

# **BRIEFING GUIDE**

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**



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**1. PARAGRAPH NUMBER AND TITLE:**

2-1-14. COORDINATE USE OF AIRSPACE

2-1-17. RADIO COMMUNICATIONS

4-5-7. ALTITUDE INFORMATION

10-4-4. COMMUNICATIONS FAILURE

**2. BACKGROUND:** The FAA operates some telecommunication stations, and some are operated by an external service provider under contract with the FAA. The external entity was, for many years, Aeronautical Radio, Incorporated (ARINC). In phraseology and documentation, the term ARINC was used to advise that communications were to occur through that service provider. Due to corporate changes, these stations are now operated by Collins Aerospace, Incorporated (formerly ARINC). The use of the term “ARINC” in phraseology and documentation has changed to the use of the term “New York Radio” or “San Francisco Radio.”

**3. CHANGE:****OLD****2-1-14. COORDINATE USE OF AIRSPACE****Title through a**

**b.** Before you issue a control instruction directly to a pilot that will change the aircraft’s heading, route, speed, or altitude, you must ensure that coordination has been completed with all controllers whose area of jurisdiction is affected by those instructions unless otherwise specified by a letter of agreement or facility directive. If your control instruction will be relayed to the pilot through a source other than another radar controller (FSS, ARINC, another pilot, etc.), you are still responsible to ensure that all required coordination is completed.

**OLD****2-1-17. RADIO COMMUNICATIONS****Title through b3 *PHRASEOLOGY***

**c.** Controllers must, within a reasonable amount of time, take appropriate action to establish/restore communications with all aircraft for which a communications transfer or initial contact to his/her sector is expected/required.

***NOTE-***

*For the purposes of this paragraph, a reasonable amount of time is considered to be 5 minutes from the time the aircraft enters the controller’s area of jurisdiction or comes within range of radio/communications coverage. Communications include two-way VHF or UHF radio contact, data link, or high frequency (HF) radio through an approved third-party provider such as ARINC.*

**NEW****2-1-14. COORDINATE USE OF AIRSPACE****No Change**

**b.** Before you issue a control instruction directly to a pilot that will change the aircraft’s heading, route, speed, or altitude, you must ensure that coordination has been completed with all controllers whose area of jurisdiction is affected by those instructions unless otherwise specified by a letter of agreement or facility directive. If your control instruction will be relayed to the pilot through a source other than another radar controller (FSS, New York Radio, San Francisco Radio, another pilot, etc.), you are still responsible to ensure that all required coordination is completed.

**NEW****2-1-17. RADIO COMMUNICATIONS****No Change****No Change*****NOTE-***

*For the purposes of this paragraph, a reasonable amount of time is considered to be 5 minutes from the time the aircraft enters the controller’s area of jurisdiction or comes within range of radio/communications coverage. Communications include two-way VHF or UHF radio contact, data link, or high frequency (HF) radio through an approved third-party provider such as New York Radio or San Francisco Radio.*

**OLD****4-5-7. ALTITUDE INFORMATION****Title through a NOTE 2**

b. Instructions to climb or descend including restrictions, as required. Specify a time restriction reference the UTC clock reading with a time check. If you are relaying through an authorized communications provider, such as ARINC, FSS, etc., advise the radio operator to issue the current time to the aircraft when the clearance is relayed. The requirement to issue a time check must be disregarded if the clearance is issued via Controller Pilot Data Link Communications (CPDLC).

**OLD****10-4-4. COMMUNICATIONS FAILURE****Title through NOTE 2**

a. In the event of lost communications with an aircraft under your control jurisdiction use all appropriate means available to reestablish communications with the aircraft. These may include, but not be limited to, emergency frequencies, NAVAIDs that are equipped with voice capability, FSS, Aeronautical Radio Incorporated (ARINC), etc.

**NOTE-**

1. ARINC is a commercial communications corporation which designs, constructs, operates, leases or otherwise engages in radio activities serving the aviation community. ARINC has the capability of relaying information to/from subscribing aircraft throughout the country.

2. Aircraft communications addressing and reporting system (ACARS) or selective calling (SELCAL) may be utilized to reestablish radio communications with suitably equipped aircraft. ACARS can be accessed by contacting the San Francisco ARINC communications center, watch supervisor, at 925-294-8297 and 800-621-0140. Provide ARINC the aircraft call sign, approximate location, and contact instructions. In order to utilize the SELCAL system, the SELCAL code for the subject aircraft must be known. If the SELCAL code is not contained in the remarks section of the flight plan, contact the pertinent air carrier dispatch office to determine the code. Then contact the San Francisco ARINC communications center, watch supervisor, at 925-294-8297 and 800-621-0140. Provide ARINC the aircraft call sign, SELCAL code, approximate location, and contact instructions.

**NEW****4-5-7. ALTITUDE INFORMATION****No Change**

b. Instructions to climb or descend including restrictions, as required. Specify a time restriction reference the UTC clock reading with a time check. If you are relaying through an authorized communications provider, such as **New York Radio, San Francisco Radio**, FSS, etc., advise the radio operator to issue the current time to the aircraft when the clearance is relayed. The requirement to issue a time check must be disregarded if the clearance is issued via Controller Pilot Data Link Communications (CPDLC).

**NEW****10-4-4. COMMUNICATIONS FAILURE****No Change**

a. In the event of lost communications with an aircraft under your control jurisdiction use all appropriate means available to reestablish communications with the aircraft. These may include, but **are not** limited to, emergency frequencies, NAVAIDs that are equipped with voice capability, FSS, **New York Radio, San Francisco Radio**, etc.

**NOTE-**

1. **New York Radio and San Francisco Radio are operated by Collins Aerospace (formerly ARINC, Incorporated) under contract with the FAA for communications services. These Radio facilities have the capability of relaying information to/from ATC facilities throughout the country.**

2. **Aircraft communications addressing and reporting system (ACARS) or selective calling (SELCAL) may be utilized to reestablish radio communications with suitably equipped aircraft. ACARS can be utilized by contacting San Francisco Radio at (800)-621-0140 or New York Radio at (800) 645-1095. Provide the aircraft call sign, approximate location, and contact instructions. In order to utilize the SELCAL system, the SELCAL code for the subject aircraft must be known. If the SELCAL code is not contained in the remarks section of the flight plan, contact the pertinent air carrier dispatch office to determine the code. Then contact San Francisco Radio (for aircraft over the Pacific, U.S. or Mexico) or New York Radio (for aircraft over the Atlantic, Gulf of Mexico, or Caribbean) and provide the aircraft call sign, SELCAL code, approximate location, and contact instructions.**

**b.** Broadcast clearances through any available means of communications including the voice feature of NAVAIDs.

No Change

**NOTE-**

**1.** *Some UHF equipped aircraft have VHF navigation equipment and can receive 121.5 MHz.*

No Change

**2.** *“Any available means” includes the use of FSS and ARINC.*

**2.** *“Any available means” includes the use of FSS and New York Radio or San Francisco Radio.*

**REFERENCE-**

*FAA Order JO 7110.65, Para 4-2-2, Clearance Prefix.*

No Change

**1. PARAGRAPH NUMBER AND TITLE:** 3-6-4. SAFETY LOGIC ALERT RESPONSES

**2. BACKGROUND:** Wrong surface landings are one of the ATO’s Top 5 hazards. In July of 2017, an aircraft on a visual approach to the San Francisco International Airport (SFO) lined up to land on a taxiway at night. The agency developed a modification to the airport surface detection equipment (ASDE) to add an alert when it identifies an aircraft is lined up to a taxiway. The SFO incident highlighted the need for this ASDE modification.

Modifications made to the ASDE established alert parameters for taxiways that are independent of runway alert parameters. The alert response time for a taxiway arrival is shorter than the alert time for aircraft inbound to a runway. Given the shortened alert timeframe, aircraft that trigger a taxiway arrival alert must be issued go-around instructions. As a result of this modification, an update to FAA Order JO 7110.65, Air Traffic Control, 3-6-4, Safety Logic Alert Response, is needed.

