

DOCUMENT CHANGE PROPOSAL/BRIEFING SHEET

FINAL DISPOSITION (INITIAL Not Required)

ORDER/PUBLICATION: 7210.3X

CHANGE: 1

EFFECTIVE DATE: July 26, 2012

TRACKING #: 31- 10-4-6

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1. PARAGRAPH NUMBER AND TITLE:

10-4-6. SIMULTANEOUS ILS/MLS APPROACHES

2. BACKGROUND: Forty-three airports currently conduct simultaneous approaches to parallel runways. The use of simultaneous approaches is an important procedural method for airports to handle a high volume of arrival traffic without extensive delays. Current requirements stipulate that all components of the ILS, including the glide slope, must be functioning to use those simultaneous approaches.

When a glide slope outage occurs, it can have a significant impact on the airport acceptance rate. Options to work around an outage of a glide slope could include a single runway arrival operation, or dual simultaneous approaches at airports where triple approach operations are conducted. These options reduce arrival capacity by one-third to one-half. Another option is to utilize runways that are not the preferred runways for wind direction. This option could present issues with long landing rolls, longer runway occupancy times, and tail wind on final. The last option is to use a runway designed as a departure runway for arrivals. This often introduces new risks associated with increased runway crossings and lack of high speed taxiways.

3. EXPLANATION OF CHANGE: An SRM panel convened on December 8-9, 2011, and created a procedure (DCP) that allows continued use of ILS approaches with a glide slope unusable. Periods of 29 days or less require an approved contingency plan and periods of 30 days or more require an AOV approved waiver in addition to the approved contingency plan. The glideslope out contingency plan must be approved by Terminal Safety and Operations Support, ATO-Safety, the Air Traffic Safety Oversight Service (AOV), and FAA Flight Standards (AFS-400) prior to conducting ILS (glideslope unusable) operations and must include a detailed plan how the facility will mitigate the loss of the glide slope to their respective runway pairing. This change cancels and incorporates N JO 7210.802, Simultaneous Dependent and Independent Approaches, effective January 18, 2012.

4. CHANGE:

OLD

10-4-6. SIMULTANEOUS ILS/MLS APPROACHES

The concept for conducting simultaneous ILS, MLS, or ILS and MLS approaches to parallel runways with straight-in approaches is:

Add

Add

Add

a. A separate ILS/MLS system is required for each parallel runway. A minimum distance of

NEW

10-4-6. SIMULTANEOUS APPROACHES **(DEPENDENT/INDEPENDENT)**

The requirements for conducting simultaneous **straight-in** approaches to parallel runways are:

a. Dependent approaches may be conducted when a minimum distance of 2,500 feet, but no more than 9,000 feet, exists between centerlines.

REFERENCE-

FAAO JO 7110.65, Para 5-9-6, Simultaneous Dependent Approaches, FIG 5-9-7

FAAO JO 7110.65, Para 5-9-6, Simultaneous Dependent Approaches, FIG 5-9-8

b. Independent approaches may be conducted when:

Delete

4,300 feet between centerlines is required when dual simultaneous MLS or ILS front course approaches are used. A minimum distance of 5,000 feet between centerlines is required for triple simultaneous ILS, MLS or ILS, and MLS approaches at airports with field elevation less than 1,000 feet MSL. Other integral parts of the total Simultaneous ILS/MLS Approach System include radar, communications, ATC procedures, and appropriate airborne equipment.

Add

1. A minimum distance of 4,300 feet between centerlines is required when dual simultaneous approaches are used.

Add

2. A minimum distance of 5,000 feet between centerlines is required for triple simultaneous approaches at airports with field elevation less than 1,000 feet MSL.

Add

c. Specially-designed instrument approach procedures annotated with “simultaneous approaches authorized with Rwy XX” are authorized for simultaneous dependent and independent approaches.

Add

d. Equipment required to maintain communication, navigation, and surveillance systems is operational with the glide slope exception as noted below.

Add

e. Operations without vertical guidance may be continued for up to 29 days provided the following conditions are met:

Add

1. Each facility must have a contingency plan for unplanned glide slope out procedures approved by the Air Traffic Safety Oversight Service (AOV).

Add

2. At a minimum, the following special provisions and conditions must be identified in the plan, if applicable, along with any other facility-specific requirements:

Add

(a) The facility must have final monitor controllers with override capability.

Add

(b) The facility must have radar coverage down to the decision altitude or minimum descent altitude, as applicable.

Add

(c) A “No Transgression Zone” (NTZ) must be established and used.

