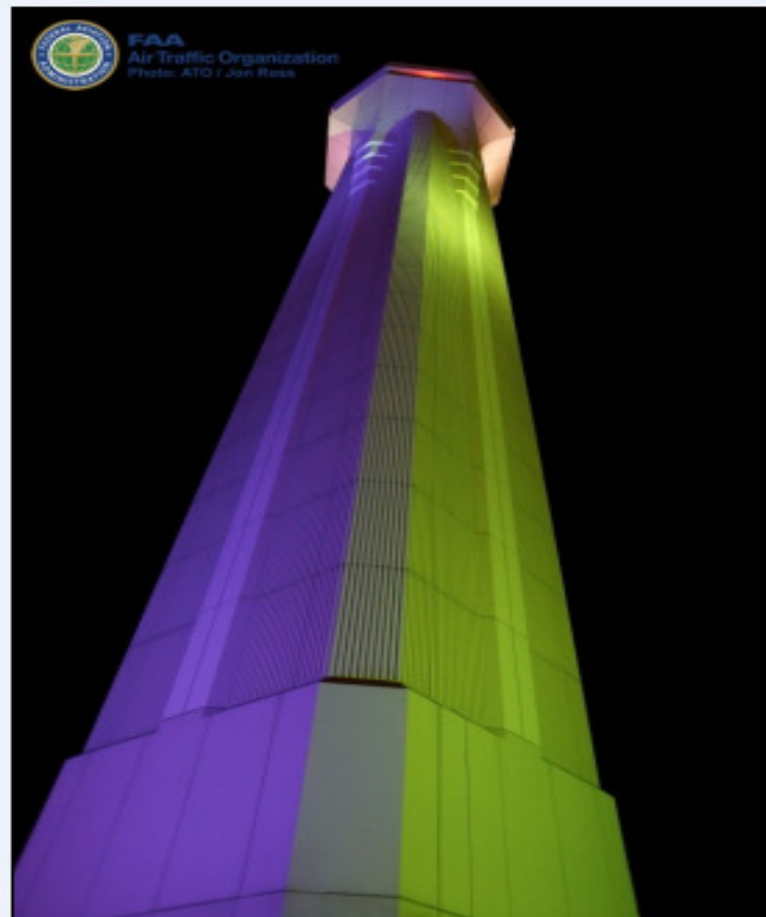




**United States Department of Transportation
Federal Aviation Administration
Miami Air Traffic Control Tower**

**ORDER
MIA ATCT
MT 7110.65X**

STANDARD OPERATING PROCEDURES



December 1, 2011

RECORD OF CHANGES DIRECTIVE NO. **MT ORDER 7110.65X**

CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL	CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL

FAA Form 1320-5 (6-80) USE PREVIOUS EDITION (electronic equivalent)

TABLE OF CONTENTS

<i>Foreword</i>	8
<i>CHAPTER 1. Introduction</i>	9
Section 1. General	9
1-1. Purpose	9
1-2. Distribution	9
1-3. Cancellations	9
1-4. Responsibilities.....	9
1-5. Explanation of Changes.....	9
1-6. thru 1-10 Reserved.....	10
Section 2. Handbook Use	11
1-11. Annotations.....	11
1-12. Front Line Manager	11
1-13. thru 1-19 Reserved.....	11
Section 3. Policy	12
1-20. Communications Transfer and Transfer of Control.....	12
1-21. Radar Use	12
1-22. VFR Airspace Delegation.....	13
1-23. Land and Hold Short Operations (LAHSO)	13
1-24. Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas & Clear Zones.....	14
1-25. Ground Traffic Management.....	15
1-26. Taxiway and Ramp Restrictions.....	15
1-27. Runway Crossing and Closing Procedures.....	16
1-28. Prearranged Coordination Procedures for Departures.....	17
1-29. Law Enforcement Aircraft Operations.....	18
1-30. Terminal Data Link System (TDLS) Procedures.....	18
1-31. Class Bravo Airspace Clearances.....	19
1-32. Combining Positions of Operation.....	19
1-33. Flight Progress Strips.....	20
1-34. Vectoring Across the MIA Final Approach Courses Involving A380/Heavy/B757 Aircraft.....	21
1-35. Simultaneous Intersecting/Converging Runway Operations.....	21
1-36. Ensuring Separation prior to Simultaneous turns to Final and Arrival Sequencing.....	22
1-37. Critically Dependent Positions.....	22
1-38. Position Relief Briefings.....	23
1-39. Concurrent Instrument/Visual approaches.....	23
1-40. Three-hour/Four-hour Tarmac Rule	23
1-41. Stratification	23
1-42. Acknowledgement of Arrivals/Departures and Communication Checks.....	24
1-43 thru 1-50. Reserved.....	25
Section 4. Noise Abatement	26
1-51. Miami International Airport.....	26
1-52. Fort Lauderdale International Airport.....	29
1-53. Fort Lauderdale Executive Airport	30
1-54. Opa-Locka Airport.....	30
1-55 thru 1-59. Reserved.....	30
Section 5. LUAW Procedures	31
1-60. LUAW procedures.....	31
1-61 thru 1-99. Reserved.....	33
<i>CHAPTER 2. Tower</i>	34

Section 1. General **34**

2-1. Cab FLM/CIC Position..... 34

2-2. Flight Data 36

2-3. Clearance Delivery. 39

2-4. Gate Hold..... 40

2-5. Ground Control North, South, West. 42

2-6. Local Control North and South..... 46

2-7. Cab Coordinator. 49

2-8. ASDE-X 50

2-9. Safety Logic System..... 51

2-10 thru 2-99. Reserved..... 52

CHAPTER 3. TRACON..... 53

Section 1. General **53**

3-1. OMIC/FLMIC/CIC RESPONSIBILITIES 53

3-2. Miami Sector FLMIC/CIC. 55

3-3. Traffic Management Coordinator. 57

3-4. TMB Arrival/Departure Radar..... 59

3-5. TMB Arrival/Departure Handoff..... 59

3-6. Miami South Departure Radar 60

3-7. Miami South Departure Handoff 61

3-8. Miami North Departure Radar 62

3-9. Miami North Departure Handoff 62

3-10. Miami South Feeder Radar 63

3-11. Miami South Feeder/Final Handoff..... 64

3-12. Miami South Final Radar..... 64

3-13. Miami North Feeder Radar 65

3-14. Miami North Feeder/Final Handoff..... 66

3-15. Miami North Final Radar..... 67

3-16. Monitor North and South. 68

3-17. Satellite Sector FLM/CIC 69

3-18. FLL South East Departure/West Arrival Radar 70

3-19. FLL South East Departure/West Arrival Handoff 72

3-20. FLL South West Departure/East Arrival Radar 73

3-21. FLL South West Departure/East Arrival Handoff 74

3-22. FLL North Departure Radar 74

3-23. FLL North Departure Handoff..... 75

3-24. FXE Arrival/Departure Radar..... 76

3-25. FXE Arrival/Departure Handoff..... 76

3-26. FLL North Feeder Radar 77

3-27. FLL North Feeder Handoff..... 77

3-28. FLL North Final Handoff 78

3-29. FLL North Final Radar 78

3-30. Data Distribution 1 79

3-31. Data Distribution 2 80

3-32. Radar Coordinator Positions (CI-1; CI-2; CI-3;) 80

3-33 thru 3-99 Reserved..... 81

CHAPTER 4. Automation Procedures..... 83

Section 1. General **83**

4-1. Radar Equipment Operation 83

4-2. TMB ASRS 4/QMA Site Procedures 83

4-3. STARS Display Data. 84

4-4. Automated Point Out Procedures. 85

4-5. STARS Mode of Operation. 85

4-6. MSAW/CA Warning Aural Alarm Volume 85

4-7. Scratch Pad Entries..... 85

4-8 thru 4-19 RESERVED.....	85
Section 2. Electronic Flight Strip Transfer System (EFSTS) _____	86
4-20. Responsibilities.....	86
4-21 thru 4-29. Reserved.....	87
Section 3. Airport Resource Management Tool (ARMT) _____	88
4-30. Responsibilities.....	88
4-31 thru 4-39. Reserved.....	88
Section 4. Minimum Safe Altitude Warning (MSAW) Tower Aural Alert Awareness _____	89
4-41. MSAW Tower Alert Area	89
4-42. Procedures	89
4-43 thru 4-99. Reserved.....	89
CHAPTER 5. Dual ATIS.....	90
Section 1. General _____	90
5-1. Digital ATIS	90
5-2 thru 5-99. Reserved.....	90
CHAPTER 6. GROUP 6 AIRCRAFT OPERATIONS.....	91
Section 1. General _____	91
6-1. General Operations.	91
6-2. Procedures.	92
6-3. Vectoring Across the MIA Final Approach Courses Involving Group 6 Aircraft.....	93
6-4. B748 Aircraft Operations.	94
6-5 thru 6-99. Reserved.....	94
APPENDIX 1 - Airspace Delegation.....	95
Tamiami Arrival Radar - H _____	95
Miami South Departure Radar – W _____	96
Miami North Departure Radar – D _____	98
Miami South Feeder Radar- S _____	100
Miami South Final Radar – A _____	104
Miami North Feeder Radar – N _____	106
Miami North Final Radar – V _____	110
FLL South East Departure/West Arrival Radar – Z _____	112
FLL South West Departure/East Arrival Radar – Q _____	113
Fort Lauderdale North Departure Radar – L _____	114
Fort Lauderdale Executive Arrival/Departure Radar – G _____	116
Fort Lauderdale North Final Radar - F _____	117
Fort Lauderdale North Feeder Radar - R _____	119
APPENDIX 2 – Identifiers and Scratch Pad Entries.....	121
1. DTA/ATA Identifiers _____	121
2. STARS Scratch Pad Contractions _____	121
3. MIA and FLL VISUAL APPROACH Scratch Pad Entries. _____	122
APPENDIX 3 – Strip Marking.....	123

1. Departure Strip Marking _____ **125**

2. Class B Airspace Departure _____ **126**

3. Gate Hold Strip Marking _____ **126**

APPENDIX 4 – Local Control/Ground Control Tablet *127*

APPENDIX 5 – Distance Remaining – EAST..... *128*

APPENDIX 5 – Distance Remaining - WEST *129*

APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones..... *130*

APPENDIX 7 - Checklists *137*

FLMIC/CIC TOWER CHECKLIST _____ **137**

 Day Shift..... 137

 Evening Shift 137

 Midnight Shift..... 137

TRACON FLMIC/OMIC CHECKLIST _____ **138**

 Day Shift..... 138

 Evening Shift 138

 Midnight Shift..... 138

TOWER - POSITION RELIEF CHECKLIST _____ **139**

CAB FLMIC/CIC RUNWAY CHANGE CHECKLIST _____ **140**

TRACON –POSITION RELIEF CHECKLIST _____ **141**

TRACON – FLMIC/CIC RUNWAY CHANGE CHECKLIST _____ **142**

APPENDIX 8 - Movement Areas *143*

GROUND CONTROL WEST _____ **143**

GROUND CONTROL SOUTH _____ **144**

GROUND CONTROL NORTH _____ **145**

LOCAL CONTROL NORTH & SOUTH _____ **146**

APPENDIX 9 – Pre-Arranged Coordination Airspace *147*

Miami South Departure Radar - East _____ **147**

Miami South Departure Radar – West _____ **148**

Miami North Departure Radar – D _____ **149**

 East 149

Miami North Departure Radar – D _____ **150**

 West 150

Ft. Lauderdale North Departure Radar - L _____ **151**

 East 151

Ft. Lauderdale North Departure Radar - L _____ **152**

 West 152

APPENDIX 10 – Tower Dispersal Area and Local Control Assigned Airspace..... *153*

