vZID Phraseology Guide

Note: This guide is provided for simulation purposes only. It is not intended to be used for real world operations

INTRODUCTION

Purpose

This guide contains phraseology as listed in the 7110.65. It is designed to help you with various phraseology that you will need throughout your virtual ATC career. Note that this guide is by no means a replacement for the 7110.65. It is merely a condensed document which contains the necessary phraseology for virtual controlling all in one place. Note that the actual 7110.65 chapters are listed for reference.

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GENERAL CONTROL PHRASEOLOGY

The phraseology in this section is referenced from the 7110.65 Chapter 2

2-1-6 SAFETY ALERTS

Issue a safety alert to an aircraft if you are aware the aircraft is in a position/altitude which, in your judgment, places it in unsafe proximity to terrain, obstructions, or other aircraft. Once the pilot informs you action is being taken to resolve the situation, you may discontinue issuance of further alerts. Do not assume that, because someone else has responsibility for the aircraft, the unsafe situation has been observed and the safety alert issued; inform the appropriate controller.

Phraseology	***Examples***
LOW ALTITUDE ALERT (call sign), CHECK YOUR ALTITUDE IMMEDIATELY. *THE, (as appropriate), MEA/MVA/MOCA/MIA IN YOUR AREA IS (altitude).*	*"Low altitude alert Northwest Three, check your altitude immediately. The Minimum Vectoring Altitude in your area is one thousand niner hundred."*
Or if past the final approach fix (nonprecision approach), or the outer marker, or the fix used in lieu of the outer marker (precision approach), and if known, issue	
THE, (as appropriate), MDA/DH IS (altitude).	*"American 113, the decision height is four eight six."*
TRAFFIC ALERT (call sign) (position of traffic), ADVISE YOU TURN LEFT/RIGHT (heading), and/or *CLIMB/DESCEND (specific altitude if appropriate), IMMEDIATELY.*	*"Traffic alert Skyhawk N5204N, two o'clock four miles, advise you turn left heading two six zero, descend to five thousand immediately."*

2-1-17 RADIO COMMUNICATIONS TRANSFER

Transfer radio communications by specifying the facility name or location name and terminal function to be contacted.

TERMINAL: Omit the location name when transferring communications to another controller within your facility except, when instructing the aircraft to change frequency for final approach guidance, include the name of the facility.

Include the frequency to use, except in the following cases: FSS frequency; departure frequency if previously given or published on a SID chart for the procedure issued; for Terminal facilities, the ground/local control frequency if, in your opinion, the pilot knows which frequency is in use; or the numbers preceding the decimal point if the ground control frequency is in the 121 MHz band width. Issue a time, fix, or altitude when to contact a facility as necessary.

Phraseology	***Examples***
CONTACT (facility name or location name and terminal function), *(frequency)*.	*"TWA Six Fifty-One heavy, contact tower."*
AT (time, fix, or altitude).	*"Skhyawk N5204N, contact Indinapolis Approach, one one niner point five PENDS."*
	"Baron N7845M, monitor tower."
In situations where an operational advantage will be gained, and following coordination with the receiving controller, you may instruct aircraft on the ground to monitor the receiving controller's frequency.	
CHANGE TO MY FREQUENCY (state frequency).	*"Skyhawk N5204N, change to my frequency one two three point four."*
REMAIN THIS FREQUENCY.	*"Skyhawk N5204N, remain this frequency."*

2-1-18 OPERATIONAL REQUESTS

Respond to a request from another controller, a pilot, or a vehicle operator by one of the following verbal means: restating the request in complete or abbreviated terms followed by the word “APPROVED” or the phrase “APPROVED AS REQUESTED.” State restrictions followed by the word “APPROVED,” the word “UNABLE,” and a reason, if time permits, or state the words “STAND BY.”

Phraseology	***Examples***
(Requested operation) APPROVED.	*“Baron N1423S, left turn approved.”*
APPROVED AS REQUESTED.	*“Baron N1423S, approved as requested.”*
(Restriction and/or additional instructions, requested operation) APPROVED.	*“Baron N1423S, maintain seven thousand, change to FSS frequency approved.”*
UNABLE (requested operation), (reason and/or additional instructions).	*“Baron N1423S, unable due to traffic.”*
State the words “stand by.”	*“Baron N1423S, stand by.”*

2-1-20 WAKE TURBULENCE CAUTIONARY ADVISORIES

Issue cautionary information to any aircraft if, in your opinion, wake turbulence may have an adverse effect on it. When traffic is known to be a heavy aircraft, include the word *“HEAVY”* in the description.

Phraseology	***Examples***
CAUTION WAKE TURBULENCE (traffic information).	*“American 113, caution wake turbulence, traffic two o'clock five miles, southbound, Heavy American Boeing Seven Forty-Seven, five thousand.”* *“American 113, caution wake turbulence, traffic two o'clock five miles, southbound, American Boeing Seven Fifty-Seven, five thousand.”*

2-1-21 TRAFFIC ADVISORIES

Unless an aircraft is operating within Class A airspace or omission is requested by the pilot, issue traffic advisories to all aircraft (IFR or VFR) on your frequency when, in your judgment, their proximity may diminish to less than the applicable separation minima. Where no separation minima applies, issue traffic advisories when, in your judgment, aircraft proximity warrants it.

Phraseology	***Examples***
TRAFFIC (number) O'CLOCK/(direction), (number) MILES, (direction) BOUND, and/or (relative movement), (type of aircraft and altitude if known).	*"American 113, traffic eleven o'clock, five miles, eastbound, opposite direction, Heavy 767, one one thousand."*
	"Delta 562 traffic five miles, eastbound, opposite direction, Boeing 737, one one thousand."
(Type of aircraft and relative position), (number of feet) FEET ABOVE/BELOW YOU.	*"Skylane N562RP, traffic, Citation to your left, five hundred feet above you."*
ALTITUDE UNKNOWN.	
TRAFFIC NO FACTOR/NO LONGER OBSERVED.	*"Skylane N562RP, traffic no longer observed."*
(Number) O'CLOCK TRAFFIC NO FACTOR/NO LONGER OBSERVED.	*"Skylane N562RP, ten o'clock traffic no factor."*
(Direction) TRAFFIC NO FACTOR/NO LONGER OBSERVED.	*"Skylane N562RP, northbound traffic no longer observed."*
For traffic that is not radar identified:	
Phraseology	***Examples***
TRAFFIC, (number) MILES/MINUTES (direction) OF (airport or fix), (direction)-BOUND, (type of aircraft and altitude if known), ESTIMATED (fix) (time).	*"Skylane N562RP, traffic, niner miles southeast of Brickyard VOR, west-bound, Bonanza Seven Thousand, estimated Dayton VOR one three three five."*
TRAFFIC, NUMEROUS AIRCRAFT VICINITY (location).	*"Cessna Three Seven Bravo, traffic, numerous aircraft vicinity Sporty's Airstrip. Altitude unknown."*
ALTITUDE UNKNOWN.	

2-1-24 WHEELS DOWN CHECK

USA/USAF/USN
Tower shall issue the wheels down check at an appropriate place in the pattern.

Phraseology

CHECK WHEELS DOWN.

Example

"NAVY One One Two Three Zero, check wheels down."

Approach/Arrival control, GCA shall issue the wheels down check.

Phraseology

WHEELS SHOULD BE DOWN.

Example

"NAVY One One Two Three Zero, wheels should be down."

2-2-11 FORWARDING AMENDED AND UTM DATA

Forward any amending data concerning previously forwarded flight plans, except that revisions to ETA information in par. 2-2-6, IFR Flight Progress Data, need only be forwarded when the time differs by more than 3 minutes from the estimate given.

Phraseology

(Identification), REVISED (revised information).

Examples

"American 113, revised flight level three three zero."

"Delta 562, revised type M-D Eighty."

2-4-12 INTERPHONE MESSAGE FORMAT

Both caller and receiver identify their facility and/or position in a manner that ensures they will not be confused with another position. Between two facilities that utilize numeric position identification, the caller must identify both the facility and position.

Examples

Caller- *"Indianapolis Center, Covington Departure."*

Receiver- *"Indianapolis Center."*

2-4-13 INTERPHONE MESSAGE TERMINATION

Terminate Interphone messages with operation initials.

Examples

Caller- *"Indy High, Covington Approach."*

Receiver- *"Covington Approach."*

Caller- *"Request direct Cincinnati for American 113."*

Receiver- *"American 113, direct Cincinnati Approved. M.H."*

Caller- *"B.R."*

2-6-3 PIREP INFORMATION

Solicit PIREPs when requested or when appropriate conditions exist. Use the word “GAIN” and/or “LOSS” when describing to pilots the effects of wind shear on airspeed.

Phraseology	***Examples***
REQUEST/SAY FLIGHT CONDITIONS.	*“Skylane N562RP, request flight conditions.”*
REQUEST/SAY (specific conditions - i.e., ride, ceiling, visibility, etc.) CONDITIONS. *OVER (fix).*	*“Delta 562, request ceiling and visibility conditions over Huntington.”*
ALONG PRESENT ROUTE.	*“Skylane N562RP, request ceiling, visibility, and turbulence conditions along present route.”*
BETWEEN (fix) AND (fix).	*“Skylane N562RP, request ceiling, visibility, and turbulence conditions between Denver and Cheyenne.”* *“Delta 562, A Boeing Seven Twenty-seven previously reported wind shear, loss of two five knots at four hundred feet.”* *“Delta 562, a Boeing 737 previously reported wind shear, gain of twenty-five knots between niner hundred and six hundred feet, followed by a loss of five zero knots between five hundred feet and the surface.”*

2-7-2 ALTIMETER SETTING ISSUANCE BELOW LOWEST USABLE FL

TERMINAL: Identify the source of an altimeter setting when issued for a location other than the aircraft's departure or destination airport.

EN ROUTE: Identify the source of all altimeter settings when issued.

Phraseology

THE (facility name) (time of report if more than 1 hour old) ALTIMETER (setting).

Example

"American 113, the Columbus two three five five altimeter two niner niner four."

When the barometric pressure is greater than 31.00 inches Hg., issue the altimeter setting. Advise En Route/Arrival aircraft to remain set on 31.00 until reaching final approach segment. Advise departures to set altimeter 31.00 prior to reaching any mandatory/crossing altitude or 1,500 feet AGL, whichever is lower.

Phraseology

ALTIMETER, (current setting), SET THREE ONE ZERO ZERO UNTIL REACHING THE FINAL APPROACH FIX.

ALTIMETER, (current setting), SET THREE ONE ZERO ZERO PRIOR TO REACHING (altitude).

Examples

"American 113, altimeter, three one zero niner, set three one zero zero until reaching the final approach fix."

"Skylane N562RP, altimeter, three one one one, set three one zero zero prior to reaching three thousand."

2-8-3 RVR/RVV TERMINOLOGY	
Provide RVR/RVV information by stating the runway, the abbreviation RVR/RVV, and the indicated value.	***Example*** *"Runway One Four RVR two thousand four hundred."*
When two or more RVR systems serve the runway in use, report the indicated values for the different systems in terms of touchdown, mid, and rollout as appropriate.	***Examples*** *"Runway Two Two Left RVR two thousand, rollout one thousand eight hundred."* *"Runway Two Seven Right RVR one thousand eight hundred, mid eight hundred, rollout six hundred."*
When there is a requirement to issue an RVR or RVV value, and a visibility condition greater or less than the reportable values of the equipment is indicated, state the condition as "MORE THAN" or "LESS THAN" the appropriate minimum or maximum readable value.	***Examples*** *"Runway Three Six RVR more than six thousand."* *"Runway Niner RVR one thousand, rollout less than six hundred."*
When a readout indicates a rapidly varying visibility condition (1,000 feet or more for RVR; one or more reportable values for RVV), report the current value followed by the range of visibility variance.	***Examples*** *"Runway Two Four RVR two thousand, variable one thousand six hundred to three thousand."* *"Runway Three One RVV three-quarters, variable one-quarter to one."*
2-9-2 AUTOMATIC TERMINAL INFORMATION SERVICE (ATIS) OPERATING PROCEDURES	
Broadcast on all appropriate frequencies to advise aircraft of a change in the ATIS code/message.	***Examples*** *"Piper Two Three Whiskey, verify you have information Alpha."* *"Information Bravo now current, visibility three miles."* *"Information Charlie current, advise when you have Charlie."*

2-9-3 ATIS CONTENT

Include the following in ATIS broadcast as appropriate:

1. Airport/Facility name
2. Phonetic letter code
3. Time of weather sequence (UTC)
4. Weather information
   - Wind direction/velocity
   - Visibility
   - Obstruction to vision
   - Present weather
   - Sky condition
   - Temperature
   - Dew point
   - Weather observation remarks (Lightning, cumulonimbus, towering cumulus clouds)
5. Approach(es) & Runway (if needed) in use
6. Departure runway(s) only if different from landing runway(s)
7. NOTAMs/PIREPs/HIWAS/Bird activity
8. Braking action (as appropriate)
9. Optional local information
10. Low-level wind shear/microburst
11. Hold short readback instructions (optional)
12. ATIS receipt instructions

When runway braking action or friction reports are provided, issue the time of the report and a word describing the cause of the runway friction problem.

Example

"Cincinatti Tower Information Delta. One four zero zero Zulu. Wind two five zero at one zero. Visibility one zero. Ceiling four thousand five hundred broken. Temperature three four. Dew point two eight. Altimeter three zero one zero. ILS Runway Two Seven Approach in use. Departing Runway Two Seven Right. VFR Aircraft State Direction of Flight. Advise on initial contact you have Delta."

Phraseology

RUNWAY (number) MU (first value, second value, third value) AT (time), (cause).

(ref. 7210.3, par. 10-4-1)

Examples

"Runway Two Seven, MU forty-two, forty-one, twenty-eight at one zero one eight Zulu, ice."

NOTE -

Ensure that speech rate does not exceed 100 words per minute, enunciation is of the highest quality, and each part of the message is easily understood.

Part-time towers that have ATIS capabilities should record for continuous broadcast the local tower closure time, the common traffic advisory frequency, the radio-controlled approach light frequency, the FAA facility and frequency for additional information and the local tower opening time.