Add

(d) Approaches must be terminated to the runway without a glide slope whenever the

reported visibility is below the S-LOC minimum for that runway.

Add

(e) Any required equipment for the approach with the glide slope out of service must be operational, such as DME or VORTAC. This equipment must be identified in the facility contingency plan for glide slope out procedures.

Add

(f) Mode C requirements must not be waived for any aircraft conducting an ILS approach with the glide slope out of service.

Add

(g) An LOA with the ATCT (or facility directive for a combined facility) must contain a description of the procedures, requirements, and any limitations as specified in the facility contingency plan for glide slope out of service procedures.

Add

(h) The ATC facility must notify Technical Operations personnel of the glide slope outage.

Add

**REFERENCE-
FAAO JO 7210.3, Paragraph 3-5-2, System Component Malfunctions**

Add

(i) The ATC facility must notify arriving pilots that the glide slope is out of service. This can be accomplished via the ATIS broadcast.

Add

(j) Any other requirements specified in the local facility contingency plan for glide slope out procedures must be complied with before conducting simultaneous approach procedures.

Add

(k) Controllers must be trained and provided annual refresher training concerning the application of these procedures.

Add

(l) The ATC facility must record when the glide slope outage occurs and any adverse impact on the operation in FAA Form 7230-4, Daily Record of Facility Operation.

Add

(m) Any loss of separation or break out associated with operations under a contingency plan for glide slope out must be reported to the Terminal Procedures Group Manager at FAA Headquarters (HQ).

Add

f. Simultaneous approaches with the glide slope unusable must be discontinued after 29 days unless a waiver has been submitted to and

b. When simultaneous ILS/MLS approaches are being conducted, the pilot is expected to inform approach control, prior to departing an outer fix, if the aircraft does not have the appropriate airborne equipment or they do not choose to conduct a simultaneous approach. Provide individual handling to such aircraft.

c. Closely monitor weather activity that could impact the final approach course. Weather conditions in the vicinity of either final approach course may dictate a change of the approach in use. (See subpara 10-1-6b Note, Selecting Active Runways.)

d. All turn-on's and final approaches are monitored by radar. Since the primary responsibility for navigation rests with the pilot, instructions from the controller are limited to those necessary to ensure separation between aircraft. Information and instructions are issued, as necessary, to contain the aircraft's flight path within the "Normal Operating Zone" (NOZ). Aircraft which are observed to enter the "No Transgression Zone" (NTZ) are instructed to alter course left or right, as appropriate, to return to the desired course. Unless altitude separation is assured between aircraft, immediate action must be taken by the controller monitoring the adjacent parallel approach course to require the aircraft in potential conflict to alter its flight path to avoid the deviating aircraft.

e. Missed approach procedures are established with climbs on diverging courses. To reduce the possibility of error, the missed approach procedure for a single runway operation should be revised, as necessary, to be identical with that of a simultaneous ILS/MLS operation.

f. The following minimum radar and communications equipment must be provided for monitoring simultaneous ILS/MLS approaches:

1. One separate airport surveillance radar display of a model currently certified for ATC functions. A high-resolution, color monitor with alert algorithms, such as the Final Monitor Aid or that required in the Precision Runway Monitor program, must be required as follows:

(a) At locations where triple simultaneous approaches are conducted to parallel runways with

approved by FAA HQ. (See Appendix 4.)

g. When simultaneous approaches are being conducted, the pilot is expected to inform approach control, prior to departing an outer fix, if the aircraft does not have the appropriate airborne equipment or they do not choose to conduct a simultaneous approach. Provide individual handling to such aircraft.

h. Closely monitor weather activity that could impact the final approach course. Weather conditions in the vicinity of either final approach course may dictate a change of the approach in use. (See subpara 10-1-6b Note, Selecting Active Runways.)

i. All turn-ons and final approaches are monitored by radar. Since the primary responsibility for navigation rests with the pilot, instructions from the controller are limited to those necessary to ensure separation between aircraft. Information and instructions are issued, as necessary, to contain the aircraft's flight path within the "Normal Operating Zone" (NOZ). Aircraft which are observed to enter the NTZ are instructed to alter course left or right, as appropriate, to return to the desired course. Unless altitude separation is assured between aircraft, immediate action must be taken by the controller monitoring the adjacent parallel approach course to require the aircraft in potential conflict to alter its flight path to avoid the deviating aircraft.

j. Missed approach procedures are established with climbs on diverging courses. To reduce the possibility of error, the missed approach procedure for a single runway operation should be revised, as necessary, to be compatible with that of a simultaneous approach operation.

k. The following minimum radar and communications equipment must be provided for monitoring simultaneous approaches:

1. One separate airport surveillance radar display of a model currently certified for ATC functions. A high-resolution color monitor with alert algorithms, such as the Final Monitor Aid or that required in the Precision Runway Monitor program, must be required as follows:

(a) At locations where triple simultaneous approaches are conducted to parallel runways with

centerlines separated by at least 4,300 feet but less than 5,000 feet, and the airport field elevation is less than 1,000 feet MSL.