**3. CHANGE:**

**OLD**  
**3-6-4. SAFETY LOGIC ALERT RESPONSES**  
 Title through **a** *REFERENCE*  
 Add  
  
**b** through **c**

**NEW**  
**3-6-4. SAFETY LOGIC ALERT RESPONSES**  
 No Change  
**b. When an arrival aircraft activates a warning alert to a taxiway, the controller must issue go-around instructions.**  
 Re-letter **c** through **d**

**1. PARAGRAPH NUMBER AND TITLE:** 4-3-4. DEPARTURE RESTRICTIONS, CLEARANCE VOID TIMES, HOLD FOR RELEASE, AND RELEASE TIMES

**2. BACKGROUND:** While investigating multiple runway incidents involving aircraft departing from an airport without an operating control tower, it was identified that the term “Released” or “Released for departure” is being used by some controllers to communicate that the aircraft, having received its departure clearance (IFR flight plan), was now released off the airport. The preamble to this section does not specifically require a distinction. The different methods controllers are using to approve an IFR aircraft to depart from an airport without an operating control tower may cause some confusion. ATC will now be required to state “Released for departure” or “Hold for release” when issuing a departure clearance (IFR flight plan) to an aircraft that is departing from an airport without an operating control tower.

3. CHANGE:

**OLD**

**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.

**REFERENCE-**

FAA Order JO 7110.65, Para 10-3-1, Overdue Aircraft.  
 FAA Order JO 7110.65, Para 10-4-1, Traffic Restrictions.  
 FAA Order JO 7110.65, Para 10-4-3, Traffic Resumption.

a. Clearance Void Times.

Add

1. When issuing clearance void times at airports not served by control towers, provide alternative instructions requiring the pilots to advise ATC of their intentions no later than 30 minutes after the clearance void time if not airborne.

2. The facility delivering a clearance void time to a pilot must issue a time check. A void time issued using a specified number of minutes does not require a time check.

**NEW**

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

Assign departure restrictions, clearance void times, or release times to separate departures from other traffic or to restrict or regulate the departure flow. **Departures from an airport without an operating control tower must be issued either a departure release, a hold for release, or a release time.**

No Change

**a. Departure Release. When conditions allow, release the aircraft as soon as possible.**

**PHRASEOLOGY-**

**To another controller,**  
**(aircraft identification) RELEASED.**

**To a flight service specialist, or Flight Data Communication Specialist (FDCS).**

**ADVISE (aircraft identification) RELEASED FOR DEPARTURE.**

**To a pilot at an airport without an operating control tower,**  
**(aircraft identification) RELEASED FOR DEPARTURE.**

Delete

Delete

**PHRASEOLOGY-**

Delete

**CLEARANCE VOID IF NOT OFF BY (clearance void time),**

and if required,

**IF NOT OFF BY (clearance void time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS.**

**TIME (time in hours, minutes, and the nearest quarter minute).**

Or

**CLEARANCE VOID IF NOT OFF IN (number of minutes) MINUTES**

and if required,

**IF NOT OFF IN (number of minutes) MINUTES, ADVISE (facility) OF INTENTIONS WITHIN (number of minutes) MINUTES.**

**b. Hold For Release (HFR).**

No Change

**1. “Hold for release” instructions must be used when necessary to inform a pilot or a controller that a departure clearance is not valid until additional instructions are received.**

**1. “Hold for release” instructions must be used to inform a pilot or a controller that a departure clearance is not valid until additional instructions are received.**

**REFERENCE-**  
**P/CG Term- Hold for Release.**

No Change

**2. When issuing hold for release instructions, include departure delay information.**

No Change

**PHRASEOLOGY-**

**(Aircraft identification) CLEARED TO (destination) AIRPORT AS FILED, MAINTAIN (altitude),**

**PHRASEOLOGY-**

**(aircraft identification) HOLD FOR RELEASE, EXPECT (time in hours and/or minutes) DEPARTURE DELAY.**

and if required,

(additional instructions or information).

**HOLD FOR RELEASE, EXPECT (time in hours and/or minutes) DEPARTURE DELAY.**

**3. When conditions allow, release the aircraft as soon as possible.**

Delete

**PHRASEOLOGY-**  
*To another controller.*

Delete

*(aircraft identification) RELEASED.*

*To a flight service specialist, or Flight Data Communication Specialist (FDCS)*

**ADVISE (aircraft identification) RELEASED FOR DEPARTURE.**

*To a pilot at an airport not served by a control tower.*

**(aircraft identification) RELEASED FOR DEPARTURE.**

**c through c1 NOTE**

No Change

**2.** The facility issuing a release time to a pilot must issue a time check. A release time using a specified number of minutes does not require a time check.

No Change

**PHRASEOLOGY-**  
*(Aircraft identification) RELEASED FOR DEPARTURE AT (time in hours and/or minutes),*

**PHRASEOLOGY-**  
*(aircraft identification) RELEASED FOR DEPARTURE AT (time in hours and/or minutes),*

*and if required,*

*and if required,*

*IF NOT OFF BY (time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS.*

*IF NOT OFF BY (time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS.*

*TIME (time in hours, minutes, and nearest quarter minute).*

*TIME (time in hours, minutes, and nearest quarter minute).*

**(Aircraft identification) RELEASED FOR DEPARTURE IN (number of minutes) MINUTES**

**(aircraft identification) RELEASED FOR DEPARTURE IN (number of minutes) MINUTES**

*and if required,*

*and if required,*

*IF NOT OFF IN (number of minutes) MINUTES, ADVISE (facility) OF INTENTIONS WITHIN (number of minutes) MINUTES.*

*IF NOT OFF IN (number of minutes) MINUTES, ADVISE (facility) OF INTENTIONS WITHIN (number of minutes) MINUTES.*

**d.** When expect departure clearance times (EDCT) are assigned through traffic management programs, excluding overriding call for release (CFR) operations as described in subparagraph e, the departure terminal must, to the extent possible, plan ground movement of aircraft destined to the affected airport(s) so that flights are sequenced to depart no earlier than 5 minutes before, and no later than 5 minutes after the EDCT. Do not release aircraft on their assigned EDCT if a ground stop (GS) applicable to that aircraft is in effect, unless approval has been received from the originator of the GS.

No Change

e. Call for Release (CFR). When CFR is in effect, release aircraft so they are airborne within a window that extends from 2 minutes prior and ends 1 minute after the assigned time, unless otherwise coordinated.

No Change

NOTE-

1. Subparagraph (e) applies to all facilities.

NOTE-

1. Subparagraph e applies to all facilities.

2. Coordination may be verbal, electronic, or written.

No Change

e1 through e2(a)

No Change

(b) If the pilot's EDCT is not the same as the FAA EDCT, refer to Trust and Verify Note below.

(b) If the pilot's EDCT is not the same as the FAA EDCT, refer to Trust and Verify note below.

e3 and e3 NOTE

No Change

Add

**f. Clearance Void Times.**

Add

**1. When issuing clearance void times at airports without an operating control tower, provide alternative instructions requiring the pilots to advise ATC of their intentions no later than 30 minutes after the clearance void time if not airborne.**

Add

**2. The facility delivering a clearance void time to a pilot must issue a time check. A void time issued using a specified number of minutes does not require a time check.**

Add

**NOTE-**

**If the clearance void time expires, it does not cancel the departure clearance (IFR flight plan). It withdraws the pilot's authority to depart IFR until a new departure release/release time has been issued by ATC and acknowledged by the pilot.**