A. Tower Dispersal Area. _____ **153**

B. Local Control Assigned Airspace.	154
<i>APPENDIX 11 – Runway 9 Preferential Taxi Routes</i>	<i>155</i>
<i>APPENDIX 12 – RDVS Monitor Codes</i>	<i>156</i>
<i>APPENDIX 13 – MSAW Tower Alert Area</i>	<i>157</i>
<i>APPENDIX 14 – Scratch Pad Entries</i>	<i>158</i>
<i>APPENDIX 15 – Scratch Pad Entries (MIA FLL)</i>	<i>159</i>
<i>APPENDIX 16 – Best Operating Practices</i>	<i>160</i>
ALL POSITIONS	160
MIAMI ARRIVAL POSITION	161
MIAMI NORTH AND SOUTH DEPARTURE POSITIONS	161
FLL SOUTH ARRIVAL/DEPARTURE	162
OPF ARRIVAL/DEPARTURE (Z/Q)	162
FLL NORTH DEPARTURE, FLL ARRIVAL,	162
FXE ARRIVAL/DEPARTURE (L, R/F, G)	162
LOCAL CONTROL	163
GROUND CONTROL	164
CLEARANCE DELIVERY/FLIGHT DATA	165
<i>APPENDIX 17 – TRACON Layout</i>	<i>166</i>
<i>APPENDIX 18 – Beacon Code Allocation</i>	<i>167</i>
<i>APPENDIX 19 – Stratification</i>	<i>168</i>
<i>APPENDIX 20 – Group 6 Aircraft Operations</i>	<i>169</i>
<i>APPENDIX 21 - Miami ARTCC Airspace Sectors</i>	<i>172</i>

Foreword

This order prescribes air traffic control procedures and phraseology for use by Miami Air Traffic Control Tower personnel.

All concerned personnel must familiarize themselves with the provisions of this order that pertain to their operational responsibilities.

Original signed by:

Juan Fuentes,
Air Traffic Manager

CHAPTER 1. Introduction

Section 1. General

1-1. Purpose

This order prescribes local air traffic control procedures and phraseology for use by Miami Air Traffic Control Tower personnel, This Order is supplemental to the procedures contained in FAA Order JO 7110.65.

1-2. Distribution

This order is distributed to the Master Binder, Tower and TRACON Binders, Support Manager, Training Department, NATCA Facility Representative.

1-3. Cancellations

MTN 7110.65W, Standard Operating Procedures, dated 3/16/11
 MTN 7110.361, Combining Positions of Operation, dated 4/01/11
 MTN 7110.365, Midnight Shift Coordination, dated 4/22/11
 MTN 7110.366, Group 6 Aircraft Operations, dated 6/10/11
 MTN 7110.367, Missed Approach/Go Around assigned altitude, 7/20/11
 MTN 7110.368, TARMAC Delay, dated 9/2/11
 MTN 7110.369, LUAW Operations, dated 10/14/11
 MTN 7110.370, Taxiway Papa Restriction, dated 10/26/11

1-4. Responsibilities

Each manager is responsible for coordinating revisions and revalidating the sections of this Order that pertain to their functional area.

1-5. Explanation of Changes

Par. 1-23i. LAHSO. Removed LCS restriction regarding crossing runway 12 per Tower Collaboration workgroup recommendation. SRMDM on file.
 Par. 1-26g. Taxiway and Ramp Restriction. Changes restriction when using taxiway P.
 Par. 1-27a(8). Runway Crossing and Closing Procedures. Removed LCS restriction regarding crossing runway 12 and LCN runway 12 responsibilities per Tower Collaboration workgroup recommendation. SRMDM on file.
 Par. 1-32c. Combining Positions of Operation. Adds restriction to combining operational position per MTN 7110.361 and national guidance.
 Par. 1-34. Note. Vectoring Across the MIA Final Approach Courses. Adds Group 6 aircraft crossing restriction per MTN 7110.366. SRMDM on file.
 Par. 1-40. Three-hour/Four-hour Tarmac Rule. Adds four-hour Tarmac rule per MTN7110.368.
 Par. 1-42. Acknowledgement of Arrivals and Departures and Communication Checks. Adds TRACON and Tower operational restrictions between the hours of midnight to 0600 per MTN7110.365 and national guidance.

Par. 1-60b(9)f. LUAW Procedures, Local Control, Cab FLMIC/CIC Responsibilities. Adds familiarity requirement for airport movement areas per MTN7110.369 and national requirements.

Par. 1-60b(9)g. LUAW Procedures, Local Control, Cab FLMIC/CIC Responsibilities. Adds LUAW restriction per MTN7110.369 and national requirements.

Par. 2-1b(28). Tower Cab FLM/CIC Position. Adds Tarmac Rule notification requirement per MTN7110.368 and national requirements.

Par. 2-6d(6). Local Control North and South. Removes runway 12 from LCN responsibilities per Tower Collaboration workgroup recommendation. SRMDM on file.

Par. 2-6d(7)(a). Local Control North and South. Adds runway 12 to LCS responsibilities per Tower Collaboration workgroup recommendation. SRMDM on file.

Par. 2-6d(12). Local Control North and South Responsibilities. Specified altitude required in the event of a missed approach/go around, per MTN7110.367.

Par. 2-7b(6). Cab Coordinator Responsibilities. Adds call forwarding requirement.

Par. 3-1f. OMIC/FLMIC/CIC Responsibilities. Adds Tarmac four-hour rule and responsibilities per MTN7110.368 and national requirements.

Par. 3-1m. OMIC/FLMIC/CIC Responsibilities. Clarifies FLMIC/CIC leave request coordination.

Par. 3-1t. OMIC/FLMIC/CIC Responsibilities. Adds consumer complaint information per MTN7110.368 and national requirements.

Par. 3-1u. OMIC/FLMIC/CIC Responsibilities. Adds restrictions and coordination for airborne intercepts per national requirements.

Par. 3-1v. OMIC/FLMIC/CIC Responsibilities. Adds responsibility for physical oversight in the control tower during midnight shift.

Par. 3-4d. TMB Arrival/Departure Radar. Adds X51 arrivals and departures responsibility.

Par. 3-16(2)and (3). Monitor North and South. Corrects misprint of Radar scope and STARS symbol.

Par. 3-20d(7). FLL South West Departure/East Arrival Radar. Adds FLL to MIA turbojet traffic altitude assignment.

Chapter 6. Group 6 Aircraft Operations. Adds procedures for Group 6 aircraft operations per MTN7110.366. SRMDM on file.

Appendix 6. Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones. Adds POFZ depictions on runways 27, 8R and 30.

Appendix 12. RDVS Monitor Codes. Corrects IA codes.

Appendix 20. Group 6 Aircraft Operations. Adds visual depiction of Group 6 aircraft operations. SRMDM on file.

Appendix 21. Miami ARTCC Airspace Sectors. Depicts sector boundaries and frequencies for Miami ARTCC.

1-6. thru 1-10 Reserved

Section 2. Handbook Use

1-11. Annotations

Revised, new or reprinted pages will be marked as follows:

- a.** The change number and effective date will be printed on each revised or additional page.
- b.** Vertical lines in the margin of the text mark the location of substantive, procedural, operational and/or policy changes; e.g., when material affecting the performance of duty is added, revised, or deleted. The accompanying Change Notice explains the intent of the change and provides information for proper interpretation. A reprinted page not requiring change will be reproduced in its original form.
- c.** “Editorial Change” at the bottom of the page indicates that revisions have been made that do not change the intent of the text or affect performance of duty; e.g., changes in wording, numbering of paragraphs or pages, or page makeup. This notation will not appear whenever editorial and substantive changes are on the same page.
- d.** Statements of fact of a prefatory or explanatory nature relating to directive material are set forth as notes.

1-12. Front Line Manager

FLMIC/CIC duties are performed by the Front Line Manager.

1-13. thru 1-19 Reserved

Section 3. Policy

1-20. Communications Transfer and Transfer of Control.

a. Whenever the STARS Full Service Level (FSL) Program is operational, and data blocks of all arrival aircraft are displayed on the Tower Display Workstation (TDW), local controllers will utilize this information for the arrival sequence.

b. Transfer of control from the TRACON to the Tower Cab must take place, at the lateral limits of Local Control airspace or 5nm from airport.

c. Communication transfer will be accomplished prior to transfer of control, but not so far from the runways as to impair the approach/local controller's ability to provide service to the aircraft (i.e., traffic information).

Note: Approach must transfer communications between 10 and 7 miles from the airport.

1-21. Radar Use.

a. When both the Miami and Fort Lauderdale radar systems are operational, Radar Control positions will be operated on the ASR system appropriate for the control function assigned

b. **ASR-9/STARS Radar System.** All ATC personnel are responsible for determining that the radar presentation and equipment performance is adequate for the service provided. Immediately report any radar discrepancy to the FLM/CIC.

(1) Alignment. RADAR alignment is automatically monitored by the system. Tech Ops will receive alarms if there is a problem with RADAR alignment.

c. **Operational Modes.** There are 2 operational modes, Mode S and IBI Mode (Interrogator Back-up). When operating in Mode S, IBI Mode is always available.

In accordance with FAAO 7110.65, the ASR-9 radar system must display prominent obstructions as permanent echoes on the radar display using operating beacon transponders (Parrots), Moving Target Indicator (MTI) reflectors, or Surveillance and Communications Interface Processors (SCIP) generated alignment targets.

d. **ASR-9 Reflector Location.** (MTI)

(1) Miami ASR-9 – 323/2.1NM

(2) Ft. Lauderdale ASR-9 – East: 96.65/1.5NM, West: 294.61/1.56NM

Note: Since the reflector is run on solar power, a return may not always be visible. If a return is not shown, notify Tech Ops.

e. **Permanent Beacon Target Locations.** (Parrot/CPME)

(1) Miami ASR-9 - 094/40 and 320/40.

(2) Ft. Lauderdale ASR-9 - 274/53 and 358/25.

f. **Position Startup.** Weather levels settings will normally be Level 2 and above. The weather displayed is a mosaic of both radars, the MIA and FLL ASR-9 radars. The weather from the long range radar is inhibited via software. If controllers go to long range radar only, and need weather displayed, Tech Ops must be notified.

g. **IBI Limitation.** When the ASR-9 reverts to IBI from Mode S, the application of 3 NM separation within 60 miles is no longer permitted. When in the IBI mode, provisions of FAAO 7110.65, 5-5-4a1 and 2 apply, or 3NM separation when less than 40 miles from the antenna, and 5 NM when more than 40 miles from the antenna, provided the position is operating using a single sensor.

1-22. VFR Airspace Delegation.

a. Each radar control position is delegated that airspace which lies 500 feet below its airspace delegation. This airspace may be used for VFR, except Heavy/B757 type aircraft, and may be utilized without coordination with the control position that owns the underlying airspace.

b. When a control position releases a cardinal altitude, it includes that airspace 500 feet below the cardinal altitude, as described in 1-22 a. above

1-23. Land and Hold Short Operations (LAHSO)

a. Land and Hold Short Operations are authorized only between arrivals on Runway 9 and Runway 12 subject to the following conditions:

b. Weather conditions must be equal to or greater than ceiling of 1,000 feet and visibility of 3 statute miles.

c. The LAHSO runway Available Landing Distance (ALD) must be dry.

