U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

ORDER
JO 7110.110B

Effective Date:
November 17, 2017

SUBJ: Dependent Converging Instrument Approaches (DCIA) with Converging Runway Display Aid (CRDA)

1. Purpose of This Order. This order defines and establishes the separation criteria and procedures for conducting Dependent Converging Instrument Approaches (DCIA) to converging intersecting and nonintersecting runways using the Converging Runway Display Aid (CRDA) during Instrument Meteorological Conditions (IMC).

2. Background. DCIA was developed to safely increase airport capacity during IMC at those airports with converging intersecting or non- intersecting runways. A reduction of approved separation is achieved by the use of the CRDA Tool, staggered approaches and the DCIA procedures contained in this order, while protecting for possible consecutive converging missed approaches.

3. Audience. This order applies to the following Air Traffic Organization (ATO) service units: Air Traffic Services, Mission Support Services, and System Operations; Flight Standards, Office of Airport Safety, and all associated air traffic control facilities.

4. Where Can I Find This Order? This order is available on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/ and on the FAA Web site at http://www.faa.gov/regulations_policies/orders_notices/.

5. Cancellation. This order cancels FAA Order JO 7110.110A, Dependent Converging Instrument Approaches with Converging Runway Display Aid, effective July 20, 1995.

6. Explanation of Policy Changes. This change updates the order to comply with FAA plain language guidance. It also adds procedures to conduct straight-in instrument landing system (ILS), localizer (LOC), area navigation (RNAV) global positioning system (GPS), RNAV required navigation performance (RNP) or ground based augmentation system (GBAS) landing system (GLS) approaches while removing the current wording of straight-in instrument landing system (ILS), microwave landing system (MLS), or localizer on each runway. It replaces references to decision height (DH) with approach minimums. It removes a note concerning Phase 2 operations and the normal Airport Acceptance Rate (AAR). It replaces references to instrument flight rules (IFR) with IMC. It removes the acronym “RADAR” and replaces it with air traffic control (ATC) surveillance source. It adds the Airbus A388 to the separation criteria. Finally, it changes the maximum eligible angle of convergence from 120 to 110 degrees.

7. Definitions.

a. **Commissioning Readiness Review (CRR)**. A telephone conference between national, regional, and facility personnel to review the facility's readiness to proceed with the operational use of the DCIA procedure.

b. **Common Point**. Point of intersection of converging approaches. The common point is the runway intersection when runways intersect and the point of intersection of the extended centerlines when the runways do not intersect. This is the common point used by the CRDA software to project the ghost target. The distance from the actual aircraft to the common point is equal to the distance from the common point to the ghost target depiction on the converging runway. (See Appendix 1, Figures 4 and 5)

c. **Consecutive Missed Approaches.** Missed approaches by aircraft on two converging approaches occurring within 2 minutes of each other.

d. **Converging Runway Display Aid**. A computer software display tool designed to aid controllers in conducting instrument approaches to dependent converging runways available in all terminal automation systems.

e. **Dependent Converging Instrument Approach.** An approach procedure defining separation standards and criteria for conducting approaches to converging or intersecting runways with missed approach points and/or thresholds separated by less than approved minimum lateral separation. Collision and wake turbulence protection in the event of simultaneous missed approaches is provided through staggering aircraft on the two approaches as defined in this order. DCIAs enable dependent approaches to converging runways to decision heights associated with those runways.

f. **Ghost Data Block (GDB)**. Limited data block associated with the ghost target.

g. **Ghost Target.** An artificial aircraft symbol whose position is the translated (x, y) position of an aircraft with respect to a reference point and a reference line onto another reference point and reference line. A ghost target can be offset relative to the aircraft producing it depending on the desired operation. (See Figures 1, 2, and Appendix 1, Figure 3)

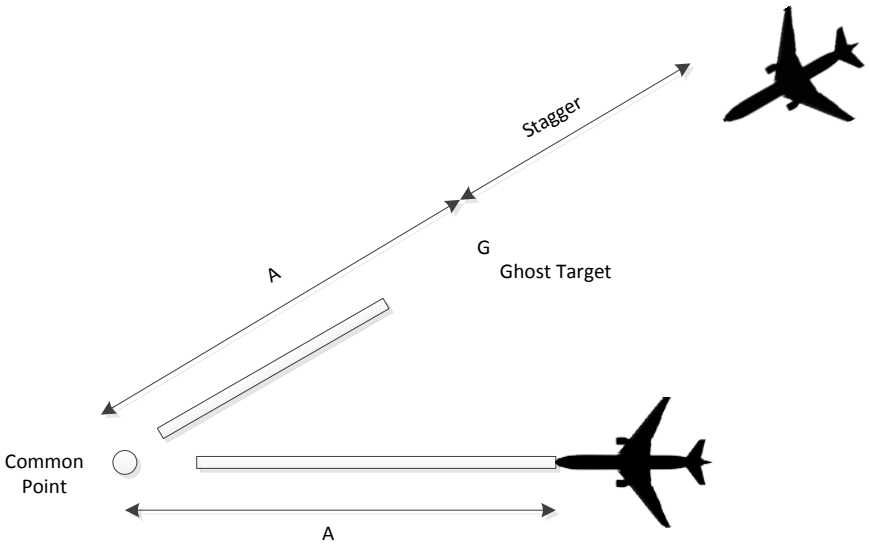


Figure 1. Stagger Behind a Ghost Target

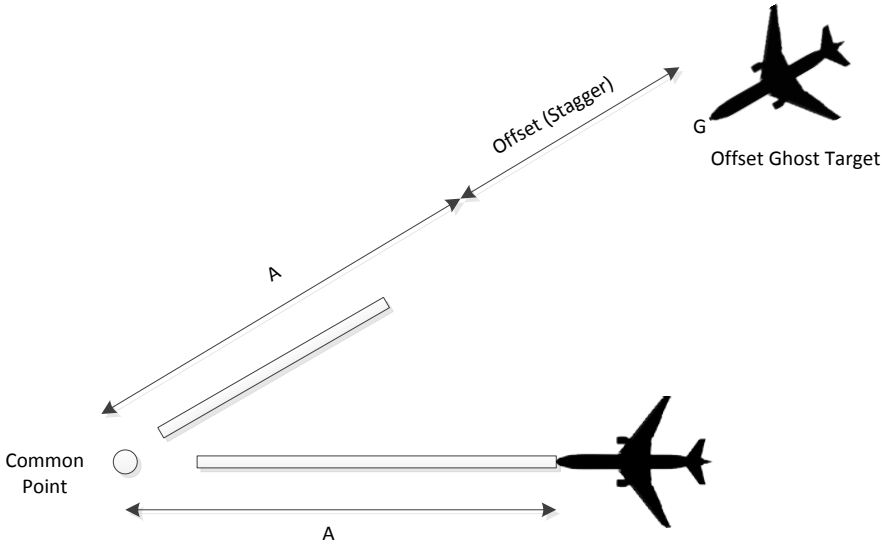


Figure 2. Stagger with an Offset Ghost Target

h. **Stagger.** The difference in range from the common point between two aircraft on converging approaches.

i. **Stagger Operation**. The vectoring of aircraft to land in a staggered mode on one runway with those landing on the converging or intersecting runway while protecting for consecutive missed approaches on either runway.

j. **Simultaneous Converging Instrument Approaches (SCIAs):** An alternate procedure defining criteria and requirements for approaches to converging and intersecting runways. SCIA requirements are defined in FAA Order JO 7210.3.

