

BASICS FOR AIR TRAFFIC CONTROL – INTRODUCTION TO FAA ORDERS AND MANUALS

MODULE OVERVIEW

Purpose: The purpose of this module is to describe the purpose and the general layout of the different orders that define the procedures and phraseology used by air traffic controllers. It also describes the purpose of the Aeronautical Information Manual (AIM) used by both controllers and pilots.

MODULE OUTLINE

Lesson: FAA Orders and Manuals

Purpose: The purpose of this lesson is to describe the general layout of the official documentation of the FAA that is referred to for rules, regulations, and standards, and explain the procedures for updating this documentation.

Objectives:

- Identify purpose of FAA orders and Aeronautical Manual (AIM)
- Identify changes, notices, and supplements
- Define terminology used in FAA orders

Topics:

- FAA Directives
- Scope of Directives
- Order Introductions
- Prefix System
- Changes, Notices, and Supplements
- Purpose of FAA Orders
 - FAA Order JO 7110.65, Air Traffic Control
 - FAA Order JO 7210.3, Facility Operation and Administration
 - FAA Order JO 7340.2, Contractions
 - FAA Order JO 7350.9, Location Identifiers
 - FAA Order JO 7360.1, Aircraft Type Designators
- Knowledge Check
- Aeronautical Information Manual (AIM)
- Terminology
- Knowledge Check
- Review/Summary

Question and Answer Session – *Parking Lot*

Exercise – Becoming Familiar with FAA Orders

Exercise – Orders and Manuals Treasure Hunt

Question and Answer Session – *Parking Lot*

End-of-Module (EOM) Test

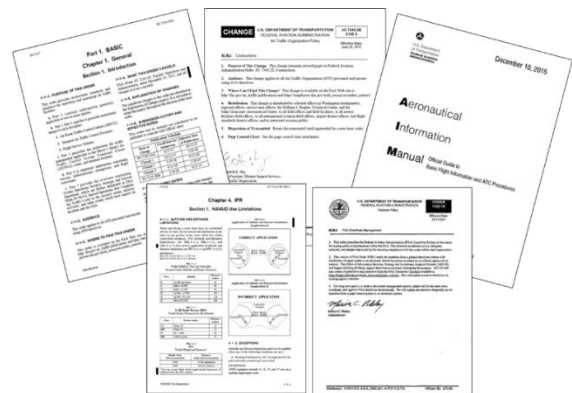
INTRODUCTION

LESSON	<ul style="list-style-type: none"> FAA Orders and Manuals
TOTAL ESTIMATED RUN TIME	3 hrs. 02 mins.
MODULE CONTENT	<ul style="list-style-type: none"> Module Overview Lesson: FAA Orders and Manuals Q&A Session – Parking Lot Exercise – Becoming Familiar with FAA Orders Exercise – Orders and Manuals Treasure Hunt Q&A Session – Parking Lot End-of-Module Test

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> Instruct students to select Introduction to FAA Orders and Manuals module within Blackboard Instruct students to read the module introduction and then wait quietly for additional instructions 	Blackboard
	EST. RUN TIME
	2 mins.

Federal Aviation Administration (FAA) orders and manuals are the “law books” of air traffic control. To do your job effectively, you will need to know what these documents are and how they define your work.

This module describes the purpose and the general layout of the different orders that define the procedures and phraseology used by air traffic controllers. It also describes the purpose of the Aeronautical Information Manual (AIM) used by both controllers and pilots.



FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> ENABLE FAA Orders and Manuals lesson in Blackboard Instruct students to navigate to the FAA Orders and Manuals lesson in Blackboard Instruct students to work individually through the lesson content Upon completion of the lesson, students should review previously introduced content or wait quietly until other students have completed 	Blackboard
	EST. RUN TIME
	20 mins.

FAA ORDERS AND MANUALS

Purpose: The purpose of this lesson is to describe the general layout of the official documentation of the FAA that is referred to for rules, regulations, and standards, and explain the procedures for updating this documentation.