Add

**PHRASEOLOGY-**

**CLEARANCE VOID IF NOT OFF BY (clearance void time),**

**and if required,**

**IF NOT OFF BY (clearance void time), ADVISE (facility) NOT LATER THAN (time) OF INTENTIONS.**

**TIME (time in hours, minutes, and the nearest quarter minute).**

**Or**

**CLEARANCE VOID IF NOT OFF IN (number of minutes) MINUTES**

**and if required,**

**IF NOT OFF IN (number of minutes) MINUTES, ADVISE (facility) OF INTENTIONS WITHIN (number of minutes) MINUTES.**

**1. PARAGRAPH NUMBER AND TITLE: 4-4-1. ROUTE USE**

**2. BACKGROUND:** FAA Order JO 7110.65Y, paragraph 4-4-1j3, incorrectly labels the EXAMPLE as PHRASEOLOGY.

**3. CHANGE:**

| <u>OLD</u>  | <u>NEW</u>   |
|---|--|
| <b>4-4-1. ROUTE USE</b>   | <b>4-4-1. ROUTE USE</b>  |
| Title through i <i>EXAMPLE 3</i>  | No Change  |
| j. Fixes/waypoints defined in terms of:   | No Change  |
| j1 and j2   | No Change  |
| 3. Latitude/longitude coordinates, state the latitude and longitude in degrees and minutes including the direction from the axis such as North or West; or  | No Change  |
| <b><u>PHRASEOLOGY-</u></b><br><b><u>“32 DEGREES, 45 MINUTES NORTH,<br/>105 DEGREES, 37 MINUTES WEST.”</u></b>   | Delete   |
| 4. Offset from published or established ATS route at a specified distance and direction for random (impromptu) RNAV Routes.   | No Change  |
| <b><u>PHRASEOLOGY-</u></b><br><i>DIRECT (fix/waypoint)</i>  | <b><u>PHRASEOLOGY-</u></b><br><i>DIRECT (fix/waypoint)</i>   |
| <i>DIRECT TO THE (facility) (radial) (distance) FIX.</i>  | <i>DIRECT TO THE (facility) (radial) (distance) FIX.</i>   |
| <i>OFFSET(distance) RIGHT/LEFT OF (route).</i>  | <b><u><i>DIRECT (number degrees) DEGREES, (number minutes) MINUTES (north or south), (number degrees) DEGREES, (number minutes) MINUTES (east or west).</i></u></b>  |
|   | <i>OFFSET (distance) RIGHT/LEFT OF (route).</i>  |
| <b><u>EXAMPLE-</u></b><br><i>“Direct SUNOL.”</i><br><i>“Direct to the Appleton three one zero radial two five mile fix.”</i><br><i>“Offset eight miles right of Victor six.”</i>  | <b><u>EXAMPLE-</u></b><br><i>“Direct SUNOL.”</i><br><i>“Direct to the Appleton three one zero radial two five mile fix.”</i><br><b><u>“Direct 32 degrees, 45 minutes north, 105 degrees, 37 minutes west.”</u></b><br><i>“Offset eight miles right of Victor six.”</i>   |
| <b><u>REFERENCE-</u></b><br><i>FAA Order JO 7110.65, Para 2-3-8 Aircraft Equipment Suffix.</i><br><i>FAA Order JO 7110.65, Para 2-5-3 NAVAID Fixes</i><br><i>FAA Order JO 7110.65, Para 4-1-2, Exceptions</i><br><i>FAA Order JO 7110.65, Para 5-5-1, Application</i><br><i>FAA Order JO 7110.65, Para 6-5-4, Minima Along Other Than Established Airways or Routes.</i><br><i>P/CG Term – Global Navigation Satellite System (GNSS)[ICAO].</i> | <b><u>REFERENCE-</u></b><br><i>FAA Order JO 7110.65, Para 2-3-8, Aircraft Equipment Suffix.</i><br><i>FAA Order JO 7110.65, Para 2-5-3, NAVAID Fixes,</i><br><i>FAA Order JO 7110.65, Para 4-1-2, Exceptions,</i><br><i>FAA Order JO 7110.65, Para 5-5-1, Application,</i><br><i>FAA Order JO 7110.65, Para 6-5-4, Minima Along Other Than Established Airways or Routes.</i><br><i>P/CG Term – Global Navigation Satellite System (GNSS)[ICAO].</i> |

**1. PARAGRAPH NUMBER AND TITLE:**

5-3-4. TERMINAL AUTOMATION SYSTEMS IDENTIFICATION METHODS

5-4-5. TRANSFERRING CONTROLLER HANDOFF

5-4-6. RECEIVING CONTROLLER HANDOFF

**2. BACKGROUND:** In response to an Air Traffic Safety Action Program Corrective Action Request (ATSAP CAR), changes were published in 2015 to JO 7110.65, paragraphs 2-1-14, Coordinate Use of Airspace; 5-4-5, Transferring Controller Handoff; and 5-4-6, Receiving Controller Handoff, to address contradictory language in those paragraphs regarding controller responsibilities for coordination in certain circumstances. However, one subparagraph in 5-4-5 and another in 5-4-6 still imply a specific point-out responsibility that was changed as part of the CAR. That change established that the transferring controller is always responsible for an adjacent sector point-out when the sectors involved in the handoff are in different altitude strata and the receiving controller decides to delay the climb or descent of the aircraft into their airspace, whether that decision is made before OR after accepting the handoff.

Paragraph 5-4-5 does not currently reflect the use of automated information transfer (AIT) procedures regarding the transfer of communications following a subsequent handoff made by a receiving controller. Advances in terminal and en route automation systems have eliminated the need to validate the position of primary or nondiscrete targets during automated intrafacility handoffs in STARS and ERAM, and in MEARTS when operating in Fused Display Mode. Automation advances have also rendered obsolete the data block status indicators “NB,” “TU,” “AM,” “OL,” and “NX.”

**3. CHANGE:****OLD****5-3-4. TERMINAL AUTOMATION SYSTEMS IDENTIFICATION METHODS****Title through a1**

2. The aircraft is being handed off using a NAS automated system and one of the following does not appear in the data block: “CST”, “NAT”, “NT”, “AMB”, “OLD”, “NB”, “TU”, “AM”, “OL”, or “TRK”.

**OLD****5-4-5. TRANSFERRING CONTROLLER HANDOFF**

The transferring controller must:

a. Complete a radar handoff prior to an aircraft’s entering the airspace delegated to the receiving controller.

**REFERENCE-**

*FAA Order JO 7110.65, Para 2-1-14, Coordinate Use of Airspace.*

*FAA Order JO 7110.65, Para 2-1-15, Control Transfer.*

*FAA Order JO 7110.65, Para 5-4-6, Receiving Controller Handoff.*

**NEW****5-3-4. TERMINAL AUTOMATION SYSTEMS IDENTIFICATION METHODS****No Change**

2. The aircraft is being handed off using a NAS automated system and one of the following does not appear in the data block: “CST”, “NAT”, “NT”, “AMB”, “OLD” or “TRK”.

**NEW****5-4-5. TRANSFERRING CONTROLLER HANDOFF**

**Unless otherwise coordinated or specified in an LOA or facility directive, the** transferring controller must:

a. Complete a handoff prior to an aircraft entering the airspace delegated to the receiving controller.

Delete

b. Verbally obtain the receiving controller’s approval prior to making any changes to an aircraft’s flight path, altitude, speed, or data block information while the handoff is being initiated or after acceptance, unless otherwise specified by a LOA or a facility directive.

c. Ensure that, prior to transferring communications:

1. Potential violations of adjacent airspace and potential conflicts between aircraft in their own area of jurisdiction are resolved.

2. Coordination has been accomplished with all controllers through whose area of jurisdiction the aircraft will pass prior to entering the receiving controller’s area of jurisdiction unless otherwise specified by a LOA or a facility directive.

3. Restrictions issued to ensure separation are passed to the receiving controller.

Add

Add

Add

d. After transferring communications, continue to comply with the requirements of subparas c1 and 2.

e. Comply with restrictions issued by the receiving controller unless otherwise coordinated.

f. Comply with the provisions of Paragraph 2-1-17, Radio Communications, subparas a and b. To the extent possible, transfer communications when the transfer of radar identification has been accepted.

**NOTE-**  
Before the ARTS/STARS “modify/quick look” function is used to transfer radar identification, a facility directive which specifies communication transfer points is required.

Add

b. Verbally obtain the receiving controller’s approval prior to making any changes to an aircraft’s flight path, altitude, speed, or data block information while the handoff is being initiated or after acceptance.

c. **Advise the receiving controller of pertinent information not contained in the data block or flight progress strip, including:**

1. **Assigned heading.**

2. **Airspeed restrictions.**

3. **Altitude information issued.**

4. **Observed track or deviation from the last route clearance.**

5. **The beacon code, if different from that normally used or previously coordinated.**

6. **Any other pertinent information.**

d. **Initiate verbal coordination to verify the position of primary or nondiscrete targets, except for intrafacility automated handoffs in STARS, ERAM, or MEARTS in Fused Display Mode.**

e. **Initiate verbal coordination before transferring control of a track when “CST,” “FAIL,” “NONE,” “IF,” “NT,” or “TRK” is displayed in the data block.**

f. **Advise the receiving controller if radar monitoring is required.**

Delete

**REFERENCE-**  
FAA Order JO 7110.65, Para 4-1-2, Exceptions.  
FAA Order JO 7110.65, Para 4-4-2, Route Structure Transitions.

g. Advise the receiving controller of pertinent information not contained in the data block or flight progress strip unless covered in a LOA or facility directive. Pertinent information includes:

- 1. Assigned heading.
- 2. Air speed restrictions.
- 3. Altitude information issued.
- 4. Observed track or deviation from the last route clearance.
- 5. The beacon code if different from that normally used or previously coordinated.
- 6. Any other pertinent information.

h. Ensure that the data block is associated with the appropriate target.