8. Criteria. The criteria for conducting DCIA with CRDA to a converging runway pair are:

a. Operating control tower.

b. Operational ATC surveillance source and relevant terminal automation platform such as STARS or CARTS.

c. Operational CRDA.

d. Straight-in ILS, LOC, RNAV (GPS), RNAV (RNP) or GLS approaches on each runway.

e. Required navigational aids and operating pilot/controller communications.

f. Nonintersecting final approach courses.

g. Included angle between the runway approach courses of not less than 45 degrees or not greater than 110 degrees.

h. The published missed approach procedures for both runways must be straight out missed approaches until the projected flight paths cross at the common point. The missed approach procedure

beyond the common point must provide for course divergence of 45 degrees or greater. (See Appendix 1)

i. Direct communication capability between the final approach control position for each runway and the associated local control position.

9. Procedures. DCIA procedures must be developed by facilities in accordance with separation criteria specified in FAA Order JO 7110.65, Air Traffic Control, and per this order, as outlined below:

a. Review runway configurations for which DCIA will be used.

b. Determine if the airport traffic volume and/or operational complexity would benefit from the use of DCIA. What benefit is expected for the user and the facility?

c. Determine the effects of DCIA and CRDA on the airport acceptance rate (AAR).

d. Determine any environmental impact.

REFERENCE-
FAA Order 1050.1F, Environmental Impacts: Policies and Procedures
FAA Order JO 7210.3, Paragraph 4-1-6, Preliminary Environmental Review.

e. Establish procedures and conditions to be used for each adaptable airport configuration. The use of facility training capabilities such as ATCoach for STARS or Enhanced Target Generator (ETG) for CARTS is recommended for this development effort. Additional support may be required from the Operational Support Facility (OSF) in the development of more than one version of site adaptation. Items which must be determined include:

(1) Common points, ghost data block display boxes, and other pertinent information required to operate CRDA. (See TI 6191.409, STARS FSL TCW/TDW Operator’s Manual or NAS-MD-636 for CARTS)

(2) Step down phases for transition training and proficiency. (See paragraph 10)

(3) Stagger distances and restrictions most appropriate for use with the airport runway pair(s). (See Appendix 1) NOTE- These are the DCIA specific separation criteria.

(4) For each applicable DCIA runway configuration, markings on the appropriate video maps may be considered to enable controllers to verify that the minimum stagger required when the lead aircraft is over the threshold is being satisfied

f. Prepare a facility directive approved by the service area Operations Support Group (OSG), specifying at a minimum:

(1) Each applicable runway configuration.

(2) Procedure to be used for each runway configuration as derived from this order.

(3) Restrictions or exclusions deemed appropriate (e.g., which aircraft types are excluded from the procedure).

(4) Weather minima in which the procedure may be used for each configuration if different from published minima.

(5) Coordination requirements.

(6) Delegated airspace changes, if any.

g. Submit proposal documents and facility procedures pertinent to the facility's DCIA/CRDA program to the OSG for approval. The OSG must, after coordination with and review by the service

area Flight Standards Division, send a copy of the approved proposal to Operations-Headquarters, AJT-2. AJT-2 must coordinate a CRR with the facility, the OSG, the ATO Operational Concepts, Validations and Requirements, AJV-7, and Terminal Procedures and Standards, AJV-8. AJT-2 must, after completion of the CRR, coordinate an operational implementation date with the OSG and the Air Traffic Control System Command Center, AJR-11. The proposed documents and facility procedures must contain the following:

(1) Each applicable runway configuration and/or delegated airspace revision.

(2) Weather minima for the procedure.

(3) Positions required to be staffed during use of this procedure.

(4) Anticipated AAR for each configuration.

(5) Anticipated effect on departures.

(6) Environmental issues and a recommended resolution of those issues.

h. Publish a letter to airmen and conduct user briefings defining local procedures to be used at least 30 days before the effective date of the DCIA procedure.

10. Requirements.

a. Only straight-in approaches must be made.

b. Aircraft must be informed on initial contact, or as soon as possible thereafter, that dependent converging approaches are in use. This information may be provided through the Automatic Terminal Information Service (ATIS)

c. Aircraft on converging approaches must be staggered in accordance with Table 1 of Appendix 1. The stagger in Table 1 must be applied when the leading aircraft is over the landing threshold.

d. Runway separation on intersecting runways is provided in accordance with FAA Order JO 7110.65 para 3-9-8, 3-9-9 and 3-10-4. Any adjustment required to increase the stagger to ensure runway separation must be included in the facility directive. Aircraft must not be instructed to hold short of any intersection or intersecting runway while conducting DCIA during IMC.

e. Training requirements are shown in Appendix 2, Training.

f. The minimum required stagger distances are described in the attached tables and appendices. A minimum stagger of 5 nautical miles (NM) or more must be used when the lead aircraft is a heavy aircraft. A minimum stagger of 8 NM or more must be used when the lead aircraft is an Airbus A388 aircraft.

11. Phase-In Criteria.

a. The facility Air Traffic Manager (ATM) must establish a facility implementation team. (See Appendix 3)

b. Phase 1 is the classroom and CRDA simulator training phase.

c. Phase 2 is the operational phase.

(1) The following phases are recommended when the runway pair do not intersect:

(a) Phase 2A. May be conducted in weather conditions down to a ceiling of 800 feet and 2 miles visibility, or the published minimums, whichever are higher.

(b) Phase 2B. May be conducted in weather conditions down to the published minimums for the approach.

NOTE-
The facility ATM may omit Phase 2A with approval by the service area OSG. Additional phases using intermediate weather levels between the values in Phases 2A and 2B may be established if deemed appropriate by the facility ATM and approved by the service area OSG.