Objectives:

- Identify purpose of FAA orders and Aeronautical Manual (AIM)
- Identify changes, notices, and supplements
- Define terminology used in FAA orders

References for this lesson are as follows:

- FAA Order JO 1320.1, FAA Directives Management
- FAA Order JO 7110.65, Air Traffic Control
- FAA Order JO 7360.1, Aircraft Type Designators
- FAA Order JO 7210.3, Facility Operation and Administration
- FAA Order JO 7340.2, Contractions
- FAA Order JO 7350.9, Location Identifiers
- Aeronautical Information Manual (AIM)

FAA Directives

Directives are the primary means within the FAA to issue, establish, and describe agency policies, organization, responsibilities, methods, and procedures. There are four different types of directives.

Orders – Orders are permanent directives and stay in effect until canceled.	Changes – Changes add, delete, or modify information or instructions in orders.
Notices – Notices are temporary directives and expire one year from their effective date or have a cancellation date before one year.	Supplements – Supplements are issued by organizations other than the originator of the basic directive to provide additional internal guidance or instructions pertaining to the basic directive.

Scope of Directives

Air Traffic Organization (ATO) directives apply to different entities and are approved by different authorities.

Agency Directives	Apply to	<ul style="list-style-type: none">■ The FAA■ More than one Line of Business (LOB)
	Approved by	The Administrator or Deputy Administrator
Internal Directives	Apply to	An LOB
	Approved by	The Chief Operating Officer (COO)
Regional and Center Directives	Apply to	<ul style="list-style-type: none">■ A region■ A center■ Administrative matters that cross program lines
	Approved by	The Regional Administrator or Center Director

Order Introductions

All ATO orders have a subject page and a table of contents in the introduction. Some, however, have subscription information, records of changes, and explanations of those changes. These items come in different combinations and different orders depending on the content and purpose of the document.

Note: The AIM is designed to provide the aviation community with basic flight information and ATC procedures for use in the National Airspace System (NAS) of the United States.

Prefix System

FAA-wide orders have no prefix other than FAAO. All ATO directives take a two-letter prefix:

- The first letter, “J,” is permanently assigned to the ATO
- The second letter discerns which area the directive covers

JO	<ul style="list-style-type: none">■ ATO■ Nationwide business units■ Nationwide support offices	JE	Eastern Service Area
JC	Central Service Area	JW	Western Service Area

Changes, Notices, and Supplements

Periodic review and revalidation of directives are important parts of the directive process. Directives are updated by using changes, notices, and supplements.

Changes

The purpose of a **change** is to add minor or new information or to update existing information in a directive. A change may replace, add, or delete material in a small part of a directive.

Changes are sent out on a scheduled basis. Usually, three changes are scheduled for each directive, and then a new version of the directive is published.

Revised, reprinted, or new pages are marked as follows:

- The change number and the effective date are printed on each revised or additional page
- Bold vertical lines in the margin of changed pages indicate the location of substantive revisions to the order

Example:

5-7-4. TERMINATION

■ Advise aircraft when speed adjustments are no longer needed.

■ a. Advise aircraft to “resume normal speed” when ATC-assigned speed adjustments are no longer required and no published speed restrictions apply.

Notices

Notices are used for emergencies or when a situation requires immediate action. They are also self-canceling and may not be revised or extended. If a notice needs to be revised or extended, it will be converted to an order and given a new number.

Three types of notices are:

- General Notices (GENOTs)
 - Issued by Washington Headquarters
- Regional Notices (RENOTs)
 - Issued by the Regions
- Service Area Notices (SERNOTs)
 - Issued by Service Areas

Supplements

Supplements provide additional internal guidance or instructions pertaining to the basic directive.

Example:

A supplement may be special operations procedures and/or restrictions at an airshow or fly-in.

Purpose of FAA Orders

Each FAA order has a unique purpose.