(ref. 7210.3, par. 10-4-1)

"Lunken Tower suspended operation at two three zero zero local time, the common traffic advisory frequency is one one eight point one, pilot controlled approach and runway lights are available on frequency one one eight point one. Lunken Tower will resume operation at zero seven zero zero local time."

AIRPORT TRAFFIC CONTROL PHRASEOLOGY

The phraseology in this section is referenced from the 7110.65 Chapter 3

3-1-3 USE OF ACTIVE RUNWAYS	
When the local controller authorizes another controller to cross an active runway, the local controller shall verbally specify the runway to be crossed preceded by the word “CROSS.”	
Phraseology	***Example***
CROSS (runway) AT (intersection if necessary).	*“Cross Runway Three Six at Bravo.”*
3-1-8 LOW-LEVEL WIND SHEAR ADVISORIES	
Controllers shall issue the alert to all arriving and departing aircraft until the alert is broadcast on the ATIS and pilots indicate they have received the appropriate ATIS code. A statement shall be included on the ATIS for 20 minutes following the last report or indication of wind shear.	
Phraseology	***Example***
LOW LEVEL WIND SHEAR (or MICROBURST, as appropriate) ADVISORIES IN EFFECT.	*“Low level wind shear advisories in effect.”* *“Microburst advisories in effect.”*

3-1-8 LOW-LEVEL WIND SHEAR ADVISORIES (Cont'd)

If an alert is received, issue the airport wind and the displayed field boundary wind.

Phraseology

WIND SHEAR ALERT. AIRPORT WIND (direction) AT (velocity). (Location of sensor) BOUNDARY WIND (direction) AT (velocity).

Example

"Wind shear alert. Airport Wind three six zero at one five. Southeast boundary wind one two zero at two zero."

If multiple alerts are received, issue an advisory that there are wind shear alerts in two/several/all quadrants. After issuing the alert, issue the airport wind and the displayed field boundary wind.

Phraseology

WIND SHEAR ALERTS TWO/SEVERAL/ALL QUADRANTS. AIRPORT WIND (direction) AT (velocity). (Location of sensor) BOUNDARY WIND (direction) AT (velocity).

Example

"Wind shear alerts several quadrants. Airport Wind two seven zero at six. Northwest boundary wind three six zero at one eight."

At facilities equipped with LLWAS "Network Expansion" (LLWAS NE), if a wind shear or microburst alert is received for the runway in use, issue the alert information for that runway to arriving and departing aircraft as it is displayed on the ribbon display.

Phraseology

(Runway) (arrival/departure) WIND SHEAR/MICROBURST ALERT, (wind speed) KNOT GAIN/LOSS, (location).

Examples

RIBBON DISPLAY:
17A MBA 40K - 3MF

"Runway One Seven arrival microburst alert four zero knot loss three mile final."

RIBBON DISPLAY:
17D WSA 25K+ 2MD

"Runway One Seven departure wind shear alert two zero knot gain two mile departure."

If requested by the pilot or deemed appropriate by the controller, issue the displayed wind information oriented to the threshold or departure end of the runway.

Phraseology

(Runway) DEPARTURE/THRESHOLD WIND (direction AT (velocity).

Example

"Runway Two Eight Right departure wind three six zero at one five."

3-1-8 LOW-LEVEL WIND SHEAR ADVISORIES (Cont'd)	
If alerts occur on the edge of the system: ***Phraseology*** *(Appropropriate wind or alert information) POSSIBLE WIND SHEAR OUTSIDE THE NETWORK.* If unstable conditions produce multiple alerts, issue an advisory of multiple wind shear/microburst alerts followed by specific alert or wind information. ***Phraseology*** *MULTIPLE WIND SHEAR/MICROBURST ALERTS (specific alert or wind information).*	 ***Example*** *"Airport Wind two seven zero at six. Possible wind shear outside the network."* ***Example*** *"Multiple wind shear/microburst alerts. Runway Two Eight Right departure wind three six zero at one five."*
3-1-13 ESTABLISHING TWO-WAY COMMUNICATIONS	
Pilots are required to establish two-way communications before entering the Class D airspace. If the controller responds to a radio call with, "(a/c call sign) stand by," radio communications have been established and the pilot can enter the Class D airspace. If workload or traffic conditions prevent immediate provision of Class D services, inform the pilot to remain outside of the Class D airspace until conditions permit the services to be provided. ***Phraseology*** *(A/C call sign) REMAIN OUTSIDE DELTA AIRSPACE AND STAND BY.*	 ***Example*** *"November One Four Four Three Bravo, Lunken Tower, remain outside Delta airspace and stand by."*

3-3-4 BRAKING ACTION	
Furnish quality of braking action, as received from pilots or the airport management, to all aircraft.	***Example*** *"American 113, braking action poor, reported by a Boeing Seven Twenty-Seven."*
Describe the quality of braking action using the terms "good," "fair," "poor," "nil," or a combination of these terms.	***Example*** *"American 113, braking action fair to poor, reported by a Heavy D-C Ten."*
If the braking action report affects only a portion of a runway, obtain enough information from the pilot or airport management to describe the braking action in terms easily understood by the pilot.	***Examples*** *"American 113, braking action poor first half of runway, reported by a Heavy L-Ten Eleven."* *"American 113, braking action poor beyond the intersection of Runway Two Seven, reported by a Boeing Seven Twenty-Seven."*
Furnish information, as received from the airport management, to pilots on the ATIS where friction measuring devices are in use.	***Example*** *"American 113, M-U forty-two, forty-one, twenty-eight at one zero one eight Zulu, ice."*
3-3-4 BRAKING ACTION (Cont'd)	
Issue the runway surface condition and/or the Runway Condition Reading (RCR), if provided, to all USAF and ANG aircraft. Issue the RCR to other aircraft upon pilot request.	***Example*** *"American 113, ice on runway, RCR zero five, patchy."*
3-3-5 BRAKING ACTION ADVISORIES	
During the time Braking Action Advisories are in effect but no report has been received for the runway of intended use, issue an advisory stating that condition. ***Phraseology*** *NO BRAKING ACTION REPORTS RECEIVED FOR RUNWAY (number).*	***Example*** *"American 113, no braking action reports received for Runway One Eight."*

State the runway intersection when authorizing an aircraft to taxi into position to hold or when clearing an aircraft for takeoff from an intersection.

Phraseology	***Examples***
RUNWAY (number) AT (taxiway designator) (further instructions as needed).	*"American 113, Runway one eight at Charlie cleared for takeoff."*
RUNWAY (number) AT (taxiway designator), POSITION AND HOLD.	*"American 113, Runway one eight at Charlie, position and hold."*
RUNWAY (number) AT (taxiway designator) INTERSECTION DEPARTURE, (remaining length) FEET AVAILABLE.	*"American 113, Runway one eight at Charlie intersection departure, five thousand feet available."*

If two or more aircraft call the tower ready for departure, one or more at the approach and one or more at the intersection, state the location of the aircraft at the full length of the runway when authorizing that aircraft to taxi into position and hold or when clearing that aircraft for takeoff.

Phraseology	***Examples***
RUNWAY (number) FULL LENGTH, POSITION AND HOLD.	*"American 113, Runway Three Zero full length, position and hold."*
Or	
RUNWAY (number) FULL LENGTH, CLEARED FOR TAKEOFF.	*"American 113, Runway Two Five Right full length, cleared for takeoff."*

Issue, as required or requested, the route for the aircraft/vehicle to follow on the movement area in concise and easy-to-understand terms. When a taxi clearance is issued to an aircraft, confirm the aircraft has the correct runway assignment.	
Phraseology	***Examples***
HOLD POSITION.	*"American 113, hold position."*
HOLD FOR (reason).	*"American 113, hold for landing traffic."*
CROSS (runway/taxiway).	*"American 113, cross Runway One Eight."*
TAXI/CONTINUE TAXIING/PROCEED/VIA (route) *ON (runway number or taxiways, etc.).*	*"American 113, continue taxiing, proceed on Runway One Four."*
TO (location).	*"American 113, taxi to Runway Two Four."*
(Direction).	*"American 113, read back runway assignment."*
Phraseology	***Examples***
ACROSS RUNWAY (number).	*"American 113, taxi across Runway Three Four."*
VIA (route), HOLD SHORT OF (location)	*"American 113, taxi via Taxiway Bravo, hold short of Runway One Six."* *Or* *"American 113, taxi via Bravo, hold short of Runway One Six."*
FOLLOW (traffic) (restrictions as necessary)	*"American 113, follow the Southwest Seven Thirty-Seven, hold short of Runway Four."*
BEHIND (traffic).	*"American 113, taxi behind the Bonanza."*

When authorizing an aircraft to taxi to an assigned takeoff runway and hold short instructions are not issued, specify the runway preceded by “taxi to,” and issue taxi instructions if necessary. This authorizes the aircraft to “cross” all runways/taxiways which the taxi route intersects except the assigned takeoff runway. This does not authorize the aircraft to “enter” or “cross” the assigned takeoff runway at any point. Specify the runway for departure, any necessary taxi instructions, and hold short restrictions when an aircraft will be required to hold short of a runway or other points along the taxi route. Request a readback of runway hold short instructions when they are not received from the pilot/vehicle operator.

Phraseology	***Examples***
TAXI TO RUNWAY (number) VIA...	*“American 113 e, taxi to Runway Four via Taxiway Alfa.”* *Or* *“American 113, taxi to Runway Four via Alfa.”*
RUNWAY (number), TAXI/PROCEED VIA (route if necessary), HOLD: *SHORT OF RUNWAY (number),*	*“American 113, taxi via Taxiway Charlie, hold short of Runway Two Seven Right.”* *Or* *“American 113, taxi via Charlie, hold short of Runway Two Seven Right.”*
SHORT OF (location), *ON (taxi strip, runup pad, etc.),* *and, if necessary,* *TRAFFIC (traffic information),* FOR (reason).	*“American 113, hold short of Taxiway Golf.”* *Or* *“American 113, hold short of Golf.”* *“American 113, hold short of Runway Two Seven Right. Traffic landing Runway Two Seven Right.”*

Request a readback of runway hold short instructions when it is not received from the pilot/vehicle operator.	
Phraseology	***Examples***
READ BACK HOLD INSTRUCTIONS.	*"American 113, Runway Three Six Left, taxi via taxiway Charlie, hold short of Runway Two Seven Right."* *"American 113, roger."* *"American 113, read back hold instructions."* *"Lunken Tower, American 113 is ready for departure."* *"American 113, hold short of Runway Two Three Left, traffic one mile final."* *"American 113, roger."* *"American 113, read back hold instructions."* *"OPS Three, proceed via Taxiway Charlie, hold short of Runway Two Seven."* *"OPS Three, roger."* *"OPS Three, read back hold instructions."*
TAXI WITHOUT DELAY (traffic if necessary).	*"American 113, taxi without delay, traffic will hold for you."*
EXIT/PROCEED/CROSS (runway/taxiway) WITHOUT DELAY.	*"American 113, cross Runway Four Left without delay."*

3-8-1 SEQUENCE/SPACING APPLICATION	
Establish the sequence of arriving and departing aircraft by requiring them to adjust flight or ground operation as necessary to achieve proper spacing.	
Phraseology	***Examples***
CLEARED FOR TAKEOFF.	*"Jetstar Six Two Bravo, cleared for takeoff."*
CLEARED FOR TAKEOFF OR HOLD SHORT/HOLD IN POSITION/TAXI OFF THE RUNWAY (traffic).	*"Cessna Eight Three Papa, cleared for takeoff or taxi off the runway, traffic two mile final."*
EXTEND DOWNWIND.	*"Sport Two Three Alfa, extend downwind."*
MAKE SHORT APPROACH.	*"Cessna Three Three Golf, make short approach."*
NUMBER (landing sequence number),	*"Cherokee Two Six Foxtrot, number four, follow Bonanza on base."*
FOLLOW (description and location of traffic).	*"Cessna Seven Six Mike, follow Bonanza on base."*
CIRCLE THE AIRPORT.	*"Sierra Two Six Bravo, circle the airport."*

3-8-1 SEQUENCE/SPACING APPLICATION (Cont'd)	
Phraseology	***Examples***
TRAFFIC (description and location) LANDING RUNWAY (number of runway being used).	*"Cherokee Niner Five Kilo, traffic Cessna One Seventy-two landing Runway Three Two."*
MAKE LEFT/RIGHT THREE SIXTY/TWO SEVENTY.	*"November Niner Two Seven One Mike, make right three sixty."*
GO AROUND.	*"November Eight Two Six One Lima, go around."*
CLEARED TO LAND.	*"Southwest Sixty-Three, Runway Two Eight Right cleared to land."*
CLEARED TOUCH-AND-GO/STOP-AND-GO/LOW APPROACH.	*"Sport Niner One Lima, Runway Two Eight Left cleared touch-and-go."*
CLEARED FOR THE OPTION.	*"November Eight Eight Eight Quebec, cleared for the option."*
OPTION APPROVED.	
UNABLE OPTION, (alternate instructions).	*"Bonanza One Two Bravo, unable option, cleared touch-and-go."*
UNABLE (type of option), OTHER OPTIONS APPROVED.	*"Bonanza One Two Bravo, unable stop-and-go, other options approved."*

3-8-4 SIMULTANEOUS OPPOSITE DIRECTION OPERATION	
Authorize simultaneous opposite direction operations on parallel runways, on parallel landing strips, or on a runway and a parallel landing strip only when operations are conducted in VFR conditions, two-way radio communication is maintained with the aircraft involved, and pertinent traffic information is issued.	
Phraseology	***Example***
TRAFFIC,(description) ARRIVING/DEPARTING/LOW APPROACH, OPPOSITE DIRECTION ON PARALLEL RUNWAY/LANDING STRIP.	*"Merlin One One X-Ray, traffic, Comanche arriving, opposite direction on parallel runway."*

3-9-2 DEPARTURE DELAY INFORMATION

When gate hold procedures are in effect, issue the departure delay information as appropriate. Advise departing aircraft the time at which the pilot can expect to receive engine startup advisory. Advise departing aircraft when to start engines and/or to advise when ready to taxi. Advise all aircraft on GC/FD frequency upon termination of gate hold procedures.

