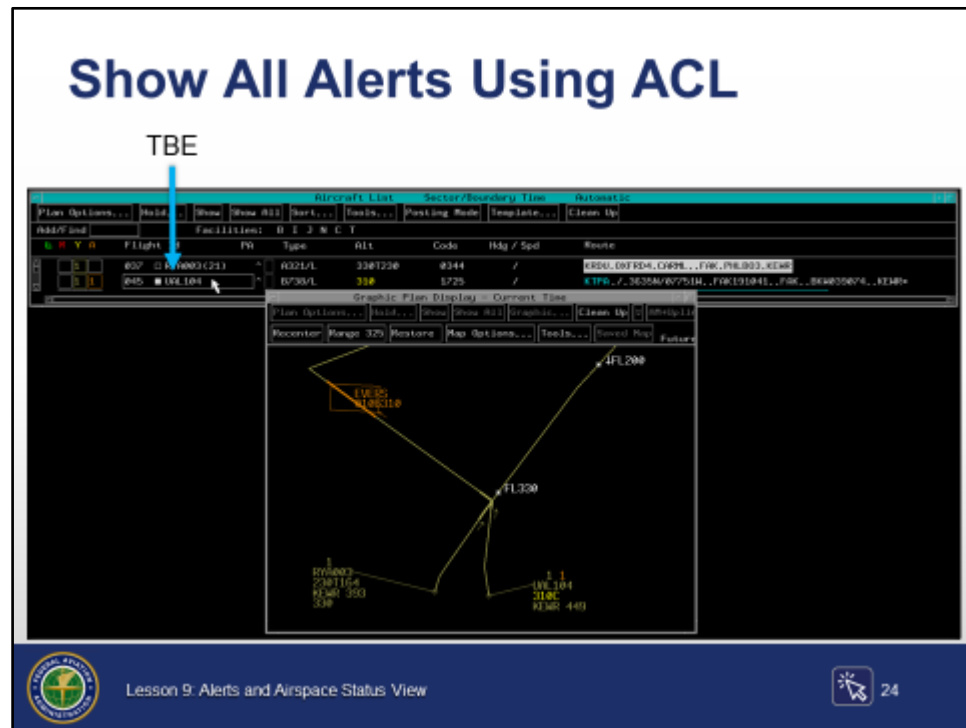
Slide is animated, 2 clicks. Click where indicated by click icon.

- ⦿ The GPD Show button displays the aircraft's current route and any alert(s) assigned to the sector
 -  TBP on an alert number in Line 0
 -  Then TBP GPD Show button to display the specific alert(s)
 - Selecting Show button again will remove the display of the alert(s)
- ⦿ TBE alert number in Line 0 to automatically display the specific alert(s)
 - TBE alert number again to remove the display of the alert(s)

ALERTS ON THE GPD (CONT'D)

Show All Alerts Using ACL

TI 6110.101,
secs. 2.5.7,
3.2.3.20, 5.2.2



Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ Show All displays or removes a Current Plan and all associated alerts, regardless of sector, for a specific aircraft on the GPD



Click to demonstrate a Show All using the ACL call sign.

- ⦿ ACL
 - TBE on the call sign to display all alerts
 - TBE on ACL or GPD call sign again to remove these alerts
 - TBP on a call sign, then TBP on Show All to display all alerts
 - TBP Show All a second time to remove the display of the alerts

ALERTS ON THE GPD (CONT'D)

Show All Alerts Using GPD

TI 6110.101,
secs. 2.5.7,
3.2.3.20, 5.2.2



Slide is animated, 1 click. Click where indicated by click icon.



Click to demonstrate a Show All by TBE on a GPD data block call sign.

⦿ GPD

- TBE on call sign or position symbol to automatically display all alerts for that aircraft
 - TBE on call sign or position symbol again to remove these alerts
- TBP on call sign or position symbol, then TBP Show All to display all alerts for that aircraft
 - TBP Show All again to remove the display of the alerts


ALERTS ON THE GPD (CONT'D)

Acknowledge Selected Conflict

TI 6110.101,
sec. 5.3.1

Acknowledge Selected Conflict

- To acknowledge a selected conflict:



1. TBH

2. TBP

3. TBP

Graphic Plan Display - Current Time

Plan Options... Hold... Show Show All Graphic... Clean Up... RTDLink

Recenter Range SR Suppress Map Options... Tools... Saved Map Future Time

Conflict Acknowledge Menu

REL CONFLICTS

UNL 151

UNL 202

UNL 152 (RR)

UNL 153 (UNC)



OK Exit

Lesson 9: Alerts and Airspace Status View

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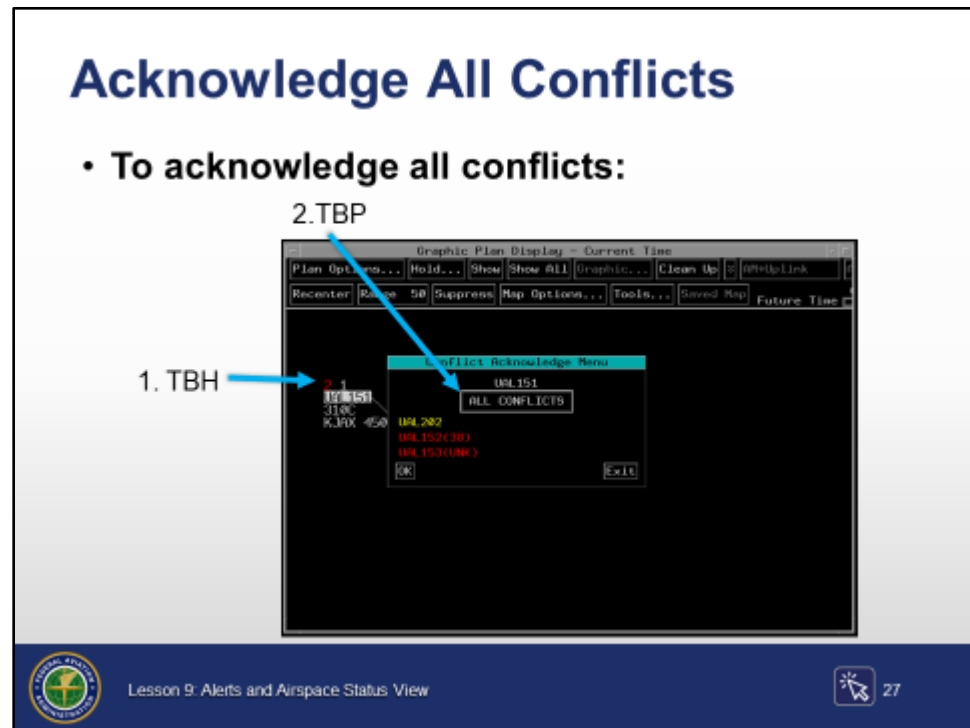
Slide is animated, 2 clicks. Click where indicated by click icon.

- To acknowledge a selected conflict:
 -  TBH on an alert indicator, then
 - TBP on ACID in Conflict Acknowledge Menu
 - TBP on OK
- When all alerts within an alert type (red, muted red, yellow, muted yellow, and orange) are acknowledged:
 -  GPD - Alert indicator on Line 0 of the data block changes to white
 - ACL - Alert box and number change to white
 - Plans Display - Problem ID(s) for selected flight and controlling sector IDs (if present) change to white

ALERTS ON THE GPD (CONT'D)


Acknowledge All Conflicts

TI 6110.101,
sec. 5.3.1




Slide is animated, 2 clicks. Click where indicated by click icon.

⦿ To acknowledge all conflicts:

-  TBH on an alert indicator, then
- TBP on ALL CONFLICTS in the Conflict Acknowledge Menu

⦿ Results:

-  GPD - Alert indicators on Line 0 of the data block change to white
- ACL - Alert boxes and numbers change to white
- Plans Display - Problem IDs for all flight and controlling sector IDs (if present) change to white


ALERTS ON THE GPD (CONT'D)

Knowledge Check


Knowledge Check

How is a Point of Violation shown on the GPD?

- A. Dashed line where the conflict is predicted
- B. Blue line where the conflict is predicted
- C. Bold line where the conflict is predicted



Lesson 9: Alerts and Airspace Status View

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Question: How is a Point of Violation shown on the GPD?



Answer: C. Bold line where the conflict is predicted


ALERTS ON THE GPD (CONT'D)

Knowledge Check


Knowledge Check

What color is the route of flight when it is displayed for an aircraft that is not predicted to have any violations?

- A. Orange
- B. Yellow
- C. Green



Lesson 9: Alerts and Airspace Status View

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Question: What color is the route of flight when it is displayed for an aircraft that is not predicted to have any violations?



Answer: C. Green

ALERTS ON THE GPD (CONT'D)

Knowledge Check

Knowledge Check

What color is the numbered alert indicator in the GPD data block that predicts an airspace violation within 3 miles of active or scheduled Special Activity Airspace?

- A. Red
- B. Muted yellow
- C. Orange



Lesson 9: Alerts and Airspace Status View



Question: What color is the numbered alert indicator in the GPD data block that predicts an airspace violation within 3 miles of active or schedules Special Activity Airspace?



Answer: C. Orange



ALERTS ON THE GPD (CONT'D)

Knowledge Check

Knowledge Check

Which button is used to graphically display or remove a selected aircraft's Current Plan and any specific alert(s) assigned to your sector?

- A. Alert
- B. Show All
- C. Show

 Lesson 9: Alerts and Airspace Status View  31

Question: Which button is used to graphically display or remove a selected aircraft's Current Plan and any specific alert(s) assigned to your sector?