JO 7110.65 Air Traffic Control	<p>This order prescribes procedures and phraseology for use by air traffic personnel providing air traffic control services.</p> <p>Controllers are required to be familiar with the provisions of this order and to exercise their best judgment if they encounter situations that are not covered</p>
JO 7210.3 Facility Operation and Administration	<p>This order provides instructions, standards, and guidance for operating and managing air traffic facilities.</p>
JO 7340.2 Contractions	<p>This order contains the approved word and phrase contractions used by personnel of the FAA and by other agencies that provide ATC, communications, weather, charting, and associated services.</p> <ul style="list-style-type: none">■ After the subject page and the record of changes comes subscription information followed by the table of contents
JO 7350.9 Location Identifiers	<p>This order lists the location identifiers authorized by the FAA and Transport Canada.</p> <ul style="list-style-type: none">■ It lists United States airspace fixes and procedure codes■ The order also includes guidelines for requesting identifiers and procedures for making assignments
JO 7360.1 Aircraft Type Designators	<p>This order provides standard abbreviations for the most common aircraft in the NAS with air traffic service (ATS).</p> <ul style="list-style-type: none">■ It provides additional reference information used by air traffic control■ It applies to the ATO and anyone using ATO directives



Knowledge Check A

REVIEW what you have learned so far about FAA orders and manuals. ANSWER each question below.

1. FAA orders are updated by which documents? (Select all correct answers that apply.)
 - ☐ **Changes**
 - ☐ Appendices
 - ☐ **Notices**
 - ☐ **Supplements**
 - ☐ Addendums
2. When a change is issued to an order, how are new pages marked? (Select all correct answers that apply.)
 - ☐ **Bold line next to change in margin**
 - ☐ **Change number is listed**
 - ☐ Change is underlined
 - ☐ Change version is listed
 - ☐ **Effective date of change listed**

3. To whom is an FAA order with a prefix of “JO” directed? (*Select the correct answer.*)
- ☐ Western Service Area
 - ☐ Eastern Service Area
 - ☐ Central Service Area
 - ☐ **Air Traffic Organization**

Aeronautical Information Manual (AIM)

This manual is designed to provide the aviation community with basic flight information and ATC procedures for use in the National Airspace System (NAS).

This manual contains fundamentals required in order to fly in the United States NAS, including:

- Items of interest to pilots concerning health and medical facts
- Factors affecting flight safety
- A pilot/controller glossary of terms used in the ATC system
- Information on safety, accident, and hazard reporting



Terminology

When used in FAA orders, the following words have specific meanings:

<p>“Need Not” or “May” (means a procedure is optional)</p>	<ul style="list-style-type: none"> ■ All students <u>need not</u> eat lunch in the cafeteria ■ The phraseology “APPROVED AS REQUESTED” <u>may</u> be substituted in lieu of a lengthy readback
<p>“Must” or “Shall” (means a procedure is mandatory)</p>	<ul style="list-style-type: none"> ■ All students <u>must</u> be back from breaks on time ■ Controllers <u>shall</u> exercise their best judgement based on the facts and circumstances known to them
<p>“Shall Not” or “Must Not” (means a procedure is prohibited)</p>	<ul style="list-style-type: none"> ■ Students <u>shall not</u> use electronic devices in the classroom ■ The maximum distance between points <u>must not</u> exceed 500 miles
<p>“Should” (means a procedure is recommended)</p>	<ul style="list-style-type: none"> ■ All students <u>should</u> study 20 hours a day ■ Administrative messages <u>should</u> be restricted to 20 lines
<p>“Will” (means futurity, not a requirement for application of a procedure)</p>	<ul style="list-style-type: none"> ■ All students <u>will</u> enjoy themselves while at the Academy ■ The U.S. ARTCC <u>will</u> transmit flight data to the Canadian ACC in one of the following...



Knowledge Check B

REVIEW what you have learned so far about FAA orders and manuals. ANSWER the questions below.

