

BASICS FOR AIR TRAFFIC CONTROL – AIR TRAFFIC CONTROL (ATC) CLEARANCES

MODULE OVERVIEW

Purpose: This module explains the purpose of Air Traffic Control (ATC) clearance, including pilot responsibility for compliance, and describes the different types of ATC clearances.

MODULE OUTLINE

Lesson: Air Traffic Control (ATC) Clearances

Purpose: This lesson explains Air Traffic Clearances and defines the pilot's responsibility for compliance with an ATC Clearance.

Objectives:

- Identify the purpose of an ATC clearance
- Describe the pilot's responsibility for compliance
- Identify use of ATC clearance prefixes
- Identify ATC clearance items and their sequence

Topics:

- ATC-to-Pilot Communication
 - Air Traffic Clearance
 - ATC Instructions
 - Immediately
 - Expedite
- Pilot Compliance
- IFR Cancellation
 - No Functioning Control Tower
 - Functioning Control Tower
- Clearance Items
- Clearance Prefixes
- Clearance Prefixes/Examples
- Knowledge Check
- Review/Summary

Question and Answer Session – *Parking Lot*

Lesson: Types of Clearances

Purpose: The purpose of this lesson is to explain and provide examples of types of ATC clearances.

Objective:

- Identify types of ATC clearances

Topics:

- Clearance Types
 - Amended Clearance
 - Departure Clearance
 - Taxi Clearance
 - Takeoff Clearance
 - Approach Clearance
 - Landing Clearance
 - Through Clearance
 - Cruise Clearance
 - Altitude Reservation (ALTRV) Clearance
 - Climb Via Clearance
 - Descend Via Clearance
- Holding Instructions
- Knowledge Check
- Review/Summary

Question and Answer Session – *Parking Lot*

Study Aid – Examples of ATC Clearances and Instructions

Activity – Name That Clearance

Question and Answer Session – *Parking Lot*

End-of-Module (EOM) Test

INTRODUCTION

LESSONS	<ul style="list-style-type: none">■ Air Traffic Control (ATC) Clearances■ Types of Clearances
TOTAL ESTIMATED RUN TIME	2 hr. 42 mins.
MODULE CONTENT	<ul style="list-style-type: none">■ Module Overview■ Lesson: Air Traffic Control (ATC) Clearances■ Q&A Session – Parking Lot■ Lesson: Types of Clearances■ Q&A Session – Parking Lot■ Study Aid – Examples of ATC Clearances and Instructions■ Activity – Name That Clearance■ Q&A Session – Parking Lot■ End-of-Module Test

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none">■ Instruct students to select Air Traffic Control (ATC) Clearances module link within Blackboard■ Instruct students to read the module introduction and then wait quietly for additional instructions	Blackboard
	EST. RUN TIME
	2 mins.

The Air Traffic Control (ATC) system cannot function without ATC clearances. Controllers deal with clearances on a daily basis, and your ability to master these procedures and effectively issue the appropriate clearance will produce a safe and orderly flow of air traffic.

This module will explain the purpose of ATC clearance, including pilot responsibility for compliance, and describes the different types of ATC clearances.



FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none">■ ENABLE Air Traffic Control (ATC) Clearances lesson in Blackboard■ Instruct students to navigate to the Air Traffic Control (ATC) Clearances 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
	15 mins.

AIR TRAFFIC CONTROL (ATC) CLEARANCES

Purpose: This lesson explains Air Traffic Clearances and defines the pilot's responsibility for compliance with an ATC Clearance.

Objectives:

- Identify the purpose of an ATC clearance
- Describe the pilot's responsibility for compliance
- Identify use of ATC clearance prefixes
- Identify ATC clearance items and their sequence

References for this lesson are as follows:

- FAA Order JO 7110.65, Air Traffic Control
- Title 14 Code of Federal Regulations, Part 91.123

ATC-to-Pilot Communication

Two types of ATC-to-pilot communications are:

Air Traffic Clearance	An authorization by ATC, for the purpose of preventing collision between known aircraft, for an aircraft to proceed under specified traffic conditions within controlled airspace.	Example: "UNITED TEN, CLEARED TO TULSA AIRPORT AS FILED, FLY RUNWAY HEADING, MAINTAIN FOUR THOUSAND, EXPECT FLIGHT LEVEL TWO FOUR ZERO ONE ZERO MINUTES AFTER DEPARTURE, DEPARTURE FREQUENCY ONE TWO ZERO POINT TWO, SQUAWK THREE THREE SEVEN TWO."
ATC Instructions	Directives issued by ATC for the purpose of requiring a pilot to take a specific action.	Example: "BOEING ONE TWO THREE FOUR FIVE GO AROUND."