Answer: C. Show



ALERTS ON THE GPD (CONT'D)

Knowledge Check

Knowledge Check

What color does an alert indicator change to when all alerts of that type are acknowledged?

- A. Red
- B. Muted yellow
- C. White

 Lesson 9: Alerts and Airspace Status View  32

Question: What color does an alert indicator change to when all alerts of that type are acknowledged?



Answer: C. White

AUTOMATED PROBLEM DETECTION (APD)

Automated Problem Detection (APD)

JO 7110.65,
Pilot/Controller
Glossary

TI 6110.101,
Glossary

AT URET User
Manual Ver. 5.0,
p. xxxvi

Automated Problem Detection (APD)

- **Automated Problem Detection (APD) compares trajectories to predict conflicts**
 - Checks Current Plan trajectory
 - Checks Trial Plan trajectory
 - Checks Current and Trial Plans against other current plans and airspaces
- **Neither Current Plans nor Trial Plans are checked against other Trial Plans**



Lesson 9: Alerts and Airspace Status View

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CURRENT PLAN - The plan an aircraft is currently expected by the En Route Automation System (EAS) to fly. A Current Plan is used for modeling the trajectory and, when APD eligible, for detecting conflicts.



TRIAL PLAN - A proposed amendment which utilizes automation to analyze and display potential conflicts along the predicted trajectory of the selected aircraft.

- ⦿ Automated Problem Detection (APD) compares trajectories to predict conflicts
 - Checks Current Plan trajectory when trajectory is created, amended or flight plan is activated
 - Checks Trial Plan trajectory when created
 - Checks Current and Trial Plans against all other Current Plans and adapted airspaces

Continued on next page

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

Automated Problem Detection (APD) (Cont'd)

JO 7110.65,
Pilot/Controller
Glossary

AT URET User
Manual Ver, 5.0,
p. xxxvi

- Trajectories are modeled:
 - 20 minutes in advance for aircraft-to-aircraft conflicts
 - 40 minutes in advance for aircraft-to-airspace conflicts
- ⊙ Neither Current Plans nor Trial Plans are checked against other Trial Plans

NOTE: A potential conflict is not detected beyond the 20 or 40-minute modeled trajectories. To probe the entire route of flight, do a Trial Plan on the aircraft at its current altitude.

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

APD - Plans Display

TI 6110.101,
sec. 3.2.1

APD - Plans Display

- **Current Plan** entries include **CID** and **FLID**
- **Trial Plan** entries appended with **.T(#)**
 - Indicates the number of Trial Plans

Current Plans

Trial Plan

Plan Options...	H/B767/L	KRIC	450	KRIC	Tools...	Template...	ICAO	Clean Up
A 004 AAL236	0021	H/B767/L..KRDU/1749	450	KRIC	P1727	140		
A 008 UAL315(PCT1A)	0031	RDU../LVL170010..RJC	350	LVL170010	E1731	110		
A 010 UAL316	0032	H/B767/L 0032	350	LVL170010	E1733	110		
A 006 AAL237.T1	0006	RDU../LVL170010..RJC	350	LVL170010	E1733	110		

Lesson 9: Alerts and Airspace Status View 34



Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ Current Plan entries include CID and FLID



Click to add the last bullets and highlight graphic.

- ⦿ Trial Plan entries are appended with .T(#)
 - Indicates the number of Trial Plans created for the flight



Trial Plans and the Plans Display will be discussed in depth in a future lesson.

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

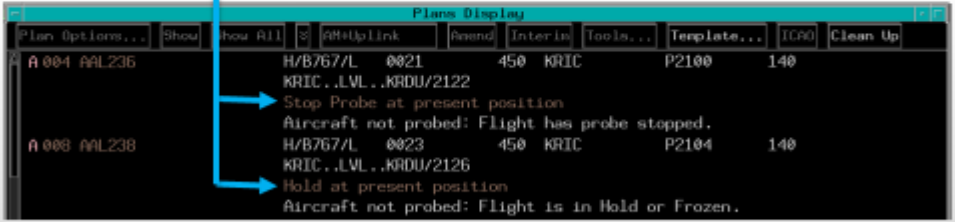
APD Ineligible

TI 6110.101,
sec. 3.2.1.3

APD Ineligible

- Aircraft not probed, no alerts for flight
- Reason displayed in Plans Display

APD Ineligible Reasons



The screenshot shows a 'Plans Display' window with a table of aircraft data. Two aircraft are listed: A 004 AAL235 and A 008 AAL238. For each, the reason for being ineligible is displayed. Red arrows point from the text 'Reason displayed in Plans Display' to the reason text for each aircraft.

Plan Options...	Show	Show All	S	AMUplink	Reconf	Interim	Tools...	Template...	ICAO	Clean Up
A 004 AAL235				H/B767/L 0021	450	KRIC	P2100	140		
KRIC..LVL..KADU/2122										
Stop Probe at present position										
Aircraft not probed: Flight has probe stopped.										
A 008 AAL238				H/B767/L 0023	450	KRIC	P2104	140		
KRIC..LVL..KADU/2126										
Hold at present position										
Aircraft not probed: Flight is in Hold or Frozen.										

Lesson 9: Alerts and Airspace Status View 35



Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ If APD does not probe for an aircraft, you will not receive any alerts for the flight



Click to reveal the second bullet.

- ⦿ When APD is ineligible, the reason is displayed in the Plans Display
 - The Plans Display does not open automatically when an APD ineligible reason code is posted
 - A variety of reasons can be displayed

Examples:

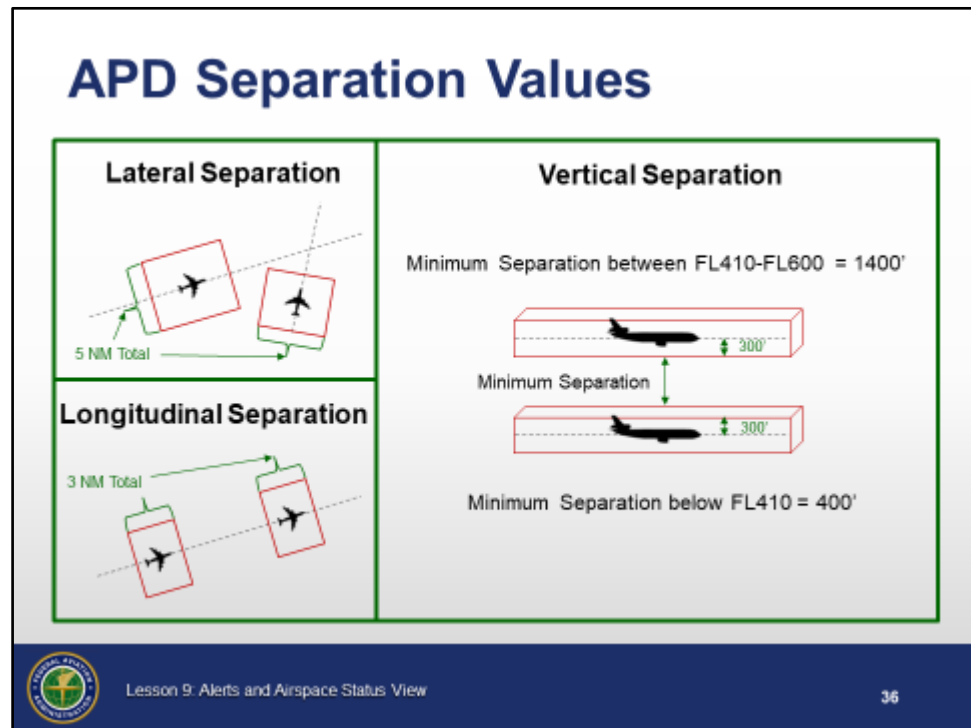
Stop Probe at present position

Hold at present position

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

APD Separation Values

AT URET User
Manual Ver. 5.0,
p. xxxvii



- ⦿ Lateral, longitudinal, and vertical separation values are applied to modeled trajectories and are used by APD to determine whether a conflict exists between trajectories or between a trajectory and Special Activity Airspace (SAA)
- ⦿ APD separation values are calculated by the system algorithms based on the minimum separation standards

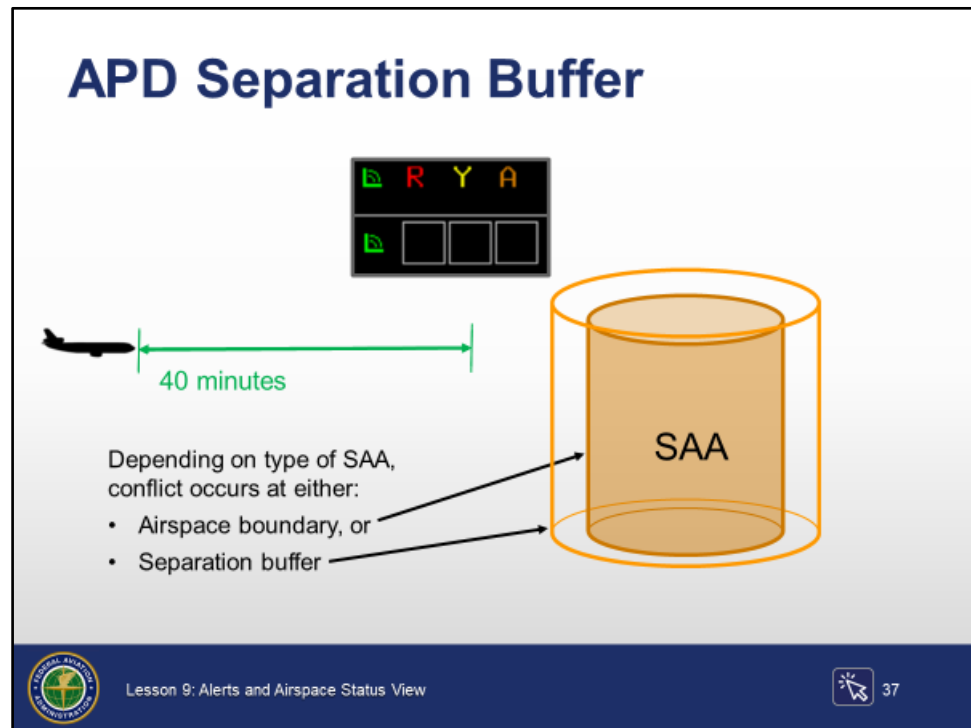


APD probing is based on aircraft models and what the aircraft is predicted to do. It may not always accurately predict what the aircraft is doing. Conflicts may be displayed inaccurately or potential conflicts may not be depicted. It should only be used as a tool and not relied upon for separation.