Phraseology	***Examples***
GATE HOLD PROCEDURES ARE IN EFFECT, ALL AIRCRAFT CONTACT (position) ON (frequency) FOR ENGINE START TIME. EXPECT ENGINE START/TAXI (time).	*"Gate hold procedures are in effect, all aircraft contact clearance delivery on one two one point niner for engine start time. Expect taxi one five minutes after engine start time."*
START ENGINES, ADVISE WHEN READY TO TAXI. *ADVISE WHEN READY TO TAXI.*	*"American Three Forty-Nine, start engines, advise when ready to taxi."*
GATE HOLD PROCEDURES NO LONGER IN EFFECT.	*"Attention all aircraft. Gate hold procedures no longer in effect."*

3-9-4 TAXI INTO POSITION AND HOLD (TIPH)

The intent of TIPH is to position aircraft for an imminent departure. Authorize an aircraft to taxi into position and hold, except as restricted in subpararaph e, when takeoff clearance cannot be issued because of traffic. Issue traffic information to any aircraft so authorized. Traffic information may be omitted when the traffic is another aircraft which has landed on or is taking off the same runway and is clearly visible to the holding aircraft. Do not use conditional phrases such as "behind landing traffic" or "after the departing aircraft."

Phraseology	***Examples***
RUNWAY (number), POSITION AND HOLD.	*"United Five, Runway One Eight, position and hold. Traffic a Boeing Seven Thirty-Seven, six-mile final."*
Or, when only one runway is active:	
POSITION AND HOLD.	*"United Fifty, position and hold. Traffic a Boeing Seven Thirty-Seven, six-mile final."*

When an aircraft is authorized to taxi into takeoff position to hold, inform it of the closest traffic that is cleared to land, touch-and-go, stop-and-go, or unrestricted low approach on the same or parallel runway separated by less than 2,500 feet.

"United Five, Runway Two Four Left, position and hold. Traffic a Boeing Seven Thirty-Seven, six-mile final, Runway Two Four Right."

Do not authorize an aircraft to taxi into position and hold at an intersection between sunset and sunrise or at anytime when the intersection is not visible from the tower.

When a local controller delivers or amends an ATC clearance to an aircraft awaiting departure, and that aircraft is holding short of a runway or is holding in position on a runway, an additional clearance shall be issued to prevent the possibility of the aircraft inadvertently taxiing onto the runway and/or beginning takeoff roll. In such cases, append one of the following ATC instructions as appropriate.

Phraseology	***Examples***
HOLD SHORT OF RUNWAY.	*"Sport Five Four Lima, after departure, turn right heading two four zero, hold short of Runway Two Eight Right."*
HOLD IN POSITION.	*"Sierra Three Seven Mike, amend altitude, maintain six thousand, hold in position."*

3-9-6 SAME RUNWAY SEPARATION

WAKE TURBULENCE APPLICATION

Inform all aircraft when it is necessary to hold in order to provide the required 3-minute interval.

Phraseology

HOLD FOR WAKE TURBULENCE.

Example

"November Eight Two Four Six Bravo, hold for wake turbulence."

3-9-7 WAKE TURBULENCE SEPARATION FOR INTERSECTION DEPARTURES

Inform an aircraft when it is necessary to hold in order to provide the required 3-minute interval.

Phraseology

HOLD FOR WAKE TURBULENCE.

Example

"Cessna Six One Four, hold for wake turbulence."

When the pilot of a small aircraft conducting touch-and-go or stop-and-go is maintaining visual separation/spacing behind a preceding large aircraft, issue a wake turbulence cautionary advisory and the position of the large aircraft.

Example

"Caution wake turbulence, D-C Niner on base leg."

When the pilot of any aircraft conducting touch-and-go or stop-and-go is maintaining visual separation/spacing behind a preceding heavy aircraft or B-757, issue a wake turbulence cautionary advisory and the position of the heavy aircraft or B-757.

Example

"Caution wake turbulence, heavy Lockheed C-Five-A departing Runway Two Three."

3-9-9 TAKEOFF CLEARANCE

Issue takeoff clearance as appropriate. When more than one runway is active, first state the runway number followed by the takeoff clearance.

Phraseology

CLEARED FOR TAKEOFF.

RUNWAY (number), CLEARED FOR TAKEOFF.

Examples

"Baron Seven Niner Juliett, cleared for takeoff."

"Baron Seven Niner Juliett, Runway Two Seven, cleared for takeoff."

3-9-10 CANCELLATION OF TAKEOFF CLEARANCE

Cancel a previously issued clearance for takeoff and inform the pilot of the reason if circumstances require. Once an aircraft has started takeoff roll, cancel the takeoff clearance only for the purpose of safety.

Phraseology	***Example***
CANCEL TAKEOFF CLEARANCE, (reason).	*"Duchess Seven Six Mike, cancel takeoff clearance, vehicle on runway."*

3-10-1 LANDING INFORMATION

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 specific traffic pattern information (may be omitted if the aircraft is to circle the airport to the left).

Phraseology	***Examples***
ENTER LEFT/RIGHT BASE.	*"Cheetah Eight Six Kilo, enter left base."*
STRAIGHT-IN.	
MAKE STRAIGHT-IN.	*"November Seven Juliett Mike, make straight-in."*
STRAIGHT-IN APPROVED.	
RIGHT TRAFFIC.	
MAKE RIGHT TRAFFIC.	
RIGHT TRAFFIC APPROVED. CONTINUE.	*"November One Two Whiskey, right traffic approved. Continue."*

3-10-3 SAME RUNWAY SEPARATION

WAKE TURBULENCE APPLICATION

Issue wake turbulence cautionary advisories and the position, altitude if known, and direction of flight of:

- The heavy jet or B-757 to aircraft landing behind a departing/arriving heavy jet or B-757 on the same or parallel runways separated by less than 2,500 feet
- The large aircraft to a small aircraft landing behind a departing/arriving large aircraft on the same or parallel runways separated by less than 2,500 feet

Examples

"Twin Cessna Two One Uniform, Runway Two Seven Left cleared to land, caution wake turbulence, Heavy Boeing Seven Forty-Seven departing Runway Two Seven Right."

"Seneca Three Eight Zero Mike, number two to land, following a Heavy Lockheed C-Five-A on two-mile final. Caution wake turbulence."

"Cessna Six One Four cleared to land, caution wake turbulence, Boeing Seven Twenty-Seven departing Runway One Six."

3-10-4 INTERSECTING RUNWAY SEPARATION

Instruct the landing aircraft to hold short of the intersecting runway being used by the aircraft taking off. In the case of simultaneous landings and no operational benefit is lost, restrict the aircraft in the lesser group. Issue traffic information to both aircraft involved and obtain an acknowledgment from each.

Phraseology

HOLD SHORT OF RUNWAY (number), (traffic or other information).

Examples

"*Twin Beech One Six Uniform, Runway One Eight cleared to land, hold short of Runway One Four Left, traffic landing Runway One Four Left.*"

"November Six Niner Foxtrot, Runway One Four Left cleared to land, traffic landing Runway One Eight will hold short of the intersection."

"Navajo Seven Two Charlie, Runway Three Six cleared to land, hold short of Runway Three Three, traffic departing Runway Three Three."

"November Three One Echo, traffic landing Runway Three Six will hold short of the intersection, Runway Three Three cleared for takeoff."

READ BACK HOLD INSTRUCTIONS.

"Twin Beech One Six Uniform, readback hold instructions."

Issue the measured distance from the landing threshold to the hold short point rounded down to the nearest 50-foot increment if requested by either aircraft.

Example

"Sport Five Four Lima, five thousand fifty feet available."

WAKE TURBULENCE APPLICATION

Issue wake turbulence cautionary advisories and the position, altitude if known, and direction of flight of the heavy jet or B-757 to IFR/VFR aircraft landing on crossing runways behind a departing heavy jet or B-757 if the arrival flight path will cross the takeoff path behind the heavy jet or B-757 and behind the heavy jet or B-757 rotation point. Additionally, issue the advisory to VFR aircraft landing on a crossing runway behind an arriving heavy jet or B-757 if the arrival flight paths will cross.

Examples

"Cherokee Two One Uniform, Runway Niner cleared to land. Caution wake turbulence, Heavy C-One Forty-One departing Runway One Five."

"November Seven Two Foxtrot, Runway Niner cleared to land. Caution wake turbulence, Heavy Boeing Seven Forty-Seven landing Runway Three Six."

3-10-5 LANDING CLEARANCE

Issue landing clearance. Restate the landing runway whenever more than one runway is active or an instrument approach is being conducted to a closed runway.

Phraseology

CLEARED TO LAND.

RUNWAY (designator) CLEARED TO LAND.

Examples

"Cherokee Eight One Niner, cleared to land."

"Bolo Eight Eight, Runway Three Six Right cleared to land."

Inform the closest aircraft that is cleared to land, touch-and-go, stop-and-go, or unrestricted low approaches when there is traffic holding on the same or parallel runway separated by less than 2,500 feet.

Examples

"Delta One, cleared to land, traffic holding in position."

"Delta One, Runway One Eight Left, cleared to land, traffic holding in position."

"Delta One, Runway Two Four Right, cleared to land. Traffic holding in position, Runway Two Four Left."

3-10-6 ANTICIPATING SEPARATION

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 cross the landing threshold. Issue traffic information to the succeeding aircraft if not previously reported and appropriate traffic holding in position or departing prior to their arrival.

NOTE - *Landing sequence number is optional at tower facilities where arrivals are sequenced by the approach control.*

Examples

"American Two Forty-Five cleared to land, number two following United Boeing Seven Thirty-Seven two-mile final, traffic will depart prior to your arrival."

"American Two Forty-Five cleared to land, number two following United Boeing Seven Thirty-Seven two-mile final, traffic will be an M-D Eighty-Eight holding in position."

"American Two Forty-Five cleared to land, following United Boeing Seven Thirty-Seven two-mile final, traffic will depart prior to your arrival."

3-10-9 RUNWAY EXITING

Instruct aircraft where to turn off the runway after landing, when appropriate, and advise the aircraft to hold short of a runway or taxiway if required for traffic.

Phraseology

TURN LEFT/RIGHT (turning point).

IF ABLE, TURN LEFT/RIGHT (turning point),

and, if required,

HOLD SHORT OF RUNWAY (number).

Examples

"Comanche Eight Six Papa, turn right Taxiway Delta."

"November One Two Uniform, if able, turn left next intersection."

"T-W-A Five Twenty, turn right next taxiway, hold short of Runway One Eight."

Taxi instructions shall be provided to the aircraft by the local controller when compliance with Air Traffic Control (ATC) instructions will be required before the aircraft can change to ground control or when the aircraft will be required to enter a taxiway/runway/ramp area, other than the one used to exit the landing runway, in order to taxi clear of the landing runway. Request a readback of runway hold short instructions when not received from the pilot.

Examples

"U-S Air Ten Forty-Two, turn right next taxiway, cross Taxiway Bravo, hold short of Taxiway Charlie, contact ground point seven."

Or

"U-S Air Ten Forty-Two, turn right next taxiway, cross Bravo, hold short of Charlie, contact ground point seven."

"American Four Ninety-Two, read back hold instructions."

3-10-11 CLOSED TRAFFIC

Approve/disapprove pilot requests to remain in closed traffic for successive operations subject to local traffic conditions.

Phraseology

LEFT/RIGHT (if required) CLOSED TRAFFIC APPROVED. REPORT (position if required).

UNABLE CLOSED TRAFFIC, (additional information as required.)

Examples

"Cherokee Three Niner Juliett, right closed traffic approved. Report base."

"Gulfstream Six Six Alfa, unable closed traffic, say request."

3-10-12 OVERHEAD MANEUVER

Issue pattern altitude and direction of traffic to arriving aircraft that will conduct an overhead maneuver. (Omit either or both if standard or when you know the pilot is familiar with a nonstandard procedure.)

Phraseology

PATTERN ALTITUDE (altitude). RIGHT TURNS.

Example

"Air Force Niner Four Three, pattern altitude two thousand. Right turns."

Request for report on initial approach.

Phraseology

REPORT INITIAL.

Example

"Fenix Zero Four, report initial."

Specify the point of break only if nonstandard. Request the pilot to report break if required for traffic or other reasons.

Phraseology

BREAK AT (specified point). REPORT BREAK.

Example

"Navy Alfa Kilo One Three, break at midfield. Report break."

3-10-13 SIMULATED FLAMEOUT (SFO) APPROACHES

Military aircraft may be authorized when a letter of agreement exists, traffic is exchanged, and the high-key altitude is obtained prior to approving the approach.

For overhead simulated flameout approaches, request a report at the entry point.

Phraseology

REPORT (high or low) KEY (as appropriate).

Example

"Duddy Five One, report high key."

Request a report at low key.

Phraseology

REPORT LOW KEY.

Example

"Duddy Five One, report low key."

At low key, issue low approach clearance or alternate instructions.

For straight-in simulated flameout approaches, request a position report from aircraft conducting straight-in SFO approaches.

Phraseology

REPORT (distance) MILE SIMULATED FLAMEOUT FINAL.

Example

"Jason Two Two, report four mile simulated flameout final."

3-11-1 HELICOPTER TAXI AND GROUND MOVEMENT OPERATION

Issue helicopter taxi instructions as required.

Phraseology

HOVER-TAXI. CAUTION (dust, blowing snow, loose debris, taxiing light aircraft, personnel, etc.).

AIR-TAXI VIA (direct, as requested, or specified route) TO (location, heliport, helipad, operating/movement area, active/inactive runway).

AVOID (aircraft/vehicles/personnel).

REMAIN AT OR BELOW (altitude). CAUTION (wake turbulence or other reasons). LAND AND CONTACT TOWER.

HOLD FOR (reason--takeoff clearance, release, landing/taxiing aircraft, etc.).

Examples

"Hughes Eight X-Ray Papa, hover-taxi across Runway Three Five. Caution field lighting vehicle on your left."