Note: LAHSO distances are contained in Appendix 5.

d. The tailwind on the hold short runway must be calm (less than 3 knots)

Note: For the purpose of LAHSO, Order 7110.118 defines a tailwind as any wind more than 90 degrees to the longitudinal axis of the runway. The runway designation must be used as the basis for determining the longitudinal axis.

e. When the wind instruments are inoperative, only the wind direction may be estimated, e.g., windsock, pilot reports.

- f. A LAHSO clearance must not be issued to any foreign air carrier or any foreign air taxi.
- g. Domestic air carriers must not land when a non-air carrier is landing to hold short of the air carrier runway.
- h. LAHSO must not be conducted if in the preceding 20 minutes there have been any reports of wind shear.
- i. Aircraft Group/Distance Minima. Aircraft conducting LAHSO must have established landing distance criteria in accordance with 7110.118, Appendix 3. Aircraft groups 1 through 9 are authorized to conduct LAHSO on either Runway 12 or Runway 9. Aircraft not listed in Appendix 3, or for which a letter of authorization has not been issued, must not participate in LAHSO.
- j. LAHSO in-pavement lights must be left on when LAHSO is being conducted.
- k. LAHSO must be terminated for any situation or weather condition that, in the judgment of the tower FLM/ controller-in-charge, would adversely affect land and hold short operations.
- l. All runways to which LAHSO are conducted require visual or electronic glide slope information (i.e. VASI, PAPI, or ILS Glide Slope).
- m. Nighttime LAHSO requires PAPI on the hold short runway.
- n. When LAHSO operations are expected to be utilized, an announcement must be made on the ATIS. This announcement must also inform pilots to advise the approach controller if they are unable to accept or comply with a hold short clearance.

NOTE: ATIS Example: “Land and hold short operations are in effect. Notify approach control if you are unable to comply. Available landing distance runway one two to hold short of runway niner is eight thousand one hundred feet. Available landing distance runway niner to hold short of runway one two is nine thousand seven hundred and fifty feet. Aircraft landing runway niner or runway one two can expect to hold short of the intersecting runway.”

1-24. Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas & Clear Zones

- a. The run-up pad between runways 27 and 30 is not large enough to hold an aircraft short of Runway 30 without infringing on the safety area for runway 27. Aircraft must not be held in this area unless runway 27 is not in use.

b. Ground Control / Local Control must ensure that aircraft/tug movements operating to and from spots 52/53 (Northeast Base), are clear of the RWY 26R Clear Zone prior to landing aircraft entering the protected area. (See Appendix 6).

c. When an aircraft is holding short of runway 8R/26L in the Corral Area, runway 12/30 is unusable for arrivals. When an aircraft is holding short of runway 12/30 in the Corral Area, runway 8R/26L is unusable for arrivals. (See Appendix 6).

1-25. Ground Traffic Management.

a. When STARS FSL is operational and data blocks of all arrival aircraft are displayed on either the TDW or ASDE-X, Ground Controllers will utilize this information for the arrival sequence.

b. An EFSTS or handwritten strip on all departing aircraft must be passed to the appropriate Local Controller by Ground Control in proper sequence, or as directed by the Cab FLM/CIC.

c. When information received from the tower TDW, EFSTS strips/ASDE X, or obtained manually is transferred to a writing tablet; the information must be recorded in the following format:

(1) Local Control. The left side of the tablet is used for Runways 8L, 8R, 26L, 26R; right side of tablet for Runway 9/27 and center for Runway 12/30. The lower 1/3 of the tablet must have a line scribed across the page and contain special operations, (i.e., helicopters, photo-missions, flow restrictions, etc.).

(2) Ground Control. Information pertaining to Runways 8L/26R, 8R/26L 9/27 and 12/30 must be recorded as above. The lower 1/3 of the page must have a line scribed across the tablet and contain general information and aircraft, vehicle or tug identification.

(3) When the aircraft, vehicle or tug is no longer a factor, a line must be drawn through the identification.

d. All pertinent information relating to active entries on the tablet must be included in position relief briefings. Refer to the example in Appendix 4 when preparing tablets.

1-26. Taxiway and Ramp Restrictions.

a. Aircraft and vehicles are to remain clear of the taxiway area between the north-south hold bars located on the eastern most edge of taxiway "AA" while aircraft are landing and departing RY8R or landing RY26L.

b. Ground Control must ensure that aircraft hold at the appropriate hold bar unless prior coordination with Local Control has been accomplished.

- c. Local/Ground Control North must ensure that runway 26R clear zone is free of aircraft prior to arrival aircraft entering the runway 26R clear zone.
- d. Taxiway "AA" should not be utilized when Runway 26L is in use for arrivals.
- e. Taxiway "AA" lights must not be turned on from sunset to sunrise when visibility is two miles or less or when Runway 26L is in use for arrivals.
- f. Aircraft with a wingspan greater than 143 feet are prohibited from using Taxiway "AA".
- g. Aircraft with a wingspan greater than 171 feet are prohibited from using taxiway P from taxiway U eastbound.
- h. Aircraft with a wingspan greater than 78 feet are prohibited from using GAC Apron.
- i. Local/Ground Control must ensure that when an aircraft is landing runway 30 and rolls to the end of the runway, the aircraft must clear the runway and continue unimpeded either across runway 26L or eastbound towards taxiways 'M', 'N', 'P' or 'Q' until east of the common hold bar 'Z BAR' in order for runway 30 to be considered cleared.

Local/Ground Control must ensure that when an aircraft is landing runway 26L and rolls to the end of the runway, if turning left, the aircraft must clear the runway and continue unimpeded either on to runway 12/30 or eastbound towards taxiways 'M', 'N', 'P' or 'Q' until east of the common hold bar 'Z BAR' in order for runway 26L to be considered cleared. See Corral Area depiction in Appendix 6.

1-27. Runway Crossing and Closing Procedures.

- a. Local/Ground Control must use the following procedures:
 - (1) Local Control must, upon approval of a request to occupy the runway for vehicle operations, other than runway crossings, place a prepared strip marked "**VEHICLE ON RUNWAY**" in the appropriate strip bay to visually indicate a temporary runway closure.
 - (2) When runways are closed for reasons other than vehicle operations listed in 1-27.a(1), Local Control must place a prepared strip marked "**RUNWAY /_ CLOSED**" in the appropriate runway strip bay.
 - (3) Ground Control/Local Control must identify to the appropriate Local Control position the runway, the point at which crossing will occur, and the phrase "under tow" when applicable.
 - (4) After receiving approval from Local Control to cross a runway, Ground Control must place the "**TOWING ACROSS RUNWAY**" on the appropriate

local controller's Board. Once the towing operation is completed, the ground controller must verbally advise local control of that fact and remove the **"TOWING ACROSS RUNWAY"** strip from local control's bay.

(5) Visually scan the runway and final approach course prior to crossing the runway.

(6) There must not be any conditional clearances issued between Local Control and Ground Control.

(7) In order to reduce noise levels in the cab and minimize the potential for miscommunication, it is expected that between 0700 and 2300, all coordination for crossing of active runways, will be accomplished using the override landlines to the appropriate controller.

1-28. Prearranged Coordination Procedures for Departures.

Coordination is considered to have been affected subject to the following:

a. Prearranged coordination may be applied only by Miami North Departure Radar (D), Miami South Departure Radar (W) and Fort Lauderdale North Departure Radar (L) in the areas depicted and within the altitudes specified in Appendix 9.

b. Miami North Feeder Radar (N), Miami South Feeder Radar (S), Fort Lauderdale Feeder Radar (R), and Miami North Departure Radar (D) must:

(1) Verbally point out to "D", "W" or "L" non-STARs tracked aircraft operating in the prearranged coordination airspace, including aircraft in coast mode.

(2) Start STARs tracks on all primary targets under their control in the prearranged coordination airspace.

(3) Have the option to suspend this procedure with FLM concurrence.

c. Miami Departure Radar "D" and "W", and Fort Lauderdale Departure Radar "L" must:

(1) Be responsible for separation of aircraft under their control from all targets operating in the prearranged coordination airspace.

(2) Use the STARs "quick look" function to identify tracked targets operating in the prearranged coordination airspace.

(3) Not penetrate that portion of airspace that has been delegated to another position/sector, (i.e. when airspace has been temporarily realigned due to weather).

(4) Not penetrate another position's airspace within five miles of a coordinated converging target in that airspace.

- d. This procedure is canceled during STARS FSL outages.
- e. Operations FLMs/CIC's must inform the appropriate departure positions of any change in position configurations/airspace configurations that will affect this procedure.

1-29. Law Enforcement Aircraft Operations.

a. When information is received that the U.S. Customs Service, Drug Enforcement Administration, Federal Bureau of Investigation or other Law Enforcement aircraft operations are planned in the Miami terminal area, the FLMIC may staff a separate position to accomplish the following:

(1) Coordinate with Miami Center on the 46 or 501 line for Law Enforcement aircraft operations.

(2) Coordinate Law Enforcement aircraft operations with the appropriate positions.

b. Communications with these aircraft should be conducted on a discrete UHF frequency, if possible. Care should be exercised not to have two frequencies selected when communicating with the UHF equipped aircraft.

c. Law Enforcement aircraft, while having exemptions from certain FAR's, have no exemption from FAR's pertaining to air traffic control. Safety being paramount, operation of these flights in positive control airspace should be approved or disapproved based on traffic.

d. ATCS personnel must notify the OM/FLMIC whenever a Customs overflight exempt aircraft changes its planned destination, descends below 12,500 MSL prior to arrival at the intended destination, or reports a transponder failure.

Note. The pilot is required to include the words "Customs Overflight" on initial contact with ATC and each time control is transferred.

e. The Air Traffic Manager will contact AJO-2E2 prior to any agreement for operational support for sensitive/classified national defense and law enforcement operations (Ref. FAA Order 1650.20).

1-30. Terminal Data Link System (TDLS) Procedures.

a. Clearances will be delivered via TDLS data communications system to participating aircraft only.

b. Review all flight progress strips at the tower workstation for accuracy and clarity before transmission to respective airlines.

c. Ensure that the following information is displayed and accurate prior to transmittal:

- (1) Current SID and Transition as appropriate
- (2) Initial Altitude
- (3) Departure Frequency
- (4) Ground Control Frequency
- (5) Remarks Section [i.e. Call for Release (CFR), Gate Hold, EDCT]

d. Notify the appropriate ground controller of aircraft receiving revised or duplicate flight plans and ensure that the appropriate clearance is issued.

e. Ensure that the following clearances are not transmitted via TDLS:

- (1) Any revised/amended/duplicate flight plan.
- (2) Full Route Clearance (FRC).
- (3) Flow Control reroutes, TMU/Center reroutes.
- (4) Any clearance generated that may cause misunderstanding on pilot interpretation of the clearance.
- (5) A flight plan that includes a PDR that does not connect with the filed route of flight.

1-31. Class Bravo Airspace Clearances.

When an aircraft intends to enter Miami Class Bravo airspace, the clearance will be issued on first radio contact with Miami Approach or as soon as possible thereafter.