Add

Add

Add

Add

i. Initiate verbal coordination to verify the position of primary or nondiscrete targets when using the automated handoff functions except for intrafacility handoffs using single-sensor systems or multisensory systems operating in a mosaic RDP mode.

Add

j. Initiate verbal coordination before transferring control of a track when “CST,” “FAIL,” “NONE,” “NB,” “NX,” “IF,” “NT”, or “TRK” is displayed in the data block.

k. Advise the receiving controller if radar monitoring is required.

**g. Consider the target being transferred as identified on the receiving controller’s display when the receiving controller acknowledges receipt verbally or accepts the automated handoff.**

Delete

Delete

Delete

Delete

Delete

Delete

**h. Prior to transferring communications:**

**1. Resolve any potential violations of adjacent airspace and potential conflicts with other aircraft in your area of jurisdiction.**

**2. Coordinate with any controller whose area of jurisdiction the aircraft will transit prior to entering the receiving controller’s area of jurisdiction.**

**3. Forward to the receiving controller any restrictions issued to ensure separation.**

**4. Comply with restrictions issued by the receiving controller.**

**i. Comply with the provisions of paragraph 2-1-17, Radio Communications. To the extent possible, transfer communications when the handoff has been accepted.**

**NOTE-**

**Before the STARS “modify/quick look” function is used to effect a handoff, a facility directive that specifies communication transfer points is required.**

**j. After transferring communications, continue to comply with the requirements of subparagraphs h1 and h2.**

**k. Before releasing control of the aircraft, issue restrictions to the receiving controller that are necessary to maintain separation from other aircraft within your area of jurisdiction.**

Add

l. Issue restrictions to the receiving controller which are necessary to maintain separation from other aircraft within your area of jurisdiction before releasing control of the aircraft.

Delete

m. Consider the target being transferred as identified on the receiving controller's display when the receiving controller acknowledges receipt verbally or has accepted an automated handoff.

Delete

n. Accomplish the necessary coordination with any intervening controllers whose area of jurisdiction is affected by the receiving controller's delay in the climb or the descent of an aircraft through the vertical limits of your area of jurisdiction when the receiving controller advises you of that delay before accepting the transfer of radar identification unless otherwise specified by a LOA or a facility directive.

Delete

REFERENCE-

FAA Order JO 7110.65, Para 2-1-14, Coordinate Use of Airspace.

FAA Order JO 7110.65, Para 2-1-15, Control Transfer.

FAA Order JO 7110.65, Para 5-4-6, Receiving Controller Handoff.

FAA Order JO 7110.65, Para 5-4-8, Automated Information Transfer (AIT).

FAA Order JO 7210.3, Para 4-3-8, Automated Information Transfer (AIT).

**OLD**

**5-4-6. RECEIVING CONTROLLER HANDOFF**

**Title through c**

**d.** After accepting a handoff from another controller, confirm the identity of primary target by advising the aircraft of its position, and of a beacon target by observing a code change, an "ident" reply, or a "standby" squawk unless one of these was used during handoff. These provisions do not apply at those towers and GCAs which have been delegated the responsibility for providing radar separation within designated areas by the parent approach control facility and the aircraft identification is assured by sequencing or positioning prior to the handoff.

**REFERENCE-**

FAA Order JO 7110.65, Para 5-9-5, Approach Separation Responsibility.

**e.** When using appropriate equipment, consider a discrete beacon target's identity to be confirmed when:

**1.** The data block associated with the target being handed off indicates the computer assigned discrete beacon code is being received, or

**NEW**

**5-4-6. RECEIVING CONTROLLER HANDOFF**

**No Change**

**d.** After accepting a handoff from another **facility**, confirm the **identification** of **a** primary target by advising the aircraft of its position, and of a **nondiscrete** beacon target by observing a code change, an "ident" reply, or a "standby" squawk unless one of these was used during handoff. These provisions do not apply at those towers and GCAs **that** have been delegated the responsibility for providing radar separation within designated areas by the **overlying** approach control facility and the aircraft identification is assured by sequencing or positioning prior to the handoff.

**No Change**

**e.** Consider a beacon target's identity to be confirmed when:

**1.** The data block associated with the target being handed off indicates the computer assigned discrete beacon code is being received, or

2. You observe the deletion of a discrete code that was displayed in the data block<sub>2</sub> or

**NOTE-**

When the aircraft generated discrete beacon code does not match the computer assigned beacon code, the code generated will be displayed in the data block. When the aircraft changes to the assigned discrete code, the code disappears from the data block. In this instance, the observance of code removal from the data block satisfies confirmation requirements.

3. You observe the numeric display of a discrete code that an aircraft has been instructed to squawk or reports squawking.

f. Take the identified action prior to accepting control of a track when the following indicators are displayed in the data block:

1. “AMB” and “AM”: advise the other facility that a disparity exists between the position declared by their computer and that declared by your STARS system.

2. “NAT”<sub>1</sub> “NT”<sub>2</sub> or “TU”: advise the other facility if a disparity exists between the position declared by their computer and the actual target position.

3. “DATA”<sub>1</sub> “CST”<sub>2</sub> “NONE”<sub>3</sub> “NX”<sub>4</sub> “OLD”<sub>5</sub> or “OL”: initiate verbal coordination.

g. ERAM: Notify the OS when a MISM is displayed in the data block.

h. Advise the transferring controller, prior to accepting the transfer of radar identification, that you will delay the climb or the descent of an aircraft through the vertical limits of the transferring controller’s area of jurisdiction, unless otherwise specified in a LOA or a facility directive.

i. If you decide, after accepting the transfer of radar identification, to delay the aircraft’s climb or descent through the vertical limits of the transferring controller’s area of jurisdiction, advise the transferring controller of that decision as soon as possible.

2. You observe the deletion of a discrete code that was displayed in the data block<sub>2</sub> or

**NOTE-**

When the beacon code received from the aircraft does not match the computer assigned beacon code, the code received (ERAM, MEARTS) or the site-adapted code (received, computer-assigned, or both for STARS) will be displayed in the data block. When the aircraft changes to the computer assigned code, the code is automatically removed from the data block. In this instance, the observance of code removal from the data block satisfies confirmation requirements.

No Change

No Change

1. “AMB”: advise the other facility that a disparity exists between the position declared by their computer and that declared by your STARS system.

2. “NAT” or “NT”: advise the other facility if a disparity exists between the position declared by their computer and the actual target position.

3. “DATA”<sub>1</sub> “CST”<sub>2</sub> “NONE”<sub>3</sub> or “OLD”<sub>5</sub>: initiate verbal coordination.

g. ERAM: Notify the OS/CIC when a MISM is displayed in the data block.

h. Advise the transferring controller as soon as possible if you will delay the climb or descent of the aircraft through the vertical limits of that controller’s area of jurisdiction, unless otherwise specified in an LOA or a facility directive.

Delete

**1. PARAGRAPH NUMBER AND TITLE:** 5–9–6. SIMULTANEOUS DEPENDENT APPROACHES

**2. BACKGROUND:** Recently, a question from a field facility concerning simultaneous dependent approaches brought to light a note that was incorporated into the order in July 2012. Subsequent research found that while the note in question clarified area navigation (RNAV) operations at the time, in the decade since there have been numerous updates to Standards for Terminal Instrument Procedures (TERPS) orders and instrument procedure charting requirements as a result of performance-based navigation (PBN) capabilities. In order to align with current and planned PBN concepts in TERPS orders, the current note is being eliminated. Additionally, all mention of Established on RNP (EoR) operations is wholly contained under simultaneous independent approaches, and this note change is intended to close a gap with the lack of mention under dependent operations.