(2) The following phases are required when the runways intersect:

(a) Phase 2A. The tower must establish visual contact with either aircraft by the missed approach point (MAP). This procedure may be conducted in weather conditions down to a ceiling of 800 feet and 2 miles visibility, or the published minimums for the approach, whichever are higher. Sub-phases may be established by the facility ATM with the approval by the service area OSG.

(b) Phase 2B. Authorization from the OSG must be obtained by the facility prior to proceeding from Phase 2A to Phase 2B. This phase may be operated down to the published minimums for the approach.

12. Reporting Requirements. Notify AJT-2, through the service area QCG, as soon as possible of any Mandatory Occurrence Report, pilot deviation, TCAS Resolution Advisory, or near midair collision report involving DCIA operation. This requirement is in addition to the requirements for reporting and handling incidents in accordance with FAA Order JO 7210.632, ATO Occurrence Reporting.

13. Miscellaneous.

a. Submit any suggested changes or improvements to the software as directed by Order 1800.66, Configuration Management Policy, case file/NAS change proposal system (WebCM).

b. Submit changes, improvements, and/or additional uses of the DCIA procedures or CRDA through the service area OSG to AJT-2. AJT-2 will coordinate with AJV-8 and AJR-11.

(1) AJV-7 will provide support for any additional or future analysis-of specific runway configurations.

(2) Submit requests for additional runway configuration analyses to AJT-2 through the OSG.

(3) Runway configurations providing capacity benefits must be processed in accordance with paragraph 7.

c. Program errors or faults should be submitted through the program trouble report (PTR) system.

14. Distribution. This order is distributed to the following ATO service units: Air Traffic Service (AJT), Mission Support Services (AJV), and System Operations (AJR); ATO Safety and Technical Training (AJI); Air Traffic Safety Oversight Service (AOV); the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

Original signed by Maurice Hoffman

Maurice Hoffman
Director (A), Air Traffic Procedures
Air Traffic Organization

11-9-17
Date Signed

APPENDIX 1

Dependent Converging Instrument Approaches Procedure Table

1. Purpose. This appendix establishes the stagger values for the DCIA procedure to be used for applicable runway configurations. These stagger values establish the separation required between aircraft on converging approaches for which the DCIA operation is being conducted.

2. Using the DCIA Procedure Table. The DCIA procedure can be run safely under a range of conditions and runway configurations. This range is defined in Table 1. The following lists the steps necessary to be taken by a facility to use the table.

a. Identify all the runway configurations for which the facility may use the DCIA procedure. Follow steps b through f below for each runway configuration.

b. Determine the common point for the runway configuration. Determine the distances from each runway threshold to the common point (See Figures 4 and 5).

c. Determine the approach minimums for each runway and select the larger of the two.

d. If the approach minimum is 250 feet or less, refer to Table 1A. If the approach minimum is at least 251 feet, but not higher than 500 feet, refer Table 1B. If the approach minimum is at least 501 feet, but not higher than 700 feet, refer to Table 1C.

e. Using the table selected in step d, locate the row that covers the runway configuration (for example, the combination of threshold to intersection distances determined in step b) to find the DCIA procedure to use for this configuration. The procedure is determined by the stagger value required and certain speed restrictions and/or exclusions. All of the options provide the required level of safety. The tradeoff is between the potential throughput and the severity of the restrictions. Select the option that is most operationally suitable if several options are identified. The speeds referenced in this table are indicated final approach airspeeds. Guidance concerning restricted and excepted aircraft is explained following in Appendix 1, Tables 1A, 1B, and 1C.

f. Determine the approach minimum for each runway when the glide slope is out of service. Find the larger of the two values. Repeat steps d and e to determine the DCIA procedure for this runway configuration when either glide slope is out of service.

3. Example for Use of Tables. The use of the table for determining the DCIA procedure for each candidate runway configuration is illustrated with an example for General Edward Lawrence Logan International Airport (KBOS). KBOS has three eligible runway configurations. They are runway 4R/33L, runway 4R/15R; and runway 22L/27. There is an instrument landing system (ILS) or localizer (LOC) on each of the paired runways and the prescribed missed approach procedures meet the criteria described in this order. The first step is to determine the runway lengths to the common point for each configuration and the approach minimum when both ILS systems are fully available (Full ILS) and when the glide slope is out of service (GS OTS). The second step is to go to Table 1A, IB, or IC, depending upon the approach minimum, and find the applicable row.

Airport	Runways	Threshold to Intersection Distance (feet)		Approach Minima (Larger of the two minimums for both Runways)		DCIA Rule (Table – Row)	
		Short	Long	ILS	LOC	Full ILS	GS OTS
KBOS	4R/33L	4144	5201	200	463	1A-21	1B-19
KBOS	4R/15L	3998	4144	250	562	1A-20	1C-19
KBOS	22L/27	5979	6744	443	484	1B-25	1B-25

Consider runway configuration 4R/33L. The approach minimums for the two runways for full ILS approaches are both 200 feet. The runway to intersection distances are 4,144 and 5,201 feet respectively. The DCIA rule for this configuration is found in Table 1A-Row 21. Row 21 provides 7 options from which to choose. The facility might choose option number 3 which allows a 2 NM, 5 NM, and 8 NM stagger operation with the aircraft 90 knots or less and 160 knots or greater excepted. The simplest method to handle aircraft excepted from the DCIA stagger rule is to miss a DCIA slot as described at the end of this Appendix.

The 2 NM, 5 NM, and 8 NM stagger operation requires that aircraft should be staggered by 2 NM when the leading aircraft is non-heavy, by 5 NM when the leading aircraft is a heavy, and by 8 NM when the leading aircraft is an Airbus A388. For this operation, staggered means that the trailing aircraft is either 2 NM, 5 NM, or 8 NM farther from the common point than the leading aircraft when the leading aircraft reaches the threshold.

NOTE-
1. The non-heavy criteria provided in Appendix 1 will ensure that a leading non-heavy aircraft will pass the common point with 1 NM or greater separation from the trailing aircraft if both aircraft execute missed approaches.

2. The heavy criteria and the A388 criteria provided in Appendix 1 will ensure that a leading heavy or Airbus A388 aircraft will pass the common point prior to a trailing aircraft with adequate wake turbulence separation before the trailing aircraft crosses the common point.

The approach minimums for the runway 4R/33L would be 422 and 463 feet respectively if the glideslope on either runway 4R or runway 33L was out of service. The applicable rule would be found in Table IB. The runway to intersection distances are 4144 feet and 5201 feet respectively. The applicable procedure would be found in Row 19. Row 19 provides 4 options. The facility may determine that the first option, which permits a 2.5 NM, 5 NM, and 8 NM stagger operation and "excepts" aircraft with final approach speeds of 80 knots (kts) or less and 160 kts or greater from the 2.5 / 5 / 8 rule would always be used.