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

APD Separation Buffer

AT URET User
Manual Ver. 5.0,
p. xxxvii



Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ Separation values used in checking for airspace conflicts are adapted based on the type of activity in the airspace
- ⦿ A separation buffer is superimposed like a force field around airspace boundary
- ⦿ APD can probe trajectories 40 minutes into the future to see if they violate active airspace



Click to move the aircraft's trajectory to within 40 minutes flying of the SAA.

- ⦿ Depending on type of SAA, conflict occurs at either:
 - Airspace boundary, or
 - Separation buffer

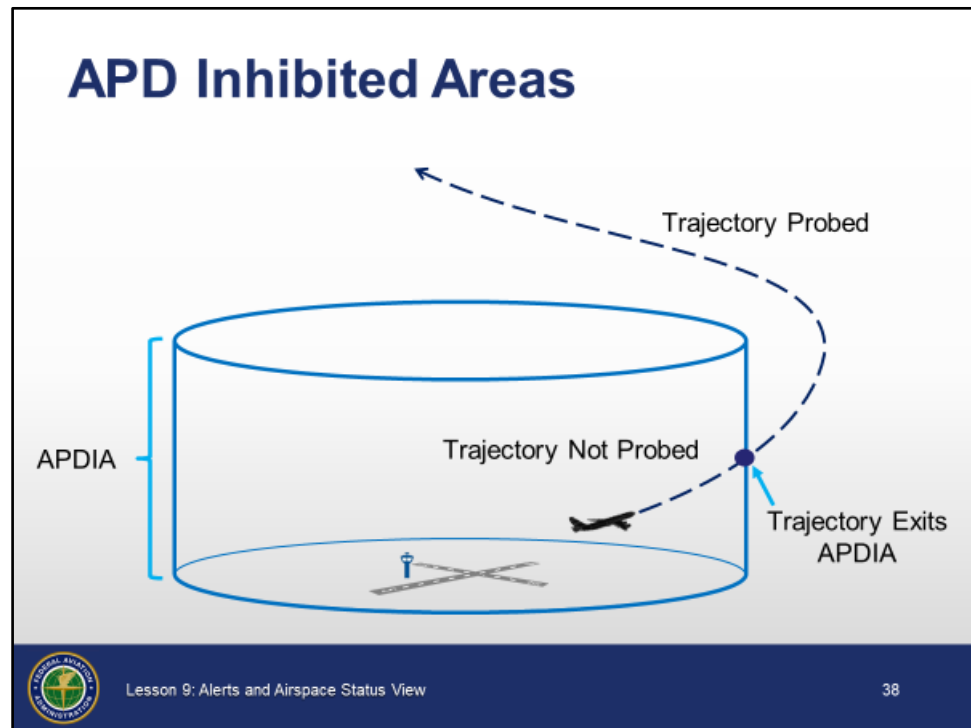


Discuss different airspace separation requirements.

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

APD Inhibited Areas

AT URET User
Manual Ver. 5.0,
p. xxxviii



- ⦿ System provides facilities the capability for determining when or where APD should not operate to reduce false alerts
- ⦿ Occurs when a portion of the aircraft's trajectory is within airspace designated as an Automated Problem Detection Inhibited Area (APDIA)

Example: Approach control airspace

- ⦿ When the aircraft leaves APDIA airspace, its trajectory is then probed for conflicts

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

Knowledge Check

Knowledge Check

When does Automated Problem Detection (APD) probe a new Trial Plan against other Trial Plans?

- A. When there are Current Plans to probe against
- B. Only if there is a conflict
- C. Never



Lesson 9: Alerts and Airspace Status View



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Question: When does Automated Problem Detection (APD) probe a new Trial Plan against other Trial Plans?



Answer: C. Never

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

Knowledge Check

Knowledge Check

When an aircraft is ineligible to be probed, where is the notification displayed?

- A. Automatic Problem Detection (APD)
- B. Aircraft Situation Display
- C. Plans Display



Lesson 9: Alerts and Airspace Status View



Question: When an aircraft is ineligible to be probed, where is the notification displayed?



Answer: C. Plans Display

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

Knowledge Check

Knowledge Check

Which type of plan shows the flight the aircraft is currently expected by EAS to fly?

- A. Trial Plan
- B. Current Plan
- C. Future Plan



Lesson 9: Alerts and Airspace Status View



Question: Which type of plan shows the route the aircraft is currently expected by EAS to fly?



Answer: B. Current Plan

AUTOMATED PROBLEM DETECTION (APD) (CONT'D)

Knowledge Check

Knowledge Check

Which type of plan is used to test whether a proposed change to the Current Plan will be conflict free?

- A. Trial Plan
- B. Current Plan
- C. Test Plan



Lesson 9: Alerts and Airspace Status View



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Question: Which type of plan is used to test whether a proposed change to the Current Plan will be conflict free?



Answer: A. Trial Plan

RULES FOR CONFLICT NOTIFICATION


Rules for Conflict Notification

TI 6110.101,
sec. 1.2.2


AT URET User
Manual Ver 5.0,
p. xxxix

Rules for Conflict Notification

- **Although APD may detect a conflict, sector may not be notified immediately**
- **When an alert is provided:**
 - Only one sector receives the alert at a time
 - Aircraft-to-aircraft alerts
 - Notification is generally provided to the sector where the conflict is first predicted to occur
 - Transferred to the next sector upon handoff
 - Aircraft-to-airspace alerts
 - Sector controlling the aircraft receives the alert







Lesson 9: Alerts and Airspace Status View

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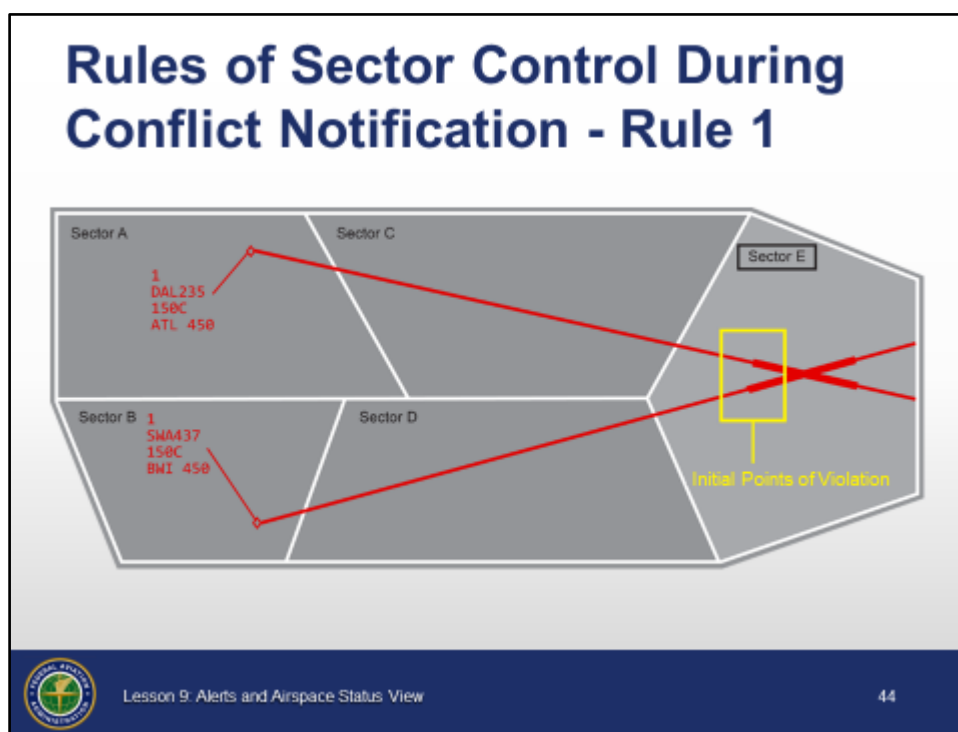
Slide is animated, 4 clicks. Click where indicated by click icon.