"Jet Ranger Two Two Juliett, air-taxi via perimeter taxiway to west ramp. Avoid military convoy exiting the Air Guard ramp."

"Hughes Six Six Juliett, remain at or below one thousand. Caution, Cessna entering left downwind. Land and contact tower."

"Huey One Eight Two Four Mike, hold for taxiing aircraft."

3-11-2 HELICOPTER TAKEOFF CLEARANCE

Issue takeoff clearance from movement areas other than active runways, or in diverse directions from active runways, with additional instructions, as necessary. Whenever possible, issue takeoff clearance in lieu of extended hover-taxi or air-taxi operations.

Phraseology

(Present position, taxiway, helipad, numbers) MAKE RIGHT/LEFT TURN FOR (direction, points of compass, heading, NAVAID radial) DEPARTURE/DEPARTURE ROUTE (number, name, or code), AVOID (aircraft/vehicles/personnel),

REMAIN (direction) OF (active runways, parking areas, passenger terminals, etc.).

CAUTION, (power lines, unlighted obstructions, trees, wake turbulence, etc.).

CLEARED FOR TAKEOFF.

Examples

"Jet Ranger Eight One Papa, Helipad Foxtrot, make left turn for southwest departure, cleared for takeoff."

"Jet Ranger Eight One Papa, from Helipad Foxtrot, make left turn for southwest departure, avoid fuel truck proceeding south on Taxiway Alfa, cleared for takeoff."

"Jet Ranger Eight One Papa, from Helipad Foxtrot, make left turn for southwest departure, remain west of Runway Three Six, caution, crane in raised position one quarter mile south of airport, cleared for takeoff."

If takeoff is requested from nonmovement areas and, in your judgment, the operation appears to be reasonable, use the following phraseology instead of the takeoff clearance.

Phraseology

PROCEED AS REQUESTED, USE CAUTION, (reason and additional instructions, as appropriate).

Example

"Enstrom Niner Niner Three, proceed as requested, use caution, light aircraft parked in your vicinity."

If takeoff is requested from an area not visible, 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

DEPARTURE FROM (requested location) WILL BE AT YOUR OWN RISK. (Reason and additional instructions).

TRAFFIC (as applicable),

TRAFFIC NOT A FACTOR.

Example

"Hughes One Four Uniform, departure from the warehouse area will be at your own risk. Area not visible from the tower, traffic is a Cessna two miles west of the airport."

3-11-6 HELICOPTER LANDING CLEARANCE

Issue landing clearance for helicopters to movement areas other than active runways, or from diverse directions to points on active runways, with additional instructions, as necessary. Whenever possible, issue landing clearances in lieu of extended hover-taxi or air-taxi operations.

Phraseology	***Examples***
MAKE APPROACH STRAIGHT-IN/CIRCLING LEFT/ RIGHT TURN TO (location, runway, taxiway, helipad, Maltese cross) ARRIVAL/ARRIVAL ROUTE (number, name, or code).	*"Huey Three Six November, make approach straight-in to Helipad Alfa."*
HOLD SHORT OF (active runway, extended runway centerline, other).	*"Huey Three Six November, hold short of Runway One Four."*
REMAIN (direction/distance: e.g., 700 feet, 1 1/2 miles) FROM (runway, runway centerline, other helicopter/aircraft).	*"Hughes Four Four Bravo, remain one mile south from Runway Niner centerline."*
CAUTION, (power lines, unlighted obstructions, wake turbulence, etc.).	*"Jet Ranger Eight Six Juliett, caution, unlighted crane vicinity south boundary of airport. Cleared to land."*
CLEARED TO LAND.	
CONTACT GROUND.	
AIR TAXI TO RAMP.	

If landing is requested to nonmovement areas and, in your judgment, the operation appears to be reasonable, use the following phraseology instead of the landing clearance.

Phraseology	***Example***
PROCEED AS REQUESTED, USE CAUTION (reason and additional instructions, as appropriate).	*"Huey Three Three Six, proceed as requested, use caution for vehicular traffic."*

If landing is requested to an area not visible, 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 instead of the landing clearance.

Phraseology	***Examples***
LANDING AT (requested location) WILL BE AT YOUR OWN RISK. (reason and additional instructions, as necessary).	*"Bell Eight Two Foxtrot, landing at Lunken Airport will be at your own risk. Parachute jumping is in progress at Lunken Airport."*
TRAFFIC (as applicable).	*"Huey Five Five Tango, landing will be at your own risk, traffic is a Twin Otter departing Runway Two Seven."*
TRAFFIC NOT A FACTOR.	

IFR PHRASEOLOGY

The phraseology in this section is referenced from the 7110.65 Chapter 4

4-2-5 ROUTE OR ALTITUDE AMENDMENTS

Amend route of flight in a previously issued clearance by either: stating which portion of the route is being amended and then the amendment; stating the amendment to the route and then that the rest of the route is unchanged; or by issuing the entire route by stating the amendment. Issue a clearance directly to a point on the previously issued route.

Phraseology

CHANGE (portion of route) TO READ (amended route), REST OF ROUTE UNCHANGED.

Examples

"Cessna Two One Alfa, change Victor Forty-One, Delta, to read Victor Forty-One, Frank, Victor Seventy-One, Delta, rest of route unchanged."

CLEARED DIRECT (FIX).

"Cessna Two One Alfa, cleared via Victor Forty-One, Frank, Victor Seventy-One, Delta, Victor One Seventy-Four, Alfa V-O-R, direct Airville Airport, maintain niner thousand."

When the route or altitude in a previously issued clearance is amended, restate all applicable altitude restrictions.

NOTE - *Restating a previously issued altitude to "maintain" is an amended clearance. If the altitude to "maintain" is changed or restated, whether prior to departure or while airborne, and if previously issued altitude restrictions are omitted, then altitude restrictions are canceled, including SID/FMSP/STAR altitude restrictions if any.*

Example

A departing aircraft is cleared to cross Ollis intersection at or above 3,000; cross Gordonsville VOR at or above 12,000; and maintain FL200. Shortly after departure, the altitude to be maintained is changed to FL240. Because altitude restrictions remain in effect, the controller issues an amended clearance as follows:

"Northwest One Eleven, amend altitude. Cross Ollis intersection at or above three thousand, cross Gordonsville V-O-R at or above one two thousand, maintain Flight Level Two Four Zero."

Shortly after departure, altitude restrictions are no longer applicable. The controller issues an amended clearance as follows:

"Northwest One Eleven, climb and maintain Flight Level Two Four Zero."

4-2-5 ROUTE OR ALTITUDE AMENDMENTS (Cont'd)

Issue an amended clearance if a speed restriction is declined because it cannot be complied with concurrently with a previously issued altitude restriction.

NOTE - *The phrase "do the best you can" or comparable phrases are not valid substitutes for an amended clearance with altitude or speed restrictions.*

Example

An aircraft is cleared to cross Gordonsville VOR at 11,000. Shortly thereafter, the pilot is cleared to reduce his/her airspeed to 300 knots. The pilot informs the controller that he/she is unable to comply with both clearances simultaneously. The controller issues an amended clearance as follows:

"Citation Eight Four Lima, cross Gordonsville V-O-R at one one thousand. Then, reduce speed to three zero zero."

4-2-6 THROUGH CLEARANCES

You may clear an aircraft through intermediate stops.

Phraseology

CLEARED THROUGH (airport) TO (fix).

Example

"Baron Seven Three Quebec, cleared through Indianapolis to Louisville."

4-2-7 ALTRV CLEARANCES

Use the phrase "via approved altitude reservation flight plan" if the aircraft will operate in an approved ALTRV.

Phraseology

VIA APPROVED ALTITUDE RESERVATION (mission name) FLIGHT PLAN.

Example

"Condor One, cleared via approved altitude reservation Iron Shield Flight Plan."

4-3-1 DEPARTURE TERMINOLOGY

Avoid using the term "takeoff" except to actually clear an aircraft for takeoff or to cancel a takeoff clearance. Use such terms as "departure" or "fly" in clearances when necessary.

Example

"Cactus Eight Fifty-Seven, after departure turn left heading one eight zero."

4-3-2 DEPARTURE CLEARANCES

Include in IFR departure clearances: departure airport (when clearance is to be relayed by an FSS or dispatcher, etc.), clearance limit, departure procedures, route of flight, and altitude.

Phraseology

FLY RUNWAY HEADING.

DEPART (direction or runway).

TURN LEFT/RIGHT.

WHEN ENTERING CONTROLLED AIRSPACE (instruction), FLY HEADING (degrees) UNTIL REACHING (altitude, point, or fix) BEFORE PROCEEDING ON COURSE.

Examples

"Toad Three Eight, fly runway heading."

"Mooney Seven One Mike, depart northeast. Turn right. When entering controlled airspace fly heading one three zero until reaching seven thousand before proceeding on course."

4-3-2 DEPARTURE CLEARANCES (Cont'd)

Phraseology	***Examples***
FLY A (degree) BEARING/AZIMUTH FROM/TO (fix) UNTIL (time). *UNTIL REACHING (fix or altitude),* *BEFORE PROCEEDING ON COURSE.*	*"Grumman Six Six Golf, fly a zero niner zero bearing from Charleston VORTAC until reaching six thousand before proceeding on course."*
NOTE - *Instrument Departure Procedure (SID)*	
(SID name and number) DEPARTURE.	*"Douglas Six Six Mike, Bluegrass 8 departure."*
(SID name and number) DEPARTURE, (transition name) TRANSITION.	*"Douglas Six Six Mike, Bluegrass 8 departure, Lexington transition."*
(SID name) DEPARTURE, EXCEPT (revised altitude information). I SAY AGAIN (revised altitude information).	*"Commander Seven Papa Quebec, Knik Three Departure, except cross Bigun at or above four thousand. I say again cross Bigun at or above four thousand."*
(SID name) DEPARTURE. CROSS (fix) AT (altitude).	*"November One Golf Alfa, Hokey Two Departure. Cross Exude at seven thousand."*
EXPECT FURTHER CLEARANCE VIA (airways, routes, or fixes).	*"Cessna Seven Three Bravo, expect further clearance via Victor Fifty-Four."*
CLIMB AND MAINTAIN (the altitude as near as possible to the pilot's requested altitude). EXPECT (the requested altitude or an altitude different from the requested altitude) AT (time or fix). *(Pilot's requested altitude) IS NOT AVAILABLE.*	*"King Air One Three Mike, climb and maintain one zero thousand. Expect flight level two one zero at Maxim. Flight level two three zero is not available."*
For Air Force One (A1) operations, do **NOT** specify the destination airport.	
Phraseology	***Example***
DESTINATION AS FILED.	*"Air Force One, cleared to destination as filed."*

4-3-3 ABBREVIATED DEPARTURE CLEARANCE

Issue abbreviated departure clearances when it reduces verbiage and the route of flight has not been changed.

Phraseology

CLEARED TO (destination) AIRPORT;

(SID name and number) DEPARTURE, (transition name) TRANSITION; THEN AS FILED. MAINTAIN (altitude), (additional instructions or information).

CLEARED TO (destination) AIRPORT AS FILED. MAINTAIN (altitude), (additional instructions or information).

CLEARED TO (destination) AIRPORT (SID name and number) DEPARTURE, (transition name) TRANSITION; THEN, AS FILED, EXCEPT CHANGE ROUTE TO READ (amended route portion). MAINTAIN (altitude), (additional instructions or information).

CLEARED TO (destination) AIRPORT AS FILED, EXCEPT CHANGE ROUTE TO READ (amended route portion). MAINTAIN (altitude), (additional instructions or information).

In a nonradar environment, specify one or more fixes, as necessary, to identify the initial route of flight.

Examples

"Tango November Seven One Three Mike, cleared to Reynolds Airport; David Two R-NAV Departure, Kingham Transition; then as filed. Maintain niner thousand; expect flight level four one zero, one zero minutes after departure."

"Tango November Seven One Three Mike, cleared to Reynolds Airport as filed. Maintain niner thousand; expect flight level four one zero, one zero minutes after departure."

"Tango November Seven One Three Mike, cleared to Reynolds Airport; South Boston One Departure; then, as filed, except change route to read South Boston, Victor Twenty, Greensboro. Maintain eight thousand, report leaving four thousand."

"Tango November Seven One Three Mike, cleared to Reynolds Airport as filed, except change route to read South Boston, Victor Twenty, Greensboro. Maintain eight thousand; report leaving four thousand."

Example

The filed route of flight is from Hutchins V10 Emporia, thence V10N and V77 to St. Joseph. The clearance will read:

"Commander Four Five Whiskey, cleared to Watson Airport as filed via Emporia, maintain Seven Thousand."

4-3-4 DEPARTURE RESTRICTIONS, CLEARANCE VOID TIMES, HOLD FOR RELEASE, AND RELEASE TIMES

Assign departure restrictions, clearance void times, hold for release, or release times when necessary to separate departures from other traffic or to restrict or regulate the departure flow. Issue a time check when delivering a clearance void/release time. When issuing hold for release instructions, include departure delay information.