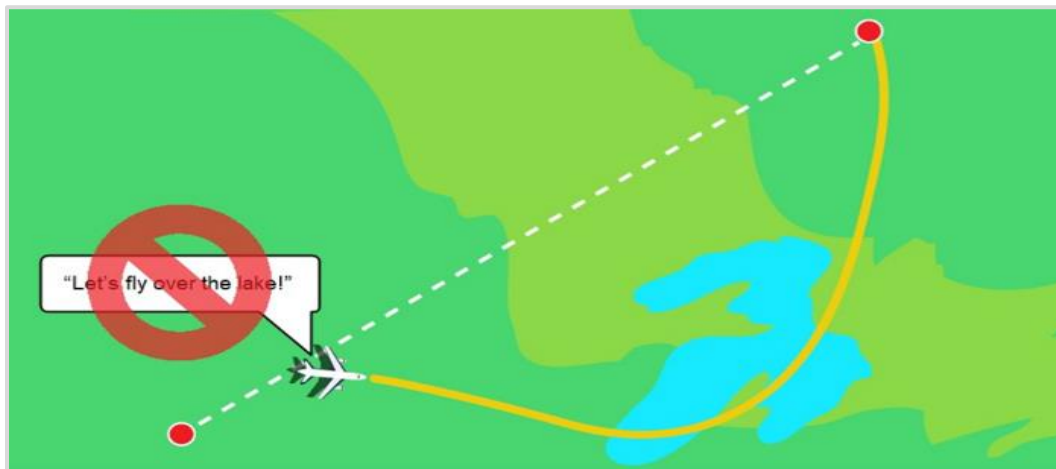
ATC uses the following terms when expeditious compliance is required. There are two key words that are used, depending on how and when the pilot needs to take action.

Immediately	Use the word " immediately " only when expeditious compliance is required to avoid an imminent situation.	Example: "TRAFFIC ALERT, CESSNA THREE FOUR JULIET, TWELVE O'CLOCK, ONE MILE, ADVISE YOU TURN LEFT IMMEDIATELY ."
Expedite	Use the word " expedite " only when prompt compliance is required to avoid the development of an imminent situation.	Example: "BOEING ONE TWO THREE FOUR FIVE, CLIMB AND MAINTAIN FOUR THOUSAND, EXPEDITE CLIMB THROUGH TWO THOUSAND."

Pilot Compliance

The pilot-in-command of an aircraft may **NOT** deviate from the provisions of an ATC clearance unless:

- ATC issues an amended clearance
- It's an emergency situation
- Pilot is responding to a Traffic Alert and Collision Avoidance System (TCAS) Resolution Advisory (RA)



IFR Cancellation

Pilots operating on an IFR flight plan must follow certain rules depending on whether the control tower is functional.



No Functioning Control Tower or Uncontrolled Airport

Pilot is responsible for canceling IFR flight plan with Flight Service Station (FSS) or through other means of direct communication with ATC (radio, telephone, etc.).

Note: Certain towers have limited operating hours.



Functioning Control Tower

Flight plan is automatically closed upon landing.

Clearance Items

Issue the following clearance items (as appropriate) in the order listed below:

- Aircraft identification
 - Call sign of aircraft must be included in all clearances
- Clearance limit
 - When the clearance limit is an airport, the word “airport” must follow the airport name
 - When the clearance limit is a navigation aid (NAVAID), and the NAVAID type is known, the type of NAVAID must follow the NAVAID name
- Standard Instrument Departure (SID)
- Route of flight
- Altitude data in order flown
- Speed or Mach number (if applicable)
- Holding instructions
- Any special instructions
 - Special information may be associated with any of the other items: release times, delay information, when to expect higher, etc.
- Frequency and beacon code information

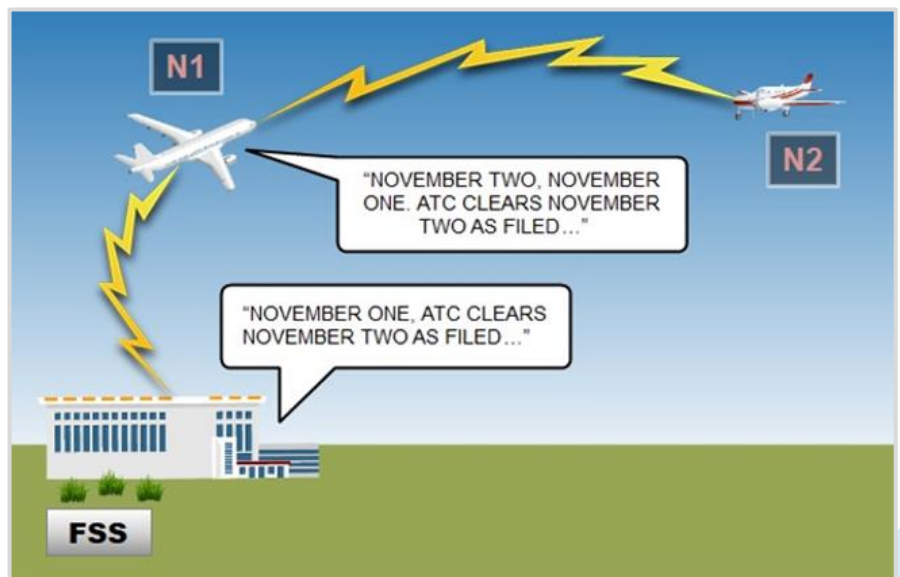
Clearance Prefixes

If non-ATC facilities (such as airline dispatchers, airport operators, or other aircraft) have to relay clearance, information, or requests for information to the aircraft, they must prefix the information with “ATC.”