- ⦿ Although APD may detect a conflict, sector may not be notified immediately
- ⦿  When an alert is provided:
 - Only one sector receives the alert at a time
 -  Aircraft-to-aircraft alerts
 - Notification is generally provided to the sector where the conflict is first predicted to occur
 -  Transferred to the next sector upon handoff
 -  Aircraft-to-airspace alerts
 - Sector controlling the aircraft receives the alert

RULES FOR CONFLICT NOTIFICATION (*CONT'D*)

Rules of Sector Control During Conflict Notification - Rule 1

AT URET User Manual Ver. 5.0, p. xxxix

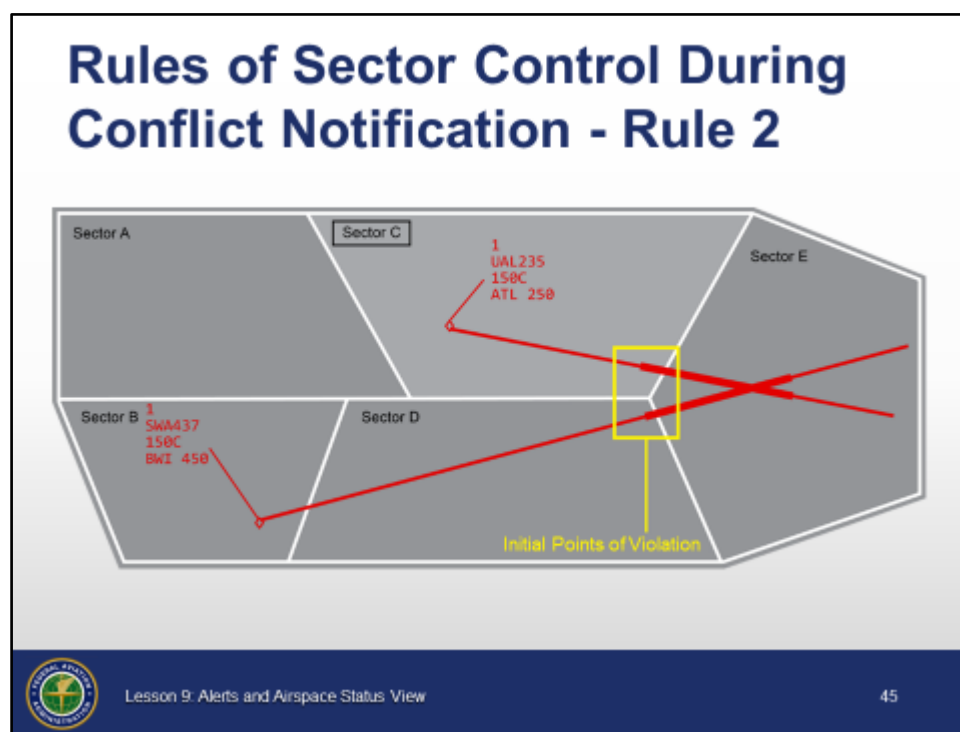


- ⦿ At the predicted start time of the conflict, if both aircraft's points of violation are in the same sector, that sector will receive the conflict notification
- ⦿ Although APD may detect a conflict, sector may not be notified immediately

RULES FOR CONFLICT NOTIFICATION (*CONT'D*)

Rules of Sector Control During Conflict Notification - Rule 2

AT URET User Manual Ver. 5.0, p. xl

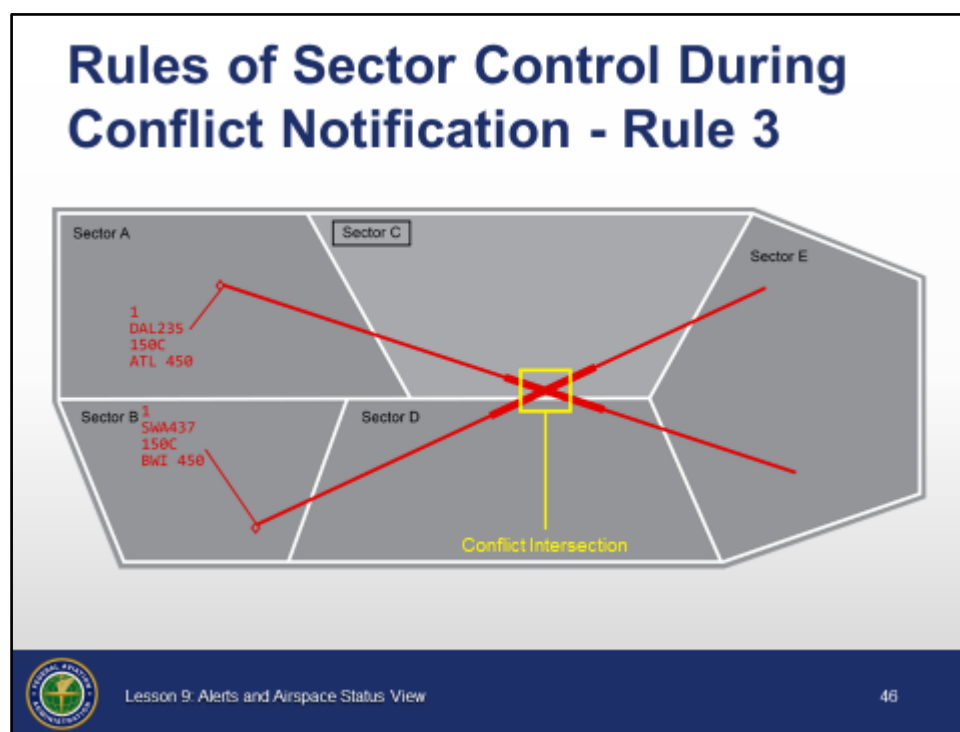


- ⊙ At the predicted start time of the conflict, if the points of violation are located in different sectors, and only one of these sectors controls an aircraft involved in the conflict, the sector containing the point of violation and currently controlling one of the aircraft receives the conflict notification

RULES FOR CONFLICT NOTIFICATION (*CONT'D*)

Rules of Sector Control During Conflict Notification - Rule 3

AT URET User Manual Ver. 5.0, p. xl

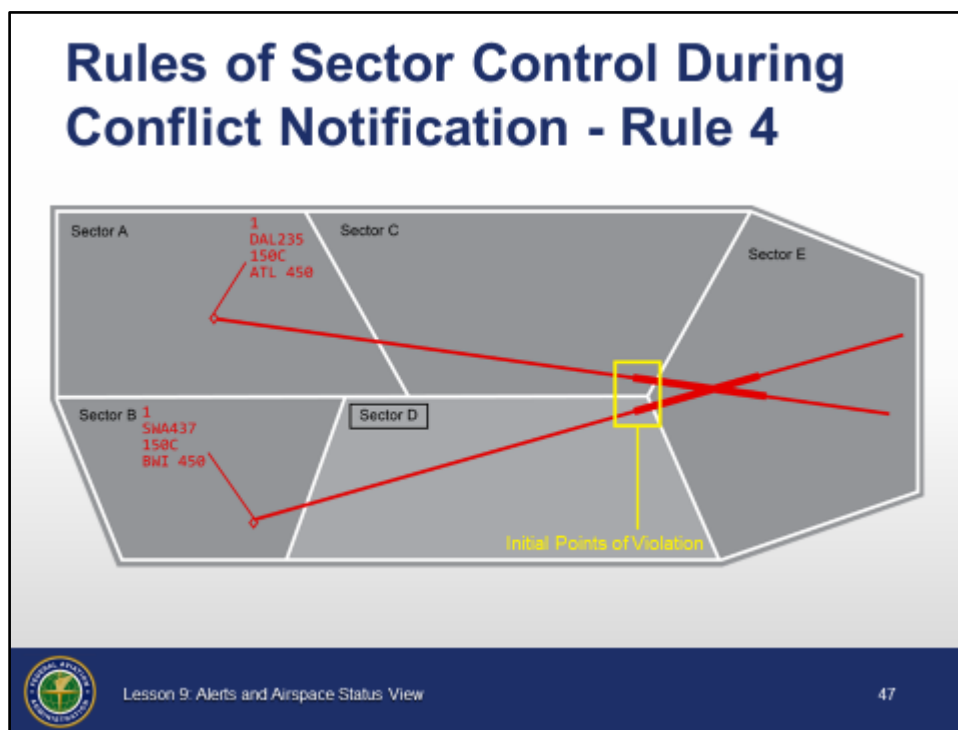


- ⦿ At the predicted start time of the conflict, if each aircraft's point of violation is in a different sector and the conflict intersection is in only one of the sectors, then the sector controlling the airspace containing the conflict intersection will receive the notification

RULES FOR CONFLICT NOTIFICATION (*CONT'D*)

Rules of Sector Control During Conflict Notification - Rule 4

AT URET User Manual Ver. 5.0, p. xl

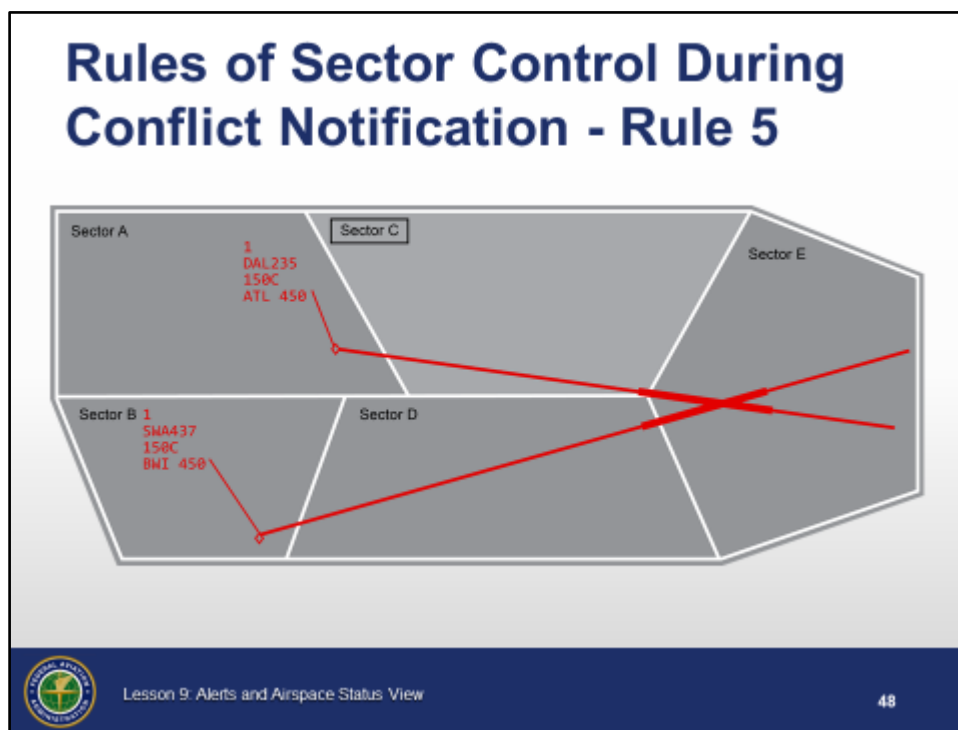


- ⊙ At the predicted start time of the conflict, if both aircraft's points of violation are in different sectors, and one aircraft is predicted to reach the sector boundary before the other reaches a sector boundary, then the sector that is predicted to be reached first will receive conflict notification