1. Match each JO numerical identifier with its title. Enter your answers in the spaces below.

<u>e</u> JO 7110.65	a. Facility Operation and Administration
<u>a</u> JO 7210.3	b. Aircraft Type Designators
<u>d</u> JO 7350.9	c. Contractions
<u>b</u> JO 7360.1	d. Location Identifiers
<u>c</u> JO 7340.2	e. Air Traffic Control
2. Which document prescribes ATC procedures and phraseology used by the FAA? (*Select the correct answer.*)
 - ☒ **FAA Order JO 7110.65**
 - ☐ FAA Order JO 7210.3
 - ☐ FAA Order JO 7340.2
3. Which document provides direction and guidance for operating and managing air traffic facilities and offices? (*Select the correct answer.*)
 - ☐ FAA Order JO 7110.65
 - ☒ **FAA Order JO 7210.3**
 - ☐ FAA Order JO 7350.9
4. Which document contains aircraft type designators? (*Select the correct answer.*)
 - ☐ FAA Order JO 7350.9
 - ☐ AIM
 - ☒ **FAA Order JO 7360.1**
5. Which document lists the location identifiers authorized by the FAA? (*Select the correct answer.*)
 - ☒ **FAA Order JO 7350.9**
 - ☐ FAA Order JO 7340.2
 - ☐ AIM
6. Which document provides the aviation community with basic flight information and ATC procedures for use in the NAS? (*Select the correct answer.*)
 - ☐ FAA Order JO 7350.9
 - ☐ FAA Order JO 7340.2
 - ☒ **AIM**

FAA Orders and Manuals Summary

An order is a directive that the FAA uses to issue policy, instructions, and work information to its own personnel and designees. It spells out how the FAA expects to carry out its responsibilities. It is very important that you learn your way around these documents. They are the resources you need to do your job.

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> ■ Review content presented in FAA Orders and Manuals lesson ■ Navigate to the Parking Lot link within Blackboard and review any student questions ■ Address Parking Lot questions and facilitate a brief discussion of the lesson content 	Facilitated Discussion
	EST. RUN TIME
	15 mins.

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> ■ Instruct students to locate student exercise Becoming Familiar with FAA Orders in the printed Student Guide ■ The exercise will be performed in small groups ■ Divide students into groups and assign a different order or manual per group ■ Instruct students how to locate orders and manuals from student computers (SEE Detailed Facilitator Instructions below) ■ Instruct each group to research their assigned order or manual to locate answers to questions provided ■ Instruct students to prepare a report of findings to present to other class members, then select one spokesperson to present report ■ Call upon each group to present their briefing to the class ■ Encourage class discussion at the end of the each group presentation ■ Provide feedback to each group's presentation 	Exercise
	EST. RUN TIME
	45 mins.

EXERCISE: BECOMING FAMILIAR WITH FAA ORDERS

Purpose

This exercise will help you to become familiar with the information contained in FAA orders.

Directions

Your class will be divided into groups and will be assigned an order or manual to review. Each group will prepare a briefing about the purpose of the specific order or manual. Select one member of your group to be a spokesperson and present your findings to the rest of the class. Use the questions below to help your group prepare your briefing.

Detailed Facilitator Instructions: Divide the class into groups. Assign each group a different order or manual to review (JO 7110.65, JO 7210.3, JO 7340.2, JO 7350.9, JO 7360.1, and the AIM).

- Using the student computers, have the class go to “Introduction to FAA Orders and Manuals, Module Introduction Page,” “Student Guide and References”
- Select “Orders” for JO 7110.65, JO 7210.3, JO 7340.2, JO 7350.9, and JO 7360.1
- Select “Manuals” for the AIM

Give the class 15-20 minutes to review their assigned order and to prepare their briefing.

Call upon each group to present their briefing at the appropriate point in the lesson. Reports will vary, ensure each group includes information pertaining to questions below.

Questions

1. What is the purpose of the order?
2. Who uses the order? Flight Service? Centers? Towers?
3. How is the order organized? Does it contain chapters, sections, or paragraphs?
4. What types of information does the order contain?
5. What kinds of information are contained in the appendices, if any?
6. How often is the order updated?

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none">■ Instruct students to locate student exercise Orders and Manuals Treasure Hunt in the printed Student Guide■ The exercise will be performed in small groups■ Divide students into groups■ Instruct students how to locate orders and manuals from student computers (SEE Detailed Facilitator Instructions below)■ Instruct each group to research in the orders or manual to locate answers to questions and enter answers on the worksheet■ Instruct students to be prepared to report their findings■ Instruct other groups to look up each reported reference to verify accuracy■ Encourage class discussion during group presentations■ Provide feedback to each group's presentation	Exercise
	EST. RUN TIME
	45 mins.

EXERCISE: ORDERS AND MANUALS TREASURE HUNT

Purpose

This exercise promotes student interaction and provides a review of key points in the lesson.

Directions

Your class will be divided into teams. Your team will locate the FAA “treasures” listed below by searching the FAA orders and the AIM. Find each one of the items and write down its description and where the item was located.

This exercise consists of 14 items for you to find. Questions require you to identify either the chapter, section, and paragraph, or the location of the item and the description. Some of the items may be found in more than one location, so check for multiple references.

Example: “Find the identifier for the Will Rogers VORTAC.” Write “IRW” and the page number of Order JO 7350.9 where the identifier was found.

Detailed Facilitator Instructions: Divide the students into teams. Team size will be dependent on the number of students in class.

- Using the student computers, have the class go to “Introduction to FAA Orders and Manuals, Module Introduction Page,” “Student Guide and References”
- Select “Orders” for JO 7110.65, JO 7210.3, JO 7340.2, JO 7350.9, and JO 7360.1
- Select “Manuals” for the AIM

Give the students 45 minutes to find the answers to the questions.

Ask the teams to report their findings. While one team is reporting, ask the other groups to look up each reference to ensure that it is accurate.

After each team is finished, provide the answers to any treasures that they did not find.

Identify the following:

ITEM TO IDENTIFY	INFORMATION	LOCATION
1. The location of the criteria for establishing administrative hours of duty for Air Traffic Control (ATC) facilities	<u>Facility managers and staff should conform to their service area office.</u>	<u>7210.3 Chap. 2, sec. 6, para. 2-6-10</u>
2. The location for offshore/oceanic types of separation	<u>Types of separation</u>	<u>7110.65 Chap. 8, sec. 1, para. 8-1-4</u>
3. The location for a facility manager to find guidelines for developing Letters of Agreement (LOAs)	<u>Facility manager’s guidelines for LOAs and SOPs.</u>	<u>7210.3 Chap. 4, sec. 3, para. 4-3-3</u>
4. The identifier for Fort Jensen Airport	<u>AK60</u>	<u>7350.9, page A-F-12</u>
5. The latitude and longitude for the radio fix known as HIPPY intersection	<u>36° 11’ 40.02” N 99° 58’ 20.24” W</u>	<u>7350.9, page P-A-156</u>

ITEM TO IDENTIFY	INFORMATION	LOCATION
6. The phraseology for issuing a takeoff clearance	<u>“CLEARED FOR TAKEOFF”</u>	<u>7110.65, Chap. 3; sec. 9, para. 3-9-10</u>
7. The three letter designator of Asiana Airlines	<u>AAR</u>	<u>7340.2, Page 3-1-19</u>
8. Definition of “SHALL”	<u>The procedure is mandatory</u>	<u>7110.65, Chap. 1, sec 2, para. 1-2-1, 7210.3, Chap. 1, sec. 2, para. 1-2-3</u>
9. The model name and the manufacturer of the aircraft with the designator E120	<u>Brasilia, manufactured by Embraer</u>	<u>7360.1, App. A, page A58</u>
10. Meaning of WTSPT	<u>Waterspout</u>	<u>7340.2 Chap. 2, page 2-1-32</u>
11. The suggested phraseology for assigning a Military Training Route (MTR)	<u>“I-R” or “V-R” followed by route number in group form, e.g. “I-R fifteen”</u>	<u>7110.65, Chap. 2, sec 5, para 2-5-1, 7110.65, Chap. 9, sec. 2, para 9-2-7</u>
12. The nationality of an aircraft with a call sign beginning with 5V	<u>Togo</u>	<u>7340.2, Chap. 4, sec 1, page 4-1-1</u>
13. The tie-in Flight Service Station (FSS) for Possum Kingdom airport	<u>FTW</u>	<u>7350.9, page A-P-21</u>
14. Three types of pilot briefings	<u>Standard, abbreviated and outlook</u>	<u>AIM Chap. 7, sec. 1, para. 7-1-4</u>

SUMMARY

This module described the purpose and general layout of the different orders and manuals used by both controllers and pilots.