The facility could identify groups by aircraft type that reflect the appropriate indicated final approach speeds. Suppose, for KBOS, aircraft with 90 kts or less final approach speed include all single engine general aviation aircraft and aircraft with 160 kts or greater final approach speed include all military fighter type aircraft.

The facility directive would state that the stagger operation for runways 4R/33L would be conducted with a 2 NM, 5 NM, and 8 NM stagger rule and, when a single engine general aviation aircraft is the leading aircraft, or a fighter type aircraft is the trailing aircraft, that a DCIA slot should be missed. The

DCIA operation would be run with a 2.5 / 5 / 8 rule if the glide slope to either runway were out of service.

The facility would repeat the process for the other two configurations.

Restricted Aircraft:

Table 1 identifies restrictions with reference to final approach speeds and restricts the slower aircraft to the runway with the shorter threshold to intersection distance. This procedure is used to ensure separation is maintained if the slower leading aircraft, and a faster trailing aircraft, both execute a missed approach. The slower leading aircraft executing an approach to the runway with the shorter threshold to intersection distance ensures that the slower aircraft will cross the common point earlier in the case of a dual missed approach.

A restricted aircraft landing on the runway with the longer threshold to intersection distance can be safely followed on the other runway by any aircraft with a slower final approach airspeed. Restricting an aircraft, to the runway with the shorter threshold to intersection distance, means “assign an aircraft with the specified approach speed or less to the runway with the shorter threshold to intersection distance. The faster of the two slow aircraft sequenced together can be assigned to the runway with the longer threshold to intersection distance as long as the trailing aircraft on the runway with the shorter intersection distance has speed control applied to be the slower to land."

Excepted Aircraft:

Certain aircraft speed groups are excepted from the reduced DCIA separations identified in Table 1. Those excepted aircraft must be sequenced by any one of the following methods:

Method 1: Miss or skip an appropriate DCIA slot on the other approach when the excepted aircraft is involved. The slot to be missed is the "trailing" slot on the other approach when the aircraft involved is slow (120 kts or less) and a leading slot on the other approach when the aircraft involved is fast (160 kts or greater).

Method 2: The DCIA slot can be missed more efficiently by sequencing the excepted aircraft in trail. An excepted aircraft which is slow (120 kts or less) should be sequenced so that the next aircraft to land is landing on the same runway. A fast aircraft (160 kts or greater) should be sequenced so that the previous aircraft lands on the same runway.

Method 3: In most cases, a DCIA slot will not be required to be missed to accommodate excepted aircraft. The spacing required by the DCIA operation can be assured by simply providing an extra stagger as identified in the last column of Table 1. The restricting of a certain speed group on the shorter intersection distance runway must be observed. Provide the slightly larger stagger, identified in the last column in Table 1, when the excepted aircraft is a slow leading or a fast trailing aircraft.

For example, suppose the applicable procedure was Row 3 in Table 1A. The DCIA procedure for this geometry requires a stagger of 2 NM, 5 NM, and 8 NM, excludes aircraft of 80 kts or less, and those of 160 kts or greater from the 2 / 5 / 8 rule. The last column of Table 1A requires that when either of these types of aircraft are involved a stagger of 2.5 NM is used to provide adequate DCIA separation.

FIG 3
Ghost Target and Stagger

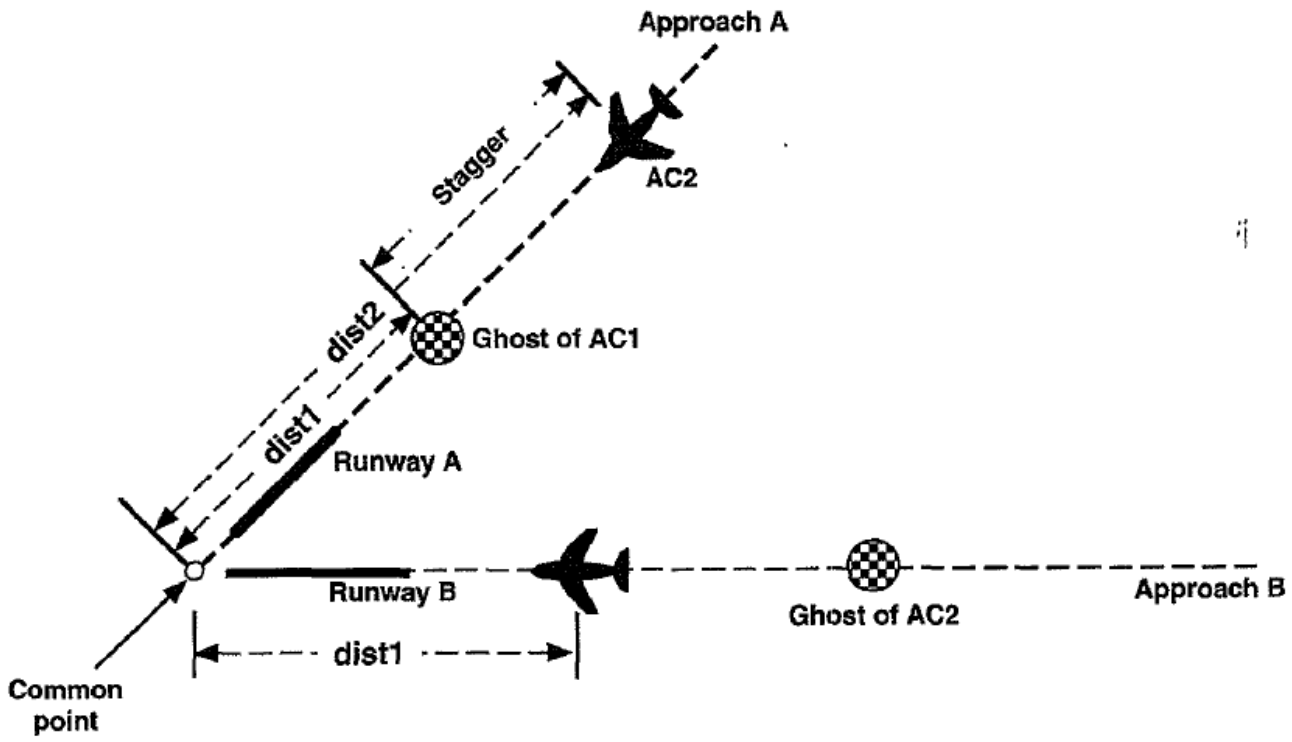


FIG 4
Distances from Threshold to Intersection

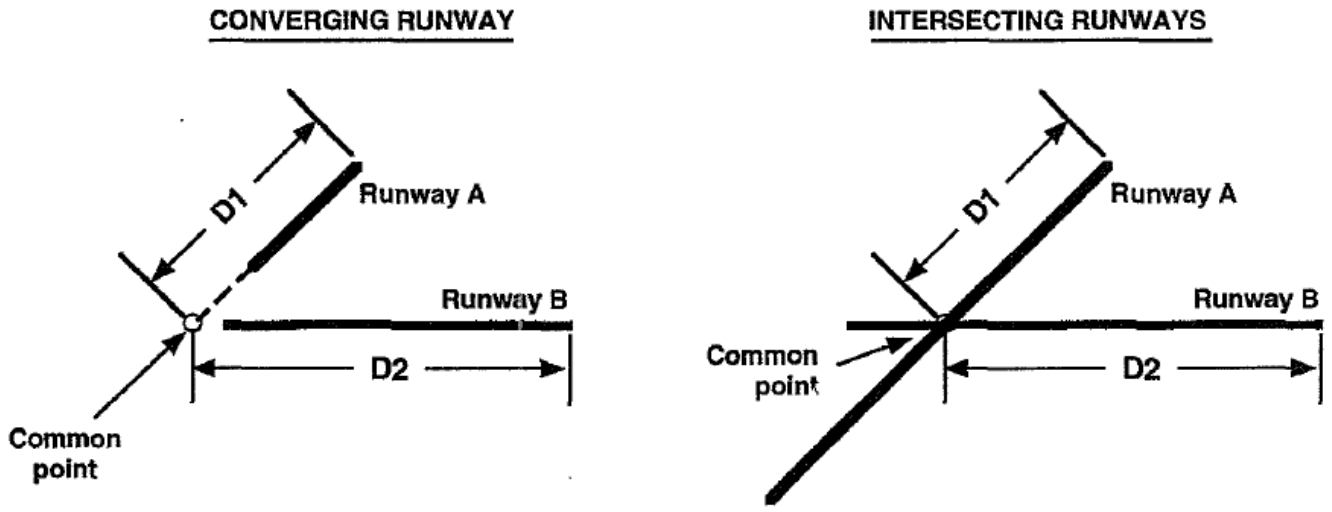
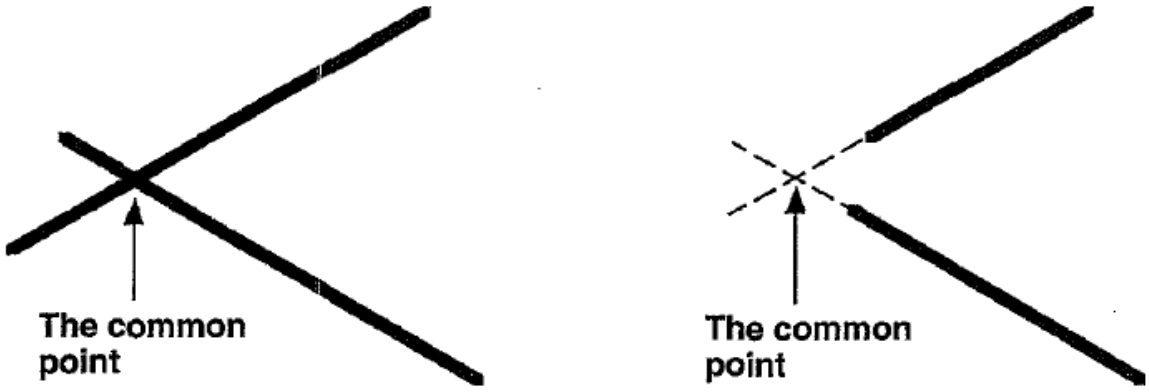


FIG 5
The Common Point



Operational Application

It is understood that the facility may employ stagger values larger than the minimum required by this order in order to facilitate an operation suitable for the configuration. Examples of factors that may necessitate the use of larger staggers are simplicity and robustness of the operation, departures, and runway separation with respect to the intersection.

Regardless of the stagger values used in the operation, the pair involved in a DCIA operation is always preceded and followed by other aircraft and other DCIA pairs. Facilities may wish to include material in controller training that enables controllers to understand this aspect.

Table 1-A. DCIA Procedure for Published Approach Minimums (250 feet or less)

The stagger rule (x / y / z) means a minimum of "x" NM stagger behind non-heavy aircraft, "y" NM stagger behind a heavy aircraft, and "z" NM stagger behind A388 aircraft when the leading aircraft is at the runway threshold. For example, (2 / 5 / 8) means 2 NM stagger behind a non-heavy aircraft, 5 NM stagger behind a heavy aircraft, and 8 NM stagger behind an A388 aircraft.

	Shorter Distance from Threshold to Intersection	**Longer Distance from Threshold to Intersection**	**DCIA Procedure** Stagger Aircraft to Converging Runways using Indicated Stagger Distances (Restrictions Noted)	**Stagger Rule for Excepted Aircraft**
1	Up to 2,600'	Up to 2,600'	No restrictions; stagger rule is **(2 / 5 / 8)**	N/A
2	Up to 2,600'	2,601' to 3,200'	Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** No restrictions; stagger rule is **(2.5 / 5 / 8)**	N/A *(2.5 / 5 / 8) or skip a slot for excepted aircraft* N/A
3	Up to 2,600'	3,201' to 4,500'	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)**	N/A *(2.5 / 5 / 8) or skip a slot for excepted aircraft* N/A N/A N/A

			or No restrictions; stagger rule is **(3 / 5 / 8)**	N/A
4	Up to 2,600’	4,501’ to 5,900’	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with-shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)**	NA *(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA NA NA NA NA
5	Up to 2,600’	5,901’ to 7,500’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)**	NA *(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA

			or Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)**	NA NA NA
6	Up to 2,600’	7,501’ to 9,700’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)**	*(2.5 / 6 / 8) or skip a slot for excepted aircraft* *(2.5 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(2.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
7	Up to 2,600’	9,701’ to 10,600’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)**	*(2.5 / 6 / 8) or skip a slot for excepted aircraft* *(2.5 / 6 / 8) or skip a slot for excepted aircraft*

			or Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
8	Up to 2,600’	10,601’ to 12,200’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* NA *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
9	Up to 2,600’	12,201’ to 13,900’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* NA
10	Up to 2,600’	13,901’ to 17,600’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)**	*(3 / 7 / 9) or skip a slot for excepted aircraft*
11	Up to 2,600’	17,601’ to 19,700’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3 / 7 / 9) or skip a slot for excepted aircraft*