Phraseology	***Examples***
CLEARANCE VOID IF NOT OFF BY (clearance void time), *IF NOT OFF BY (clearance void time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS, TIME (time in hours, minutes, nearest quarter minute).*	*"Boxcar Three, clearance void if not off by two two three five, if not off by two two three five, advise Anchorage Approach not later than two three zero five of intentions. Time two two one eight and one half."*
(Aircraft identification) CLEARED TO (destination) AIRPORT AS FILED, MAINTAIN (altitude), (additional instructions or information). HOLD FOR RELEASE, EXPECT (time in hours and/or minutes) DEPARTURE DELAY.	*"Baron Five Seven Bravo, cleared to Dallas Love Airport as filed, maintain one four thousand. Hold for release, expect one hour departure delay."*

Release an aircraft to another controller by stating:

Phraseology	***Example***
(Aircraft identification) RELEASED.	*"Baron Four Two Five Seven Bravo released."*

Release an aircraft to a flight service specialist by stating:

Phraseology	***Example***
ADVISE (aircraft identification) RELEASED FOR DEPARTURE.	*"Advise Baron Four Two Five Seven Bravo released for departure."*

When issuing the release of an aircraft directly to a pilot at an airport not served by a control tower:

Phraseology	***Examples***
(*Aircraft identification) RELEASED FOR DEPARTURE.*	*"Lear One Delta Charlie, released for departure."*
(Aircraft identification) RELEASED FOR DEPARTURE AT (time in hours and/or minutes), *IF NOT OFF BY (time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS. TIME (time in hours, minutes, and nearest quarter minute).*	*"King Air Two Five X-Ray, released for departure at one seven one five. If not off by one seven two zero, advise Columbus Approach not later than one seven five zero of intentions. Time one seven zero niner and three quarters."*

4-3-8 VFR RELEASE OF IFR DEPARTURE	
For aircraft filed IFR requesting VFR departure, inform the pilot of the proper frequency and, if appropriate, where or when to contact the facility responsible for issuing the clearance.	
Phraseology	***Example***
VFR DEPARTURE AUTHORIZED. CONTACT (facility) ON (frequency) AT (location or time if required) FOR CLEARANCE.	*"November Six Three Echo, V-F-R departure authorized. Contact Fort Worth Center on one one niner point five at Marshall for clearance."*

4-5-7 ALTITUDE INFORMATION	
Issue altitude to maintain or cruise. Issue an appropriate crossing altitude as required.	
Phraseology	***Examples***
MAINTAIN/CRUISE (altitude). MAINTAIN (altitude) UNTIL (time)/PAST (fix),/(number of miles or minutes) MILES/MINUTES PAST (fix).	*"Yankee Five Seven Lima, cruise seven thousand. Maintain niner thousand until two zero miles past Rockford VORTAC."*
CROSS (fix, point)/INTERCEPT (route) AT OR ABOVE (altitude), CRUISE (altitude).	*"November Three Niner X-Ray, cross Enid VORTAC at or above six thousand, cruise five thousand."*
CLIMB/DESCEND AND MAINTAIN (altitude).	*"Convair Five Three Tango, descend and maintain one two thousand at zero four two zero."*
AFTER PASSING (fix)/AT (time).	*"Delta Forty-Five, after passing Charleston VORTAC, descend and maintain one one thousand."*

4-5-7 ALTITUDE INFORMATION (Cont'd)

AT (time) CLIMB/DESCEND AND MAINTAIN (altitude) WHEN ESTABLISHED AT LEAST (number of miles or minutes) MILES/MINUTES PAST (fix) ON THE (NAVAID) (specified) RADIAL.	*"T-W-A Fifty-Five, climb and maintain one zero thousand when established at least five miles past Huron on the Baxter VORTAC three three zero radial."*
CLIMB/DESCEND TO REACH (altitude) AT (time(issue time check) or fix)/A POINT (number of miles) MILES (direction) OF (name of DME NAVAID).	*"Northwest One Forty-Two Heavy, descend to reach four thousand at a point two zero miles west of Saint Paul VORTAC."*
Phraseology	***Examples***
CROSS (fix) AT (altitude).	*"United Eighty-One, cross James at eight thousand."*
CROSS (fix) AT OR ABOVE/BELOW (altitude).	*"November Five Three Quebec, cross Bixby at or above one one thousand."*
CLIMB/DESCEND AT PILOT'S DISCRETION.	*"United Four Seventeen, descend at pilot's discretion, maintain six thousand."*
CLIMB/DESCEND NOW TO (altitude), THEN CLIMB/ DESCEND AT PILOT'S DISCRETION MAINTAIN (altitude).	*"Delta Sixteen, descend now to one two thousand, then descend at pilot's discretion maintain seven thousand."*
MAINTAIN BLOCK (altitude) THROUGH (altitude).	*"Quack One Four, maintain block one one thousand through one five thousand."*
DESCEND VIA (STAR/RNAV STAR/FMSP name and number and runway number).	*"Northwest Two Thirty-Two, descend via the Mudde One Arrival Runway Two Seven Right."*
DESCEND VIA THE (STAR/RNAV STAR/FMSP name and number) EXCEPT (revised altitude information).	*"Northwest Two Thirty-Two, descend via the Muddle One Arrival, except cross Water at or above six thousand."*

4-5-8 ANTICIPATED ALTITUDE CHANGES

If practicable, inform an aircraft when to expect climb or descent clearance or to request altitude change from another facility.	
Phraseology	***Examples***
EXPECT HIGHER/LOWER IN (number of miles or minutes) MILES/MINUTES.	*"Skylane Niner One Mike, expect lower altitude in one five miles."*
AT (fix) REQUEST ALTITUDE CHANGE FROM (name of facility) AT (time/fix/altitude if appropriate).	*"Pearl Four Two, request altitude change from Kansas City Approach on initial contact."*
	"Skywagon Seven Seven Bravo at Oklahoma City, request altitude change from Baxter Approach at Bigun."

4-5-9 ALTITUDE CONFIRMATION - NONRADAR

Unless pilot states altitude or you assign a new altitude to a climbing or descending aircraft, request the pilot to confirm assigned altitude on initial contact.

Phraseology	***Examples***
VERIFY AT (altitude/flight level).	*"November Seven Two Foxtrot, verify at one zero thousand."*
VERIFY ASSIGNED ALTITUDE (altitude).	*"November Zero Zero X-Ray, verify assigned altitude five thousand."*
VERIFY ASSIGNED FLIGHT LEVEL (flight level).	*"Delta Four Eighty-Nine, verify assigned flight level three three zero."*

4-6-1 CLEARANCE TO HOLDING FIX

If any part of the route beyond a clearance limit differs from the last routing cleared, issue the route the pilot can expect beyond the clearance limit.

Phraseology	***Examples***
EXPECT FURTHER CLEARANCE VIA (routing).	*"Tango November Three Seven Mike, expect further clearance via direct Cincinatti V-O-R, Victor Two Twenty-Six, Snapy Intersection, direct Newark."*
CLEARED TO (fix), HOLD (direction), AS PUBLISHED.	*"U-S Air Nineteen, cleared to Brickyard VORTAC, hold northwest, as published."*
CLEARED TO (fix), NO DELAY EXPECTED.	
EXPECT FURTHER CLEARANCE (time), *ANTICIPATE ADDITIONAL (time in minutes/hours) MINUTE/HOUR DELAY AT (fix).*	*"November One One Three Whiskey, cleared to Drewe, hold west, as published, expect further clearance one three one five, anticipate additional two zero minute delay at Woody."*
ANTICIPATE ADDITIONAL (time in minutes/hours) MINUTE/HOUR EN ROUTE DELAY.	
EXPECT FURTHER CLEARANCE (time), *ANTICIPATE ADDITIONAL (time in minutes/hours) MINUTE/HOUR TERMINAL DELAY.*	*"Southwest Forty, cleared to Aston, hold west on Victor Two Twenty-Five, seven-mile leg, left turns, expect further clearance one niner two zero, anticipate additional one five minute terminal delay."*
DELAY INDEFINITE, (reason if known), EXPECT FURTHER CLEARANCE (time). (After determining the reason for the delay, advise the pilot as soon as possible.)	*"Cessna Seven Zero Uniform, cleared to Wally, hold north, as published, delay indefinite, snow removal in progress, expect further clearance one one three zero."*

4-6-2 CLEARANCE BEYOND FIX

If no delay is expected, issue a clearance beyond the clearance limit as soon as possible and, whenever possible, at least 5 minutes before the aircraft reaches the fix. Issue a clearance limit or approach clearance and the route of flight by the complete details or the phrase, "via the last routing cleared."

Phraseology

VIA LAST ROUTING CLEARED.

Example

"Alfa November Three One, proceed via last routing cleared."

4-6-3 DELAYS

When arrival delays reach or are anticipated to reach 30 minutes, issue the delay information.

Phraseology

(Airport) ARRIVAL DELAYS (time in minutes/hours).

Example

"T-W-A Twelve, O'Hare arrival delays two hours."

4-6-4 HOLDING INSTRUCTIONS

When necessary to issue holding instructions, specify the direction of holding from the fix, holding fix, radial/course/bearing, leg length, and direction of turns (if left or considered necessary).

Phraseology

HOLD (direction) OF (fix) ON (specified radial, course, bearing, airway, azimuth(s), or route).

(Number of minutes/miles) MINUTES/MILES LEG.

LEFT/RIGHT TURNS.

MAXIMUM HOLDING AIRSPEED IS TWO ONE ZERO KNOTS.

Example

"American Fifty-Six Eleven, hold southwest of Lasky on the localizer. Three minutes leg. Left turns. Maximum holding airspeed is two one zero knots."

4-6-5 VISUAL HOLDING POINTS

You may use as a holding fix a location which the pilot can determine by visual reference to the surface if he/she is familiar with it.

Phraseology

HOLD AT (location) UNTIL (time or other condition).

Example

"Kido Two One, hold at City Dam until further advised."

4-7-1 CLEARANCE INFORMATION

Clear an arriving aircraft to a clearance limit by specifying the fix or airport and the route of flight.

Phraseology

(STAR/RNAV STAR/FMSP name and number) ARRIVAL.

(STAR/RNAV STAR/FMSP name and number) ARRIVAL, (transition name) TRANSITION.

Assign an altitude or instructions to vertically navigate on the STAR/RNAV STAR/FMSP or STAR/RNAV STAR/FMSP transition.

Examples

"Delta Forty-Seven, cleared to Tulsa Airport via Tulsa One Arrival, maintain one two thousand."

"Tally Three Three, cleared to Tulsa Airport via Camak One Arrival, Dilly Transition, maintain one two thousand."

Examples

"Lear Four Five Victor, cleared to the Backwater Airport via Bayview Three R-NAV Arrival, Helen Transition, maintain Flight Level Three Three Zero."

"Airwest Sixty-Five, descend via the Civit One Arrival."

"Delta Eight Sixty-Five, cross JCT at Flight Level Two Four Zero."

"United Eight Twenty-Three, descend via the Coast Two Arrival."

4-8-1 APPROACH CLEARANCE

Clear aircraft for "standard" or "special" instrument approach procedures only. To require an aircraft to execute a particular instrument approach procedure, specify in the approach clearance the name of the approach as published on the approach chart. Where more than one procedure is published on a single chart and a specific procedure is to be flown, amend the approach clearance to specify execution of the specific approach to be flown. If only one instrument approach of a particular type is published, the approach need not be identified by the runway reference. An aircraft conducting an ILS/MLS approach when glideslope/glidepath is reported out of service shall be advised at the time when the approach clearance is issued.

Phraseology

CLEARED (type) APPROACH.

CLEARED STRAIGHT-IN (type) APPROACH.

Examples

"November Two One Seven Three Mike, cleared V-O-R approach."

"Arrow Zero Eight Juliett, cleared straight-in V-O-R approach."

4-8-1 APPROACH CLEARANCE (Cont'd)	
Phraseology	***Examples***
CLEARED APPROACH.	*"Mooney Eight Zero Mike, cleared F-M-S Runway Three Six approach."*
CLEARED (specific procedure to be flown) APPROACH.	*"Mooney Eight Zero Mike, cleared localizer back course Runway One Three Approach."* *"Mooney Eight Zero Mike, cleared R-NAV Runway Two Two Approach."* *"Mooney Eight Zero Mike, cleared Branch One R-NAV Arrival and R-NAV Runway One Three Approach."*
CLEARED (type) APPROACH, GLIDESLOPE/GLIDEPATH UNUSABLE.	*"Mooney Eight Zero Mike, cleared I-L-S Runway Three Six Approach, glideslope unusable."* *"November Two Niner Victor, cleared M-L-S Runway Three Six Approach, glidepath unusable."*
Assign an altitude to maintain until the aircraft is established on a segment of a published route or instrument approach procedure.	***Example*** *"Centurion One Zero Mike, cross the Redding V-O-R at or above five thousand, cleared V-O-R Runway Three Four Approach."*
Where a Terminal Arrival Area (TAA) has been established to support RNAV, assign a minimum IFR altitude for the route of flight until entering the TAA.	***Example*** *"King Air One Hotel Lima, cleared to CHARR, maintain at or above five thousand until entering the TAA, cleared R-NAV Runway One Eight Approach."*
4-8-6 CIRCLING APPROACH	
Circling approach instructions may only be given for aircraft landing at airports with operational control towers. When the direction of the circling maneuver in relation to the airport/runway is required, state the direction (eight cardinal compass points) and specify a left/right base/downwind leg as appropriate.	
Phraseology	***Examples***
CIRCLE TO RUNWAY (number).	*"Sabreliner Four Niner Lima, circle to Runway Three Two."*
CIRCLE (direction using eight cardinal compass points) OF THE AIRPORT/RUNWAY FOR A LEFT/RIGHT BASE/DOWNWIND TO RUNWAY (number).	*"Commander Eight Seven Mike, circle northeast of the airport for a right base to Runway Two Niner."*

4-8-7 SIDE-STEP MANEUVER

TERMINAL: When authorized by an instrument approach procedure, you may clear an aircraft for an approach to runway and inform the aircraft that the landing will be made on a parallel runway.

Example

"Centurion Eight Three Bravo Foxtrot, cleared I-L-S Runway Seven Left Approach, side step to Runway Seven Right."

4-8-8 COMMUNICATIONS RELEASE

If an IFR aircraft intends to land at an airport not served by a tower or FSS, approve a change to the advisory service frequency when you no longer require direct communications.

Phraseology

CHANGE TO ADVISORY FREQUENCY APPROVED.

Example

"November Three Zero Bravo, change to advisory frequency approved."

4-8-11 PRACTICE APPROACH

Where separation services are not provided to VFR aircraft practicing instrument approaches, the controller shall instruct the pilot to maintain VFR and advise the pilot that separation services are not provided.

Phraseology

(Aircraft identification) MAINTAIN VFR, PRACTICE APPROACH APPROVED, NO SEPARATION SERVICES PROVIDED.

Example

"November One Alfa Charlie, maintain V-F-R, practice approach approved, no separation services provided."

4-8-12 LOW APPROACH AND TOUCH-AND-GO

Before an aircraft begins its final descent, issue the appropriate departure instructions the pilot is to follow upon completion of the approach. Climb-out instructions must include a specific heading or a route of flight and altitude, except when the aircraft will remain VFR and contact the tower. Climb-out instructions may be omitted after the first approach if instructions remain the same.