RULES FOR CONFLICT NOTIFICATION (*CONT'D*)

Rules of Sector Control During Conflict Notification - Rule 5

AT URET User Manual Ver. 5.0, p. xli

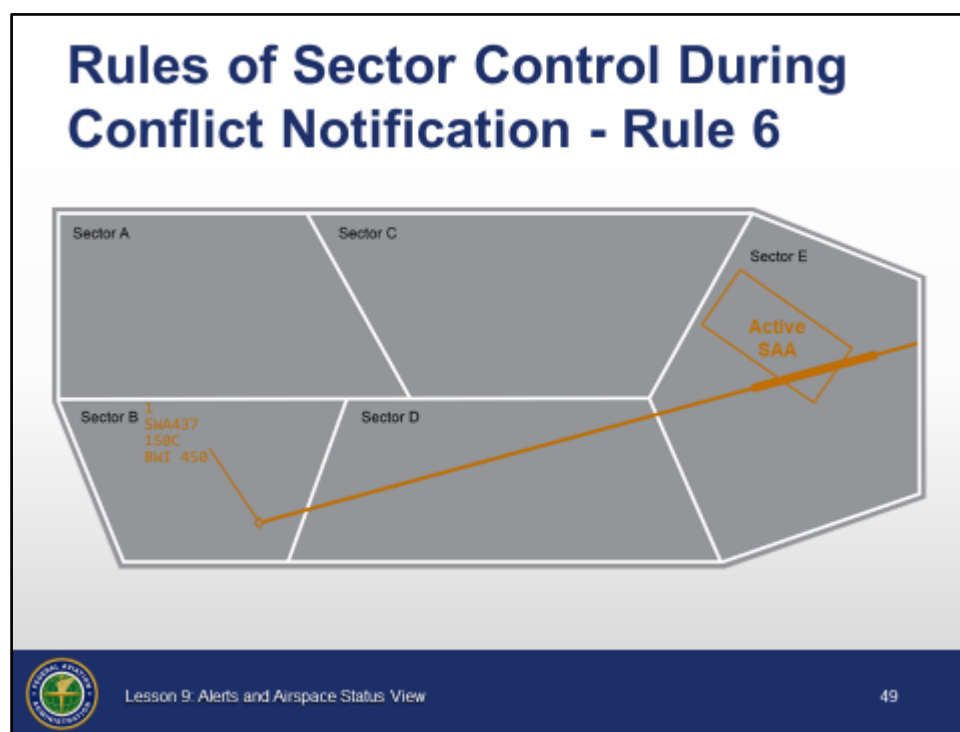


- ⊙ If none of the previous rules apply, then the system arbitrarily assigns the alert to one of the sectors containing the initial points of violation

RULES FOR CONFLICT NOTIFICATION (*CONT'D*)

Rules of Sector Control During Conflict Notification - Rule 6

AT URET User Manual Ver. 5.0, p. xxxix



- ⦿ For aircraft-to-airspace alerts, the sector that has track control of the aircraft receives the alert
 - These alerts are posted to the sector at a facility determined time, up to 40 minutes in advance


RULES OF CONFLICT NOTIFICATION (CONT'D)

Knowledge Check


Knowledge Check

Which sector will receive a conflict notification when an aircraft conflict is predicted to occur?

- A. Every sector that has control of a problem aircraft
- B. All sectors that the aircraft are flying through
- C. Sector where the conflict is first predicted to occur



Lesson 9: Alerts and Airspace Status View

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Question: Which sector will receive a conflict notification when an aircraft conflict is predicted to occur?



Answer: C. Sector where the conflict is first predicted to occur

RULES OF CONFLICT NOTIFICATION (CONT'D)

Knowledge Check

Knowledge Check

If points of violation are located in different sectors, and only one of these sectors controls an aircraft involved in conflict, which sector would receive conflict notification?

- A. Every sector that has control of a problem aircraft
- B. Sector containing a point of violation and currently controlling one of the aircraft
- C. Sector where the conflict is first predicted to occur



Lesson 9: Alerts and Airspace Status View



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Question: If points of violation are located in different sectors, and only one of these sectors controls an aircraft involved in conflict, which sector would receive conflict notification?



Answer: B. Sector containing a point of violation and currently controlling one of the aircraft

RULES OF CONFLICT NOTIFICATION (CONT'D)

Knowledge Check

Knowledge Check

Which sector will receive a conflict notification when an aircraft-to-airspace conflict is predicted to occur?

- A. Every sector that has an FDB displayed for the problem aircraft
- B. All sectors that the aircraft is flying through
- C. Sector that has track control of the aircraft



Lesson 9: Alerts and Airspace Status View



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Question: Which sector will receive a conflict notification when an aircraft-to-airspace conflict is predicted to occur?

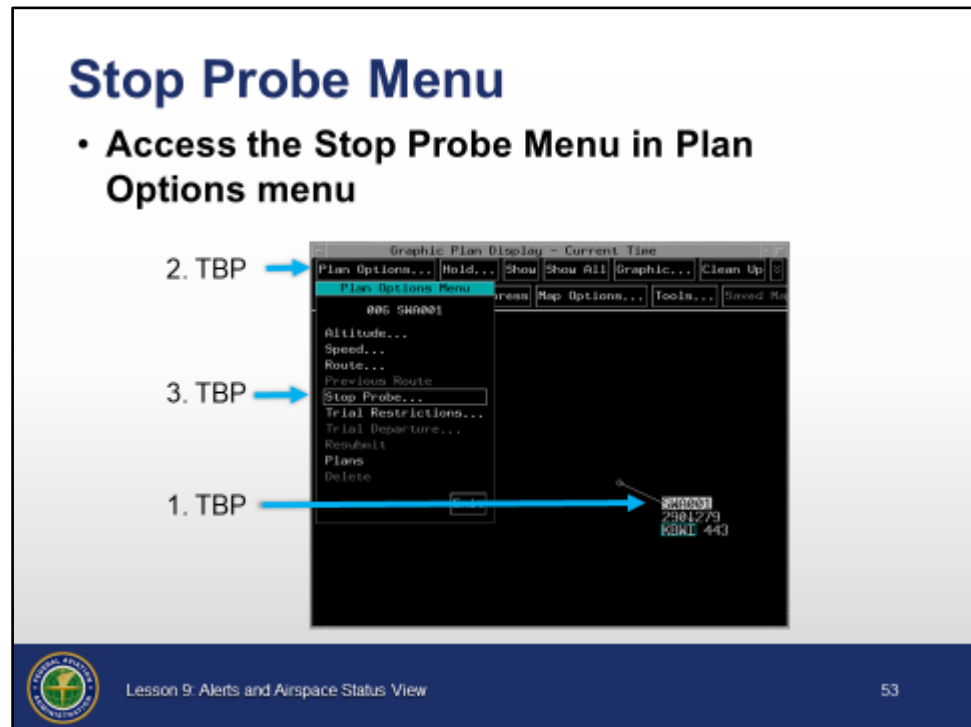


Answer: C. Sector that has track control of the aircraft





STOP PROBE FUNCTIONS

Stop Probe Menu

TI 6110.101,
sec. 5.1.1.5.1



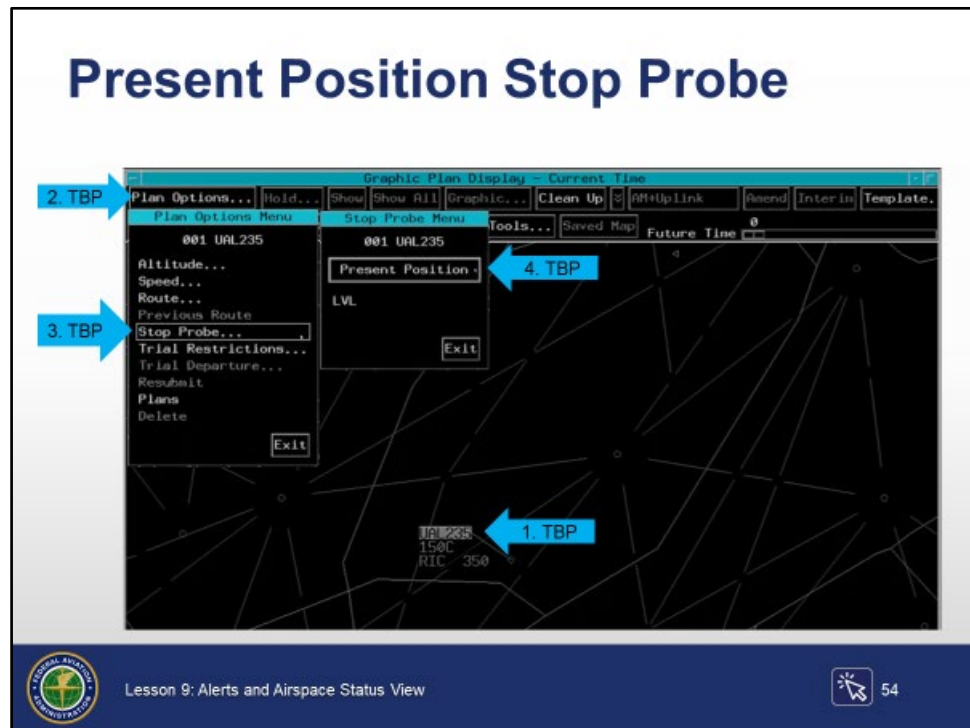
Slide is animated, 4 clicks. Click where indicated by click icon.