**3. CHANGE:**

| <u>OLD</u>   | <u>NEW</u>  |
|--|---|
| <p><b>5–9–6. SIMULTANEOUS DEPENDENT APPROACHES</b></p> <p style="text-align: center;"><b>Title through a5 REFERENCE</b></p> <p>b. The following conditions are required when applying the minimum radar separation on adjacent final approach courses allowed in subparagraph a:</p> <p><i>NOTE–</i><br/> <b>1. <u>Simultaneous dependent approaches involving an RNAV approach may only be conducted when (GPS) appears in the approach title or a chart note states that GPS is required.</u></b></p> <p><b>2. <u>Simultaneous dependent approaches may only be conducted where instrument approach charts specifically authorize simultaneous approaches to adjacent runways.</u></b></p> | <p><b>5–9–6. SIMULTANEOUS DEPENDENT APPROACHES</b></p> <p style="text-align: center;">No Change</p> <p style="text-align: center;">No Change</p> <p><i>NOTE–</i><br/> <b>1. <u>Established on RNP (EoR) operations are not authorized in conjunction with simultaneous dependent approaches.</u></b></p> <p><b>2. <u>Simultaneous dependent approaches may only be conducted where instrument approach charts specifically authorize simultaneous approaches.</u></b></p> |

**1. PARAGRAPH NUMBER AND TITLE:**

5–9–7. SIMULTANEOUS INDEPENDENT APPROACHES– DUAL & TRIPLE

5–9–8. SIMULTANEOUS INDEPENDENT CLOSE PARALLEL APPROACHES –PRECISION RUNWAY MONITOR (PRM) APPROACHES

5–9–9. SIMULTANEOUS OFFSET INSTRUMENT APPROACHES (SOIA)

**2. BACKGROUND:** The Flight Standards Service (AFS) completed a safety study, DOT/FAA/AFS400/2017/R/14, in July 2017 concerning altitude sensitivity in the conduct of simultaneous independent instrument approaches. The study evaluated simultaneous parallel approaches beginning at sea level up to 6000 feet MSL. This was done to account for all airports within the NAS that could conduct these types of approach procedures. The study found that for all operations, the collision risk associated at the study altitudes meets the FAA target level of safety of  $1 \times 10^{-9}$ . This allows the removal of the currently articulated airfield elevations as a condition for conducting these types of simultaneous approaches. Additionally, in May 2018, FAA Flight Standards Service, Flight Technologies and Procedures Division, (AFS–400) completed the Safety Study of Closely Spaced Parallel Operations with High Update Rate (HUR) Surveillance (DOT/FAA/AFS400/2018/R/22). This study showed that during the conduct of closely spaced simultaneous parallel approaches, runway centerline spacing could be reduced provided HUR surveillance is utilized and the processing time for presentation of the updated target reports is less than 3 seconds.

3. CHANGE:

**OLD**

**5-9-7. SIMULTANEOUS INDEPENDENT APPROACHES- DUAL & TRIPLE**

**Title through a1(b) REFERENCE**

2. Dual parallel runway centerlines are at least 3,600 feet apart, or dual parallel runway centerlines are at least 3,000 feet apart with a 2.5° to 3.0° offset approach to either runway and the airport field elevation is 2,000 feet MSL or less.

**NOTE-**  
Airport field elevation requirement does not apply to dual parallel runways that are 4,300 feet or more apart.

3. Triple parallel approaches may be conducted under one of the following conditions:

(a) Parallel runway centerlines are at least 3,900 feet apart and the airport field elevation is 2,000 feet MSL or less; or

(b) Parallel runway centerlines are at least 3,000 feet apart, a 2.5° to 3.0° offset approach to both outside runways, and the airport field elevation is 2,000 feet MSL or less; or

(c) Parallel runway centerlines are at least 3,000 feet apart, a single 2.5° to 3.0° offset approach to either outside runway while parallel approaches to the remaining two runways are separated by at least 3,900 feet, and the airport field elevation is 2,000 feet MSL or less.

(d) Parallel approaches to airports where the airport field elevation is more than 2,000 feet MSL require the use of the final monitor aid (FMA) system and an approved FAA aeronautical study.

**a4 and a4 NOTE**

Add

Add

Add

**NEW**

**5-9-7. SIMULTANEOUS INDEPENDENT APPROACHES- DUAL & TRIPLE**

No Change

2. Dual parallel runway centerlines are at least 3,600 feet apart, or dual parallel runway centerlines are at least 3,000 feet apart with a 2.5° to 3.0° offset approach to either runway.

Delete

3. Triple parallel approaches may be conducted **when:**

(a) Parallel runway centerlines are at least 3,900 feet apart; or

(b) Parallel runway centerlines are at least 3,000 feet apart, a 2.5° to 3.0° offset approach to both outside runways; or

(c) Parallel runway centerlines are at least 3,000 feet apart, a single 2.5° to 3.0° offset approach to either outside runway while parallel approaches to the remaining two runways are separated by at least 3,900 feet.

(d) Parallel approaches to airports where the airport field elevation is more than 2,000 feet MSL require the use of the final monitor aid (FMA) system.

No Change

**HIGH UPDATE RATE SURVEILLANCE**

**b. At locations with high update rate surveillance, simultaneous independent approaches may be conducted where the surveillance update rate is 1 second or faster, the system processing time is 3 seconds or faster, and under the following conditions:**

**1. Dual parallel runway centerlines are at least 3,200 feet apart, or dual parallel runway centerlines are at least 2,500 feet apart with a 2.5° to 3.0° offset approach to either runway.**

Add

**2. Triple parallel runway centerlines are at least 3,400 feet apart, or triple parallel runway centerlines are at least 2,500 feet apart with a 2.5° to 3.0° offset approach to both outside runways, or triple parallel runway centerlines are at least 2,500 feet apart, a single 2.5° to 3.0° offset approach to either outside runway while parallel approaches to the remaining two runways are separated by at least 3,400 feet.**

Add

**NOTE-**  
**Aircraft without functioning ADS-B Out are restricted from utilizing these high update rate (HUR) procedures unless an alternative HUR surveillance source providing one-second or faster target report updating is utilized.**

Add

**3. A surveillance update rate of at least 1 second is required for monitoring the no transgression zone (NTZ) when conducting simultaneous independent approaches to the runway centerline spacing (RCLS) provided in this paragraph.**

Add

**NOTE-**  
**1. HUR procedures cannot be conducted if notified that a one second update rate is not being provided.**

Add

**2. Where RCLS is <3400 feet, the normal operating zone (NOZ) is constant at 700 feet; and for RCLS >3400 feet, the no transgression zone (NTZ) remains constant at 2000 feet.**

Add

**4. Provide the minimum applicable radar separation between aircraft on the same final approach course.**

**b.** A color digital display set to a 4 to 1 (4:1) aspect ratio (AR) with visual and aural alerts, such as the STARS final monitor aid (FMA), and a surveillance update rate at least 4.8 seconds must be used to monitor approaches where:

**1.** Dual parallel runway centerlines are at least 3,000 and less than 4,300 feet apart.

**2.** Triple parallel runway centerlines are at least 3,000 but less than 5,000 feet apart and the airport field elevation is 2,000 feet MSL or less.

**3.** Triple parallel approaches to airports where the airport field elevation is more than 2,000 feet MSL require use of the FMA system and an approved FAA aeronautical study.

**NOTE-**  
*FMA is not required to monitor the NTZ for runway centerlines 4,300 feet or greater for dual runways, and 5,000 feet or greater for triple operations.*

**c.** A color digital display set to a 4 to 1 (4:1) aspect ratio (AR) with visual and aural alerts, such as the STARS final monitor aid (FMA), and a surveillance update rate at 4.8 seconds **or faster** must be used to monitor approaches where:

No Change

**2.** Triple parallel runway centerlines are at least 3,000 but less than 5,000 feet apart.

**3.** Triple parallel approaches to airports where the airport field elevation is more than 2,000 feet MSL require use of the FMA system.