Clearance Prefixes/Examples

An aircraft may be waiting at an uncontrolled airport within your area of responsibility but unable to communicate directly on the radio. Other aircraft you are working could relay the clearance to that aircraft.

- There are three types of prefixes:
 - “ATC CLEARS” (clearance)
 - “ATC ADVISES” (information)
 - “ATC REQUESTS” (request)
- Omit ATC prefix when:
 - Issuing directly to aircraft
 - Issuing to an ATC facility
 - Including an FSS
- FSSs shall prefix a clearance with appropriate phrase:
 - “ATC CLEARS”
 - “ATC ADVISES”
 - “ATC REQUESTS”
- Relay clearances from another controller verbatim





Knowledge Check A

REVIEW what you have learned so far about ATC Clearances. ANSWER the questions listed below.

Which key word should you use in your instructions to the pilot **ONLY** when expeditious compliance is required to avoid an imminent situation? (Select the correct answer.)

- ☐ **Immediately**
- ☐ ASAP
- ☐ Expedite

One reason a pilot-in-command of an aircraft may deviate from a clearance without an amended clearance is if _____. (Select the correct answer.)

- ☐ An early departure is required
- ☐ Instrument flight rules are in effect
- ☐ **It is an emergency situation**

Which of these are **NOT** considered clearance items? (Select all correct answers that apply.)

- ☐ **Standard Terminal Arrival (STAR)**
- ☐ Beacon code
- ☐ Altitude
- ☐ **Alternate destination**
- ☐ Aircraft identification

Which prefix should an FSS use to relay ATC information to an aircraft? (Select the correct answer.)

- ☐ "FSS..."
- ☐ **"ATC..."**
- ☐ No prefix required

What prefix phrase should you use to relay a clearance to an aircraft through another aircraft? (Select the correct answer.)

- ☐ **"ATC CLEARS"**
- ☐ "ATC RELAYS"
- ☐ "ATC ADVISES"

Air Traffic Control (ATC) Clearances Summary

As an air traffic controller, you must get the message across, and the pilot must comply. This lesson explained the purpose of air traffic control clearance and defined the pilot's responsibility for compliance with an air traffic control clearance. Giving clear and concise information in combination with the pilot's comprehension is crucial for air traffic efficiency, as well as everyone's safety.

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> ■ Review content presented in <i>Air Traffic Control (ATC) Clearances</i> lesson ■ Navigate to the <i>Parking Lot</i> link within Blackboard and review any student questions ■ Address <i>Parking Lot</i> 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"> ■ ENABLE <i>Types of Clearances</i> lesson in Blackboard ■ Instruct students to navigate to the <i>Types of Clearances</i> 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
	15 mins.

TYPES OF CLEARANCES

Purpose: This lesson identifies and provides examples of types of clearances used in Air Traffic Control (ATC).

Objective:

- Identify types of ATC clearances

References for this lesson are as follows:

- FAA Order JO 7110.65, Air Traffic Control

Clearance Types

There are many types of ATC clearances. Most include specific ATC instructions for the pilot to follow. In this lesson, we will discuss the following types of ATC clearances.

- | | | | |
|-------------|------------|------------------------|---------------|
| ■ Amended | ■ Takeoff | ■ Through | ■ Climb Via |
| ■ Departure | ■ Approach | ■ Cruise | ■ Descend Via |
| ■ Taxi | ■ Landing | ■ Altitude Reservation | |

Amended Clearance

ATC will issue an **Amended Clearance** anytime the controller deems such action necessary.

- Controllers may amend an aircraft's clearance for traffic or weather or to accommodate a pilot request

Pilots may request a different clearance from that which has been issued by ATC if they feel that they have information which would make another course of action more practical.

- Reasons for a request may be aircraft equipment limitations or company procedures that forbid compliance with the clearance issued



Departure Clearance

A **Departure Clearance** is authorization for a pilot to proceed from the point of departure to the point of destination under specific conditions.

- This is generally the initial clearance
- Air Force One is cleared to "destination as filed" (do not state the destination)



Taxi Clearance

Taxi Clearances are ATC instructions for aircraft/vehicles to operate on the movement area of an airport.