In accordance with FAA Orders JO 7110.65, Air Traffic Control; JO 7210.3, Facility Operation and Administration; JO 7340.2, Contractions; JO 7350.9, Location Identifiers; JO 7360.1, Aircraft Type Designators; and the Aeronautical Information Manual (AIM), you should now be able to:

- Identify purpose of selected FAA orders and Aeronautical Information Manual (AIM)
- Identify changes, notices, and supplements
- Define terminology used in FAA orders

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none">■ Navigate to the Parking Lot link within Blackboard and review any student questions■ Address Parking Lot questions and facilitate a brief discussion of the lesson content■ Instruct students to prepare for the End-of-Module test by putting away their Student Guides	Facilitated Discussion
	EST. RUN TIME
	15 mins.

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none">■ ENABLE <i>Introduction to FAA Orders and Manuals End-of-Module Test</i> link in Blackboard■ Instruct students:<ul style="list-style-type: none">○ Clear desks○ Do not write anything during or after the test○ Navigate to the <i>Introduction to FAA Orders and Manuals End-of-Module Test</i> link in Blackboard○ Once they are satisfied with their responses, click “Save and Submit;” do not click “OK” to review results until directed to do so○ Choose “Cancel” if they receive a warning message that the test has unanswered questions; choosing OK will submit the test and not allow them to go back and answer the questions○ Leave the room after submitting the test and return at the “Be Back” time■ Note: <i>This test is scored but not graded</i>■ During test, monitor students to ensure a secure testing environment■ Identify the most commonly missed questions by reviewing student statistics in Blackboard■ Instruct students to click “View Results” when ready to review commonly missed questions■ Review commonly missed questions with students	Blackboard Assessment
	EST. RUN TIME
	10 mins.

END-OF-MODULE TEST (ANSWER KEY)

Note: Test questions in Blackboard are presented to the students in random order. Please be aware the test key question order will not match the student version.

1. What information is contained in the FAA Order JO 7340.2? (Select the correct answer.)

- ☒ **Contains approved words and phrase contractions used by the FAA**
- ☐ Prescribes air traffic procedures and phraseology used by Flight Service Specialists
- ☐ Prescribes air traffic procedures and phraseology used by air traffic controllers
- ☐ Provides direction and guidance for operating and managing air traffic facilities

Reference(s): JO 7340.2, Chap. 1

2. What information is contained in the FAA Order JO 7350.9? (Select the correct answer.)

- ☒ **Lists location identifiers authorized by FAA**
- ☐ Aeronautical information for pilots and controllers
- ☐ Provides direction and guidance for operating and managing air traffic facilities
- ☐ Contains approved words and phrase contractions used by the FAA

Reference(s): JO 7350.9

3. What are supplements? (Select the correct answer.)

- ☒ **Local document that provides internal guidance and/or instruction and is issued by someone other than the originator**
- ☐ Documents that give temporary direction or announcement
- ☐ Documents that transmit additions, deletions, or modifications to orders
- ☐ Temporary documents issued to consolidate several documents into one

Reference(s): JO 1320.1, Chap. 1

4. When used in FAA Orders JO 7110.65 and JO 7210.3, the word “may” means that the procedure is _____. (Select the correct answer.)

- ☒ **Optional**
- ☐ Recommended
- ☐ Approved
- ☐ Mandatory

Reference(s): JO 7110.65, Chap. 1; JO 7210.3, Chap. 1