1-32. Combining Positions of Operation.

a. When positions are combined or when working more than one frequency at a position, all aircraft should be on the same frequency. All frequencies for the combined positions must be monitored.

b. Operational radar positions must not be combined with a newly certified CPC with less than 20 hours since certification. Prior to accepting the assignment of an operational position, the newly certified CPC will ensure the minimum time requirement

has been met. This requirement is not applicable to the following combined positions, or their associated handoff positions:

- a. Local Control North and South
 - b. Clearance Delivery (CD) and Flight Data1 (FD)
 - c. Ground Control North, South and West
 - d. Ft. Lauderdale Feeder (R) and Ft. Lauderdale Final (F)
 - e. Miami North Feeder (N) and Miami North Final (V)
 - f. Miami South Feeder (S) and Miami South Final (A)
 - g. FLL Southeast Departure (Z) and FLL Southeast Arrival (Q)
 - h. Miami South Departure (W) and Homestead Arrival Radar (H)
- c. During the midnight shift, the Local Control position will not be combined with any other operational position (except the CIC position) unless approved by the FLMIC and documented in the 7230-4, Facility Daily Operations log.

1-33. Flight Progress Strips.

The requirement to use flight progress strips in the TRACON is waived, provided:

- a. STARS FSL and one of the following RADAR systems are operating: MIA ASR, FLL ASR.
- b. Blank flight progress strips and notepads are made available.
- c. Scratchpad information must be verified as correct prior to handoff to the next control position.
- d. Departure strips must be available at the departure position to verify pertinent information. (i.e. headings, altitudes, DTA's, and STARS information).

Note: Assigned departure headings within the departure dispersal area are deemed coordinated with the receiving departure controller when scanned by the tower.

- e. If a strip is used, standard strip marking must be utilized. See Appendix 3 MT7110.65.
- f. If a strip is desired by a subsequent control position, it will be generated by that position.
- g. If the conditions of 1-33.a. are not met, standard strip marking and delivery procedures will be resumed.

1-34. Vectoring Across the MIA Final Approach Courses Involving A380/Heavy/B757 Aircraft.

All transitioning IFR aircraft at or below 2,000' must be vectored outside of the 15nm range mark when crossing the MIA final approach courses for the runways in use, unless the appropriate approach control positions are Quick Looked to ensure that wake turbulence separation will be maintained between the transitioning aircraft and MIA arrivals.

Note: All transitioning IFR aircraft at or below 2,000' must be vectored outside of the 20nm range mark when crossing the MIA final approach courses for the runways in use, when an A388 aircraft is on any of the final approach courses. See Chapter 6 for Group 6 Aircraft Operations.

1-35 Simultaneous Intersecting/Converging Runway Operations.

Unless otherwise coordinated, the following procedures must apply:

a. General. In addition to the separation minima contained in FAAO JO7110.65, visual separation may be applied between simultaneous converging runway operations, provided the following requirements are met:

(1) Aircraft participating in simultaneous converging runway operations must be informed on initial contact with approach control that simultaneous converging/intersecting runway operations are being conducted. This information may be omitted if contained in the ATIS and the pilot states that he has received the current ATIS information.

(2) Simultaneous converging runway operations must not be conducted if the reported ceiling is below 1000 feet or prevailing visibility is less than 3 miles. If the tower FLM/CIC determines that visual separation may be impractical during VFR conditions simultaneous converging runway operations must not be conducted.

(3) The tower FLM/CIC must closely monitor weather activity that could impact the final approach courses and discontinue simultaneous converging operations if weather trends indicate deteriorating conditions that would increase the probability of missed approaches.

(4) STARS displays must be operational and in FSL mode at each operating Local Control position.

(5) Visual or electronic vertical approach guidance must be operational for arrivals on runway 30.

(6) Local Control North/South must immediately notify the other local controller in the event of a missed approach/balked landing and coordinate headings and altitudes that will ensure separation from all other known/observed traffic.

b. Missed Approaches/Balked Landing Instructions:

(1) In the event of a missed approach/balked landing inside the applicable missed approach point, aircraft must be assigned headings consistent with noise abatement procedures for Miami International Airport *to the extent that traffic conditions permit*. If weather and/or other known or observed traffic do not allow assignment of noise abatement headings, the following missed approach headings and altitudes *should* be used to the extent traffic conditions permit:

- (a) Runway 12: Left turn heading 090 and climb to 3000’.
- (b) Runway 9: Right turn heading 120 and climb to 3000’
- (c) Runway 26L/R: Right turn heading 320 and climb to 3000’.
- (d) Runway 30: Left turn heading 270 and climb to 3000’.

(2) Local Control North/South must hand off aircraft executing missed approach/balked landing to the appropriate Miami Departure Controller.

1-36. Ensuring Separation prior to Simultaneous turns to Final and Arrival Sequencing.

a. Ensure vertical separation exists (1000 feet or more) during turns to base leg unless the aircraft will intercept the final approach course no closer than 5nm from traffic on the parallel final approach course. Vertical separation may be discontinued after other approved separation is established.

b. Miami arrivals must be assigned 210 knots or less abeam the airport on downwind. This requirement may be discontinued between the hours of 2300 and 0700 local, at the discretion of the FLMIC/CIC.

1-37. Critically Dependent Positions.

a. Critically dependent positions cannot be simultaneously relieved. Positions that have been identified as ‘critically dependent’ must have a minimum of two minutes after the first position has been relieved before beginning the relief process for the other position. The following positions have been identified as critically dependent positions:

- (1) Local Control North and South
- (2) Ground Control North and South
- (3) Cab Coordinator and Local Control North
- (4) Ft. Lauderdale Feeder (R position) and Ft. Lauderdale Final (F position).

(5) Miami North Feeder (N position), Miami North Final (V position)

(6) Miami South Final (A position), and Miami South Feeder (S position)

(7) Miami South Feeder (S position) and Miami North Feeder (the N or V positions).

(8) Final Monitor North (MN) and South (MS)

Note: All handoff positions are considered critically dependent on their associated radar positions.

1-38. Position Relief Briefings

a. The Relieving and Relieved Controller must ensure a minimum position relief briefing overlap on operational positions of at least a 2-minutes during position relief briefings.

b. The Relieved Controller must monitor and observe the position for a minimum of 2 minutes after completion of relief briefing/transfer of position responsibility.

1-39. Concurrent Instrument/Visual approaches.

Concurrent instrument/visual approaches to Runway 27/30; 8L/12 and 8R/12 are authorized provided standard separation is maintained until the preceding arrival crosses the threshold or until visual separation is applied.

1-40. Three-hour/Four-hour Tarmac Rule. When any operational position becomes aware that an aircraft is within one hour of exceeding the “Three-hour/Four-hour Tarmac Rule” notify the OM/FLMIC and other operationally affected positions.

Note 1: See paragraph 3-1 for OMIC/FLMIC/CIC responsibilities as it relates to the TARMAC Rule.

Note 2: Three-hour Tarmac Rule is for domestic flights remaining in domestic airspace; Four-hour Tarmac Rule is for international flights for both foreign and domestic air carriers. These rules apply to all categories of airports.

Note 3: For the purposes of the “Three-hour/Four-hour Tarmac Rule”, the time begins once the aircraft leaves the gate. Requests to taxi back for deplanement due to the “Three-hour/Four-hour Tarmac Rule” must be documented in FAA Form 7230-4 as a QAR with the time the request was made.

1-41. Stratification. Stratification is implemented when weather prevents aircraft from exiting the DTA on the transition or within the confines of the DTA. See Appendix 19.

1-42. Acknowledgement of Arrivals/Departures and Communication Checks.

Between the hours of midnight to 0600:

TRACON Operations, during a single person staffed shift of more than 30 minutes:

- a. Miami ARTCC will coordinate and receive acknowledgement via landline or automated procedures from Miami TRACON prior to communication transfer of all inbound aircraft into Miami TRACON's airspace.
- b. FLL, FXE and MIA towers will coordinate all departures with Miami TRACON, prior to issuing a takeoff clearance, either verbally (recorded line) or through handoff by keystroke entry (if available).
- c. Miami TRACON must initiate a Comm Check on the hour and at 30 minutes past the hour with Miami ARTCC. Miami ARTCC must initiate a Comm Check at 15 and 45 minutes past the hour with Miami TRACON.
- d. Miami TRACON will notify FLL, FXE and MIA towers whenever there is a single person operation.

Tower Operations, during a single person staffed shift of more than 30 minutes:

- a. Miami Tower will notify Miami TRACON whenever there is a single person operation.
- b. Whenever there is an ATIS change, the Miami Tower Controller will call, on a recorded line, the Miami TRACON Controller advising of the ATIS change.
- c. Miami Tower Controllers must initiate a Comm Check on the hour and at 30 minutes past the hour with Miami TRACON. Miami TRACON Controllers must initiate a Comm Check at 15 and 45 minutes past the hour with Miami Tower.
- d. When FLL, FXE and MIA towers advise of a single person operation, Miami TRACON will coordinate and receive acknowledgement via landline or automated procedures prior to communication transfer.

The requirement for Comm Checks can be accomplished through the exchange of traffic or information, either verbally or through automation with human interaction. Routine operational calls at or near these intervals will meet this requirement.

In the event numerous aircraft are inbound or outbound, a single notification is sufficient. If there is a break of more than 5 minutes between consecutive operations the coordination described above is required.

If under any of the circumstances above, there is no response from the controller working alone, immediate action must be taken to determine the status of the unresponsive

controller and the arrival or departure pilot must be offered an alternative flight option or diversion option.

1-43 thru 1-50. Reserved

Section 4. Noise Abatement

1-51. Miami International Airport.

a. Runway Use Program.

(1) Runway 9 intersection departures are restricted as follows:

(a) **0700 - 2200 local time:**

Turbojet aircraft meeting FAR Part 36 Criteria and propeller driven aircraft with certified gross weights above 12,500 pounds may not depart from any intersection except T1. All other aircraft will be required to use the full length of the runway.

Note: It is not the controller's responsibility to determine which aircraft meet FAR Part 36 Criteria.

(b) **2200-0700 local time:**

(1) All aircraft with certified gross weights of 12,500 pounds or more and all turbojet aircraft regardless of weight will be required to utilize the full runway length.

(2) T1 intersection departures are approved for propeller driven aircraft with certified gross weight less than 12,500 pounds.

b. Preferential Departure Runways in order of preference.

(1) **0700-2300 local time.**

(a) East: Runway 8R/12, Runway 9, Runway 8L.

(b) West: Runway 27/26L, Runway 30, Runway 26R.

(2) **2300-0700 local time.**

(a) West: Runway 27/26L, Runway 30.

(b) East: Runway 8R, Runway 9, Runway 12.

(c) Every effort should be made to maximize the use of West Flow Operation during nighttime hours (2300 to 0600 local) under wind conditions below 5 knots.

c. Preferential Arrival Runways in order of preference.

(1) **0700 - 2300 local time:**

(a) East:

1. Runway 9 and 8L.
2. Runway 12.
3. Runway 8R.

(b) West:

1. Runway 30 and 26R.
2. Runway 26L.
3. Runway 27.

(2) 2300-0700 local time.

(a) West:

1. Runway 26L.
2. Runway 30.

Note: Turbojet arrivals are restricted from using RY 27 between the hours of 2300-0700 unless the pilot advises they are unable to accept the preferential arrival runway. This noise restriction is by a court order.