- Movement on a non-movement area is the responsibility of the pilot, the aircraft operator, or the aircraft company



Takeoff Clearance

A **Takeoff Clearance** is issued to authorize the pilot to depart the airport from a runway.

- Clearance for takeoff is preceded by the runway number



Approach Clearance

An **Approach Clearance** is an authorization by ATC for a pilot to conduct an instrument approach.

- Specify in the approach clearance the name of the approach as published on the approach chart
- An aircraft conducting an Instrument Landing System (ILS) approach must be advised at the time an approach clearance is issued when the glide slope is reported out of service
- Where adequate radar coverage exists, radar facilities may vector aircraft to the final approach course



Landing Clearance

A **Landing Clearance** is authorization for an aircraft to land on a runway.

- When issuing a landing clearance, first state the runway number followed by the landing clearance
- Landing clearance to succeeding aircraft in a landing sequence need not be withheld if you observe the positions of the aircraft and determine that prescribed runway separation will exist when the aircraft crosses the landing threshold
- Issue traffic information to the succeeding aircraft if a preceding arrival has not been previously reported and when traffic will be departing prior to their arrival

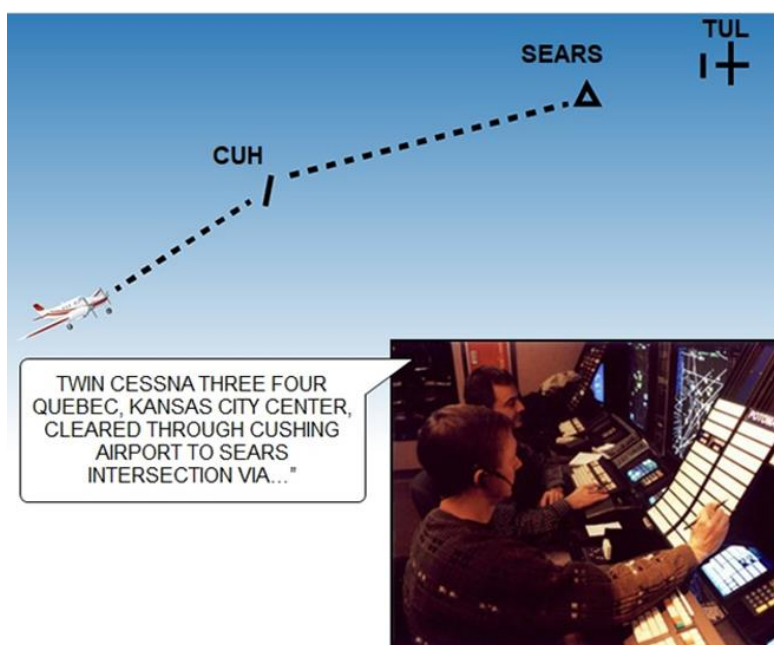


Through Clearance

Through Clearances are issued for pilots to make intermediate stops while en route to a final destination.

- A Through Clearance is a combination approach/departure
- Allows one clearance instead of two or more

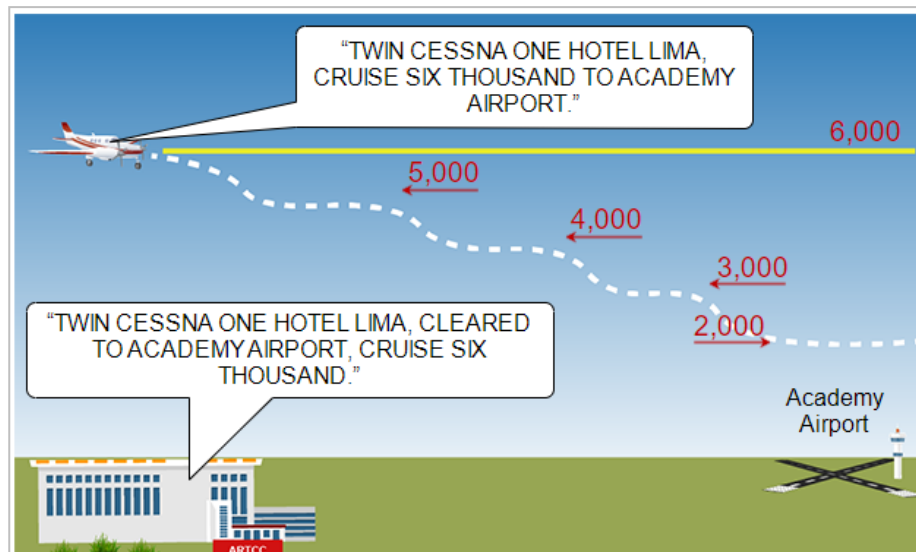
Note: Rarely used – advantageous when communication at the intermediate stop is difficult due to terrain, outage, or disaster.



Cruise Clearance

A **Cruise Clearance** authorizes a pilot to conduct flight at any altitude from the minimum Instrument Flight Rules (IFR) altitude up to and including the altitude specified in the clearance.

- The pilot may level off at any intermediate altitude within this block of airspace
- Climb/descent within the block is to be made at the discretion of the pilot
- Pilots shall not return to an altitude previously reported as vacated
- Includes approval for the pilot to execute a published instrument approach at the destination airport



Altitude Reservation (ALTRV) Clearance

ALTRV is 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.



Climb Via Clearance

A **Climb Via Clearance** is an abbreviated ATC Clearance that requires the pilot to comply with the following on a Standard Instrument Departure (SID):

- Lateral path
- Speed restrictions
- Altitude restrictions



Note: Standard Instrument Departure (SID): A preplanned instrument flight rule (IFR) air traffic control (ATC) departure procedure printed for pilot/controller use in graphic form to provide obstacle clearance and a transition from the terminal area to the appropriate en route structure.

Descend Via Clearance

A **Descend Via Clearance** is an abbreviated ATC clearance that requires the pilot to comply with the following on a Standard Terminal Arrival (STAR) procedure:

- Lateral path
- Speed restrictions
- Altitude restrictions

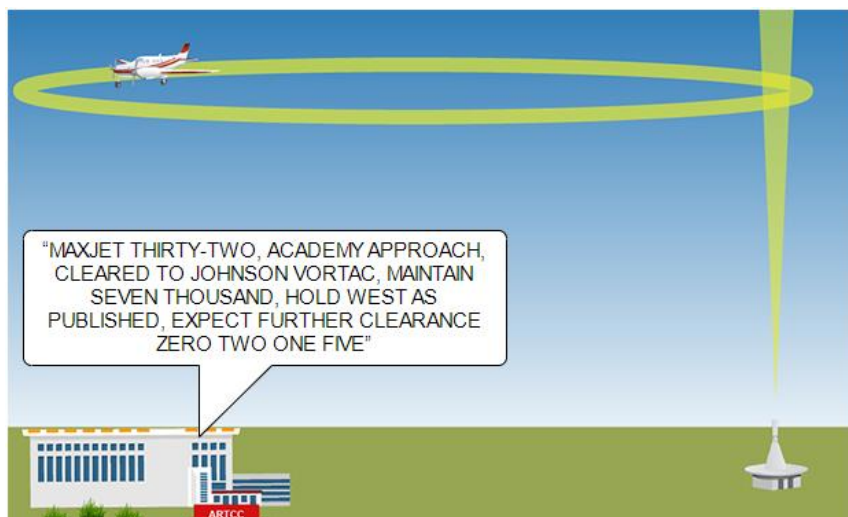


Note: Standard Terminal Arrival (STAR): A preplanned instrument flight rule (IFR) air traffic control arrival procedure published for pilot use in graphic and/or textual form. STARs provide transition from the en route structure to an outer fix or an instrument approach fix/arrival waypoint in the terminal area.

Holding Instructions

Holding Instructions are maneuvers which keep aircraft within a specified airspace while awaiting further clearance from ATC. Also used during ground operations to keep aircraft within a specified area or at a specified point while awaiting further clearance from ATC.

Note: Holding instructions are not an ATC clearance. They are given at a specified point while awaiting further ATC clearance.



Knowledge Check B

REVIEW what you have learned so far about ATC clearances. ANSWER the questions listed below.

1. A _____ clearance provides ATC instructions for aircraft/vehicles on the movement area of an airport. (Select the correct answer.)
 - ☐ Takeoff
 - ☐ Departure
 - ☒ **Taxi**
2. Which of the following is **NOT** a type of clearance used in ATC? (Select all correct answers that apply.)
 - ☐ Takeoff
 - ☒ **Speed**
 - ☐ Landing
 - ☐ Amended
 - ☐ Taxi
 - ☐ Altitude
 - ☒ **Holding**

When issuing a Landing Clearance, first state the _____ followed by the Landing Clearance. (Select the correct answer.)

- ☐ Aircraft type
- ☒ **Runway number**
- ☐ Airport name

The following is an example of which type of clearance? *(Select the correct answer.)*

“CESSNA ONE HOTEL LIMA, CLEARED TO ACADEMY AIRPORT, CRUISE SIX THOUSAND.”

- ☐ **Cruise**
- ☐ ALTRV
- ☐ Approach

Which clearance is used when communication at the intermediate stop is difficult due to terrain, outage, or disaster? *(Select the correct answer.)*

- ☐ **Through**
- ☐ Cruise
- ☐ Approach

3. Match the type of clearance to the description of the clearance. Enter your answers in the spaces below.

- | | |
|---|--------------|
| e Provides ATC instructions for aircraft or vehicles on movement area of the airport | a. Approach |
| a Authorizes aircraft to execute a particular procedure for the purpose of landing at an airport | b. ALTRV |
| d Changes previously issued clearance | c. Departure |
| b Provides the mass movement of aircraft | d. Amended |
| c Authorization for pilot to proceed from point of origin to point of destination | e. Taxi |

The following is an example of which type of clearance? *(Select the correct answer.)*

“SOUTHWEST ONE NINETY-NINE, ACADEMY APPROACH, MAINTAIN TWO THOUSAND UNTIL ESTABLISHED ON THE LOCALIZER, CLEARED I-L-S APPROACH.”