12	2,601’ to 3,400’	Up to 3,400’	Except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** No restrictions; stagger rule is **(2.5 / 5 / 8)**	*(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA
13	2,601’ to 3,400’	3,401’ to 4,000’	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** No restrictions; stagger rule is **(3 / 5 / 8)**	*(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(3 / 5 / 8) or skip a slot for excepted aircraft* NA NA NA
14	2,601’ to 3,400’	4,001’ to 5,800’	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)** **or**	*(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA NA NA

			Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	NA
15	2,601' to 3,400'	5,801' to 7,500'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)**	*(2.5 / 5 / 8) or skip a slot for excepted aircraft*
			or	
			Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)**	NA
			or	
			Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)**	NA
			or	
			Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)**	NA
			or	
			Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	NA
16	2,601' to 3,400'	7,501' to 9,700'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft*
			or	
			Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft*
			or	
			Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft*
			or	
			Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)**	NA
			or	
			Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)**	NA

17	2,601’ to 3,400’	9,701’ to 12,100’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* NA NA
18	2,601’ to 3,400’	12,101’ to 13,900’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)**	NA NA
19	2,601’ to 3,400’	13,901’ to 17,800’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3.5 / 7 / 9) or skip a slot for excepted aircraft*
20	3,401’ to 4,400’	Up to 4,400’	Except 80 kts or less aircraft and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** No restrictions; stagger rule is **(3 / 5 / 8)**	*(3 / 5 / 8) or skip a slot for excepted aircraft* *(3 / 5 / 8) or skip a slot for excepted aircraft* NA NA
21	3,401’ to 4,400’	4,401’ to 5,800’	Restrict 110 kts or less aircraft to runway with shorter threshold to	*(3 / 5 / 8) or skip a slot*

			intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2 / 5 / 8)**	*for excepted aircraft*
			or	
			Except 90 kts or less aircraft and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)**	*(3.5 / 5 / 8) or skip a slot for excepted aircraft*
			or	
			Except 90 kts or less aircraft and except 160 kts or greater aircraft, stagger rule is **(2 / 5 / 8)**	*(3.5 / 5 / 8) or skip a slot for excepted aircraft*
			or	
			Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)**	NA
			or	
			Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)**	NA
			or	
			Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)**	NA
			or	
			Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	NA
22	3,401’ to 4,400’	5,801’ to 7,400’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)**	*(3 / 5 / 8) or skip a slot for excepted aircraft*
			or	
			Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)**	NA
			or	
			Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)**	NA
			or	
			Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)**	NA

			or Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	NA
23	3,401' to 4,400'	7,401' to 9,600'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* NA
24	3,401' to 4,400'	9,601' to 12,200'	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and do not pair 90 kts	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft*

			or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	NA
25	3,401' to 4,400'	12,201' to 13,900'	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
26	3,401' to 4,400'	13,901' to 17,800'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3.5 / 7 / 9) or skip a slot for excepted aircraft*
27	4,401' to 5,700'	Up to 5,700'	Except 90 kts or less aircraft and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** • Except 80 kts or less aircraft and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** • Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	*(3.5 / 5 / 8) or skip a slot for excepted aircraft* *(3.5 / 5 / 8) or skip a slot for excepted aircraft* *(3.5 / 5 / 8) or skip a slot for excepted aircraft* NA
28	4,401' to 5,700'	5,701' to 6,500'	Except 80 kts or less aircraft and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	*(4 / 5 / 8) or skip a slot for excepted aircraft* NA

29	4,401’ to 5,700’	6,501’ to 7,200’	Except 80 kts or less aircraft and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	*(4 / 5 / 8) or skip a slot for excepted aircraft* NA
30	4,401’ to 5,700’	7,201’ to 12,100’	Restrict110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** • Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft with 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* NA
31	4,401’ to 5,700’	12,101’ to 13,800’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft*
32	4,401’ to 5,700’	13,801’ to 17,800’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 7 / 9) or skip a slot for excepted aircraft*
33	5,701’ to 6,400’	Up to 6,400’	Except 80 kts or less aircraft and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Except 80 kts or less aircraft; stagger rule is **(3 / 5 / 8)**	*(4 / 5 / 8) or skip a slot for excepted aircraft* *(4 / 5 / 8) or skip a slot for excepted aircraft*

34	5,701’ to 6,400’	6,401’ to 6,900’	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 5 / 8)**	*(4 / 5 / 8) or skip a slot for excepted aircraft* *(4 / 5 / 8) or skip a slot for excepted aircraft* NA
35	5,701’ to 6,400’	6,901’ to 10,800’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft*
36	5,701’ to 6,400’	10,801’ to 12,100’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft*

			(3 / 6 / 8)	
37	5,701’ to 6,400’	12,101’ to 13,800’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft*
38	5,701’ to 6,400’	13,801’ to 17,800’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4.5 / 7 / 9) or skip a slot for excepted aircraft*
39	6,401’ to 8,300’	Up to 8,300’	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft*
40	6,401’ to 8,300’	8,301’ to 8,700’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or	*(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft*

			greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	
41	6,401' to 8,300'	8,701' to 11,100'	Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(5.5 / 6 / 8) or skip a slot for excepted aircraft*
42	6,401' to 8,300'	11,101' to 14,000'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 7 / 9) or skip a slot for excepted aircraft*
43	6,401' to 8,300'	14,001' to 17,700'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 7 / 9) or skip a slot for excepted aircraft*
44	8,301' to 10,800'	Up to 10,800'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft or leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(5.5 / 6 / 8) or skip a slot for excepted aircraft* *(5.5 / 6 / 8) or skip a slot for excepted aircraft*

Table 1-B. DCIA Procedure for Published Approach Minimums
(At least 251 feet up to and including 500 feet)

The stagger rule (x / y / z) means a minimum of "x" NM stagger behind non-heavy aircraft, "y" NM stagger behind a heavy aircraft, and "z" NM stagger behind A388 aircraft when the leading aircraft is at the runway threshold. For example, (2 / 5 / 8) means 2 NM stagger behind a non-heavy aircraft, 5 NM stagger behind a heavy aircraft, and 8 NM stagger behind an A388 aircraft.