(b) East:

1. Runway 9 and 8R,
2. Runway 12.

d. Between 2300 and 0700 local time. Controllers must advise aircraft requesting other than preferential runways that they are noise sensitive.

e. All hours - four engine piston aircraft (excluding DH7) must not use Runway 12/30 for departure.

f. Local Control has use of the following headings for turbojet departures:

(1) **0700 - 2300 local time:**

(a) **East:**

1. Runway 8L/8R: Northbound - 090, Southbound - 120.
2. Runway 9: Northbound - 075 and 090, Southbound - 105 and 120. Local Control must ensure that south departures on Runway 9 do not begin their turn until reaching the departure end of Runway 9.
3. Runway 12: Northbound - 075 and 090, Southbound - 105 and 120.
4. Whenever feasible, Runway 9 Heavy jet departures using the Vally/Padus DTA should be issued heading 105 to reduce aircraft noise over sensitive areas. Local Control must coordinate this heading with the appropriate departure controllers.

(b) West:

1. Runway 27, 26L, and 26R, heading 270. If operational conditions/traffic does not permit northbound turbojets heading 270 then northbound turbojets may use heading 290.

2. Runway 30, heading 305 for turbojets. If operational conditions/traffic does not permit heading 305 for turbojets then turbojet aircraft may use heading 270.

Note: For coordination purposes heading 270 is the standard departure heading for jets departing west. All other headings must be coordinated. i.e. 290 and 305

(2) 2300 - 0700 local time:**(a) West Departures Northbound or Southbound;**

1. Runway 27 heading 270.

2. Runways 26L, 30, and 26R heading 265.

(b) East Departures Northbound:

1. Preferential route is the POTTR Departure.

2. If operational necessity dictates the following headings must be used.

a. Runway 8L/8R- 090.

b. Runway 9 - 075.

c. Runway 12 - 075

(c) East Departures Southbound:

1. Preferential route is the SOUBY Departure.

2. If operational necessity dictates the following headings must be used.

a. Runway 8L/8R-120.

Note: Southbound turbojets departing Runway 8R should turn to heading 120 as soon as practical.

b. Runway 9 – 105.

c. Runway 12 –105.**g. Miami South Departure:**

(1) **From 0600 - 2300 local time**, ensure southbound turbojet departures remain on assigned heading until 4,000 feet or 5 miles.

(2) **From 2300 - 0600 local time**, ensure southbound turbojet departures remain on assigned heading until 8.5 miles southeast of Miami International.

h. Miami North Departure ensures northbound turbojet departures remain on assigned heading until 4,000 feet or 5 miles.

i. Miami North and South Final Radar control turbojet and 4-engine propeller aircraft as follows:

(1) Ensure aircraft executing a visual approach enter the final approach no less than 5 NM from the landing runway.

(2) Ensure aircraft remain at 3,000 feet until 10 flight miles from the approach end of the assigned runway.

(3) Between the hours of 2300 and 0700 local time, when MIA is landing to the west, ensure that aircraft execute the ILS/Localizer approach (when operational) and are established on the localizer prior to “BASHO”, “HINKU” or “SARCO” as appropriate.

(4) Turbojet arrivals are restricted from using RY 27 between the hours of 2300-0700 unless the pilot advises they are unable to accept the preferential arrival runway. This noise restriction is by a court order.

1-52. Fort Lauderdale International Airport.**a. Preferential Runway Use.**

(1) East in order of preference- Runway 9L, 9R, 13

(2) West in order of preference- Runway 27R, 27L, 31

(3) Turbojet aircraft - Runway 9L/27R

(4) Between 2200-0700 (local time), Runway 9R/27L will be closed for noise abatement.

b. FLL South Arrival/Departure Radar ensures FLL southbound departures remain on assigned heading until 3,000 feet or 3 miles.

c. **FLL North Departure Radar** ensures FLL northbound departures remain on assigned heading until 3,000 feet or 3 miles.

d. **FLL North Feeder Radar** ensures that turbojet arrivals from the north remain at 6,000 feet until abeam the airport.

e. **FLL Final Radar** ensures that turbojet arrivals do not turn base leg until west of the final approach fix for an east operation or offshore for a west operation.

1-53. Fort Lauderdale Executive Airport.

a. **Runway 26** is the preferred departure runway for turbojets.

b. **When FXE is East**, 2300 – 0700 assign FXE northbound turbojet departures an initial heading of 330.

c. **When traffic conditions permit**, assign a higher initial altitude for turbojet departures.

1-54. Opa-Locka Airport.

2100 – 0700. Runway 12 is the preferred runway for turbojet arrivals when OPF is on an east operation.

1-55 thru 1-59. Reserved.

Section 5. LUAW Procedures

1-60. LUAW procedures:

a. Authorized at MIA under the following conditions:

- (1) Both Local Control North and Local Control South, or a Local Control Position and Cab Coordinator must be open, to conduct LUAW.
- (2) Local Control position may only be combined with the other Local Control position.
- (3) No other position may be combined with a Local Control Position.
- (4) FLMIC/CIC must notify the OMIC prior to closing a Local Control position.
- (5) Cab Coordinator must not have any position combined to it.
- (6) FLMIC/CIC should not be combined with any other position.
- (7) Do not authorize LUAW operations at an intersection between *sunset and sunrise*.
- (8) An entry into FAA Form 7230-4 must be made when conducting and terminating LUAW procedures.

b. Local Control:

- (1) Must use a “memory jogger” (i.e. tilting the strip in the strip bay or sliding the strip part way out of the strip holder) when instructing an aircraft to taxi into line up and wait on any runway.
- (2) Do not issue a landing clearance, *when ASDE-X is inoperative or when the safety logic system is in limited configuration*, to an aircraft requesting a full-stop or unrestricted low approach on the same runway with an aircraft that is holding in position, or taxiing to line up and wait, until the aircraft in position starts takeoff roll. *When ASDE-X is inoperative or when the safety logic system is in limited configuration*, do not clear an aircraft to LUAW if an aircraft has been cleared to land, or unrestricted low approach on the same runway.
- (3) Local Control may issue a landing clearance (with an aircraft holding in position or taxiing to LUAW on the same runway) if the safety logic system is operating in full core alert runway configuration, and if the ceiling conditions of 800 feet or more, and visibility of 2 miles or greater are reported.

(4) Must withhold landing clearance until the aircraft in position starts the takeoff roll, if ASDE-X (safety logic system) is not operating in full logic mode.

Note: Rain is full logic mode, limited is not considered full logic mode.

EXAMPLE- "United Five, runway eight right, continue. Traffic holding in position."

(5) When an aircraft is authorized to LUAW, inform it of the closest traffic requesting a full-stop, touch-and-go, stop-and-go, option or unrestricted low approach to the same runway.

EXAMPLE- "United Five, runway eight right, line up and wait. Traffic a Boeing Seven Thirty Seven, six mile final."

(6) Must not authorize aircraft to simultaneously LUAW on the same runway.

(7) When aircraft are authorized to LUAW on runways that intersect, traffic must be exchanged between that aircraft and the aircraft that is authorized to line up and wait, depart, or arrive to the intersecting runway(s).

EXAMPLES:

"United Five, runway one two, line up and wait, traffic holding runway niner."

"Delta One, runway niner, line up and wait, traffic holding runway one two."

Or, when issuing traffic information to an arrival aircraft and an aircraft that is holding on runway(s) that intersect(s):

"Delta One, runway one two, line up and wait, traffic landing runway niner."

"United Five, runway niner, cleared to land. Traffic holding in position runway one two."

Or, when issuing traffic information to a departing aircraft and an aircraft that is holding on runway(s) that intersect(s):

"Delta One, runway one two, line up and wait, traffic departing runway niner."

"United Five, runway niner, cleared for takeoff, traffic holding in position runway one two."

(8) Obstructions/Limitations to visibility.

(a) There are no intersections that are not visible from the control tower.

(b) Fleet Mix. There are no unique fleet mix considerations for LUAW operations.

(9) Cab FLMIC/CIC Responsibilities:

(a) Advise all Tower Cab positions when LUAW procedures are authorized or terminated.

(b) Ensure the LUAW memory jogger (“LUAW Authorized” Green Strip Holder) is posted in the appropriate Local Control bay when LUAW procedures are in use and (“LUAW Not Authorized” Red Strip Holder) is posted in the appropriate Local Control bay when LUAW procedures are not being used.

(c) When LUAW procedures are not in effect, ensure “**LUAW NOT AUTHORIZED**” is transmitted on the ATIS.

(d) Make an entry in the Daily Record of Facility Operation (FAA Form 7230-4) when LUAW procedures are in effect and terminated.

(e) Maintain situational awareness of the operating environment, especially as it pertains to LUAW operations.

(f) Ensure familiarity with Appendix 8 for runway geometry and physical configuration of runways and other airport movement areas.

(g) There is no known traffic volume, complexity restrictions or limitations to visibility from controller-to-aircraft or aircraft-to-aircraft when using LUAW. Should these conditions become a factor, LUAW must be discontinued.

1-61 thru 1-99. Reserved

CHAPTER 2. Tower

Section 1. General

2-1. Cab FLM/CIC Position.

- a.** Position of Operation.
 - (1) Tower position IC
 - (2) RDVS TSUP1 041
 - (3) RDVS TSUP2 053

- b.** Responsibilities.
 - (1) Provide front line supervision.
 - (2) Make position assignments consistent with operational needs.
 - (3) Rotate personnel so as to provide appropriate relief periods
 - (4) Direct overall tower operation to ensure an equitable flow of traffic.
 - (5) When selecting active runways, FLMs must consider variables such as noise, availability of NAVAIDS, equipment, runway conditions, construction, weather, winds, presence of birds and many other factors in making runway use determination.
 - (6) When simultaneous ILS approaches are in use, Local Control North and Local Control South positions must be staffed unless otherwise approved by the FLM/CIC and indicated on the 7230-4.
 - (7) Ensure that the FLM in Charge (FLMIC/CIC) or Traffic Management Coordinator (TMC) is informed of any flow restrictions, holding, and/or emergency situations.
 - (8) Determine flow intervals and advise the TRACON.
 - (9) Initiate the following gate hold procedures.
 - (a) Notify the FLMIC/CIC when gate hold is implemented/terminated.
 - (b) Ensure the ATIS broadcast reflects that gate hold procedures are in effect.

(c) Determine departure interval and advise gate hold.

(d) When the ARMT is not fully operational ensure that the TMU is notified when delays are expected or exceed 15 minutes and each multiple thereof. Ensure like notification when delays are reduced by the same parameters.

(e) When the ARMT is not fully operational ensure that Local Controllers record departure times when accountable delays are anticipated.

(10) Perform the necessary coordination for opposite direction traffic.

(11) Serve as the focal point for close coordination whenever security or emergency vehicles in contact with ground control are ready to proceed along an active runway.

(12) Report bird strikes and/or any bird activity on or around the airport that poses a hazard to all aircraft in accordance with the following guidelines:

BIRD STRIKE	BIRD ACTIVITY
Advise Airport Mgr	Advise Airport Mgr
Document on 7230-4	Advertise on ATIS
	Inform all positions

Note: If aircraft damage is known or if aircraft returns to land complete FAA form 8020-9 Aircraft Accident Incident Preliminary Notice.

(13) Ensure that the ATIS is reviewed for accuracy and quality of the message prior to broadcast. Ensure information entered into the GSI by Clearance Delivery accurately reflects information contained in the ATIS broadcast.

(14) Perform the Watch Checklist for the appropriate shift. (See Appendix 7).

(15) Ensure all frequencies listed on the RDVS checklist are selected or in loudspeaker as appropriate.

(16) Combine/de-combine positions, exercising good judgment and considering traffic, weather, and special operations.