Examples

"Challenger Eight One Bravo, after completing low approach, climb and maintain six thousand, turn right heading three six zero."

"Grumman Four One Five, maintain V-F-R, contact tower."

The phraseology in this section is referenced from the 7110.65 Chapter 5

5-1-13 RADAR SERVICE TERMINATION

Inform aircraft when radar service is terminated.

Phraseology

RADAR SERVICE TERMINATED (nonradar routing if required).

Example

"November Six Two Seven Lima, radar service terminated proceed direct Indianhead V-O-R then as filed."

5-2-9 VFR CODE ASSIGNMENTS

Instruct IFR aircraft that cancel an IFR flight plan and are not requesting radar advisory service and VFR aircraft for which radar advisory service is being terminated to squawk the VFR code.

Phraseology

SQUAWK VFR.

SQUAWK 1200.

Examples

"Yankee Eight Echo Yankee, squawk V-F-R."

"Cougar Seven Whiskey Whiskey, squawk one two zero zero."

5-2-14 FAILURE TO DISPLAY ASSIGNED BEACON CODE OR INOPERATIVE/MALFUNCTIONING TRANSPONDER

Inform an aircraft with an operable transponder that the assigned beacon code is not being displayed. Inform an aircraft when its transponder appears to be inoperative or malfunctioning.

Phraseology

(Identification) RESET TRANSPONDER, SQUAWK (appropriate code).

(Identification) YOUR TRANSPONDER APPEARS INOPERATIVE/MALFUNCTIONING, RESET, SQUAWK (appropriate code).

Examples

"Baron Niner Kilo Kilo, reset transponder, squawk zero three zero four."

"Baron Niner Kilo Kilo, your transponder appears inoperative, reset, squawk zero three zero four."

5-2-17 VALIDATION OF MODE C READOUT

Ensure that Mode C altitude readouts are valid after accepting an interfacility handoff, initial track start, track start from coast/suspend tab list, missing, or unreasonable Mode C readouts. Whenever you observe an invalid Mode C altitude readout below FL 180, issue the correct altimeter setting and confirm the pilot has accurately reported the altitude. If the altitude readout continues to be invalid, instruct the pilot to turn off the altitude reporting part of the transponder and include a reason.

Phraseology	***Examples***
SAY ALTITUDE.	*"November Two One Kilo Mike, say altitude."*
SAY FLIGHT LEVEL.	*"Delta Ten, say flight level."*
(Location) ALTIMETER (appropriate altimeter), VERIFY ALTITUDE.	*"Southwest Forty-three, Covington altimeter three zero zero one, verify altitude."*
CONFIRM USING TWO NINER NINER TWO AS YOUR ALTIMETER SETTING, VERIFY ALTITUDE.	*"November Niner Golf Charlie, confirm using two niner niner two as your altimeter setting, verify altitude."*
VERIFY FLIGHT LEVEL.	*"Delta Ten, verify flight level."*
STOP ALTITUDE SQUAWK. ALTITUDE DIFFERS BY (number of feet) FEET.	*"U-S Air Fifty-five, stop altitude squawk. Altitude differs by four hundred feet."*

5-2-20 AUTOMATIC ALTITUDE REPORTING

Inform an aircraft when you want it to turn on/off the automatic altitude reporting feature (Mode C) of its transponder.

Phraseology	***Examples***
SQUAWK ALTITUDE.	*"Northwest Eighty-Four, squawk altitude."*
STOP ALTITUDE SQUAWK.	*"Lockheed Niner Lima November, stop altitude squawk."*

5-3-3 BEACON IDENTIFICATION METHODS

When using only Mode 3/A radar beacon to identify a target, request the aircraft to "IDENT," change to a specific code, or squawk "standby" followed by squawk "normal."

Phraseology	***Examples***
IDENT.	*"Super Cub Four Romeo Charlie, ident."*
SQUAWK (code) AND IDENT.	*"Super Cub Four Romeo Charlie, squawk zero three zero four and ident."*
SQUAWK STANDBY.	*"Skyhawk Three Five Four, squawk standby."*
SQUAWK NORMAL.	*"Skyhawk Three Five Four, squawk normal."*
SQUAWK (4-digit discrete code), AND IF YOUR ALTITUDE REPORTING EQUIPMENT IS TURNED OFF, SQUAWK ALTITUDE.	*"Lear Two Papa Tango, squawk zero four zero three, and if your altitude reporting equipment is turned off, squawk altitude."*

5-3-6 POSITION INFORMATION

Inform an aircraft of its position whenever radar identification is established by means of identifying turns or by any of the beacon identification methods. Position information need not be given when identification is established by position correlation or when a departing aircraft is identified within 1 mile of the takeoff runway end.

Example

"Skyhawk Three Five Four, radar contact two zero miles southeast of the Erie Airport."

5-3-7 IDENTIFICATION STATUS

Inform aircraft of radar contact when radar identification is initially established or reestablished subsequent to loss of radar contact or terminating radar service.

Phraseology	***Examples***
RADAR CONTACT (position if required).	*"United Forty-Three, radar contact."* *"Skyhawk Three Five Four, radar contact two zero miles southeast of the Erie Airport."*

Inform an aircraft when radar contact is lost.

Phraseology	***Example***
RADAR CONTACT LOST (alternative instructions when required).	*"November Three Niner Golf, radar contact lost, squawk one two zero zero."*

5-4-3 METHODS (TRANSFER OF RADAR IDENTIFICATION)

When making a handoff or point-out, or issuing traffic restrictions, relay in the following order: the position of the target, the aircraft identification, and the assigned altitude (unless covered in an LOA).

Phraseology	***Examples***
HANDOFF/POINT-OUT/TRAFFIC (aircraft position) (aircraft ID) or (discrete beacon code point-out only) (altitude, restrictions, and other appropriate information, if applicable).	*"Handoff one zero miles southeast of Wails, November Three Four Charlie Charlie at six thousand."* *"Point-out, one zero miles north of the Tulsa V-O-R, code three four seven seven, at one three thousand requesting descent to seven thousand."*

When receiving a handoff, point-out, or traffic restrictions, respond to the transferring controller as follows:

Phraseology	***Examples***
(Aircraft ID), (restrictions, if applicable) RADAR CONTACT.	*"November Three Four Charlie Charlie, radar contact."*
(Aircraft ID or discrete beacon code) (restrictions, if applicable) POINT-OUT APPROVED.	*"Code three four seven seven, point-out approved."*
TRAFFIC OBSERVED.	
UNABLE (appropriate information, as required).	*"Code three four seven seven, unable seven thousand, maintain niner thousand, point-out approved."*

5-6-2 METHODS (VECTORING)	
Specify the direction of turn, if appropriate, and the magnetic heading to be flown, or the number of degrees, in group form, to turn and the direction of turn. For NO-GYRO procedures, issue the type of vector, the direction of turn, and when to stop turn.	
Phraseology	***Examples***
TURN LEFT/RIGHT HEADING (degrees).	*"November Three Four Five, turn right heading three five zero."*
FLY HEADING (degrees).	*"Aztec Niner Two Golf, fly heading zero four zero."*
FLY PRESENT HEADING.	*"United Four Twenty-Eight, fly present heading."*
DEPART (fix) HEADING (degrees).	*"Skylane Two One Zulu, depart Wails heading zero niner zero."*
TURN (number of degrees) DEGREES LEFT/RIGHT.	*"U-S Air Six Thirty-Two, turn thirty degrees right."*
THIS WILL BE A NO-GYRO VECTOR, TURN LEFT/RIGHT.	*"Air Guard Five Seven Three, this will be a no-gyro vector, turn right."*
STOP TURN.	*"Air Guard Five Seven Three, stop turn."*

5-6-2 METHODS (VECTORING) (Cont'd)

When initiating a vector, advise the pilot of the purpose and, if appropriate, what to expect when the vector is completed.

Phraseology

VECTOR TO (fix or airway).

VECTOR TO INTERCEPT (name of NAVAID) (specified) RADIAL.

VECTOR FOR SPACING.

VECTOR TO FINAL APPROACH COURSE.

VECTOR TO (approach name) FINAL APPROACH COURSE.

EXPECT TO RESUME (route, SID, STAR, FMSP, etc.).

(Position with respect to course/fix along route), RESUME OWN NAVIGATION.

FLY HEADING (degrees). WHEN ABLE, PROCEED DIRECT (name of fix).

RESUME (name-number FMSP/SID/Transition/ STAR/ procedure).

Aircraft instructed to resume a procedure which contains restrictions shall be issued/reissued all applicable restrictions or shall be advised to comply with those restrictions.

Phraseology

RESUME (name-number FMSP/SID/Transition/STAR), COMPLY WITH RESTRICTIONS.

Examples

"Luscombe Niner Two Three, turn right heading zero niner zero vector to Victor Fourteen."

"Bonanza Four One Bravo, turn right heading zero niner zero vector to intercept the Erie zero one five radial."

"U-S Air Four Twenty-Three, turn right heading three four zero, vector for spacing."

"Delta Thirty-Two, turn left heading two seven zero, vector to final approach course."

"T-W-A Fifty-Five, fly heading three one zero, vector to I-L-S Runway Two Eight Right final approach course."

"Bonanza Seven Three Eight, turn left heading three three zero, expect to resume Rainy One Departure."

"Tomahawk Four Five Six, one zero miles northeast of the Tulsa V-O-R, resume own navigation."

"United Four Twenty-Eight, fly heading three five zero. When able, proceed direct Tulsa V-O-R."

"Southwest Thirty-Four, resume Rainy One Departure, Stillwater Transition."

Example

"U-S Air Forty-Four, resume River One Departure, comply with restrictions."

5-6-2 METHODS (VECTORING) (Cont'd)	
Inform the pilot when a vector will take the aircraft across a previously assigned nonradar route.	
Phraseology	***Example***
EXPECT VECTOR ACROSS (NAVAID radial)/ (airway/route/course) FOR (purpose).	*"Eagle Three, expect vector across Victor Twelve for spacing."*
5-7-2 METHODS (SPEED ADJUSTMENT)	
Instruct aircraft to maintain present/specific speed, specified speed or greater/less, highest/lowest practical speed, and increase/reduce to a specified speed or by a specified number of knots.	
Phraseology	***Examples***
SAY AIRSPEED/MACH NUMBER.	*"T-W-A Eighty-Three, say mach number."*
MAINTAIN PRESENT SPEED.	*"Mooney Two One Zulu, maintain present speed."*
MAINTAIN (specific speed) KNOTS.	*"Troy One Three, maintain two five zero knots."*
MAINTAIN (specific speed) KNOTS OR GREATER.	*"U-S Air Eight Seventy-One, maintain two five zero knots or greater."*
DO NOT EXCEED (speed) KNOTS.	*"Lear Two Seven Lima, do not exceed two one zero knots."*
MAINTAIN MAXIMUM FORWARD SPEED.	*"Skipper Six Seven Three, maintain maximum forward speed."*
MAINTAIN SLOWEST PRACTICAL SPEED.	*"Okie Forty-Four, maintain slowest practical speed."*
INCREASE/REDUCE SPEED/TO (specified speed in knots)/TO MACH (mach number)/(number of knots) KNOTS.	*"United Four Twenty-Eight, increase speed to two three zero."* *"United Four Twenty-Eight, increase speed thirty knots."* *"United Four Twenty-Eight, reduce speed to two one zero."* *"United Four Twenty-Eight, reduce speed thirty knots."*
DO NOT EXCEED (speed) KNOTS.	*"Navy Alfa Lima Four Three, do not exceed two five zero knots."*

5-7-2 METHODS (SPEED ADJUSTMENT) (Cont'd)

Use the following phraseology to obtain pilot concurrence for a speed adjustment:

Phraseology

(Speed adjustment), IF UNABLE ADVISE.

Examples

"Eagle Three, reduce speed to one eight zero, if unable advise."

Specify which action is to be accomplished first when combining speed reduction with a descent clearance. Specify combined speed/altitude fix crossing restrictions.

Phraseology

REDUCE SPEED TO (specified speed)/(number of knots) KNOTS, THEN, DESCEND AND MAINTAIN (altitude).

DESCEND AND MAINTAIN (altitude), THEN, REDUCE SPEED TO (specified speed in knots)/TO MACH (mach number)/(number of knots) KNOTS.

CROSS (fix) AT AND MAINTAIN (altitude) AT (specified speed) KNOTS.

Examples

"Southwest Forty-Three, reduce speed to two five zero knots. Then, descend and maintain six thousand."

"Falcon Eight Two Three, descend and maintain six thousand. Then, reduce speed to one eight zero knots."

"U-S Air Thirty-Three, cross Grace at and maintain one zero thousand at two three zero knots."

5-7-4 SPEED ADJUSTMENT TERMINATION

Advise aircraft when speed adjustment is no longer needed.

Phraseology

RESUME NORMAL SPEED.

Example

"United Four Twenty-Eight, resume normal speed."

5-8-2 INITIAL HEADING

Before departure, assign the initial heading to be flown if a departing aircraft is to be vectored immediately after takeoff. A purpose for the heading is not necessary in the terminal environment for a departure.

Phraseology

FLY RUNWAY HEADING.

TURN LEFT/RIGHT, HEADING (degrees).

Examples

"Aerostar Two Three Four, fly runway heading."

"Cessna Niner Hotel Lima, turn left, heading three two zero."

5-9-3 VECTORS ACROSS FINAL APPROACH COURSE

Inform the aircraft whenever a vector will take it across the final approach course and state the reason.

Phraseology

EXPECT VECTOR ACROSS FINAL FOR (purpose).

Example

"U-S Air Four Twenty-Three, expect vector across final for spacing."

5-9-4 ARRIVAL INSTRUCTIONS

Issue to an aircraft, before it reaches the approach gate, its position, a vector to intercept the final approach course (if necessary), an altitude to maintain (unless established on a segment of the approach), and the approach clearance. When radar is used to establish the final approach fix, inform the pilot that, after being advised that he/she is over the fix, he/she is to contact the tower.

Examples

"Jetstream Six Five Alpha, seven miles from X-Ray, cleared I-L-S Runway Three Six Approach."

"Grumman Four Eight Bravo, four miles from Lima, turn right heading three four zero, maintain two thousand until established on the localizer, cleared I-L-S Runway Three Six Approach."

"Skylane Niner Four Victor, five miles from Alfa, turn right heading three three zero, cross Alfa at or above four thousand, cleared I-L-S Runway Three Six Approach."

"United Six Seventy-Five, eight miles from Alfa, cross Alfa at or above four thousand, cleared I-L-S Runway Three Six Approach."

"Saberliner Three Three Mike, three miles from Alfa, turn left heading two one zero, maintain four thousand until established on the azimuth course, cleared M-L-S Runway One Eight Approach."

5-9-4 ARRIVAL INSTRUCTIONS (Cont'd)

	Examples *"Baron Three Four Whiskey, three miles from final approach fix, turn left heading zero one zero, maintain two thousand until established on the localizer, cleared I-L-S Runway Three Six Approach, I will advise when over the fix."* *"Twin Cessna Six Three Six One, seven miles from FOORE, cleared direct FOORE, cross FOORE at or above four thousand, cleared RNAV Runway One Eight Approach."* *"Baron Three Four Whiskey, over final approach fix, contact tower one one eight point one."*

5-9-7 SIMULTANEOUS INDEPENDENT ILS/MLS APPROACHES - DUAL AND TRIPLE

Instruct the aircraft to return to the correct final approach course when observed overshooting/on a track which will penetrate the No Transgression Zone (NTZ). Instruct aircraft on the adjacent final approach course to alter course to avoid the deviating aircraft.	
Phraseology	***Examples***
YOU HAVE CROSSED THE FINAL APPROACH COURSE. TURN (left/right) IMMEDIATELY AND RETURN TO LOCALIZER/AZIMUTH COURSE.	*"T-W-A Thirty-Two, you have crossed the final approach course. Turn right immediately and return to localizer course."*
TURN (left/right) AND RETURN TO THE LOCALIZER/ AZIMUTH COURSE.	*"T-W-A Thirty-Two, turn left and return to the azimuth course."*
TRAFFIC ALERT, (call sign), TURN (left/right) IMMEDIATELY HEADING (degrees), CLIMB AND MAINTAIN (altitude).	*"Traffic Alert, T-W-A Thirty-Two, turn left immediately heading one niner zero, climb and maintain one two thousand."*

5-9-8 SIMULTANEOUS INDEPENDENT DUAL ILS/MLS APPROACHES - HIGH UPDATE RADAR

Instruct aircraft to return immediately to the correct final approach course when observed overshooting/on a track which will penetrate the No Transgression Zone (NTZ).	
Phraseology	***Examples***
(Aircraft call sign) I SHOW YOU (left/right) OF THE FINAL APPROACH COURSE.	*"Mooney Six Five Papa, I show you left of the final approach course."*
YOU HAVE CROSSED THE FINAL APPROACH. TURN (left/right) IMMEDIATELY AND RETURN TO THE LOCALIZER/AZIMUTH COURSE.	*"T-W-A Thirty-Two, you have crossed the final approach course. Turn right immediately and return to localizer course."*
TURN (left/right) AND RETURN TO THE LOCALIZER AZIMUTH COURSE.	*"T-W-A Thirty-Two, turn left and return to the azimuth course."*
TRAFFIC ALERT, (call sign), TURN (left/right) IMMEDIATELY HEADING (degrees), CLIMB AND MAINTAIN (altitude).	*"Traffic Alert, Delta Four Sixteen, turn left immediately heading one niner zero, climb and maintain two thousand."*

5-10-3 NO-GYRO APPROACH

When an aircraft will make a no-gyro surveillance or PAR approach, before issuing a vector, inform the aircraft of the type of approach. Instruct the aircraft when to start and stop turn. After turn to final approach has been made and prior to the aircraft reaching the approach gate, instruct the aircraft to make half standard rate turns.

Phraseology	***Examples***
THIS WILL BE A NO-GYRO SURVEILLANCE/PAR APPROACH.	*"Trice Three Two, this will be a no-gyro surveillance approach."*
TURN LEFT/RIGHT.	*"Trice Three Two, turn right."*
STOP TURN.	*"Trice Three Two, stop turn."*
MAKE HALF-STANDARD RATE TURNS.	*"Trice Three Two, make half-standard rate turns."*

5-10-8 FINAL CONTROLLER CHANGEOVER

When instructing the aircraft to change frequency for final approach guidance, include the name of the facility.

Phraseology	***Example***
CONTACT (name of facility) FINAL CONTROLLER ON (frequency).	*"Totem Eight Four, contact Niagara final controller on one two zero point zero."*

5-10-9 COMMUNICATIONS CHECK

On initial contact with the final controller, ask the aircraft for a communications check.

Phraseology	***Example***
(Name of facility) FINAL CONTROLLER. HOW DO YOU HEAR ME?	*"Totem Eight Four, Niagara final controller. How do you hear me?"*

5-10-10 TRANSMISSION ACKNOWLEDGMENT

After contact has been established with the final controller and while on the final approach course, instruct the aircraft not to acknowledge further transmissions.

Phraseology	***Example***
DO NOT ACKNOWLEDGE FURTHER TRANSMISSIONS.	*"Totem Eight Four, do not acknowledge further transmissions."*

5-10-12 LOW APPROACH AND TOUCH-AND-GO

Before an aircraft which plans to execute a low approach or touch-and-go begins final descent, issue appropriate departure instructions to be followed upon completion of the approach. Climb-out instructions must include a specific heading and altitude, except when the aircraft will maintain VFR and contact the tower.

Phraseology

AFTER COMPLETING LOW APPROACH/TOUCH AND GO:

CLIMB AND MAINTAIN (altitude). TURN (right/left) HEADING (degrees)/FLY RUNWAY HEADING.

MAINTAIN VFR, CONTACT TOWER.

(Other instructions as appropriate).

Examples

"Fargo Two Two, after completing low approach, climb and maintain three thousand, fly runway heading."

"Fargo Two Two, after completing touch-and-go, maintain V-F-R, contact tower."

5-11-2 VISUAL REFERENCE REPORT

Aircraft may be requested to report the runway, approach/runway lights, or airport in sight. Helicopters making a "point-in-space" approach may be requested to report when able to proceed to the landing area by visual reference to a prescribed surface route.

Phraseology

REPORT (runway, approach/runway lights or airport) IN SIGHT.

REPORT WHEN ABLE TO PROCEED VISUALLY TO AIRPORT/HELIPORT.

Examples

"Bingo Seven Four, report runway in sight."

"Bingo Seven Four, report when able to proceed visually to airport."

VISUAL PHRASEOLOGY

The phraseology in this section is referenced from the 7110.65 Chapter 7

7-1-2 VFR CONDITIONS

You may clear aircraft to maintain "VFR conditions."

Phraseology	***Examples***
MAINTAIN VFR CONDITIONS.	*"Bellanca Five Two Four, maintain V-F-R conditions."*
MAINTAIN VFR CONDITIONS UNTIL (time or fix).	*"Cardinal Seven Eight Three, maintain V-F-R conditions until Stillwater V-O-R."*
MAINTAIN VFR CONDITIONS ABOVE/BELOW (altitude).	*"Tiger Niner Tango Lima, maintain V-F-R conditions below five thousand."*
CLIMB / DESCEND VFR,	*"Cessna One Two Papa, climb V-F-R between five thousand and one one thousand."*
BETWEEN (altitude) AND (altitude).	
ABOVE/BELOW (altitude).	
IF UNABLE, (alternative procedure), AND ADVISE.	*"Seminole Three Two Four, climb V-F-R above six thousand. If unable, maintain six thousand, and advise."*

7-1-4 VISUAL HOLDING OF VFR AIRCRAFT

Clear VFR aircraft to hold at selected, prominent geographical fixes which can be easily recognized from the air, preferably those depicted on sectional charts. Issue traffic information to aircraft cleared to hold at the same fix.

Phraseology	***Examples***
HOLD AT (location) UNTIL (time or other condition).	*"Comanche Six Juliett Golf, hold at Riverside Water Tower until one eight three zero. Traffic, Cherokee holding at Riverside Water Tower holding at two thousand five hundred."*
TRAFFIC, (description) HOLDING AT (fix, altitude if known)/PROCEEDING TO (fix) FROM (direction or fix).	*"Comanche Six Juliett Golf, hold at Riverside Water Tower until one eight three zero. Traffic, Cherokee proceeding to Riverside Water Tower from Owasso at two thousand five hundred."*

7-2-1 VISUAL SEPARATION

A pilot may be instructed to maintain visual separation from another aircraft. Inform the pilot of the other aircraft's position and intentions. When the pilot sees the other aircraft, instruct the pilot to maintain visual separation. Advise the pilot if the radar targets appear likely to merge. If the aircraft are on converging courses, inform the other aircraft of the traffic and that visual separation is being applied.

Phraseology	***Examples***
TRAFFIC, (clock position and distance), (direction)-BOUND, (type of aircraft), (intentions and other relevant information).	*"United Forty-Two Eighteen, traffic, ten o'clock five miles, eastbound, Boeing Seven Thirty-Seven, one zero thousand."*
ON CONVERGING COURSE. *DO YOU HAVE IT IN SIGHT?*	*"United Forty-Two Eighteen, traffic, ten o'clock five miles eastbound, Boeing Seven Thirty-Seven one zero thousand, on converging course. Do you have it in sight?"*
MAINTAIN VISUAL SEPARATION.	*"United Forty-Two Eighteen, maintain visual separation."*
TRAFFIC, (clock position and distance), (direction)-BOUND, (type of aircraft). HAS YOU IN SIGHT AND WILL MAINTAIN VISUAL SEPARATION.	*"Southwest Seven Thirty-Seven, traffic, two o'clock five miles, northbound, Boeing Seven Twenty-Seven descending to eight thousand. Has you in sight and will maintain visual separation."*

Nonapproach control towers may be authorized to provide visual separation between aircraft within surface areas or designated areas.

Phraseology	***Examples***
VISUAL SEPARATION APPROVED BETWEEN (identification) AND (identification).	*"Visual separation approved between Seneca Four Five Three Whiskey Juliett and Twin Cessna Eight One Four Niner Hotel."*
(Departing/succeeding aircraft) RELEASED YOUR DISCRETION.	*"Arrow Eight Two Delta released your discretion."*

7-3-1 VFR-ON-TOP

You may clear an aircraft to maintain "VFR-On-Top" if the pilot of an aircraft on an IFR flight plan requests the clearance. You may clear an aircraft to climb through clouds, smoke, haze, or other meteorological formations and then maintain "VFR-On-Top" if the pilot requests the clearance, you inform the pilot of the reported height of the tops of the meteorological formation/advise of no tops reports, you insure separation as necessary, and you reclear the aircraft to maintain "VFR-On-Top" after aircraft reports reaching "VFR-On-Top." Do not clear an aircraft to maintain "VFR-On-Top" between sunset and sunrise to separate holding aircraft from each other or from en route aircraft unless restrictions are applied to ensure appropriate IFR separation.

When, in your judgment, there is reason to believe that flight in VFR conditions may become impractical, issue an alternate clearance which will ensure separation from all other aircraft for which you have separation responsibility.

Phraseology	***Examples***
MAINTAIN VFR-ON-TOP.	*"Navion One Alfa Lima, maintain V-F-R-On-Top."*
CLIMB TO AND REPORT REACHING VFR-ON-TOP, TOPS REPORTED (altitude) /NO TOPS REPORTS. *IF NOT ON TOP AT (altitude), MAINTAIN (altitude), AND ADVISE.*	*"Archer Seven Seven Eight, climb to and report reaching V-F-R-On-Top, tops reported eight thousand. If not on top at niner thousand, maintain niner thousand and advise."*
MAINTAIN VFR-ON-TOP AT OR ABOVE/BELOW/ BETWEEN (altitudes).	*"Warrior Six Two Four, maintain V-F-R-On-Top at or above one three thousand five hundred."* *"Warrior Six Two Four, maintain V-F-R-On-Top at or below one two thousand five hundred."*
IF UNABLE, (alternative procedure), AND ADVISE.	*"Warrior Six Two Four, maintain V-F-R-On-Top between six thousand and one zero thousand. If unable, maintain eight thousand, and advise."*

7-3-2 ALTITUDE FOR DIRECTION OF FLIGHT	
Inform an aircraft maintaining "VFR-On-Top" when a report indicates the pilot is not conforming with FAR, Part 91.159(a). ***Phraseology*** *VFR-ON-TOP CRUISING LEVELS FOR YOUR DIRECTION OF FLIGHT ARE ODD/EVEN ALTITUDES/FLIGHT LEVELS PLUS FIVE HUNDRED FEET.*	***Example*** *"Caravan Six Seven Three, V-F-R-On-Top cruising levels for your direction of flight are odd altitudes plus five hundred feet."*
7-4-2 VECTORS FOR VISUAL APPROACH	
A vector for a visual approach may be initiated if the reported ceiling at the airport of intended landing is at least 500 feet above the MVA / MIA and the visibility is 3 miles or greater. At airports without weather reporting service there must be reasonable assurance that descent and flight to the airport can be made visually, and the pilot must be informed that weather information is not available. ***Phraseology*** *FLY HEADING/TURN RIGHT/LEFT HEADING (degrees), VECTOR FOR VISUAL APPROACH TO (airport name); (if appropriate) WEATHER NOT AVAILABLE.*	***Example*** *"Debonair Niner Hotel Lima, turn right heading zero three zero, vector for visual approach to James Airport; weather not available."*

7-4-3 CLEARANCE FOR VISUAL APPROACH

ARTCCs, approach controls, and authorized towers may clear aircraft for visual approaches. Advise pilots when the weather is not available for the destination airport or the frequency to receive weather information where AWOS/ASOS is available.

Phraseology

(Instructions) CLEARED VISUAL APPROACH RUNWAY (number).