**NOTE-**  
**At locations where the airfield elevation is 2000 feet or less, FMA is not required to monitor the NTZ for runway centerlines 4,300 feet or greater for dual runways, and 5,000 feet or greater for triple operations.**

**c through c2**

**3.** Inform aircraft that simultaneous independent approaches are in use, or when runway centerlines are less than 4,300 feet PRM approaches are in use, prior to aircraft departing an outer fix. This information may be provided through the ATIS.

**REFERENCE-**

*P/CG Term- Precision Runway Monitor (PRM) System.*

**4.** Clear the aircraft to descend to the appropriate glideslope/glidepath intercept altitude soon enough to provide a period of level flight to dissipate excess speed. Provide at least 1 mile of straight flight prior to the final approach course intercept.

**NOTE-**

*Not applicable to approaches with RF legs.*

**5.** An NTZ at least 2,000 feet wide is established an equal distance between extended runway final approach courses and must be depicted on the monitor display. The primary responsibility for navigation on the final approach course rests with the pilot. Control instructions and information are issued only to ensure separation between aircraft and to prevent aircraft from penetrating the NTZ.

Add

**6.** Monitor all approaches regardless of weather. Monitor local control frequency to receive any aircraft transmission. Issue control instructions as necessary to ensure aircraft do not enter the NTZ.

**NOTE-**

**1.** *Separate monitor controllers, each with transmit/receive and override capability on the local control frequency, must ensure aircraft do not penetrate the depicted NTZ. Facility directives must define responsibility for providing the minimum applicable longitudinal separation between aircraft on the same final approach course.*

**2.** *The aircraft is considered the center of the primary radar return for that aircraft, or, if an FMA or other color final monitor aid is used, the center of the digitized target of that aircraft, for the purposes of ensuring an aircraft does not penetrate the NTZ. The provisions of Paragraph 5-5-2, Target Separation, apply also.*

**7.** Communications transfer to the tower controller’s frequency must be completed prior to losing 1,000 feet vertical or 3 miles radar separation between aircraft.

**Re-letter d through d2**

**3.** Inform aircraft that simultaneous independent approaches are in use, or when runway centerlines are less than 4,300 feet, PRM approaches are in use, prior to aircraft departing an outer fix. This information may be provided through the ATIS.

No Change

No Change

No Change

**5.** An NTZ is established an equal distance between extended runway final approach courses and must be depicted on the monitor display. The primary responsibility for navigation on the final approach course rests with the pilot. Control instructions and information are issued only to ensure separation between aircraft and to prevent aircraft from penetrating the NTZ.

**NOTE-**

*Where RCLS is <3400 feet, the normal operating zone (NOZ) is constant at 700 feet; and for RCLS >3400 feet, the no transgression zone (NTZ) remains constant at 2000 feet.*

No Change

**NOTE-**

**1.** *Separate monitor controllers, each with transmit/receive and override capability on the local control frequency, must ensure aircraft do not penetrate the depicted NTZ. For PRM approaches, a transmit-only secondary “PRM frequency” is also used. Facility directives must define responsibility for providing the minimum applicable longitudinal separation between aircraft on the same final approach course.*

No Change

No Change

**d.** The following procedures must be used by the final monitor controllers:

Add

Add

**1.** Instruct the aircraft to return to the correct final approach course when aircraft are observed to overshoot the turn-on or to continue on a track which will penetrate the NTZ.

**PHRASEOLOGY-**

*YOU HAVE CROSSED THE FINAL APPROACH COURSE. TURN (left/right) IMMEDIATELY AND RETURN TO THE FINAL APPROACH COURSE, or TURN (left/right) AND RETURN TO THE FINAL APPROACH COURSE.*

**2.** Instruct aircraft on the adjacent final approach course to alter course to avoid the deviating aircraft when an aircraft is observed penetrating or in your judgment will penetrate the NTZ.

Add

**PHRASEOLOGY-**

*TRAFFIC ALERT, (call sign), TURN (right/left) IMMEDIATELY HEADING (degrees), CLIMB AND MAINTAIN (altitude).*

**d3** through **d5**

**e.** Consideration should be given to known factors that may in any way affect the safety of the instrument approach phase of flight when simultaneous independent approaches are being conducted to parallel runways. Factors include, but are not limited to, wind direction/velocity, windshear alerts/reports, severe weather activity, etc. Closely monitor weather activity that could impact the final approach course. Weather conditions in the vicinity of the final approach course may dictate a change of approach in use.

**REFERENCE-**

*FAA Order JO 7110.65, Para 5-1-13, Radar Service Termination.  
FAA Order JO 7110.65, Para 5-9-2, Final Approach Course Interception.*

**e.** The following procedures must be used by the final monitor controllers:

**1. For PRM approaches, provide position information to an aircraft that is left/right of the depicted final approach course centerline, and in your judgment is continuing on a track that may penetrate the NTZ.**

**PHRASEOLOGY-**

*(Aircraft call sign) I SHOW YOU (left/right) OF THE FINAL APPROACH COURSE.*

**2.** Instruct the aircraft to return to the correct final approach course when aircraft are observed to overshoot the turn-on or to continue on a track which will penetrate the NTZ.

No Change

**3.** Instruct aircraft on the adjacent final approach course to alter course to avoid the deviating aircraft when an aircraft is observed penetrating or in your judgment will penetrate the NTZ.

**NOTE-**

*For PRM approaches, an instruction that may include a descent to avoid the deviating aircraft should only be used when there is no other reasonable option available to the controller. In such a case, the descent must not put the aircraft below the MVA.*

**PHRASEOLOGY-**

*TRAFFIC ALERT, (call sign), TURN (right/left) IMMEDIATELY HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude).*

Renumber **e4** through **e6**

**f.** Consideration should be given to known factors that may in any way affect the safety of the instrument approach phase of flight when simultaneous independent approaches, **or PRM approaches, if applicable**, are being conducted to parallel runways. Factors include, but are not limited to, wind direction/velocity, windshear alerts/reports, severe weather activity, etc. Closely monitor weather activity that could impact the final approach course. Weather conditions in the vicinity of the final approach course may dictate a change of approach in use.

No Change

**OLD**

**5-9-8. SIMULTANEOUS INDEPENDENT  
CLOSE PARALLEL APPROACHES  
-PRECISION RUNWAY MONITOR (PRM)  
APPROACHES**

*TERMINAL*

Add

a. PRM approaches may only be conducted when charted in the approach title, and where instrument approach charts specifically authorize simultaneous approaches.

**REFERENCE-**

*P/CG- Precision Runway Monitor (PRM) System  
P/CG-Simultaneous Close Parallel Approaches*

b. PRM approaches must be assigned when conducting instrument approaches to dual and triple parallel runways with runway centerlines separated by less than 4,300 feet.

c. Provide a minimum of 1,000 feet vertical or a minimum of 3 miles radar separation between aircraft during turn-on to parallel or offset final approach.

**NOTE-**

Communications transfer to the tower controller's frequency must be completed prior to losing vertical separation between aircraft.

d. Provide the minimum applicable radar separation between aircraft on the same final approach course.

**REFERENCE-**

*FAA Order JO 7110.65, Para 5-5-4, Minima.*

e. The following conditions must be met when conducting dual and triple PRM approaches:

1. Straight-in landings will be made.

2. All appropriate communication, navigation, and surveillance systems are operating normally.

3. Inform aircraft that PRM approaches are in use prior to aircraft departing an outer fix. This information may be provided through the ATIS.

4. Clear the aircraft to descend to the appropriate glideslope/glidepath intercept altitude soon enough to provide a period of level flight to dissipate excess speed. Provide at least 1 mile of straight flight prior to the final approach course intercept.

**NOTE-**

Not applicable to approaches with RF legs.

**NEW**

**5-9-8. SIMULTANEOUS INDEPENDENT  
CLOSE PARALLEL APPROACHES  
-PRECISION RUNWAY MONITOR (PRM)  
APPROACHES**

No Change

**When conducting PRM approaches, apply all pertinent provisions of paragraph 5-9-7 and the following:**

No Change

**REFERENCE-**

*P/CG - Precision Runway Monitor (PRM) System,  
P/CG - Simultaneous Close Parallel Approaches,  
P/CG - PRM Approach.*

No Change

Delete

Delete

Delete

Delete

Delete

Delete

Delete

Delete

Delete

Delete

5. An NTZ at least 2,000 feet wide is established an equal distance between extended runway final approach courses and must be depicted on the monitor display. The primary responsibility for navigation on the final approach course rests with the pilot. Control instructions and information are issued only to ensure separation between aircraft and to prevent aircraft from penetrating the NTZ.