- ⦿ Conflict probing can be suspended for a selected flight
- ⦿ Access the Stop Probe Menu from the Plan Options Menu in ACL, Departure List (DL), GPD, or Plans Display
- ⦿ To access the Stop Probe Menu:
 -  TBP a call sign in the ACL, Departure List (DL), GPD, or Plans Display, then
 -  TBP the Plan Options... button in the same list or display, then
 -  TBP Stop Probe... in the Plan Options Menu
- ⦿  The Stop Probe Menu provides a method to suspend conflict probing at:
 - Present position, or
 - Future fix

STOP PROBE FUNCTIONS (CONT'D)





Present Position Stop Probe

TI 6110.101,
sec. 5.1.1.5



Slide is animated, 4 clicks. Click where indicated by click icon.

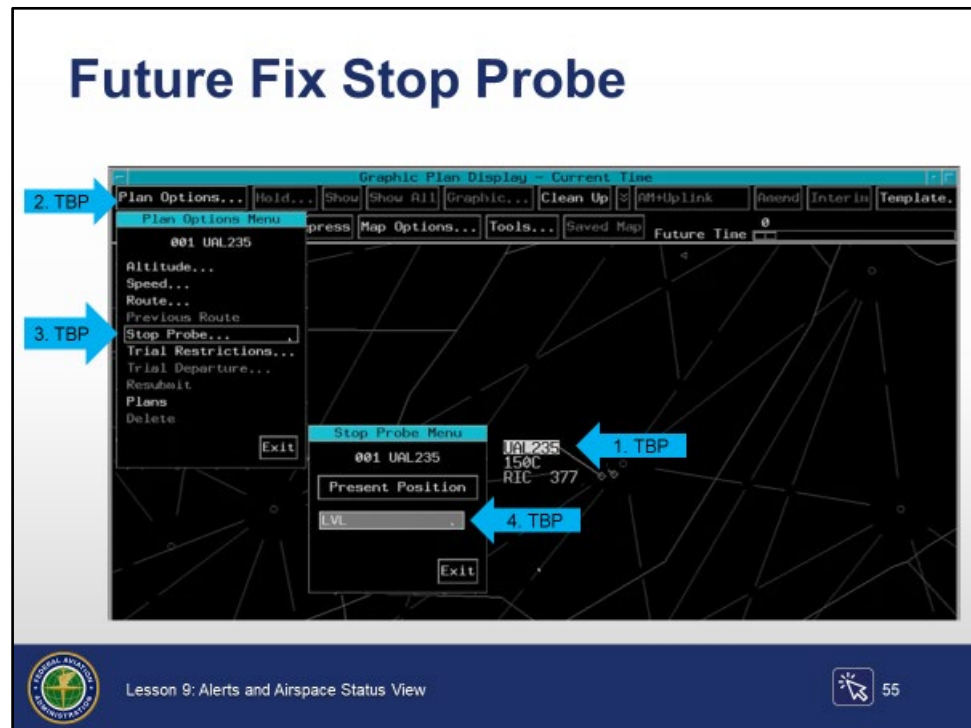
◎ To enter a Present Position Stop Probe:

-  TBP FLID
 - The Plan Options... Menu bar button becomes selectable
-  TBP Plan Options... Menu bar button
 - The Plan Options Menu opens
-  TBP Stop Probe...
 - The Stop Probe Menu opens
-  TBP Present Position

STOP PROBE FUNCTIONS (CONT'D)

Future Fix Stop Probe

TI 6110.101,
sec. 5.1.1.5



Slide is animated, 4 clicks. Click where indicated by click icon.

○ To stop probe at a future fix:

- TBP FLID
 - The Plan Options... Menu bar button becomes selectable
- TBP Plan Options... Menu bar button
 - The Plan Options Menu opens
- TBP Stop Probe...
 - The Plan Options Menu closes
 - The Stop Probe Menu opens
- TBP a future fix

STOP PROBE FUNCTIONS (CONT'D)

Stop Probe - ACL

TI 6110.101,
sec. 3.2.3.22

Stop Probe - ACL

- When a present position stop probe is in effect, a brown S appears in the three alert boxes
- When a stop probe will take effect at a future fix, a brown S appears to the right of the three alert boxes



	Flight Id	PA	Type	Alt	Code	Hdg / Spd
010	UAL316 (PCT)		H/B767/L	110	0032	/
006	AAL237		H/B767/L	140	0022	/
009	AAL238		H/B767/L	140	0023	/
009	AAL239		H/B767/L	140	0024	/
011	AAL241		H/B767/L	140	0077	/



Lesson 9: Alerts and Airspace Status View

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Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ When a present position stop probe is in effect for an aircraft, on the ACL:

- A brown S appears in each of the three alert boxes
- Flight ID is brown



Click to reveal the second bullet and the brown S character to the right of the alert boxes.

- ⦿ When a stop probe will take effect at a future fix, on the ACL:

- A brown S appears to the right of the three alert boxes
- Flight ID is white


STOP PROBE FUNCTIONS (CONT'D)


Stop Probe - GPD

TI 6110.101,
sec. 3.2.3.22

Stop Probe - GPD

- When Stop Probe is in effect for an aircraft, on the GPD data block:
 - Brown SSS occupies Line 0
 - All text is brown





Lesson 9: Alerts and Airspace Status View

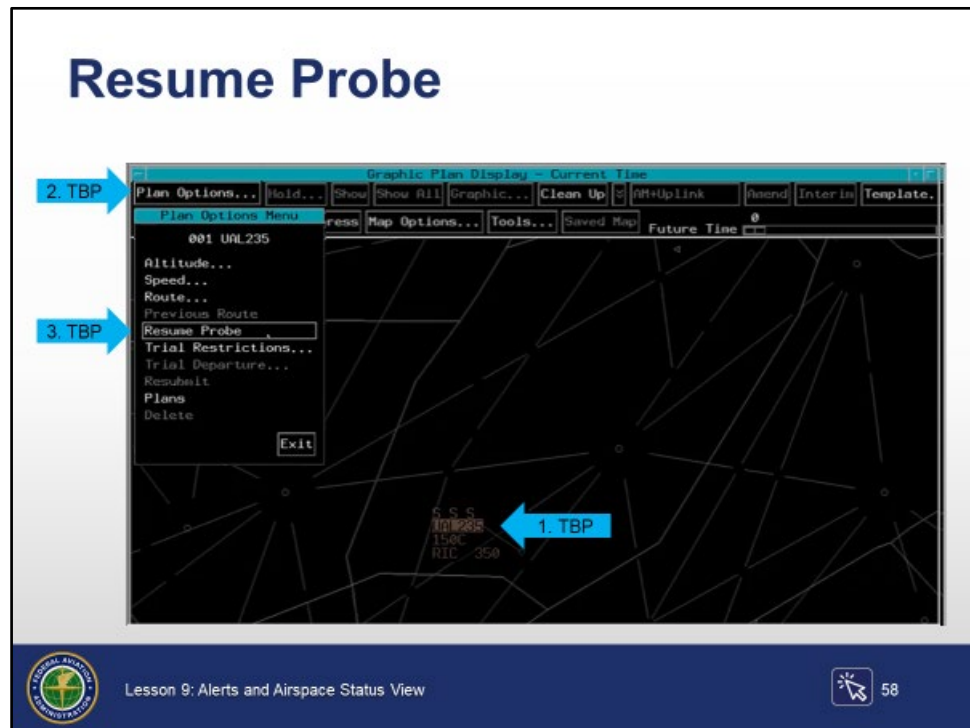
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- ⦿ When Stop Probe is in effect for an aircraft, on the GPD data block:
 - Brown SSS occupies Line 0
 - All text is brown

STOP PROBE FUNCTIONS (CONT'D)




Resume Probe

TI 6110.101,
secs. 3.2.3.18,
5.1.1.5



Slide is animated, 3 clicks. Click where indicated by click icon.

○ To resume probe:

-  TBP FLID
 - The Plan Options Menu bar button becomes selectable
-  TBP Plan Options Menu bar button
 - The Plan Options Menu opens
-  TBP Resume Probe
 - Conflict probing resumes
 - ACL flight ID turns white
 - GPD data block brown coding is removed

STOP PROBE FUNCTIONS (CONT'D)

Knowledge Check

Knowledge Check

How is a future fix Stop Probe shown on the ACL?

- A. Brown H next to the alert boxes
- B. Yellow S next to the alert boxes
- C. Brown S next to the alert boxes



Lesson 9: Alerts and Airspace Status View



Question: How is a future fix Stop Probe shown on the ACL?



Answer: C. Brown S next to the alert boxes



STOP PROBE FUNCTIONS (CONT'D)

Knowledge Check

Knowledge Check

To stop probe at a future fix TBP FLID, then TBP the Plan Options Menu, then _____.

- A. TBP Stop Probe
- B. TBP fix name
- C. TBP Stop Probe, then TBP fix name

Lesson 9: Alerts and Airspace Status View 60

Question: To stop probe at a future fix TBP FLID, then TBP the Plan Options Menu, then _____.