(b) At locations where triple simultaneous approaches are conducted to parallel runways with field elevation 1,000 feet MSL or greater require an approved FAA aeronautical study.

2. Authorize simultaneous ILS/MLS approaches to parallel dual runways with centerlines separated by 3,000 feet with one localizer offset by 2.5 degrees using a precision runway monitor system with a 1.0 second radar update system, and when centerlines are separated by 3,400 feet when precision runway monitors are utilized with a radar update rate of 2.4 seconds or less.

3. The common NOZ and NTZ lines between the final approach course centerlines must be depicted on the radar video map. The NTZ must be 2,000 feet wide and centered an equal distance from the final approach centerlines. The remaining spaces between the final approach courses are the NOZs associated with each course.

4. Establish monitor positions for each final approach course which have override transmit and receive capability on the appropriate control tower frequencies. A check of the override capability at each monitor position must be completed before monitoring begins. Monitor displays must be located in such proximity to permit direct verbal coordination between monitor controllers. A single display may be used for two monitor positions.

5. Facility directives must define the position responsible for providing the minimum applicable longitudinal separation between aircraft on the same final approach course.

g. Dual local control positions, while not mandatory, are desirable.

h. Where possible, establish standard breakout procedures for each simultaneous operation. If traffic patterns and airspace permit, the standard breakout altitude should be the same as the missed approach altitude.

centerlines separated by at least 4,300 feet, but less than 5,000 feet, and the airport field elevation is less than 1,000 feet MSL.

(b) At locations where triple simultaneous approaches are conducted to parallel runways with field elevation 1,000 feet MSL or greater require an approved FAA aeronautical study.

2. Authorize simultaneous close parallel approaches to dual runways with centerlines separated by 3,000 feet with one final approach course offset by 2.5 degrees using a precision runway monitor system with a 1.0 second radar update system, and when centerlines are separated by 3,400 feet when precision runway monitors are utilized with a radar update rate of 2.4 seconds or less.

3. The common NOZ and NTZ lines between the final approach course centerlines must be depicted on the radar video map. The NTZ must be 2,000 feet wide and centered an equal distance from the final approach centerlines. The remaining spaces between the final approach courses are the NOZs associated with each course.

4. Establish monitor positions for each final approach course which have override transmit and receive capability on the appropriate control tower frequencies. A check of the override capability at each monitor position must be completed before monitoring begins. Monitor displays must be located in such proximity to permit direct verbal coordination between monitor controllers. A single display may be used for two monitor positions.

5. Facility directives must define the position responsible for providing the minimum applicable longitudinal separation between aircraft on the same final approach course.

l. Dual local control positions, while not mandatory, are desirable.

m. Where possible, establish standard breakout procedures for each simultaneous operation. If traffic patterns and airspace permit, the standard breakout altitude should be the same as the missed approach altitude.

No further changes to paragraph.

5. INDEX CHANGES: None

6. **REFERENCE CHANGES:** None

7. **GRAPHICS:** None

8. **GENOT/NOTICE:** N JO 7210.802, Simultaneous Dependent and Independent Approaches, effective January 18, 2012

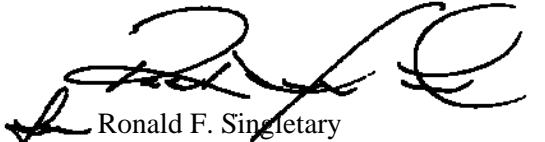
9. **FORMATTING & PLAIN LANGUAGE REVIEW:** **HM 12/23/2011**

10. **SAFETY RISK MANAGEMENT:** (Check appropriate box).

SRMD. Proposed change meets full SMS requirements for safety risk assessment.

SRMDM. Proposed change does not introduce new safety risks into the NAS.

11. **ICAO DIFFERENCES:** YES NO


Ronald F. Singletary
Manager, Terminal Operations Group

1/6/11
Date: