West Coast ATC Local Control PCG

Course Objective: Trainee will learn the responsibilities and functions of the Local Control Position at WestCoastATC.

Time Limits For General Knowledge Training	
Apprentice Controller:	**Training Time**
	Instructional Time: 30 minutes
	Practical Application: 1 hour and 30 minutes

Local Control/Tower (LC)

- Overview of Local Control/Tower
- Runway Selection
- Departure Release
- Takeoff Clearances
- Landing Clearance
- Go-around Procedures
- VFR Pattern Traffic
- Runway Exiting Instructions
- Helicopter Operations
- Transfer of Control/Communications

Overview of the Local Control/Tower Function

TR: WCATC 7110.65 Chapter 4

Objective:	The trainee must understand the responsibilities of the Local Control/Tower position and how it is utilized at WestCoastATC.

The Tower Controller also known as Local Control is responsible for the active runway surfaces and movement areas. Local clears aircraft for take off or landing and ensures the runway is clear and safe during these operations. The Tower Controller also controls aircraft in the local area depending on the class of airspace they are in. VFR traffic patterns and practice approach fall under the Local Controllers area of responsibility.

Runway Selection

TR: WCATC 7110.65 Chapter 4, FAAO 7110.65 Chapter 3 section 5all

Objective:	The trainee must understand how to issue taxi instructions.

The Local Controller/Tower is responsible for the runway selection. According to the winds you should select the appropriate runway(s) for departures and arrivals. You do this by selecting the runway that corresponds best with the winds at that particular airport. If winds are calm, select a pair or single runway used the most (ILS Equipped preferably) as your "calm wind" runway(s).

For example if the winds are 250 at 15kts (Runways available 26L and R runways 8R and L) You would want to choose Runways 26L and R for your departure and arrival runways because they are in the direction of the wind.

Departure Releases

TR: WCATC 7110.65 Chapter 4

Objective:	The trainee must understand the proper way to coordinate for departure releases.

Departure Release Procedure

An aircraft that is departing under an IFR clearance is not authorized until the aircraft is released by Departure/Approach Controller. The Departure/Approach controller must inform the Tower Controller if they are to obtain a release for each departure or grant them "automatic" releases. Normally this is accomplished prior to a session start. If automatic releases are not granted then the Tower controller will either use MSN or TS Whisper to request a release. A sample of this phraseology would be this:

LC: (Departure Facility), (Tower Facility).

DEP: Departure.

LC: Request release on (Callsign) from (departure airport) to (arrival airport).

DEP: (Callsign) is released. or (Callsign) fly runway heading maintain 3000, released.

LC: (Callsign) released or (Callsign) fly runway heading maintain 3000, released.

Clearance Void Times

A pilot may receive a departure clearance, when operating from an uncontrolled airport, which contains a provision for the clearance to be void if not airborne by a specific time.
Clearance void if not off by (clearance void time) and, if required, if not off by (clearance void time) advise (facility) not later than (time) of intentions.

Takeoff Clearances

TR: WCATC 7110.65 Chapter 4, FAAO 7110.65 Chapter 3 section 9all

Objective:	The trainee must understand what information is required and how to issue takeoff clearances.

When you issue a takeoff clearance you must include the wind, runway, and the words cleared for takeoff.

Takeoff Instructions. When issuing a takeoff clearance utilize the following phraseology:

Takeoff clearance:

(Callsign) (Airport Name) Tower, winds XXX at XX runway XXX cleared for take off.

VAA_001 (Pronounced Allied One), Memphis Tower, winds 220 at 12 runway 22L cleared for take off.

Heading after departure (if assigned by the departure controller):

(Callsign) (Airport Name) Tower, winds XXX at XX on departure fly heading XXX, maintain (altitude), runway XXX cleared for takeoff.

VAA_001 (Pronounced Allied One), Memphis Tower, winds 220 at 12, on departure fly heading 090, maintain 4000, runway 22L cleared for takeoff.

Aircraft on short Final:

(Callsign) (Airport Name) tower hold short, traffic on a XX mile final runway XXX.

VAA_001 (Pronounced Allied One), Memphis Tower, hold short, traffic on a 2 mile final runway 22L.

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Landing Clearances

TR: WCATC 7110.65 Chapter 4, FAAO 7110.65 Chapter 3 section 10all

Objective:	The trainee must understand the proper way to issue landing clearances. The Trainee must also be able to issue all the required information in a landing clearance.

Provide current landing information, as appropriate, to arriving aircraft. Landing information contained in the ATIS broadcast may be omitted if the pilot states the appropriate ATIS code. Runway, wind, and altimeter may be omitted if a pilot uses the phrase "have numbers." Issue landing information by including the following:

- Specific traffic pattern entry instructions (Enter Left/Right Base, make a Straight-in approach, enter Left/Right Downwind)
- Runway in use.
- Wind.
- Altimeter.
- Clearance to land.
- Requests for additional position reports. (report right/left base, report 4 mile final)

******NOTE*** *– Pilot use of "have numbers" does not indicate receipt of the ATIS broadcast.*

Arrival Instructions. When issuing a landing clearance utilize the following phraseology:

Aircraft on an instrument approach:

(Callsign) (Airport Name) Tower, winds XXX at XX runway XXX cleared to land.

Aircraft on a visual approach or that are VFR:

(Callsign) (Airport Name) Tower, enter a left base, winds XXX at XX runway XXX cleared to land.

Sequencing of aircraft:

(Callsign) (Airport Name) Tower, winds XXX at XX runway XXX cleared to land number XX behind a (Type of aircraft) on a XX mile final. (or other position for arrival into the airport)

Landing behind a departure:

(Callsign) (Airport Name) Tower, winds XXX at XX runway XXX cleared to land traffic is a (type of aircraft) departure roll runway XXX.

Missed Approach/Go Around procedures

TR: WCATC 7110.65 Chapter 4

Objective:	The trainee must understand the proper procedures and be able to apply them when required to issue a go-around or have an aircraft execute a missed approach.

Even the most accurately planned approaches do not always go as planned. It is at that point when a controller must be there to ensure safety. A common mistake is that a Go around is the same as a missed approach when in truth it is not. A Go-Around is when you as a controller see something in the final phase of an aircrafts approach that is unsafe about their landing surface and direct them to "Go Around". When an aircraft conducts a missed approach either on their own or at a controllers request is can be for a numerous amount of reasons which can include a unsafe situation on the landing surface but not necessarily. In most instrument approaches there is a published missed approach for the pilot to follow or a controller may give them alternate instructions. For a Go-Around you as the controller can either have the aircraft enter the traffic pattern (providing it is VFR and the aircraft is able) or you can coordinate with the approach/departure controller for instructions and have the aircraft go back to approach on those instructions for another approach.

PHRASEOLOGY–

Go-Around-
(Callsign) Go Around (reason if time permits).

(Callsign) Enter Left/Right Traffic or (other approach instructions such as fly runway heading), contact departure.

Missed Approach-
(Callsign) execute published missed approach (reason if time permits) contact approach.

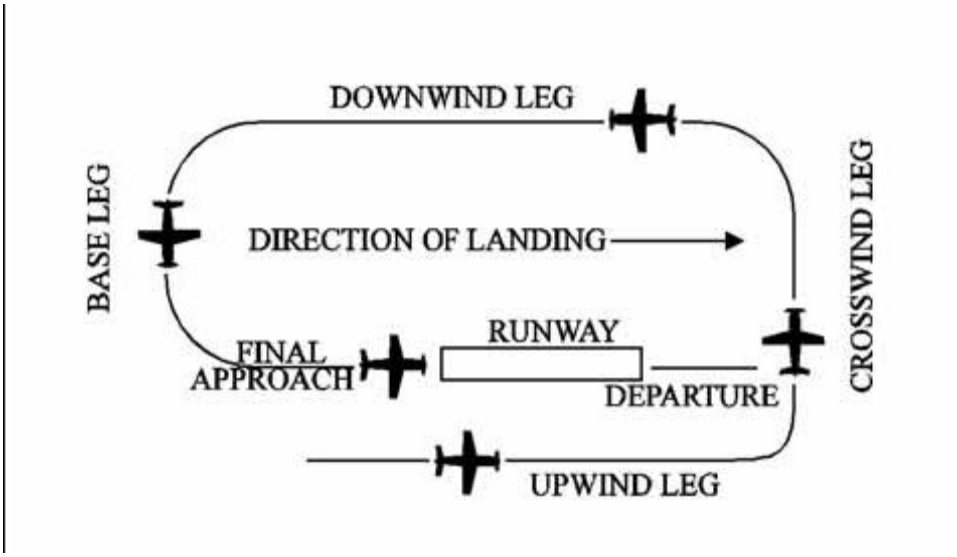
(Callsign) Turn Left/Right heading XXX, maintain XXX feet or other approach instructions, and contact departure.