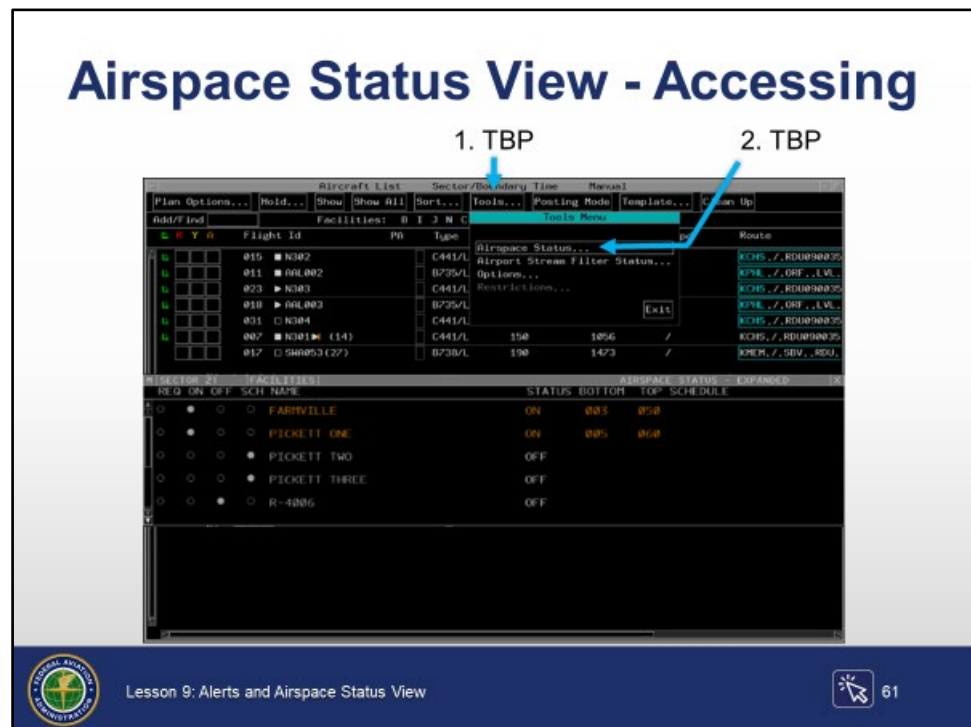


Answer: C. TBP Stop Probe, then TBP fix name



AIRSPACE STATUS VIEW

Airspace Status View - Accessing

TI 6110.101,
sec. 4.21.1



Slide is animated, 2 clicks. Click where indicated by click icon.

- ⦿ Displays the current and planned use of SAAs
 - Up to 48 hours in advance
- ⦿ To access the Airspace Status View through either the ACL or GPD:
 -  TBP the Tools... button
 - The Tools Menu opens
 -  TBP Airspace Status...
 - The Airspace Status View opens

AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View

TI 6110.101,
sec. 4.21.1

Airspace Status View

- Can display SAA of selected adjacent facilities

TBP or TBE

REQ	ON	OFF	SCH	NAME	ADJ FAC	STATUS	BOTTOM	TOP	SCHEDULE
				FARMVILLE	ZID	ON	003	050	
				PICKETT	ZJX	PEND	005	060	WED 0140-0300
				PICKETT	ZNY	ON	005	100	
				PICKETT	ZOB	ON	040	100	
				PICKETT	ZTL	ON	040	100	
				PICKETT	ZWY	ON	040	100	
				R-4006		OFF	035	249	WED 1152-2244 (SR+0000) (SS+0000)
				R-4008		OFF			
				R-6602A		ON	000	039	
				R-6602B		ON	040	109	
				R-6602C		ON	110	179	



Slide is animated, 4 clicks. Click where indicated by click icon.

- ⦿ RA positions can:
 - Change the status of designated SAAs
 - Modify the schedule of designated SAAs
 - Change the altitude limits of designated SAAs
 - Filter the display between SAAs that are of operational interest to the sector and all the SAAs in the facility
 - Display SAA of selected adjacent facilities
 - TBP or TBE FACILITIES in the menu header to open menu for selection of adjacent facility SAA


NOTE: Only certain sectors are designated with the responsibility to change status of specific SAAs.

Continued on next page

AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View (Cont'd)

TI 6110.101,
sec. 4.21.1

- ☉  View can be expanded or compressed from the Airspace Status View menu

- Expanded view displays all scheduled SAA (excluding postponed schedules) for the next 48 hours



Click to open menu, i.e., TBP or TBE on the “M”.



Click to compress view, i.e., TBP or TBE on COMPRESS.

- Compressed view displays only the first line of each SAA's data
 - Includes current status of ON, OFF, or PEND

AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View - Buttons and Labels

TI 6110.101,
sec. 4.21.1

Airspace Status View - Buttons and Labels

Radio Buttons

Column Labels

Gray Buttons

White Buttons

REQ	ON	OFF	SCH	NAME	STATUS	BOTTOM	TOP	SCHEDULE
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	WASHINGTON DC SFRA	ON	000	179	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	DEMO ONE	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	DEMO TWO	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	DEMO THREE	PEND	050	150	WED 0145-2249 (SR+0000) (SR+0000)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	DIND WEST	ON	100	500	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	EVERS	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	FARMVILLE	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	PORT BRAGG NORTH AREA A	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	PORT BRAGG NORTH AREA B	OFF			

Lesson 9: Alerts and Airspace Status View

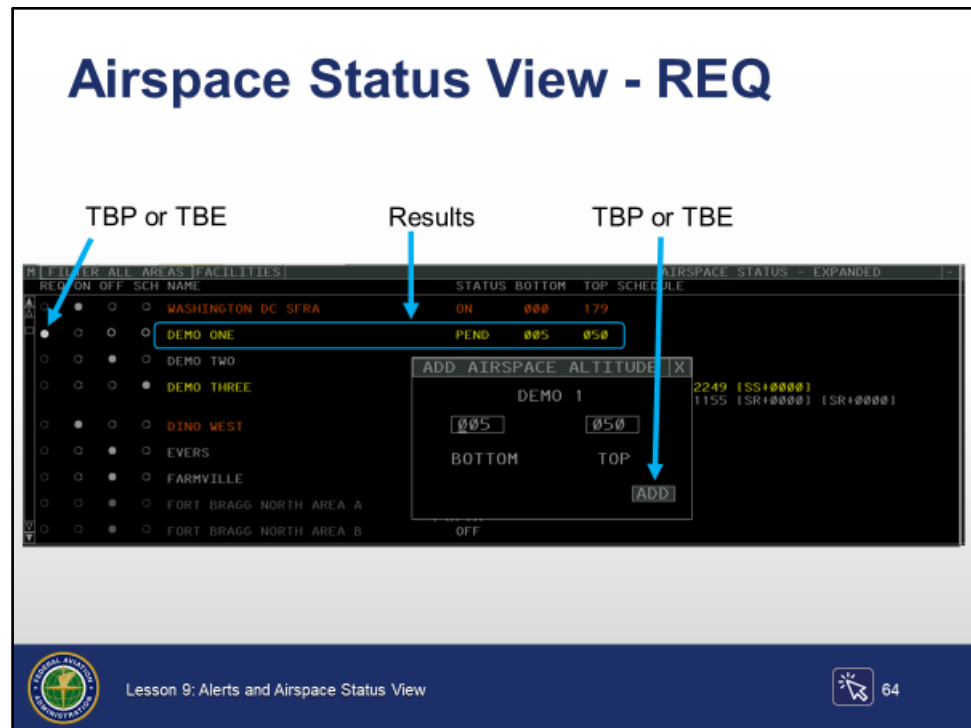
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- ⦿ White buttons are selectable
- ⦿ Gray buttons are not selectable
- ⦿ Radio buttons show the status of the respective SAA
 - REQ - Pending
 - ON - Active
 - OFF - Not Pending, Active, or Scheduled
 - SCH - Scheduled
- ⦿ Column Labels
 - NAME - Name of SAA
 - STATUS - Current status of SAA
 - BOTTOM - Lower altitude boundary
 - TOP - Top altitude boundary
 - SCHEDULE - Active & scheduled times

AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View - REQ

TI 6110.101,
sec. 4.21.1



Slide is animated, 3 clicks. Click where indicated by click icon.

- ① TBP or TBE the REQ (Request) radio button to invoke the Add Airspace Altitude menu
- ② The user then selects an altitude range
- ③ TBP or TBE the ADD button to change the SAA status to Pending
 - Yellow coding is applied to the SAA information on the Airspace Status View, SAA Filter View, and the Situation Display

AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View - Pending SAA

TI 6110.101,
sec. 4.21.1

Airspace Status View - Pending SAA

Select Altitude Range
in a Pending SAA

M		FACILITY-WIDE		FACILITIES		AIRSPACE STATUS - COMPRESSED				X	
REQ	ON	OFF	SCH	NAME	STATUS	BOTTOM	TOP	SCHEDULE			
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	FORT BRAGG SOUTH AREA A	OFF						
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	FORT BRAGG SOUTH AREA B	OFF						
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	FRIENDSHIP CAP	OFF						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	GAMECOCK A	ON	070	179	MON 0600-0200			
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GAMECOCK A ATCAA	PEND	070	179	ACTIVATE CANCEL EDIT 00-2200			
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	HATTERAS F	OFF	030	130				
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	JEFFERSON ONE	ON	240	260				
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	KIWI ANCHOR REFUELING AREA	OFF						

Lesson 9: Alerts and Airspace Status View 65



Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ When the altitude range is selected in a Pending SAA, a sub view is displayed that allows the user to Activate, Cancel, or Edit that SAA