(17) Advise all Tower positions and the TRACON OM/FLMIC/CIC when pilot reports of wind shear and/or microburst are received.

(18) Ensure Tower Cab IDS4 is operational and current.

- (19) Continuously review traffic restrictions affecting their area of responsibility and coordinate with the TMC for extensions, revisions, or cancellations.
- (20) Advise the TRACON FLMIC/CIC when aircraft are deviating from standard headings due to weather/traffic and when normal operations resume.
- (21) Notify the TRACON OM/FLMIC/CIC when Tower EFSTS scanners are inoperative.
- (22) Must ensure that backup EFSTS strips are available in the tower cab.
- (23) Ensure that runway change procedures are conducted in accordance with the “Runway Change” checklist contained in Appendix 7.
- (24) Ensure pertinent NOTAMS received are disseminated to all affected positions of operation and included in the IDS4 system or tower status board.
- (25) Determine when hazardous weather information received meets the broadcast criteria set forth in JO7110.65. When the IDS4 system is inoperative, ensure that hazardous weather information is made available to all operational positions via non-automated means.
- (26) Must inform the TRACON FLM/CIC when tower cannot provide visual separation of aircraft established on final approach courses.
- (27) When weather conditions warrant, ensure that PIREPs are obtained each hour and forwarded to AFSS/FSS as per JO7110.65.
- (28) Inform the TRACON OMIC/FLMIC/CIC when notification is received that an aircraft is within one hour of exceeding the “Three-hour Tarmac Rule” or “Four-hour Tarmac Rule” *and* when the aircraft has requested to taxi for deplanement related to the “Three-hour/Four-hour Tarmac Rule”. Provide the TRACON OMIC/FLMIC/CIC with the aircraft identification, date, time and location of the occurrence.

2-2. Flight Data.

- a. Position of Operation.
- | | | |
|-----|----------------|------|
| (1) | Tower position | FD-3 |
| (2) | RDVS position | 050 |
- b. Responsibilities.
- (1) Copy or post ATC clearances as received from the Miami ARTCC.

(2) Obtain from the appropriate Center sector a clearance for flights not cleared via FDIO.

(3) When a DTA identifier does not appear on the strip call the appropriate Center sector for clearance.

(4) When the contraction "FRC" appears in the remarks section and a full route does not appear on the flight progress strip, obtain a full route. When only one "+" is contained in the body of the clearance, a full route clearance must be obtained.

(5) When Miami Tower inputs a flight plan with a destination other than Miami/Palm Beach Terminal Area, a FRC must be issued.

(6) Transmit and receive FDIO messages. Take prompt action to make proper distribution/notification on all revisions and remove strip messages.

(7) Formulate for distribution any significant weather information (e.g. rapidly changing weather information, thunderstorms, tornadoes, PIREPS) received from other positions. Inform the Cab FLMIC /CIC of any information received.

a. Input Hazardous weather information into the IDS4 system on the hazardous weather page using the following format:

1. Message identifier.
2. Brief description of affected area.
3. Brief description of hazardous weather conditions.
4. Message expiration time.
5. Label last entry as "new".
6. Delete hazardous weather from the IDS4 when no longer valid.
7. Advise the Cab FLMIC/CIC when the IDS4 is inoperative.

b. Inform cab FLM/CIC when weather conditions warrant solicitation of PIREPs as per JO7110.65.

(8) When wind shear and/or microburst advisories or bird activity information is received from any Tower Cab position, Flight Data must update the ATIS with this information, and inform the Cab FLMIC /CIC when the above has been accomplished.

(9) ATIS Preparation and Dissemination.

a. Prepare the arrival and departure ATIS as required, ensuring that, prior to transmission, it is reviewed for accuracy by the Cab FLM/CIC. *ATIS preparation and dissemination are considered first priority duties.*

b. Verbally forward the new departure ATIS code to all tower positions.

c. When LAHSO is being utilized, include on the arrival ATIS, LAHSO runway, hold short intersection, and available landing distance for the following runways: 12, 30, 9, 27.

d. Maintain the current ATIS codes, altimeter settings (both system and airport), runways and approaches in use in the Standard System Area (SSA) for the Tower and TRACON. The SSA information for approaches in use is as follows:

System Area Text	Approaches in Use
EAST	ILS 9, 12, 8R, LOC DME 8L
WEST	ILS 26L, 27, 30, LOC DME 26R

Note: For any other configuration the approaches in use need to be listed in the systems area.

e. When both local control positions are open, the text “split” must be listed after the approaches in use (i.e. “EAST SPLIT”).

f. To ensure proper mode c readouts current altimeter must be entered into the GSI, and STARS system. This information must be obtained from the following sources.

1. DASI
2. Weather Service

(10) When LUAW procedures are not in effect, ensure “**LUAW NOT AUTHORIZED**” is transmitted on the ATIS.

(11) Advertise Terminal Data Link Service (TDLS) outages on the ATIS.

Example Phraseology: “Tower Data Link Services Unavailable.”

(12) Replace EFSTS strips as appropriate.

(13) Update the following information in the IDS4:

- (a) Equipment outages.
- (b) DASI correction factor.
- (c) LUAW status.
- (d) ASDE-X status
- (e) Hazardous Weather
- (f) Other information specified by the Cab FLMIC/CIC

(14) Obtains reroutes, DTA changes, and requests release on departures.

2-3. Clearance Delivery.

- a.** Position of Operation.
 - (1) Tower position - CD
 - (2) RDVS position - 051
 - (3) STARS symbol - T

- b.** Frequencies.
 - (1) VHF 135.35
 - (2) UHF 348.6 shared

- c.** Responsibilities.
 - (1) Issue ATC clearances verbally or via TDLS.
 - (2) Ensure that all Flight progress strips have a bar code.
 - (3) IFR departures must be cleared via the appropriate SID/DP and/or transition or PDR. Place "No SID/DP" in box 4a for those aircraft who cannot accept the Miami SID/DP.
 - (4) Place a red X in box 4a for those aircraft who cannot comply with the climb rate required in the IFR Take-off Minimums and Departure Procedures for Miami International Airport.
 - (5) Departures must be assigned 5,000 feet or the assigned/requested altitude whichever is lower.
 - (6) If no FDIO clearance has been received, advise FD of the ID, destination and first airway/fix filed.
 - (7) Formulate and issue a clearance for aircraft with destination within the Miami/Palm Beach Terminal Area. TNT departures must be assigned to North Departure when MIA is West, South Departure when MIA is East. MIA to FLL/TNT IFR jets must be assigned 5,000 feet.
 - (8) When available, obtain gate number or location from each aircraft and post on the departure strip. Indicate the pilot has received clearance and has current ATIS information by placing the appropriate ATIS code in box 10. Information contained on the departure strip must be in accordance with approved strip marking.

(9) Enter VFR aircraft into the NAS to generate a departure strip with a bar code. Departure strip should include aircraft's identification, type, route of flight, requested altitude, discrete beacon code and requested altitude and bar code.

2-3.c.(9) Example: *"Cleared out of Bravo Airspace, to the (north/south) maintain (altitude) while in bravo airspace, departure frequency will be ____, squawk (code)."*

(10) When gate hold procedures are in effect, instruct the pilot to contact gate hold on the appropriate frequency for an estimated engine start time, after issuing a clearance.

(11) Information inserted on the departure strip must be in accordance with Appendices 2 and 3.

(12) If a clearance is requested and issued more than 30 minutes prior to the "P" time Clearance delivery must amend the p-time to the current time, except, if the clearance is involved in a flow program:

- (a) No amendment to the "P" time must be made
- (b) The strip must be held at the clearance delivery position, and
- (c) When the original flight plan automatically prints, ensure that no amendments were made by MIA ARTCC.

2-4. Gate Hold.

a. Position of Operation.

- (1) Tower position GH
- (2) RDVS position 052

b. Frequency 133.725

c. Responsibilities.

- (1) Confirm proposed departure time.
- (2) Advise pilots of the current gate hold delay (as directed by the Cab FLMIC/CIC) and issue the estimated expected engine start/taxi/departure time.
- (3) When the EFSTS is operational, scan the flight progress strip at the GC scanner when aircraft calls for engine start time.
- (4) Instruct the pilot to standby on gate hold frequency and advise when ready to start engines.

Note 1: If the pilot is unable to transmit without engine(s) running, advise the aircraft to contact Miami Tower via commercial telephone for engine start time.

Note 2: Inability to contact CD/GC prior to engine start must not be justification to alter the departure sequence.

(5) Advise the pilot promptly of any subsequent change in anticipated delays and/or estimated departure time.

(6) Retain the departure strip in sequential order until the pilot has been advised to contact ground control.

(7) When engine start has been approved, advise aircraft to hold position and contact ground control on appropriate frequency for push-back/taxi/clearance.

(8) Strip marking will be in accordance with Appendix 3.

2-5. Ground Control North, South, West.

a. GCN/GCS/GCW Positions of Operation.

- | | | |
|-----|----------------|-------------------------------|
| (1) | Tower Position | GCN
GCS
GCW |
| (2) | RDVS Position | GCN 046
GCS 047
GCW 044 |

b. Frequencies.

- (1) GCN 121.8
- (2) GCS 127.5
- (3) GCW 120.35
- (4) UHF 348.6 shared

c. Responsibilities.

(1) The Preferred Taxi Routes west of Runway 12/30, when Miami International Airport is on an east operation and opposite direction traffic is a factor, are depicted on Appendix 11, as follows:

(a) Westbound/Outbound from Terminal Area - Taxi via taxiway "Y" to "S".

(b) Eastbound/Inbound to Terminal Area - Taxi via taxiway "T" to "U".

(2) Control of aircraft and vehicular traffic within the following designated portions of the movement area.

(a) When GCW is not open:

1. GCN - Movement area north of taxiway "P" including the Runway 8R/8L/12 pad, excluding taxiways "L" and "AA".

Note: LCN has control of taxiways "L" and "AA".

2. GCS - Movement area south of "P", including taxiway "P", excluding the following:

a. Runway 8R/12 pad,

b. Taxiways "T"; "V" and "U" south of runway 12.

c. Taxiway "S" south of runway 12 and east of taxiway "Y".

Note: LCS has control of all taxiways south of RY 12 excluding "R"; "Y" and "S" west of "Y"

(b) When GCW is open:

1. EAST:

GCW assumes all portions of the movement areas west of and including Taxiway "K", "Z" excluding Taxiways "L" and "AA".

2. WEST:

a. GCW has control of all taxiways north of Runway 12 and west of and including Taxiway "W". Aircraft exiting Spots 9N, 9S, and 9C and the west remote gates will contact GCW.

b. GCN has control of Taxiways "M" and "N" from taxiway "W" to the approach end of Runway 26L and all of Taxiway "K". Aircraft exiting the north remote gates will contact GCN.

c. GCS has control of Taxiways "P" and "Q" east of "W" to the approach end of Runway 27. GCS has control of taxiways "V", "U", "S", "T", "R". GCS has control of Taxiway "Y" south of Runway 30. Aircraft exiting Spot 10 will contact GCS.

(3) LCN has control of Taxiways "L" and "AA" during both east and west configurations.

(4) Ground Controllers are responsible for ensuring that all taxiway turnoffs are available for aircraft exiting active runways.

(5) Local and Ground Controllers are responsible for ensuring that ILS critical areas (localizer and glide slope) are protected (Appendix 6).