Delete

6. Monitor all approaches regardless of weather. Monitor local control frequency to receive any aircraft transmission. Issue control instructions as necessary to ensure aircraft do not enter the NTZ.

Delete

7. Separate monitor controllers, each with transmit/receive and override capability on the local control frequency, must ensure aircraft do not penetrate the depicted NTZ. Facility directives must define the responsibility for providing the minimum applicable longitudinal separation between aircraft on the same final approach course.

Delete

NOTE-

The aircraft is considered the center of the digitized target for the purposes of ensuring an aircraft does not penetrate the NTZ.

Delete

f. The following procedures must be used by the final monitor controllers:

Delete

1. Provide position information to an aircraft that is (left/right) of the depicted final approach course centerline, and in your judgment is continuing on a track that may penetrate the NTZ.

Delete

PHRASEOLOGY-

(Aircraft call sign) I SHOW YOU (left/right) OF THE FINAL APPROACH COURSE.

Delete

2. Instruct the aircraft to return immediately to the correct final approach course when aircraft are observed to overshoot the turn-on or continue on a track which will penetrate the NTZ.

Delete

PHRASEOLOGY-

YOU HAVE CROSSED THE FINAL APPROACH COURSE. TURN (left/right) IMMEDIATELY AND RETURN TO THE FINAL APPROACH COURSE.

Delete

Or

TURN (left/right) AND RETURN TO THE FINAL APPROACH COURSE.

3. Instruct aircraft on the adjacent final approach course to alter course to avoid the deviating aircraft when an aircraft is observed penetrating or in your judgment will penetrate the NTZ.

Delete

**NOTE-**

An instruction that may include a descent to avoid the deviating aircraft should only be used when there is no other reasonable option available to the controller. In such a case, the descent must not put the aircraft below the MVA.

Delete

**PHRASEOLOGY-**

TRAFFIC ALERT, (call sign), TURN (left/right)  
IMMEDIATELY HEADING (DEGREES), CLIMB  
AND MAINTAIN (altitude).

Delete

**4. Terminate radar monitoring when one of the following occurs:**

Delete

**(a) Visual separation is applied.**

Delete

**(b) The aircraft reports the approach lights or runway in sight.**

Delete

**(c) The aircraft is 1 mile or less from the runway threshold, if procedurally required, and contained in facility directives.**

Delete

**5. Do not inform the aircraft when radar monitoring is terminated.**

Delete

**6. Do not apply the provisions of Paragraph 5-13-1, Monitor on PAR Equipment, for PRM approaches.**

Delete

**g. Consideration should be given to known factors that may in any way affect the safety of the instrument approach phase of flight when PRM approaches are being conducted to parallel runways. Factors include, but are not limited to, wind direction/velocity, windshear alerts/reports, severe weather activity, etc. Closely monitor weather activity that could impact the final approach course. Weather conditions in the vicinity of the final approach course may dictate a change of the approach in use.**

Delete

**REFERENCE-**

FAA Order JO 7110.65, Para 5-1-13, Radar Service Termination.  
FAA Order JO 7110.65, Para 5-9-2, Final Approach Course  
Interception.

Delete

**OLD**

**5-9-9. SIMULTANEOUS OFFSET  
INSTRUMENT APPROACHES (SOIA)**

**Title through b4 NOTE**

**NEW**

**5-9-9. SIMULTANEOUS OFFSET  
INSTRUMENT APPROACHES (SOIA)**

**No Change**

5. A No Transgression Zone (NTZ) at least 2,000 feet wide is established an equal distance between extended runway final approach courses and must be depicted on the monitor display. The NTZ begins prior to the point where adjacent inbound aircraft first lose vertical separation and extends to a point coincident with the location of the offset approach MAP. The primary responsibility for navigation on the final approach course rests with the pilot. Control instructions and information are issued only to ensure separation between aircraft and to prevent aircraft from penetrating the NTZ.

Add

5. A no transgression zone (NTZ) is established an equal distance between extended runway final approach courses and must be depicted on the monitor display. The NTZ begins prior to the point where adjacent inbound aircraft first lose vertical separation and extends to a point coincident with the location of the offset approach MAP. The primary responsibility for navigation on the final approach course rests with the pilot. Control instructions and information are issued only to ensure separation between aircraft and to prevent aircraft from penetrating the NTZ.

NOTE-

Where RCLS is <3400 feet, the normal operating zone (NOZ) is constant at 700 feet; and for RCLS >3400 feet, the no transgression zone (NTZ) remains constant at 2000 feet.

**1. PARAGRAPH NUMBER AND TITLE:** 7-4-4. APPROACHES TO MULTIPLE RUNWAYS

**2. BACKGROUND:** Visual approaches are used by air traffic control to reduce pilot and controller workload and to expedite traffic by shortening flight paths to the airport. These approaches have been used successfully for many years. In December 2018, the Mission Support Services, Policy Directorate, AJV-P, answered an interpretation from the Central Service Area. In this interpretation, guidance was provided for aircraft approaching the airport from the same side of the airport. As a result of the interpretation, content is being added to the order to address this scenario.

**3. CHANGE:**

**OLD**

**7-4-4. APPROACHES TO MULTIPLE RUNWAYS**

**Title through b**

**1.** Do not permit the respective aircrafts' primary radar targets to touch unless visual separation is being applied.

**2.** When the aircraft flight paths intersect, ensure approved separation is maintained until visual separation is provided.

**c.** In addition to the requirements in Paragraph 7-2-1, Visual Separation, Paragraph 7-4-1, Visual Approach, Paragraph 7-4-2, Vectors for Visual Approach, and Paragraph 7-4-3, Clearance for Visual Approach, the following conditions apply to visual approaches being conducted simultaneously to parallel, intersecting, and converging runways, as appropriate:

**NEW**

**7-4-4. APPROACHES TO MULTIPLE RUNWAYS**

**No Change**

**1.** Do not permit the respective aircrafts' primary radar targets/fusion target symbols to touch unless visual separation is being applied.

**2.** When the aircraft flight paths intersect, ensure approved separation is maintained until visual separation is applied.

**c.** The following conditions apply to visual approaches being conducted simultaneously to parallel, intersecting, and converging runways, as appropriate:

1. Parallel runways separated by less than 2,500 feet. Unless approved separation is provided by ATC, an aircraft must report sighting a preceding aircraft making an approach (instrument or visual) to the adjacent parallel runway. When an aircraft reports another aircraft in sight on the adjacent final approach course and visual separation is applied, controllers must advise the succeeding aircraft to maintain visual separation. However, do not permit a super or heavy aircraft to overtake another aircraft. Do not permit a B757 or other large aircraft to overtake a small aircraft.

2. Parallel runways separated by at least 2,500 feet, but less than 4,300 feet.

(a) Approved separation is provided until the aircraft are:

(1) Established on a heading or established on a direct course to a fix or cleared on an RNAV/ instrument approach procedure which will intercept the extended centerline of the runway at an angle not greater than 30 degrees, and,

(2) Issued an approach clearance and one pilot has acknowledged receipt of a visual approach clearance, and,

(3) The other pilot has acknowledged receipt of a visual or instrument approach clearance.

**NOTE-**

1. The intent of the 30 degree intercept angle is to reduce the potential for overshoots of the extended centerline of the runway and preclude side-by-side operations with one or both aircraft in a "belly-up" configuration during the turn. Aircraft performance, speed, and the number of degrees of the turn are factors to be considered when vectoring aircraft to parallel runways.

2. Variances between heading assigned to intercept the extended centerline of the runway and aircraft ground track are expected due to the effect of wind and course corrections after completion of the turn and pilot acknowledgment of a visual approach clearance.

3. Procedures using Radius-to-Fix legs that intercept final may be used in lieu of 30-degree intercept provisions contained in this paragraph.