(Instructions) CLEARED VISUAL APPROACH TO (airport name); (if appropriate) WEATHER NOT AVAILABLE / AWOS / ASOS WEATHER AVAILABLE ON FREQUENCY (frequency) mHz.

All aircraft following a heavy jet/B757 must be informed of the airplane manufacturer and model.

In instances where airports are located in close proximity, also provide the location of the airport that may cause confusion.

Examples

"U-S Air Forty-Three, cleared visual approach Runway Two Four."

"Challenger Eight Three Delta, cleared visual approach to Corry Airport; A-WOS weather available on frequency one two eight point six five."

Example

"Cessna Three Four Juliet, following a Boeing Seven Fifty-Seven, twelve o'clock, six miles."

Example

"Cessna Five Six November, Cleveland Burke Lakefront Airport is at twelve o'clock, five miles. Cleveland Hopkins Airport is at one o'clock, twelve miles. Report Cleveland Hopkins in sight."

7-4-5 CHARTED VISUAL FLIGHT PROCEDURES (CVFP)	
Clear an aircraft for a CVFP only when the approach is conducted in a radar environment, there is an operating control tower, the published name of the approach is stated in the clearance, and the aircraft reports sighting a charted visual landmark or the preceding aircraft landing the same runway. ***Phraseology*** *(Ident) CLEARED (name of CVFP) APPROACH.*	***Example*** *"Delta Forty-Three, cleared Stadium Visual Runway Three One Approach."*
7-4-6 CONTACT APPROACH	
Clear an aircraft for a contact approach only when requested by the pilot, ground visibility is at least 1 mile, an instrument approach has been published and is functioning for the airport, approved separation is provided, and an alternative clearance is issued when weather conditions are such that a contact approach may be impracticable. ***Phraseology*** *CLEARED CONTACT APPROACH,* *AT OR BELOW (altitude) (routing).* *IF NOT POSSIBLE, (alternative procedures), AND ADVISE.*	***Example*** *"Travelair Seven Six Five, cleared contact approach at or below three thousand five hundred. If not possible, maintain three thousand five hundred, and advise."*
7-5-1 SPECIAL VFR AUTHORIZATION	
Use the following phraseology when issuing a Special VFR (SVFR) clearance: ***Phraseology*** *CLEARED TO ENTER/OUT OF/THROUGH, BRAVO/ CHARLIE/DELTA/ECHO SURFACE AREA,* *(direction) OF (name) AIRPORT (specified routing),* *MAINTAIN SPECIAL VFR CONDITIONS,* *AT OR BELOW (altitude below 10,000 feet MSL)* *CLEARED FOR (coded arrival or departure procedure) ARRIVAL/DEPARTURE, (additional instructions as required).*	***Examples*** *"Navajo Three Papa Lima, cleared to enter delta surface area, south of Jamestown Airport, maintain Special V-F-R conditions, at or below two thousand five hundred."* *"Boeing Seven Seven Six, cleared for River One Arrival."*

7-5-2 PRIORITY	
SVFR flights may be approved only if arriving and departing IFR aircraft are not delayed. Inform an aircraft of the anticipated delay when a SVFR clearance cannot be granted because of IFR traffic. ***Phraseology*** *EXPECT (number) MINUTES DELAY, (additional instructions as necessary).*	***Example*** *"Jetstream Niner Tango Charlie, expect one zero minutes delay."*
7-5-4 ALTITUDE ASSIGNMENT	
Clear SVFR aircraft at or below an altitude which is at least 500 feet below any conflicting IFR traffic but not below the minimum safe altitude. ***Phraseology*** *MAINTAIN SPECIAL VFR CONDITIONS AT OR BELOW (altitude).*	***Example*** *"Navajo Three Papa Lima, maintain Special V-F-R conditions at or below two thousand five hundred."*

7-6-7 SEQUENCING	
Establish radar contact before instructing a VFR aircraft to enter the traffic pattern at a specific point or vectoring the aircraft to a position in the approach sequence. Inform the pilot of the aircraft to follow when the integrity of the approach sequence is dependent on following the preceding aircraft. ***Phraseology*** *FOLLOW (description) (position if necessary).*	 ***Example*** *"Duchess Five Four Three, follow the Cessna One Eighty-Two at one o'clock, three miles."*
7-6-11 TERMINATION OF SERVICE	
Terminate radar service to aircraft landing at airports other than those where sequencing service is provided at a sufficient distance from the airport to permit the pilot to change to the appropriate frequency for traffic and airport information. ***Phraseology*** *RADAR SERVICE TERMINATED, SQUAWK ONE TWO ZERO ZERO,* *SQUAWK VFR,* *CHANGE TO ADVISORY FREQUENCY APPROVED,* *CONTACT (frequency identification).* *FREQUENCY CHANGE APPROVED.*	 ***Examples*** *"Duchess Five Four Three, radar service terminated, squawk one two zero zero, change to advisory frequency approved."* *"Duchess Five Four Three, contact Paine Tower."* *"Duchess Five Four Three, frequency change approved."*

7-7-5 ALTITUDE ASSIGNMENTS (TRSA) - TERMINAL	
Advise VFR aircraft to resume altitudes appropriate for the direction of flight when a previously assigned altitude is no longer needed for separation or when leaving the TRSA. ***Phraseology*** *RESUME APPROPRIATE VFR ALTITUDES.*	 ***Example*** *"Aircoupe Eight Six Five, resume appropriate V-F-R altitudes."*
7-7-7 TRSA DEPARTURE INFORMATION	
Inform VFR participating aircraft when leaving the TRSA. ***Phraseology*** *LEAVING THE (name) TRSA,* *RESUME OWN NAVIGATION/REMAIN THIS FREQUENCY FOR TRAFFIC ADVISORIES/RADAR SERVICE TERMINATED, SQUAWK ONE TWO ZERO ZERO/etc.*	 ***Examples*** *"Decathlon Eight Eight Three, leaving the Erie TRSA. Remain this frequency for traffic advisories."* *"Decathlon Eight Eight Three, leaving the Erie TRSA. Radar service terminated, squawk one two zero zero."*
7-8-4 ESTABLISHING TWO-WAY COMMUNICATIONS	
Class C service requires pilots to establish two-way radio communications before entering Class C airspace. If the controller responds to a radio call with, "(a/c call sign) standby," radio communications have been established and the pilot can enter Class C airspace. If workload or traffic conditions prevent immediate provision of Class C services, inform the pilot to remain outside of Class C airspace until conditions permit the services to be provided. ***Phraseology*** *REMAIN OUTSIDE CHARLIE AIRSPACE AND STANDBY.*	 ***Example*** *"Aircoupe Eight Six Five, remain outside Charlie Airspace and standby."*
7-8-5 ALTITUDE ASSIGNMENTS (CLASS C SERVICE AREA)	
Advise VFR aircraft to resume altitudes appropriate for the direction of flight when a previously assigned altitude is no longer needed for separation or when terminating Class C service. ***Phraseology*** *RESUME APPROPRIATE VFR ALTITUDES.*	 ***Example*** *"Aircoupe Eight Six Five, resume appropriate V-F-R altitudes."*

7-8-8 TERMINATION OF SERVICE	
Terminate Class C service to aircraft landing at other than the primary airport in sufficient time to allow the pilot to change to the appropriate frequency for traffic and airport information. ***Phraseology*** *CHANGE TO ADVISORY FREQUENCY APPROVED.* *CONTACT (facility identification).*	***Example*** *"Westwind Niner Mike Charlie, change to advisory frequency approved."*
7-9-2 VFR AIRCRAFT IN CLASS B AIRSPACE	
VFR aircraft must obtain an ATC clearance to operate in Class B airspace. ***Phraseology*** *CLEARED THROUGH/TO ENTER/OUT OF (name) BRAVO AIRSPACE* *VIA (route). MAINTAIN (altitude) WHILE IN BRAVO AIRSPACE.* *CLEARED AS REQUESTED, (additional instructions, as necessary).* *REMAIN OUTSIDE BRAVO AIRSPACE, (when necessary, reason and/or additional instructions).* *LEAVING (name) BRAVO AIRSPACE,* *RESUME OWN NAVIGATION / REMAIN THIS FREQUENCY FOR TRAFFIC ADVISORIES / RADAR SERVICE TERMINATED / SQUAWK ONE TWO ZERO ZERO / etc.*	***Examples*** *"Starship Two Romeo Mike, cleared to enter Oakland Bravo airspace via direct Oakland V-O-R. Maintain four thousand five hundred while in Bravo airspace."* *"Trinidad Seven Tango Tango, cleared through/ to Oakland Bravo airspace."* *"Lear Five Tango Charlie, cleared as requested."* *"Musketeer Five Five Three, remain outside Bravo airspace."* *"Starship Two Romeo Mike, leaving Honolulu Bravo airspace, resume own navigation, radar service terminated, squawk one two zero zero."*
7-9-7 ALTITUDE ASSIGNMENTS (CLASS B SERVICE AREA)	
Advise VFR aircraft to resume altitudes appropriate for the direction of flight when a previously assigned altitude is no longer required or when leaving Class B airspace. ***Phraseology*** *RESUME APPROPRIATE VFR ALTITUDES.*	***Example*** *"Aircoupe Eight Six Five, resume appropriate V-F-R altitudes."*

SPECIAL FLIGHTS PHRASEOLOGY

The phraseology in this section is referenced from the 7110.65 Chapter 9

9-3-7 IFR MILITARY TRAINING ROUTES

Clear aircraft into an MTR provided separation will be applied between successive aircraft unless otherwise covered in a letter of agreement between the military scheduling activity and the concerned ATC facility. Unless covered in a letter of agreement, clear aircraft to exit an MTR. Prior to an aircraft entering an MTR, request the pilot's estimate for the route's exit/alternate exit fix, the pilot's requested altitude after exiting, and if applicable, the number of reentries on a Strategic Training Range (STR).

Phraseology	***Examples***
CLEARED INTO IR (designator). MAINTAIN (altitude). *MAINTAIN IR (designator) ALTITUDE(S).* *MAINTAIN AT OR BELOW (altitude).* *CRUISE (altitude),* *CROSS (fix) AT OR LATER THAN (time).*	*"Ronco One One, cleared into I-R Four Twenty-Three. Maintain at or below five thousand, cross Delta at or later than one eight three four."*
CLEARED TO (destination/clearance limit) FROM IR (designator/exit fix) VIA (route). MAINTAIN (altitude).	*"Steel Four Three, cleared to Clarion V-O-R from I-R Four Twenty-Three at Golf via direct. Maintain eight thousand."*
CONFIRM YOUR EXIT FIX ESTIMATE AND REQUESTED ALTITUDE AFTER EXIT, (if applicable) THE NUMBER OF REENTRIES.	*"Steel Four Three, confirm your exit fix estimate and requested altitude after exit."*

9-3-11 MILITARY AERIAL REFUELING

Authorize aircraft to conduct aerial refueling along published or special tracks at their flight plan altitude, unless otherwise requested. Request the aircraft to report the ARIP, ARCP, or egress fix as necessary.

Phraseology	***Examples***
CLEARED TO CONDUCT REFUELING ALONG (number) TRACK. *FROM (fix) TO (fix).* *MAINTAIN REFUELING LEVEL (altitude).* *MAINTAIN (altitude).* *COMMENCING AT (altitude), DESCENDING TO (altitude).*	*"Tanker One Five, cleared to conduct refueling along Alpha Fox eight twenty-one track from Charlie to Foxtrot, maintain refueling level one four thousand."*
REPORT A-R-I-P/A-R-C-P/EGRESS FIX.	*"Roper Two Eight, report egress fix."*

9-3-12 MILITARY OPERATIONS ABOVE FL 600	
Approval of the flight plan indicates approval of both route and FLs (if stated), including operations below FL 600 (aerial refueling). ***Phraseology*** *CLEARED AS FILED VIA ROUTE AND FLIGHT LEVELS.*	 ***Example*** *"Blaster Four Four, cleared as filed via route and flight levels."*
9-5-5 INFORMATION DISSEMINATION (FUEL DUMPING)	
Broadcast a fuel dumping advisory at 3-minute intervals and again when completed. ***Phraseology*** *ATTENTION ALL AIRCRAFT, FUEL DUMPING IN PROGRESS OVER (location) AT (altitude) BY (type aircraft) (flight direction).* *FUEL DUMPING OVER (location) TERMINATED.*	 ***Examples*** *"Attention all aircraft. Fuel dumping in progress over Clarion V-O-R at one zero thousand by K-C Ten eastbound."* *"Attention all aircraft. Fuel dumping over Clarion terminated."*

The phraseology in this section is referenced from the 7110.65 Chapter 10

10-6-4 INFLIGHT CONTINGENCIES

In the event that an aircraft requests an emergency descent: • Issue a clearance to the requested altitude if approved separation can be provided. • Advise the aircraft of the traffic, and request its intentions if traffic prevents an unrestricted descent. ***Phraseology*** *ATC ADVISES (aircraft identification) UNABLE TO APPROVE UNRESTRICTED DESCENT. TRAFFIC (traffic information). REQUEST INTENTIONS.*	 ***Example*** *"A-T-C advises Jetstar Two One Zulu unable to approve unrestricted descent. Traffic, twelve o'clock, one zero miles, southbound, Boeing Seven Thirty-Seven at one zero thousand. Request intentions."*
In the event that an aircraft is making or will make an emergency descent without a clearance: • Advise other aircraft of the emergency descent. ***Phraseology*** *ATC ADVISES (aircraft identification/all aircraft) BE ALERT FOR EMERGENCY DESCENT IN THE VICINITY OF (latitude/longitude) FROM (altitude/FL) TO (altitude/FL).* Advise other aircraft when the emergency descent is complete. ***Phraseology*** *(Aircraft identification/all aircraft) EMERGENCY DESCENT AT (location) COMPLETED.*	 ***Example*** *"A-T-C advises all aircraft be alert for emergency descent in the vicinity of thirty-four degrees thirty-five minutes north, eighty-three degrees twenty minutes west from one seven thousand to five thousand."* ***Example*** *"All aircraft emergency descent at thirty-four degrees thirty-five minutes north, eighty-three degrees twenty minutes west completed."*