(6) Departure strips must be marked with the assigned runway in box 8a. Place a large "X" next to the runway assigned for aircraft that will use an intersection for departure. Ground control must verbally state the position and physically point to the taxied aircraft.

(7) When the pilot of an aircraft taxied to the 8R/12 pad (wedge) request a specific runway. Circle the requested runway.

(8) For aircraft that request 8R/26L holding short of Runway 8L/26R, place a circled "R" when east or "L" when west in box 8a. Ground control must verbally state the position and physically point to the taxied aircraft.

- (9) Pass strips to local control in sequence, or as directed by the Cab FLMIC/CIC.
- (10) Coordinate with the Cab FLMIC/CIC for opposite direction traffic.
- (11) Direct aircraft requiring customs as follows:
- (a) **To GAC:** Private aircraft, Part 135 operators, foreign cargo aircraft with a seating capacity of 30 or less, including crew.
- (b) **To Main/Remote Terminal:** Air Carriers and aircraft not covered in 2-5.c (10)(a) must be assigned a gate by **MDAD** gate control.
- (12) Close coordination, which includes the Cab FLMIC/CIC, is required when vehicles are required to proceed along an active runway. All vehicles operating on an active runway, excluding crossings, crash-fire rescue and airport operations vehicles should operate in a direction opposite to the aircraft traffic flow.
- (13) MDAD vehicles inspecting runways must be instructed to hold short of the runway and changed to the appropriate Local Controller prior to operating on an active runway.
- (14) Between 0700 and 2200 local time, Ground Control must scan FPS to generate a taxi time. If scanners are not operational handwritten procedures must take effect as directed by the Cab FLMIC/CIC.
- (15) Ground Control must ensure aircraft that received clearance via TDLS have current ATIS information, and mark the appropriate ATIS code in Box 10 of the departure strip.
- (16) Ensure aircraft/tug movements are clear of the Runway 26R Clear Zone prior to landing aircraft entering the protected area.
- (17) When a pilot requests action or clearance associated with a TARMAC related delay, Ground Control must:
- a) Immediately notify the FLM/CIC of the aircraft identification, time of notification, location of the aircraft and time by which the aircraft must be airborne or deplaning passengers.
- b) As soon as operationally practical, provide a taxi clearance unless a “Significant Disruption” of airport operations or a compromise of safety or security would result. A significant disruption of service may include but is not limited to:
1. Accommodation would require airborne holding that would result in delays of 15 minutes or more.

2. Taxi of *Tarmac Delay Aircraft* would result in placing other aircraft in jeopardy of violating the “Three-Hour Tarmac Rule”.

3. Use of the active runway to taxi the *Tarmac Delay Aircraft* would preclude use of that runway for arrivals/departures and result in arrival/departure delays of 15 minutes or more.

PHRASEOLOGY-

(Call Sign) TAXI TO (ramp, gate or alternate deplaning area) VIA (route)

Or

(Call Sign) EXPECT A (number) MINUTE DELAY DUE TO (ground and/or landing and/or departing) TRAFFIC

Or

(Call Sign) UNABLE DUE TO OPERATIONAL DISRUPTION

NOTE-

The Three-Hour Tarmac Rule does not apply to foreign air carriers. In addition, international flights by domestic carriers may have some latitude to extend the criteria beyond three hours to be determined by the carrier.

2-6. Local Control North and South.**a.** LCN/LCS Positions of Operation

- | | | | |
|------|----------------|-----|-----|
| (1) | Tower position | LCN | |
| | | LCS | |
|
 | | | |
| (2) | RDVS position | LCN | 045 |
| | | LCS | 048 |

b. Frequencies

- (1) LCN - 118.3
- (2) LCS - 123.9
- (3) UHF - 256.9 shared

c. Airspace includes the area bounded by 103rd Street north, then 6 NM radius of the airport at or below 1000 feet.

d. Responsibilities:

- (1) Control VFR/SVFR helicopters within the tower delegated airspace at or below 1000 feet.
- (2) Ensure the LUAW memory jogger (“LUAW Authorized” Green Strip Holder) is posted in the Local Control bay when LUAW procedures are in use and (“LUAW Not Authorized” Red Strip Holder) is posted in the Local Control bay when LUAW procedures are not being used.
- (3) Issue RVR information as required.

Example Phraseology:

“Runway Eight Left RVR Three Thousand”

“Runway One Two RVR Four Thousand, Rollout One Thousand”

“Runway Two Seven RVR Four Thousand, Mid One Thousand, Rollout Eight Hundred”

NOTE: Transmissometers for Runways 8R and 27 are certified for use in issuing RVR for Runways 12 and 30. HIRL settings for Runway 12/30 must be at the same intensity as those for Runways 8R and 27. RVR not available for runway 8L/26R.

- (4) Local Control is responsible for the initial departure separation.
- (5) Local Control must ensure that all departures are assigned a heading to remain in the airspace delegated for the dispersal of departures from MIA (Appendix 10) unless verbally coordinated.

(6) LCN must be responsible for arrivals and departures on Runways 8L/26R, 8R/26L and have the use of headings 060 through 170 (East), 290 through 320 (West).

(7) LCS must be responsible for arrivals and departures on Runways 9/27 and 12/30.

(a) **East operation:**

1. LCS must obtain a departure release from LCN for all aircraft departing Runways 12 and 9.

(b) **West operation:**

1. LCS has use of headings 270 through 240. Aircraft assigned a heading less than 245 must be restricted to an altitude of 3,000 feet or below. (LCN must coordinate for use of 270 heading with LCS).

2. LCS must obtain a departure release from LCN for all aircraft departing Runway 30.

3. LCS must obtain a departure release from LCN for all northbound aircraft.

(8) The Local Controller must scan each departure strip prior to transfer of communications. Ensure that non-standard headings/altitudes information is forwarded to the appropriate departure controller prior to transfer of communications. This must be accomplished by scanning an implied function via the associated EFSTS keypad or verbally via the override circuit.

Note: Keypads may be used for non-standard headings using an implied function two or three digits. (16=H160, 245=H245, 077=H075)

(9) Standard headings are:

(a) Turbojet Departures:

1. East-Heading 090/120.

2. West-Heading 270.

(b) Prop Departures:

1. East-Heading - 060/160

2. West-Heading - 245/320

Note: Additionally, 105 heading for SKIPS props will be considered standard for the EFSTS.

(10) LCN/LCS must ensure position correlation is made to the appropriate departure controller on any departure aircraft that has not auto acquired 3 miles from the departure end of the runway.

Example Phraseology: "No tag, 3(direction, i.e. East/West), (call sign)"

(11) When the tower TDW is operational, separate IFR/VFR arrivals from 5 miles to the runway, *except* when wake turbulence separation standards are required or when simultaneous approaches are in use.

(12) In the event of a missed approach/go around, inform the appropriate departure control position. After a missed approach/go around, aircraft must be instructed to maintain 3000, unless otherwise coordinated, and given standard departure headings that keep the aircraft in the departure dispersal area, as depicted in appendix 10.

(13) Inform the arrival control positions when the alphanumeric or the TDW displays are unsuitable for transfer of control.

(14) Local Control must coordinate any opposite direction traffic with the Cab FLMIC/CIC.

(15) Local Control must insure that departure aircraft strips marked with a red X are given the following initial headings and verbally advise the appropriate departure controller.

a. Runway 8L/8R: Runway heading, or any heading less than 090.

b. Runway 12: Runway heading, or any heading more than 120.

c. Runway 9: Turn left, heading 075, or any heading less than 075.

(16) Local Control should issue a wake turbulence advisory to aircraft within 3 flight miles arriving Runway 12 if a turbojet aircraft departs Runway 8R. When the arriving aircraft on Runway 12 is less than 1 mile from the landing threshold, Local Control should not allow a turbojet aircraft to begin departure roll until the arrival aircraft has crossed the extended centerline of Runway 8R. Local Control must instruct turbojet aircraft holding in position on Runway 8R to use idle power when Runway 12 arrivals are less than 1 mile from the runway end.

(17) Local Control should issue a wake turbulence advisory to aircraft within 3 flight miles arriving Runway 8R if a turbojet aircraft departs Runway 12. When the arriving aircraft on Runway 8R is less than 1 mile from the landing threshold, Local

Control should not allow a turbojet aircraft to begin departure roll until the arrival aircraft has crossed the extended centerline of Runway 12. Local Control must instruct turbojet aircraft holding in position on Runway 12 to use idle power when Runway 8R arrivals are less than 1 mile from the runway end.

(18) Local Control has the option to change the runway assignment and scratch pad entries on arrival aircraft when the aircraft is within 5 miles of the airport as long as it does not adversely affect the arrival sequence and the aircraft is on tower frequency.

(19) Local Control must coordinate with the appropriate arrival control position(s) immediately after issuing any turns away from the final approach course when missed approach or go-around instructions are issued within five miles of the landing runway.

(20) Use the STARS quick look function to display the appropriate north/south arrival positions.

(21) Ensure aircraft/tug movements are clear of the Runway 26R Clear Zone prior to landing aircraft entering the protected area.

(22) LCN has control of Taxiways "L" and "AA" during both east and west configurations.

(23) On an east operation, LCS must use Converging Runway Display Aid (CRDA) to display ghost targets of runway 8L and 8R arrivals on the runway 12 final.

(24) The local controller working the trailing aircraft during east converging runway operations (8L, 8R and 12) is responsible for the separation of converging traffic when wake turbulence is not a factor.

2-7. Cab Coordinator.

a. CC Positions of Operation

(1) Tower position - CC

(2) RDVS position
CC - 043 (North)
CC - 049 (South)

b. Responsibilities.

(1) CC serves as the assistant/ coordinator for Local Control (North or South as assigned by Cab FLMIC/CIC), and Ground Control.

(2) Effect/accept hand-offs and coordinate with other positions/facilities.

(3) In the event of a missed approach/go-around, inform the appropriate departure/arrival control position.

(4) CC must initiate position correlation to the appropriate departure controller on any departure aircraft that has not auto acquired 3 miles from the departure end of the runway.

Example Phraseology: "No tag, 3(direction, i.e. East/West), (call sign)"

(5) When operating in the ESL mode, provide boundary checks to the appropriate departure control position, and accept inbound sequence from the appropriate arrival control position.

(6) When the CC position is combined, the RDVS must be call forwarded to the LCN position.

2-8. ASDE-X

The ASDE-X system must be operated at all times unless removed from service by Technical Operations.

a. LC/GC must:

1. To the extent possible ensure that:

(a). All ASDE-X call signs for aircraft taxiing for departure match the STARS/NAS flight plan and are correct.

(b). All ASDE-X Dup ID, and Dup BCN's are corrected.

(c). All beacon "mismatch's" are corrected.

2. Advise the Tower FLM/CIC when a target, believed to be a false return, is observed on a runway or taxiway.

3. After positive verification that a target is false, through pilot/vehicle operator position report or controller visual observation, the track must be temporarily dropped. The FLM/CIC must make a notation on FAA Form 7230-4, Daily Record of Facility Operation, when a track is temporarily dropped.

b. LCN/LCS must not allow an aircraft to begin departure roll or cross the landing threshold whenever there is an unidentified target/track displayed on the runway.

2-9. Safety Logic System.

Safety Logic Systems are software enhancements to the ASDE-X that predict the path of aircraft landing and/or departing and/or vehicular movements on runways. Visual and aural alerts are activated when the safety logic projects a potential collision.

a. System Operations.