1. Parallel runways separated by less than 2,500 feet. Unless approved separation is **maintained**, an aircraft must report sighting a preceding aircraft making an approach (instrument or visual) to the adjacent parallel runway. When an aircraft reports another aircraft in sight on the adjacent final approach course and visual separation is applied, controllers must advise the succeeding aircraft to maintain visual separation. **Do not permit an aircraft to overtake another aircraft when wake turbulence separation is required.**

2. Parallel runways separated by 2,500 feet but less than 4,300 feet.

(a) **When aircraft are approaching from opposite base legs, or one aircraft is turning to final and another aircraft is established on the extended centerline for the adjacent runway, approved separation is provided until the aircraft are:**

No Change

(2) **One pilot has acknowledged receipt of a visual approach clearance and the other pilot has acknowledged receipt of a visual or instrument approach clearance.**

Delete

Delete

Delete

Delete

REFERENCE-  
FAA Publication, Pilot's Handbook of Aeronautical Knowledge,  
Chapter 15 "Effect of Wind."

Delete

(b) Visual approaches may be conducted to one runway while visual or instrument approaches are conducted simultaneously to other runways, provided the conditions of subpara (a) are met.

**(b) When aircraft are approaching from the same side of the airport and the lead aircraft is assigned the nearer runway, approved separation is maintained or pilot-applied visual separation is provided by the succeeding aircraft until intercepting the farther adjacent runway extended centerline.**

(c) Provided aircraft flight paths do not intersect, and when the provisions of subparagraphs (a) and (b) are met, it is not necessary to apply any other type of separation with aircraft on the adjacent final approach course.

**(c) Provided that aircraft flight paths do not intersect, when the provisions of subparagraphs (a) or (b) are met, it is not necessary to apply any other type of separation with aircraft on the adjacent final approach course.**

Add

**(d) When aircraft are approaching from the same side of the airport and the lead aircraft is assigned the farther runway, the succeeding aircraft must be assigned a heading that will intercept the extended centerline of the nearer runway at an angle not greater than 30 degrees. Approved separation must be maintained or pilot-applied visual separation must be provided by the succeeding aircraft until it is established on the extended centerline of the nearer runway.**

Add

**NOTE-**  
**1. The intent of the 30 degree intercept angle is to reduce the potential for overshoots of the extended centerline of the runway and preclude side-by-side operations with one or both aircraft in a "belly-up" configuration during the turn. Aircraft performance, speed, and the number of degrees of the turn are factors to be considered when vectoring aircraft to parallel runways.**

Add

**2. The 30-degree intercept angle is not necessary when approved separation is maintained until the aircraft are established on the extended centerline of the assigned runway.**

Add

**3. Variances between heading assigned to intercept the extended centerline of the runway and aircraft ground track are expected due to the effect of wind and course corrections after completion of the turn and pilot acknowledgment of a visual approach clearance.**

Add

**4. Procedures using Radius-to-Fix legs that intercept final may be used in lieu of the 30-degree intercept provisions contained in this paragraph.**

3. Parallel runways separated by 4,300 feet or more.

No Change

(a) When aircraft flight paths do not intersect, visual approaches may be conducted simultaneously, provided approved separation is maintained until one of the aircraft has been issued and the pilot has acknowledged receipt of the visual approach clearance.

(b) Visual approaches may be conducted to one runway while visual or instrument approaches are conducted simultaneously to other runways, provided the conditions of subpara (a) are met.

(c) Provided the aircraft flight paths do not intersect, when the provisions of subparas (a) and (b) are met, it is not necessary to apply any other type of separation with aircraft on the adjacent final approach course.

(d) Each aircraft must either be assigned a heading or established on a direct course to a fix or cleared on an RNAV/instrument approach procedure which will allow the aircraft to intercept the extended centerline of the runway at an angle not greater than 30 degrees.

**NOTE-**

**1.** *The intent of the 30 degree intercept angle is to reduce the potential for overshoots of the extended centerline of the runway and preclude side-by-side operations with one or both aircraft in a "belly-up" configuration during the turn. Aircraft performance, speed, and the number of degrees of the turn are factors to be considered when vectoring aircraft to parallel runways.*

Add

**2.** *Variations between heading assigned to intercept the extended centerline of the runway and aircraft ground track are expected due to the effect of wind and course corrections after completion of the turn and pilot acknowledgment of a visual approach clearance.*

**3.** *Procedures using Radius-to-Fix legs that intercept final may be used in lieu of 30-degree intercept provisions contained in this paragraph.*

**REFERENCE-**

*FAA Publication, Pilot's Handbook of Aeronautical Knowledge, Chapter 15 "Effect of Wind."*

**c4 and c4(a)**

(b) When aircraft flight paths intersect, approved separation must be maintained until visual separation is provided.

(a) When **the** flight paths do not intersect, visual approaches may be conducted simultaneously provided **that** approved separation is maintained until one of the aircraft has been issued and the pilot has acknowledged receipt of the visual approach clearance.

(b) Visual approaches may be conducted to one runway while visual or instrument approaches are conducted simultaneously to other runways, provided the conditions of **subparagraph** (a) are met.

(c) Provided the flight paths do not intersect, when the provisions of **subparagraphs** (a) and (b) are met, it is not necessary to apply any other type of separation with aircraft on the adjacent final approach course.

No Change

No Change

**2. The 30-degree intercept angle is not necessary when approved separation is maintained until the aircraft are established on the extended centerline of the assigned runway.**

**3.** *Variations between heading assigned to intercept the extended centerline of the runway and aircraft ground track are expected due to the effect of wind and course corrections after completion of the turn and pilot acknowledgment of a visual approach clearance.*

**4.** *Procedures using Radius-to-Fix legs that intercept final may be used in lieu of 30-degree intercept provisions contained in this paragraph.*

Delete

No Change

No Change

**NOTE-**

*Although simultaneous approaches may be conducted to intersecting runways, staggered approaches may be necessary to meet the airport separation requirements specified in Paragraph 3-10-4, Intersecting Runway/ Intersecting Flight Path Separation.*

**REFERENCE-**

FAA Order 7110.79, Charted Visual Flight Procedures.  
FAA Order JO 7110.65, Para 7-4-5, Charted Visual Flight Procedures (CVFP). USA/USN Not Applicable.  
FAA Order JO 7110.65, Para 7-7-3, Separation.

No Change

**REFERENCE-**

FAA Order JO 7110.65, Para 7-7-3, Separation.  
FAA Order JO 7110.65, Para 7-8-3, Separation.  
FAA Order JO 7110.65, Para 7-9-4, Separation.

**1. PARAGRAPH NUMBER AND TITLE:** 9-2-14. MILITARY OPERATIONS ABOVE FL 600

**2. BACKGROUND:** Due to security requirements, altitude information of military operations above FL 600 are not openly transmitted on air/ground or landline circuits. Controllers and pilots use codes when relaying altitude information that pertains to military operations above FL 600.

FAA Order JO 7110.65, paragraph 9-2-14f, Note 1, uses the term “classified” to describe the type of document for detailing the plan for ascertaining altitude codes at the operational position. It is operationally advantageous to allow facilities flexibility to provide controllers with information to ascertain altitude codes without specifying use of a classified document.

**3. CHANGE:**

| <u>OLD</u>   | <u>NEW</u>   |
|--|--|
| <p><b>9-2-14. MILITARY OPERATIONS ABOVE FL 600</b></p> <p style="text-align: center;"><b>Title through f NOTE</b></p> <p><b>1.</b> Paragraph 4-5-1, Vertical Separation Minima: 5,000 feet.</p> <p><b>NOTE-</b></p> <p><b>1.</b> <i>The security requirements of the military services preclude the transmission of actual altitude information on the air/ground or landline circuits. <u>A classified document detailing the plan for ascertaining altitude codes for the day should be readily available to the controllers at their positions of operation.</u></i></p> <p><b>2.</b> <i>Pilots will report their altitude, using the coded plan, and intended flight profile on initial contact with each ARTCC.</i></p> | <p><b>9-2-14. MILITARY OPERATIONS ABOVE FL 600</b></p> <p style="text-align: center;">No Change</p> <p style="text-align: center;">No Change</p> <p><b>NOTE-</b></p> <p><b>1.</b> <i>The security requirements of the military services preclude the transmission of actual altitude information on the air/ground or landline circuits. <u>Altitude information for the day should be readily available to the controllers at their positions of operation. The classification requirements of the altitude information remains unchanged.</u></i></p> <p style="text-align: center;">No Change</p> |