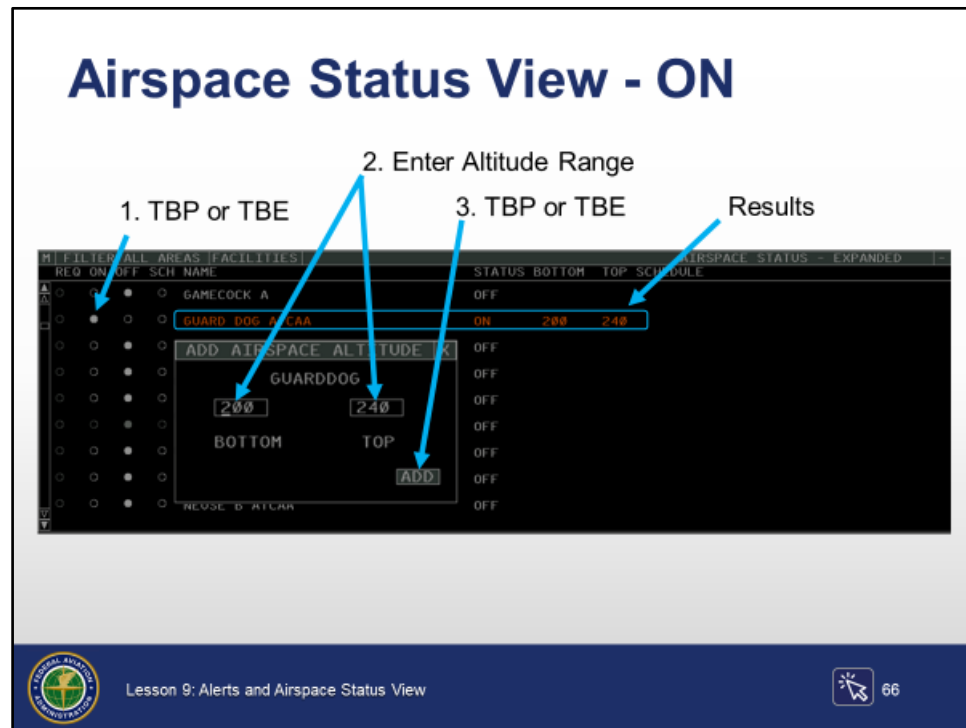


Click to select the altitude range of pending SAA GAMECOCK A ATCAA.



AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View - ON Button

TI 6110.101,
sec. 4.21.1



Slide is animated, 3 clicks. Click where indicated by click icon.

- ⦿ The ON radio button is automatically filled in when a scheduled SAA goes active or can be manually selected to activate an SAA immediately using the scheduled altitude range
- ⦿  TBP or TBE the ON button to invoke the Add Airspace Altitude menu
- ⦿  To manually enter the active altitude range, select either the BOTTOM or TOP entry box and enter the altitude range, then TBP or TBE the ADD button



Click to show results.

- ⦿ Manually selected ON SAAs remain active until a user action is taken to change the status
- ⦿ Orange coded text is used for Active SAAs

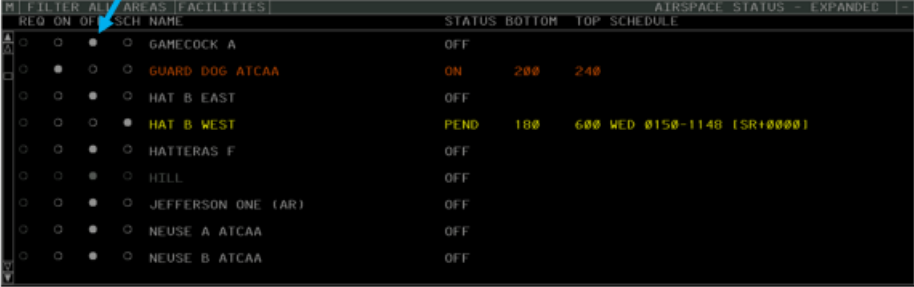
AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View - OFF Button

TI 6110.101,
sec. 4.21.1

Airspace Status View - OFF

OFF Button



FILTER ALL AREAS (FACILITIES)				AIRSPACE STATUS - EXPANDED				
REQ	ON	OFF	SCH	NAME	STATUS	BOTTOM	TOP	SCHEDULE
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	GAMECOCK A	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	GUARD DOG ATCAA	ON	200	240	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	HAT B EAST	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	HAT B WEST	PEND	100	600	WED 0150-1140 (SR10000)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	HATTERAS F	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	HILL	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	JEFFERSON ONE (AR)	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NEUSE A ATCAA	OFF			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	NEUSE B ATCAA	OFF			

Lesson 9: Alerts and Airspace Status View

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- ⦿ The OFF radio button:
 - Is filled in when an SAA is not Pending, Active or Scheduled
 - Can be manually selected to override (deactivate) any Requested, Active or Scheduled SAA
- ⦿ Applying another status deselects the OFF button
- ⦿ White coded text is used for inactive SAAs

AIRSPACE STATUS VIEW (CONT'D)

Airspace Status View - SCH Button



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Airspace Status View - SCH

- SCH button filled in when an SAA is scheduled active within the next 48 hours


H FILTER ALL AREAS FACILITIES		AIRSPACE STATUS - EXPANDED	
REQ	ON OFF	SCH NAME	STATUS BOTTOM TOP SCHEDULE
<input type="radio"/>	<input type="radio"/>	GAMECOCK A	OFF
<input type="radio"/>	<input type="radio"/>	GUARD DOG ATCAA	ON 200 240
<input type="radio"/>	<input type="radio"/>	HAT B EAST	OFF
<input type="radio"/>	<input type="radio"/>	HAT B WEST	PEND 180 600 WED 0150-1140 (SR10000)
<input type="radio"/>	<input type="radio"/>	HATTERAS F	OFF
<input type="radio"/>	<input type="radio"/>	HILL	OFF
<input type="radio"/>	<input type="radio"/>	JEFFERSON ONE (AR)	OFF 240 260 THU 0600-0200
<input type="radio"/>	<input type="radio"/>	NEUSE A ATCAA	OFF

SCH Button Pending Status

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Slide is animated, 1 click. Click where indicated by click icon.

- ⦿ The SCH button is filled in when an SAA is scheduled to be active within the next 48 hours
- ⦿  Scheduled SAAs change to Pending (yellow) coded text when a facility adapted time prior to SAA activation is reached


AIRSPACE STATUS VIEW (CONT'D)

Knowledge Check


Knowledge Check

Which view is used to see the status of Special Activity Airspace up to 48 hours in advance?

- A. Options
- B. Airport Stream Filter
- C. Airspace Status View



Lesson 9: Alerts and Airspace Status View

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Question: Which view is used to see the status of Special Activity Airspace up to 48 hours in advance?



Answer: C. Airspace Status View


AIRSPACE STATUS VIEW (CONT'D)

Knowledge Check


Knowledge Check

Which button is selected to view planned use of Special Activity Airspace?

- A. PLAN
- B. ON
- C. SCH



Lesson 9: Alerts and Airspace Status View

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Question: Which button is selected to view planned use of Special Activity Airspace?




Answer: C. SCH



PART-TASK EXERCISE: ALERTS AND AIRSPACE STATUS VIEW

Part-Task Exercise


- **Purpose**
 - Perform Alert and Airspace Status View tasks
- **Materials**
 - TTL part-task exercise: Alerts and Airspace Status View
- **Directions**
 - This exercise takes approximately 30 minutes to complete. Each student must complete the checklist tasks. No headsets are required.

 Lesson 9: Alerts and Airspace Status View 71

Purpose	Perform Alert and Airspace Status View tasks.
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Materials	 Handout: <i>HO01_L09</i>  TTL part-task exercise: Alerts and Airspace Status View
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	 TTL scenario: <i>55054003_L09_S##</i>
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Directions	This exercise takes approximately 30 minutes to complete. Each student must complete the checklist tasks. No headsets are required.  <i>Provide instruction as required. Check off each task after completion. No ghost pilots are required.</i>
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CONCLUSION

Lesson Summary

Lesson Summary

This lesson covered:

- Alert indicators and colors
- Alerts on the GPD
- Automated Problem Detection (APD)
- Rules for conflict notification
- Stop Probe functionality
- Airspace Status View functionality



Lesson 9: Alerts and Airspace Status View

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

This lesson covered:

- ⦿ Alert indicators and colors
 - Red
 - Muted red
 - Yellow
 - Muted yellow
 - Orange
 - Alert Boxes
 - Brown X
 - Brown S
 - Brown H
 - Brown F
 - Alert indicators in the Plans Display and GPD

Continued on next page

CONCLUSION (CONT'D)

Lesson Summary (Cont'd)

- ⊙ Alerts on the GPD
 - Point of violation
 - Green route of flight
 - Special Activity Airspace
 - Show/Remove Alerts ACL and GPD
 - Show All/Remove All Alerts ACL and GPD
 - Acknowledge selected conflict
 - Acknowledge all conflicts
- ⊙ Automated Problem Detection
 - Compares trajectories to predict conflicts
 - Results displayed in Plans Display
 - Ineligible
 - Separation Values
 - Separation Buffer
 - Inhibiting areas
- ⊙ Rules for conflict notification
 - Only one sector gets an alert at a time
 - Aircraft-to-aircraft alerts
 - Aircraft-to-airspace alerts
- ⊙ Stop Probe functionality
 - Menu
 - Present position Stop Probe
 - Future fix Stop Probe
 - Display in ACL
 - Display in GPD
 - Resume Probe

Continued on next page

CONCLUSION (CONT'D)

Lesson Summary (Cont'd)

☉ Airspace Status View functionality

- Accessing
- Buttons/Labels
- Request airspace
- Pending SAA
- ON button
- OFF button
- SCH button



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.