	Shorter Distance from Threshold to Intersection	**Longer Distance from Threshold to Intersection**	**DCIA Procedure** Stagger Aircraft to Converging Runways using Indicated Stagger Distances (Restrictions Noted)	**Stagger Rule for Excepted Aircraft**
1	Up to 2,100'	Up to 2,100'	No restrictions; stagger rule is **(2 / 5 / 8)**	NA
2	Up to 2,100'	2,101' to 2,800'	Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** No restrictions; stagger rule is **(2.5 / 5 / 8)**	NA *(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA
3	Up to 2,100'	2,801' to 3,700'	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** No restrictions; stagger rule is **(3 / 5 / 8)**	NA *(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA NA
4	Up to 2,100'	3,701' to 4,900'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection	NA

			distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)**	*(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA NA NA
5	Up to 2,100’	4,901’ to 5,900’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)** **or**	NA *(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(2.5 / 5 / 8) or skip a slot for excepted aircraft* NA *(3 / 5 / 8) or skip a slot for excepted aircraft* NA

			Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)**	NA
6	Up to 2,100’	5,901’ to 7,000’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 120 kts or less aircraft with 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(3 / 5 / 8) or skip a slot for excepted aircraft* NA *(3.5 / 5 / 8) or skip a slot for excepted aircraft* NA NA NA NA
7	Up to 2,100’	7,001’ to 8,900’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)**	*(2.5 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft*

			or Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	NA NA NA NA
8	Up to 2,100’	8,901’ to 11,200’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(2.5 / 5 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
9	Up to 2,100’	11,201’ to 13,100’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater	*(3 / 6 / 8) or skip a slot for excepted aircraft* NA NA

			aircraft trailing; stagger rule is **(3 / 6 / 8)**	
10	Up to 2,100’	13,101’ to 17,000’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3.5 / 7 / 9) or skip a slot for excepted aircraft*
11	2,101’ to 3,800’	Up to 3,800’	Except 80 kts or less and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Except 80 kts or less aircraft and do not pair 100 kts or less aircraft with 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Do not pair 80 kts or less aircraft with 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** No restrictions; stagger rule is **(3 / 5 / 8)**	*(3 / 5 / 8) or skip a slot for excepted aircraft* *(3 / 5 / 8) or skip a slot for excepted aircraft* NA NA
12	2,101’ to 3,800’	3,801’ to 4,100’	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** No restrictions; stagger rule is **(3 / 5 / 8)**	*(3 / 5 / 8) or skip a slot for excepted aircraft* NA NA NA
13	2,101’ to 3,800’	4,101’ to 6,700’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection	*(3 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft*

			distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	NA NA NA
14	2,101’ to 3,800’	6,701’ to 8,600’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** or Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft with 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* NA NA
15	2,101’ to 3,800’	8,601’ to 11,000’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft*

			or Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft with 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
16	2,101’ to 3,800’	11,001’ to 12,900’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA
17	2,101’ to 3,800’	12,901’ to 16,900’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3.5 / 7 / 9) or skip a slot for excepted aircraft*
18	3,801’ to 5,000’	Up to 5,000’	Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)**	*(3.5 / 5 / 8) or skip a slot for excepted aircraft* *(3.5 / 5 / 8) or skip a slot for excepted aircraft* NA
19	3,801’ to 5,000’	5,001’ to 5,900’	Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft*

			Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	NA
20	3,801' to 5,000'	5,901' to 7,900'	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA
21	3,801' to 5,000'	7,901' to 9,600'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* NA
22	3,801' to 5,000'	9,601' to 10,800'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* NA
23	3,801' to 5,000'	10,801' to 12,700'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection	*(4 / 7 / 9) or skip a*

			distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*slot for excepted aircraft* *(4 / 7 / 9) or skip a slot for excepted aircraft*
24	3,801' to 5,000'	12,701' to 16,700'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 7 / 9) or skip a slot for excepted aircraft*
25	5,001' to 7,400'	Up to 7,400'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft*
26	5,001' to 7,400'	7,401' top 10,200'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft with 160 kts or greater aircraft and except 90 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(5.5 / 6 / 8) or skip a slot for excepted aircraft* *(5.5 / 6 / 8) or skip a slot for excepted aircraft*
27	5,001' to 7,400'	10,201' to 13,000'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 7 / 9) or skip a slot for excepted aircraft*
28	5,001' to 7,400'	13,001' to 16,300'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 7 / 9) or skip a slot for excepted aircraft*
29	7,401' to 9,700'	Up to 9,700'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(5.5 / 6 / 8) or skip a slot for excepted aircraft* *(5.5 / 6 / 8) or skip a slot for excepted*

				aircraft

Table 1-C. DCIA Procedure for Published Approach Minimums (At least 501 feet up to and including 700 feet)

The stagger rule (x / y / z) means a minimum of "x" NM stagger behind non-heavy aircraft, "y" NM stagger behind a heavy aircraft, and "z" NM stagger behind A388 aircraft when the leading aircraft is at the runway threshold. For example, (2 / 5 / 8) means 2 NM stagger behind a non-heavy aircraft, 5 NM stagger behind a heavy aircraft, and 8 NM behind an A388 aircraft.

	Shorter Distance from Threshold to Intersection	**Longer Distance from Threshold to Intersection**	**DCIA Procedure** Stagger Aircraft to Converging Runways using Indicated Stagger Distances (Restrictions Noted)	**Stagger Rule for Excepted Aircraft**
1	Up to 1,600'	Up to 1,600'	No restrictions; stagger rule is **(2 / 5 / 8)**	NA
2	Up to 1,600'	1,601' to 2,100'	Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2 / 5 / 8)** **or** No restrictions; stagger rule is **(2.5 / 5 / 8)**	NA NA NA
3	Up to 1,600'	2,101' to 2,800'	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** No restrictions; stagger rule is **(2.5 / 5 / 8)**	NA NA NA
4	Up to 1,600'	2,801' to 3,700'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)**	NA NA NA

			or Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** No restrictions; stagger rule is **(3 / 5 / 8)**	NA NA
5	Up to 1,600’	3,701’ to 4,800’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance; stagger rule is **(3 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft with 160 kts or greater; stagger rule is **(2 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	NA NA NA NA NA NA NA NA NA NA
6	Up to 1,600’	4,801’ 6,100’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)**	*(2.5 / 6 / 8) or skip a slot for excepted*

			or Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
7	Up to 1,600’	6,101’ to 7,900’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(2.5 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
8	Up to 1,600’	7,901’ to 9,900’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)**	*(2.5 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft*

			or Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	NA
9	Up to 1,600’	9,901’ to 12,100’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* NA
10	Up to 1,600’	12,101’ to 16,000’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(3.5 / 7 / 9) or skip a slot for excepted aircraft*
11	1,601’ to 3,200’	Up to 3,200’	Do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2 / 5 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 5 / 8)** **or** No restrictions; stagger rule is **(3 / 5 / 8)**	*(3 / 5 / 8) or skip a slot for excepted aircraft* NA NA
12	1,601’ to 3,200’	3,201’ to 4,300’	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
13	1,601’ to 3,200’	4,301’ to 5,700’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or**	*(3 / 6 / 8) or skip a slot for excepted aircraft*

			Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do net pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA NA
14	1,601’ to 3,200’	5,701’ to 7,400’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3 / 6 / 8) or skip a slot for excepted aircraft* *(3 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* NA NA
15	1,601’ to 3,200’	7,401’ to 9,500’	Restrict 120 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a*

			distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*slot for excepted aircraft* NA
16	1,601' to 3,200'	9,501' to 11,800'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)**	*(3.5 / 7 / 9) or skip a slot for excepted aircraft*
17	1,601' to 3,200'	11,801' to 15,700'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 7 / 9) or skip a slot for excepted aircraft*
18	3,201' to 4,100'	Up to 4,100'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 90 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA
19	3,201' to 4,100'	4,101' to 4,800'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2 / 5 / 8)** **or** Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA

20	3,201’ to 4,100’	4,801’ to 7,000’	Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 80 kts or less aircraft to runway with shorter threshold to intersection, distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA
21	3,201’ to 4,100’	7,001’ to 9,100’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted aircraft* NA
22	3,201’ to 4,100’	9,101’ to 11,500’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to Intersection distance and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 7 / 9) or skip a slot for excepted aircraft* *(5 / 7 / 9) or skip a slot for excepted aircraft*
23	3,201’ to 4,100’	11,501’ to 15,500’	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 7 / 9) or skip a slot for excepted aircraft*
24	4,101’ to 5,000’	Up to 5,000’	Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or**	*(3.5 / 6 / 8) or skip a slot for excepted aircraft* *(3.5 / 6 / 8) or skip a slot for excepted*

			Do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 80 kts or less aircraft leading with 160 kts or greater aircraft trailing; stagger rule is **(3 / 6 / 8)**	*aircraft* *(3.5 / 6 /8) or skip a slot for excepted aircraft* NA
25	4,101' to 5,000'	5,001' to 6,800'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft*
26	4,101' to 5,000'	6,801' to 8,900'	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft*
27	4,101' to 5,000'	8,901' to 9,100'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Restrict 90 kts or less aircraft to runway with shorter threshold to intersection distance and do not pair 110 kts or less aircraft leading with 160 kts or greater	*(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a slot for excepted aircraft* *(4 / 6 / 8) or skip a*

			aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*slot for excepted aircraft*
28	4,101' to 5,000'	9,101' to 11,300'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4 / 7 / 9) or skip a slot for excepted aircraft* *(4 / 7 / 9) or skip a slot for excepted aircraft*
29	4,101' to 5,000'	11,301' to 15,300'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(4.5 / 7 / 9) or skip a slot for excepted aircraft*
30	5,001' to 6,400'	Up to 6,400'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(2.5 / 5 / 8)** **or** Except 80 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(2.5 / 6 / 8)** **or** Do not pair 100 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 80 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft* *(4.5 / 6 / 8) or skip a slot for excepted aircraft*
31	5,001' to 6,400'	6,401' to 8,700'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** or Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 6 / 8) or skip a slot for excepted aircraft* *(5 / 6 / 8) or skip a slot for excepted aircraft*
32	5,001' to 6,400'	8,701' to 15,000'	Restrict 110 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 7 / 9) or skip a slot for excepted aircraft*
33	6,401' to 8,100'	Up to 8,100'	Except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 5 / 8)** **or** Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 6 / 8) or skip a slot for excepted aircraft* *(5 / 6 / 8) or skip a slot for excepted aircraft*

34	6,401’ to 8,100’	8,101’ to 10,300’	Restrict 100 kts or less aircraft to runway with shorter threshold to intersection distance and except 90 kts or less aircraft and except 160 kts or greater aircraft; stagger rule is **(3 / 6 / 8)**	*(5 / 7 / 9) or skip a slot for excepted aircraft*
35	8,101’ to 8,600’	Up to 8,600’	Do not pair 110 kts or less aircraft leading with 160 kts or greater aircraft trailing and except 90 kts or less aircraft; stagger rule is **(3 / 6 / 8)**	*(5.5 / 6 / 8) or skip a slot for excepted aircraft*

APPENDIX 2

Training:

Facility managers electing to use the DCIA/CRDA concept must develop and administer classroom and laboratory training (e.g., ATCoach/ETG) consistent with locally established DCIA/CRDA programs. The number of scenario problems, and the length of time on simulation equipment, must be determined by the facility manager.

CRDA is a tool resident in all terminal automation platforms. CRDA training has been incorporated into the Air Traffic Operator Training Manuals for all automation platforms and is considered part of the field qualification training program. Due to site specificity of the program, nationally developed lesson plans will not be developed. Suggested lesson plan content should include:

1. A review of FAA Order JO 7110.110B, Dependent Converging Instrument Approaches (DCIA) with Converging Runway Display Aid (CRDA).

2. Locally adapted procedures for each runway that include missed approaches and coordination procedures between control personnel.

3. Locally developed training scenarios that provide instruction on the use of CRDA, including ghost targets and staggered approaches.

4. Techniques for "hitting the ghosts" (the desired outcome is stagger over the threshold, not separation with respect to a ghost all along approach) and dealing with winds (the ghost target shows the speed of the parent aircraft on the converging approach, which is subject to the wind field on that approach. This may be different from the wind field on its own approach.)

5. Techniques for understanding the fact that in spacing on or from a ghost, one must always remain aware of the separation required from the next aircraft in the flow.

APPENDIX 3

Examples of Responsibilities:

a. The CRDA Implementation Manager must:

1. Oversee operational implementation of CRDA.

2. Coordinate individual implementation goals (for example, spacing, items to be documented, etc.) with the Operations Manager (OM) or Front Line Manager-in-Charge (FLMIC).

3. Inform the OM/FLMIC of the current step-down weather and spacing minima for the operation in use.

b. The OM or FLMIC must:

1. Ensure CRDA is used whenever operational and weather conditions permit.

2. Inform the appropriate FLMs, controller-in-charge (CIC) and Traffic Management Coordinator (TMC) of appropriate step-down minima in use for the given phase.

c. The TRACON FLM/CIC or TMC (if applicable) must:

1. Advise Tower FLM/CIC when initiating/terminating CRDA operations. Include the aircraft identification of the first and last aircraft in the stagger.

2. Enable CRDA operation via ARTS/ STARS keyboard entry.

3. Ensure all operating positions are aware of the appropriate stagger separation in use for the given operation.

d. The Tower FLM/ CIC must:

1. Ensure the ATIS states "Dependent converging approaches to Runway (number) and Runway (number) in use" during DCIA operations.

2. Advise OM, FLMIC or TMC when weather conditions are such that Local Control will be unable to provide visual separation between aircraft on converging finals.