VFR Traffic Patterns

TR: WCATC 7110.65 Chapter 4, FAA AIM Chapter 4 section 3all

Objective:	The trainee must understand the legs of the VFR pattern and how aircraft operate within them.

There is one VFR pattern that is probably known by most every pilot. It is the rectangular VFR traffic pattern. Pilots utilize this pattern when training or just for general flying in the terminal airspace and thus it is pretty standard throughout the National Airspace System. There are other patterns and ways to fly but this is the most popular. There are 5 legs of this pattern and each portion is essential for the flow of traffic. Review the chart below for the positions of each leg within the VFR traffic pattern.



Runway Exiting Procedures

TR: WCATC 7110.65 Chapter 4, FAAO 7110.65 Chapter 3 section 10 para 9

Objective:	The trainee must understand the proper procedures and phraseology to have an aircraft exit the runway after landing.

When aircraft has landed instruct the pilot to exit the runway at a certain point and then contact the ground controller once clear.

PHRASEOLOGY–
(Callsign) turn left/right next taxiway, contact ground when clear.

If ground is not manned then you may taxi the aircraft to parking in one transmission:

PHRASEOLOGY–
(Callsign) turn left/right next taxiway, taxi to (parking location), remain this frequency, -fp in the chat box when engines are shutdown..

Helicopter Operations

TR: WCATC 7110.65 Chapter 4, FAAO 7110.65 Chapter 3 section 11all

Objective:	The trainee must understand the proper procedures and be able to apply them when involving helicopters.

Helo operations are fairly easy in the tower position as they can hover r hold at just about any point. Because of the helicopters extreme maneuverability you should be especially descriptive in your instructions when issuing a departure clearance.

PHRASEOLOGY–
(Callsign) (Present position, taxiway, helipad, numbers) make a Right/Left Turn for Departure heading (degree direction or compass direction) remain (direction) of (active runways, parking areas, passenger terminal) cleared for take off.

If a takeoff clearance is requested from a nonmovement area and, in your judgment, the operation appears to be safe and is visually observed on the airfield, use the following phraseology:

PHRASEOLOGY–
(Callsign) proceed as requested; use caution (reason and additional instructions, as appropriate).

If takeoff clearance is requested from an area not visible from the tower, an area not authorized for helicopter use, an unlighted nonmovement area at night, or an area off the airport, and traffic is not a factor, use the following phraseology.

PHRASEOLOGY–
(Callsign) departure from (requested location) will be at your own risk (reason and additional instructions, as necessary).

Local Control Coordination

TR: WCATC 7110.65 Chapter 4

Objective:	The trainee must understand the proper procedures to coordinate with the Local/Tower Controller.

As a Local Controller on occasion you may have to coordinate with several positions through out the session. Such occurrences can be:

- The announcement of the active runway(s) selection.
- Crossing approval for Ground control.
- Departure releases from the Approach/Departure Controller

Just as in all the positions communication is very important and you should set up in advance the best way to coordinate with the controller. Currently the preferred method at WestCoastATC is via TeamSpeak utilizing the Whisper function. In order to use this function and not interrupt service to the other controller's pilots you must follow the following format:

PHRASEOLOGY–
(Callsign of the position you are try to reach), (your position) then wait for a response and then give your ATC message.

Departure, Tower……Request Release N12345 to Atlanta.

Transfer of Control/Communications

TR: Training Reference

Objective:	The trainee must understand the point in which he may transfer the control/communications of an aircraft to another controller or Unicom.

After ensuring that the pilot is clear of all potential conflict and is on either clear of the runway on a taxi way or is about 1-2 miles off the departure end you may switch the aircraft other next position.

Once you are ready to switch him then utilize this phraseology:

(Callsign) contact Ground on XXX.XX (include TS channel or this channel) when clear of the runway.

Or

(Callsign) contact (Approach/Departure) on XXX.XX (include TS channel or this channel).

In the event that the airspace that the pilot is going to be flying in is uncontrolled use this phraseology: VAA_001 (Pronounced Allied One) advisory frequency change is approved on TS channel 118.5 Unicom.