- ☐ **Approach**
- ☐ Landing
- ☐ Takeoff

Why are aircraft issued holding instructions? *(Select the correct answer.)*

- ☐ The ATC tower is **NOT** manned and unable to issue a clearance
- ☐ Pilots have been penalized for **NOT** following ATC instructions
- ☐ VFR conditions are reported
- ☐ **Aircraft are awaiting further clearance from ATC**

What is an abbreviated ATC Clearance that requires the pilot comply with altitude, speeds, and a lateral path on a departure? *(Select the correct answer.)*

- ☐ Approach Via
- ☐ **Climb Via**
- ☐ Descend Via

Types of Clearances Summary

Air traffic control clearances contain details specific to the aircraft and its current location. Controllers must be able to determine the appropriate clearance and then effectively issue the clearance while producing a safe and orderly flow of air traffic. Issuing clearances will be a daily responsibility for the controller.

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> ■ Review content presented in Types of Clearances 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
	25 mins.

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> ■ This portion of training will be conducted by the facilitator ■ Instruct students to locate study aid Examples of ATC Clearances and Instructions in Student Guide ■ Facilitator will review the content included in the study aid ■ Instruct students to reference the study aid as they continue the module content 	Study Aid
	EST. RUN TIME
	5 mins.

STUDY AID: EXAMPLES OF ATC CLEARANCES AND INSTRUCTIONS

Examples of ATC Clearances

Type of Clearance	Example
Amended	"SOUTHWEST NINETY-FOUR, CHANGE VICTOR SEVENTEEN CEDAR CREEK TO READ VICTOR FOUR FRANKSTON VICTOR TWELVE CEDAR CREEK, REST OF ROUTE UNCHANGED."
Departure	"NOVEMBER TWO ONE FOUR THREE SEVEN, CLEARED TO ATLANTA AIRPORT AS FILED, FLY RUNWAY HEADING, MAINTAIN FOUR THOUSAND, EXPECT ONE TWO THOUSAND ONE ZERO MINUTES AFTER DEPARTURE, DEPARTURE FREQUENCY ONE TWO THREE POINT FIVE, SQUAWK THREE ONE ONE SIX."
Taxi	"NOVEMBER NINER SIX NINER SIERRA HOTEL RUNWAY TWO EIGHT RIGHT, TAXI VIA GOLF, BRAVO, CHARLIE, HOLD SHORT RUNWAY ONE SIX." "AMERICAN EIGHTY-ONE, RUNWAY TWO EIGHT RIGHT, TAXI VIA ALPHA."
Takeoff	"CITATION FOUR ONE TANGO, RUNWAY THREE FOUR, CLEARED FOR TAKEOFF."
Approach	"CACTUS SEVENTY-FIVE, SIX MILES FROM WOODY, TURN RIGHT HEADING TWO SIX ZERO, MAINTAIN TWO THOUSAND FOUR HUNDRED UNTIL ESTABLISHED ON THE LOCALIZER, CLEARED I-L-S APPROACH." "NOVEMBER FOUR SIERRA CHARLIE CLEARED V-O-R D-M-E APPROACH"
Landing	"CHEROKE THREE FIVE WHISKEY, RUNWAY ONE SIX, CLEARED TO LAND." "CHEROKE THREE FIVE WHISKEY, RUNWAY ONE SIX, CLEARED TOUCH AND GO." "CHEROKE THREE FIVE WHISKEY, RUNWAY ONE SIX, CLEARED FOR THE OPTION."
Through	"NOVEMBER FOUR FOUR JULIETT HOTEL, CLEARED THROUGH ADA AIRPORT TO ATOKA AIRPORT."
Altitude Reservation (ALTRV)	"CATBIRD ONE FOUR, CLEARED VIA APPROVED ALTITUDE RESERVATION FISH BOWL FLIGHT PLAN."
Cruise	CITATION FOUR ONE TANGO, CLEARED TO CRUISE ONE ZERO THOUSAND TO THE ABC AIPORT."
Climb Via	"CLIMB VIA THE TERPZ SIX DEPARTURE."
Descend Via	"UNITED 454, DESCEND VIA THE MAIER FIVE ARRIVAL, EXCEPT AFTER KARDS MAINTAIN EIGHT THOUSAND."

Examples of ATC Instructions

"CONTACT FORT WORTH CENTER ONE THREE FIVE POINT SEVEN."
"FLY HEADING ZERO FOUR ZERO."
"FLY PRESENT HEADING."
"ENTER CONTROLLED AIRSPACE HEADING THREE SIX ZERO."
"FLY RUNWAY HEADING."
"SOUTHWEST FORTY, CLIMB AND MAINTAIN FLIGHT LEVEL TWO THREE ZERO."
"TIGER ONE, MAINTAIN BLOCK NINER THOUSAND THROUGH ONE ONE THOUSAND."
"CROSS GLEN ROSE VORTAC AT OR BELOW ONE TWO THOUSAND, DESCEND AND MAINTAIN SIX THOUSAND."
"HOLD NORTHWEST AS PUBLISHED, EXPECT FURTHER CLEARANCE ONE SIX TWO ZERO."
"HOLD WEST ON VICTOR SEVEN, FOUR MILE LEG, LEFT TURNS, EXPECT FURTHER CLEARANCE ONE TWO THREE FIVE."
"MAINTAIN MACH POINT EIGHT FIVE OR GREATER."
"INCREASE SPEED TWENTY KNOTS."
"REDUCE SPEED TO TWO FIVE ZERO."

FACILITATOR INSTRUCTIONS	DELIVERY METHOD
<ul style="list-style-type: none"> ■ ENABLE <i>Name That Clearance</i> in the <i>Exercises and Activities</i> folder in Blackboard. ■ Instruct students to navigate to the <i>Exercises and Activities</i> folder in Blackboard. ■ Instruct students to locate student activity <i>Name That Clearance</i> ■ The activity will be performed individually ■ Instruct students to answer each question ■ At the end of the activity, the activity will evaluate the students' performance ■ Suggest allowing opportunities to repeat the activity during periods of down time 	Activity
	EST. RUN TIME
	15 mins.

ACTIVITY: NAME THAT CLEARANCE (ANSWER KEY)

Note: The students will identify the different types of Air Traffic Control (ATC) clearances with the examples given.

Note: The questions in the key and their distractors may appear in a different order than displayed here due to activity question randomization.

Answers for question 1–11 come from this word bank:

Amended	Departure	Taxi	Approach
Through	Cruise	ALTRV	Holding Instructions
Climb Via	Descend Via		

Question	Answer
1. "NOVEMBER FOUR FOUR JULIETT HOTEL, CLEARED THROUGH ADA AIRPORT TO ATOKA AIRPORT."	Through <u>A Through Clearance authorizes pilots to make intermediate stops while en route to a final destination.</u>
"HOLD WEST OF BARNS ON VICTOR SEVEN, FOUR MILE LEG, LEFT TURNS, EXPECT FURTHER CLEARANCE ONE TWO THREE FIVE."	Holding Instructions <u>Holding instructions are issued in accordance with holding procedures while awaiting further clearance from ATC.</u>
"NOVEMBER NINER SIX NINER SIERRA HOTEL, RUNWAY TWO EIGHT RIGHT, TAXI VIA GOLF, BRAVO, CHARLIE, HOLD SHORT RUNWAY ONE SIX."	Taxi <u>A Taxi Clearance provides aircraft or vehicles a route to follow while on movement area of airport.</u>
"NOVEMBER TWO ONE FOUR THREE SEVEN, CLEARED TO ATLANTA AIRPORT AS FILED, FLY RUNWAY HEADING, MAINTAIN FOUR THOUSAND, EXPECT ONE TWO THOUSAND ONE ZERO MINUTES AFTER DEPARTURE, DEPARTURE FREQUENCY ONE TWO THREE POINT FIVE, SQUAWK THREE ONE ONE SIX."	Departure <u>A Departure Clearance provides authorization for pilot to proceed from point of origin to point of destination.</u>
"SOUTHWEST NINETY-FOUR, CHANGE VICTOR SEVENTEEN CEDAR CREEK TO READ VICTOR FOUR FRANKSTON VICTOR TWELVE CEDAR CREEK, REST OF ROUTE UNCHANGED."	Amended <u>An Amended Clearance changes the previously issued clearance.</u>
"CACTUS SEVENTY-FIVE, SIX MILES FROM WOODY, TURN RIGHT HEADING TWO SIX ZERO, MAINTAIN TWO THOUSAND FOUR HUNDRED UNTIL ESTABLISHED ON THE LOCALIZER, CLEARED I-L-S APPROACH."	Approach <u>An Approach Clearance authorizes aircraft to execute a particular procedure for the purpose of landing at an airport.</u>
"CITATION FOUR ONE TANGO, CLEARED TO CRUISE ONE ZERO THOUSAND TO THE ABC AIPORT."	Cruise <u>A Cruise Clearance authorizes pilots to descend to any altitude above the minimum IFR altitude and execute a SIAP.</u>

Question	Answer
“CLIMB VIA THE TERPZ SIX DEPARTURE.”	<u>Climb Via</u> <u>A Climb Via is an abbreviated ATC clearance that requires pilot to comply with altitude, speeds, and a lateral path on a departure.</u>
“CATBIRD ONE FOUR, CLEARED VIA APPROVED ALTITUDE RESERVATION FISH BOWL FLIGHT PLAN.”	<u>ALTRV</u> <u>An ALTRV provides for the mass movement of aircraft.</u>
“UNITED FOUR FIFTY-FOUR, DESCEND VIA THE MAIER FIVE ARRIVAL, EXCEPT AFTER KARDS MAINTAIN EIGHT THOUSAND.”	<u>Descend Via</u> <u>A Descend Via is an abbreviated ATC clearance that requires pilot/aircraft compliance with the following along the arrival procedure/STAR.</u>

SUMMARY

The purpose of this module was to explain the purpose of ATC clearance, including pilot responsibility for compliance, and describes the different types of ATC clearances.

In accordance with FAA Order JO 7110.65, Air Traffic Control and Title 14 Code of Federal Regulations, Part 91.123 you should now be able to:

- Identify the purpose of an ATC clearance
- Describe the pilot's responsibility for compliance
- identify use of ATC clearance prefixes
- Identify ATC clearance items and their sequence
- Identify the types of ATC clearances

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>Air Traffic Control (ATC) Clearances 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>Air Traffic Control (ATC) Clearances 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
	20 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. The purpose of an ATC clearance is to _____. (Select the correct answer.)

- ☐ **Prevent collision between known aircraft**
- ☐ Specify routing in uncontrolled airspace
- ☐ Provide classified instructions to pilots
- ☐ Provide for emergency situations

Reference(s): JO 7110.65, Pilot/Controller Glossary

2. Which of the following is **NOT** a reason to allow a pilot-in-command of an aircraft to deviate from the provisions of an air traffic clearance? (Select the correct answer.)

- ☐ **The pilot adds an extra stop while en route to a final destination.**
- ☐ An amended clearance has been obtained
- ☐ An emergency situation exists
- ☐ Responding to a TCAS resolution advisory

Reference(s): JO 7110.65, Pilot/Controller Glossary; CFR, 91.123

3. The term "ATC CLEARS" shall be included in clearances relayed through _____. (Select the correct answer.)

- ☐ **An airline dispatch office**
- ☐ A local controller
- ☐ An ARTCC radar controller
- ☐ An FSS inflight specialist

Reference(s): JO 7110.65, Chap. 4

4. An aircraft is waiting at an uncontrolled airport within ATC's area of responsibility but you (controller) are unable to communicate directly on the radio. How can you get a clearance/prefix to the pilot? (Select the correct answer.)

- ☐ **Another aircraft you are working could relay the clearance to the pilot**
- ☐ Send clearance with prefix by text message
- ☐ Wait until you can communicate with the pilot
- ☐ Try to call the uncontrolled airport where the aircraft is waiting

Reference(s): JO 7110.65, Chap. 4

5. Select the correct sequence of the following clearance items: *(Select the correct answer.)*

1. Route of flight
2. Holding instructions
3. Aircraft identification
4. Clearance limit
5. Mach number, if applicable
6. Altitude data in order flown
7. Frequency and beacon code information
8. Departure procedure or DP/FMSP
9. Any special instructions

- ☐ **3, 4, 8, 1, 6, 5, 2, 9, 7**
- ☐ 3, 8, 1, 2, 4, 5, 9, 6, 7
- ☐ 3, 8, 1, 2, 4, 5, 9, 7, 6
- ☐ 3, 1, 6, 4, 8, 5, 2, 7, 9

Reference(s): JO 7110.65, Chap. 4

6. Which of the following clearances would NOT be issued by an en route controller? *(Select the correct answer.)*

- ☐ **Taxi**
- ☐ Through
- ☐ Approach
- ☐ Amended

Reference(s): JO 7110.65, Chap. 4

7. Which clearance is generally the initial clearance for the pilot? *(Select the correct answer.)*

- ☐ **Departure**
- ☐ Approach
- ☐ Takeoff
- ☐ Climb Via

Reference(s): JO 7110.65, Chap. 4

8. A Takeoff Clearance is issued to authorize the pilot to depart the airport and preceded with what information? *(Select the correct answer.)*

- ☐ **Runway number**
- ☐ Aircraft number
- ☐ Altitude reservation
- ☐ Departure number

Reference(s): JO 7110.65, Chap. 3

9. What information is provided to the pilot in a Landing Clearance? *(Select the correct answer.)*

- ☐ **Runway number followed by the landing clearance**
- ☐ Taxi order followed by the landing clearance
- ☐ Landing clearance followed by the aircraft identification
- ☐ Landing sequence followed by runway separation

Reference(s): JO 7110.65, Chap. 3