1. The Safety Logic System must be operated in a full-core alert runway configuration unless placed in limited configuration as required by MT7110.65 paragraph 2-9f.

2. When ASDE-X is in the maintenance mode, safety logic is automatically disabled. The FLM/CIC must validate, upon resumption of normal ASDE-X operations, the runway configurations and other user settings are adequate for operational use.

3. When a runway becomes unavailable for aircraft operations for an extended period of time, the runway should be entered as, "Closed" in the Safety Logic System.

4. CPC's or CIC's must not inhibit safety logic processing on a real target, only an FLM retains this authority.

5. All personnel operating a tower control position must ensure that the Safety Logic Alert volume on their controller display is set at an audible level which can be easily heard.

b. System Status.

1. The Tower FLM/CIC is responsible for ensuring that the Safety Logic System is set for the correct runway configuration

2. The Tower FLM/CIC must ensure that the operational status of the Safety Logic System is known to all operational personnel. When a status change is made to the Safety Logic System all personnel assigned an operational position must be notified verbally.

3. When any status change is made to the Safety Logic System, it must be noted on FAA Form 7230-4. Such status must be noted on the SIA. The Tower FLM/CIC must ensure that all outages are noted as a carry over on applicable logs.

c. Monitor Alerts and Corrective Action.

1. The Tower FLM/CIC must ensure that the Safety Logic System is monitored and all alerts are complied with.

2. All Safety Logic alerts generated must be documented on FAA Form 7230-4. If unable to determine the origin of an alert, treat the alert as false, and notify

Technical Operations so corrective action can be taken. The QAR process must not be used for false or nuisance alerts.

d. Safety Logic processing can be suppressed for helicopters operating in close proximity to the runways by inserting "HELO" in the STARS F9 field.

e. Rain Configuration.

1. During periods of expected precipitation, operate the ASDE-X Safety Logic Systems in rain configuration to avoid the likelihood of false alerts. When the rain configuration is selected, full-core alerting continues.

2. When the event that led to placing the system into Rain Configuration is no longer a factor, the Safety Logic system must be reset to a normal configuration.

f. Limited Configuration. Disables all alerts except arrivals to and departures on a closed runway and is not considered full-core alert status.

1. Under certain circumstances, there may be a need to operate the Safety Logic System in limited configuration. The limited configuration must only be used to temporarily inhibit persistent false alerts. "Persistent false alert" refers to frequent false alerts caused by continuous or repetitive circumstances. False alerts caused by random events or circumstances of short duration are not considered "persistent false alerts." The determination of "persistent alerts" is at the discretion of the Tower FLM/CIC.

2. When Safety Logic System is placed in limited configuration due to "persistent false alerts," notify Technical Operations and enter on FAA Form 7230-4 the reason. Ensure that all limited configurations are carried over on applicable logs.

3. When in limited configuration, availability of the Safety Logic System will be left to the discretion of the Tower FLM/CIC, taking into account the cause of the false alerts, and any pending resolution to the false alerts. Every effort should be made to return to full core alerting as soon as possible.

g. If Tech Ops requires a safety logic system test while the ASDE-X system is operational, the FLM/CIC must ensure the following;

1. Verbally advise all TWR operational personnel prior to conducting the test.
2. Set the Safety logic of the active test runway to "Closed".
3. Only a departing aircraft is used for the test alert.
4. Document on FAA Form 7230-4 Facility Log.

2-10 thru 2-99. Reserved.

CHAPTER 3. TRACON

Section 1. General

3-1. OMIC/FLMIC/CIC RESPONSIBILITIES

Watch supervision may be performed by an OM, FLM, Staff Specialist, or Controller-in-Charge (CIC), who has the following responsibilities:

Note: The OM/FLMIC/CIC signed on the FAA 7230-4 assumes all Operational, Administrative Responsibilities for the shift.

a. Maintain situational awareness, defined as...a continuous extraction of environmental information, integration of this information with previous knowledge to form a coherent mental picture, and the use of that picture in directing further perception and anticipating future events – knowing what is going on around you.

b. In concert with the FLM or CIC and the Traffic Management Coordinator in Charge (TMCIC), establish goals for the shift and provide guidance to operational personnel in accomplishing those goals.

c. Monitor controller performance and make corrections as appropriate. (On the spot corrections are not considered performance counseling and therefore are appropriately included in the responsibilities of a bargaining unit member functioning as CIC).

d. Ensure the completion of the facility watch checklist for their area of operation.

e. Ensuring that the preceding day's logs (noise sensitive ops logs, traffic count-logs, flight progress strips, etc.) are forwarded to SUPPORT MANAGER (MIA3) and new logs are generated for the current day's operations.

f. Through direct coordination with the TMC, monitor and manage traffic volume and flow.

1. Notify the ATM (or designee) and the MIA TMU when an aircraft is within one hour of reaching the "Three-hour/Four-hour" TARMAC rule.

2. Make a Q entry in FAA Form 7230-4, Daily Record of Facility Operation when a request to taxi for deplanement related to the "Three-hour Tarmac Rule" or "Four-hour Tarmac Rule" is received. Indicate on the QAR entry the time the request was made. Forward the QAR entry information to Miami ARTCC TMU.

3. *Verbally* notify Miami ARTCC TMU, on a recorded line, when a TARMAC delay request has been received.

4. When informed that an aircraft has exceeded the “Three/Four Hour Tarmac Rule”, collect all available records pertinent to that event. The QAR must include ASDE data, flight progress strips, voice replay, etc.

5. Immediately advise the Regional Operations Center (ROC) upon receipt of notification that an aircraft has exceeded the “Three-hour/Four-hour Tarmac Rule”. Notification to ROC must include the aircraft identification, date, time and location of the occurrence. Washington Operations Center (WOC) will be notified by ROC.

g. Make overall watch position assignments consistent with operational needs.

h. Rotate personnel so as to provide appropriate sector/area staffing

i. Make training assignments, including on the job training (OJT), refresher training and supplemental training as required.

j. Coordinate with Tech Ops, TRACON, Tower, and adjacent facilities as appropriate for routine equipment outages and shutdowns.

k. When necessary coordinate changes for radar sites, and/or modes of operation Inform affected CPC’s and satellite towers prior to changing the active RADAR system in use.

l. Ensure that operational equipment is configured properly for the current operational configuration.

m. Process leave requests in accordance with local directives and the NATCA/FAA negotiated agreement. Leave requests for periods outside the shift of the person performing watch supervision must be coordinated with the FLMIC of that watch before processing.

n. Directly monitor the movement of presidential aircraft in accordance with agency directives, Appendix 7

o. Keep the FLMIC/CIC fully informed of shift activities.

p. In the absence of FLM personnel, assume the operational responsibilities of the FLMIC/CIC.

q. The midnight FLM must collect, bundle, and date arrival flight progress strips daily.

r. Manage the operational environment with a goal toward eliminating distractions.

- s. Administrative duties must not be accomplished to the detriment of operational duties.
- t. Refer consumer complaints to the appropriate airline and/or Department of Transportation (DOT) web address for airline complaints:
http://airconsumer.ost.dot.gov/CP_AirlineService.htm
Specific complaints received via email may be forwarded to FAA ATO Litigation Liaison Office at: 9-AWA-AJR-8@faa.gov
- u. Airborne intercepts and observation of aircraft by airborne aircraft should only be accomplished by military or other authorized public aircraft and then only after coordination through the Domestic Event Network (DEN).
- v. The midnight FLMIC must provide physical oversight in the control tower at least once per midnight shift and document in the 7230-4, Facility Daily Operations log each occurrence.

3-2. Miami Sector FLMIC/CIC.

Responsibilities:

- a. Provide supervision for H, W, D, S, A, V, N, MN/MS and associated hand-off/coordinator positions.
- b. Make position assignments consistent with operational needs.
- c. Rotate personnel so as to provide appropriate relief periods
- d. Through coordination with TMC direct the overall operation in the Miami Sector to assure an equitable flow of traffic.
- e. After coordinating with the Cab FLMIC/CIC, establish the type of approaches to be used.
- f. Coordinate the activities of all affected positions when changing direction of operation.
- g. Perform the necessary coordination for opposite direction traffic.
- h. Assume the function of Traffic Management Coordinator when that position is not staffed.
- i. Advise the Satellite Sector FLMIC/CIC of changes in direction of operation.
- j. **WHEN WEATHER CONDITIONS WARRANT** - Ensure that PIREPs are obtained each hour and forwarded to AFSS/FSS as per JO7110.65.

- k.** Perform the TRACON Watch Checklist (See Appendix 7).
- l.** Combine or de-combine positions exercising best judgment and considering such factors as traffic, weather, and special operations and notify the CIC/Cab/Satellite FLM as necessary.
- m.** Inform the satellite towers of the STARS position being utilized for their arrivals and departures.
- n.** Inform the satellite towers of:
 - (1)** Miami or Fort Lauderdale Radar outage as appropriate.
 - (2)** When operating in ESL mode.
 - (3)** When operating in LRR.
- o.** The midnight FLMIC/CIC must collect, bundle and date the flight progress strips daily.
- p.** Forward flow control messages and/or restrictions to the TMC for inclusion in the IDS-4
- q.** Configure the EFSTS printers to ensure proper dissemination of FPS's.
- r.** Switch the EFSTS computer channel in the event of a failure.
- s.** Advise the FLL ATCT FLMIC/CIC prior to changing EFSTS channels.
- t.** Notify the MIA ARTCC Systems Engineer to enable normal FSP processing in the event of a FLL or MIA EFSTS malfunction
- u.** MIA FLMIC/CIC must notify the ATCSCC and Air Traffic Manager when delays exceed 90 minutes, except for Expected Departure Clearance Time (EDCT) delays created by ground delay programs. The FLMIC/CIC that first becomes aware of delays of 15 minutes or more must ensure the TMC is notified.
- v.** When the IDS4 system is inoperative, ensure that hazardous weather information is made available to all operational positions via non-automated means.
- w.** TRACON FLM/CIC must ensure that the Arrival Coordinator position is staffed when a one feeder – one final sector configuration is in use, when staffing permits. *Note: Additional considerations should be given to staffing Arrival Coordinator during unusual situations (weather, staggered approaches, etc.)*

3-3. Traffic Management Coordinator.

a. Position of Operation.

The primary position of operation is the TRACON Traffic Management Unit position. The secondary position of operation is the TMU position in the Tower Cab. When there are two or more TMC's on duty, one may be assigned to the Tower Cab at the direction of the FLMIC/CIC.

b. Positions.

- (1) RDVS 028 (primary)
- (2) RDVS 029 (alternate)

c. Responsibilities.

(1) Perform pre-duty familiarization to include an overview of existing and forecasted weather, existing and anticipated traffic management initiatives, equipment outages, special activities, airport conditions, staffing, etc.

(2) Obtain a current and forecasted weather briefing from the National Weather Service and/or the Miami Center CWSU at the beginning of each day and evening shift and provide that information to the FLMIC/CIC.

(3) Coordinate with the Miami Center Traffic Management Unit (TMU) anytime delays are anticipated or conditions may require the implementation of flow initiatives.

(4) Inform the FLMIC/CIC and Miami Center TMU when delays increase/decrease by 15-minute increments or no longer exist.

(5) Maintain liaison with the FLMIC/CIC, and stay informed of operating conditions (i.e. traffic delays, factors detrimental to the normal flow of traffic, forecasts of traffic delays, and recommended traffic restrictions) which affect the efficient management of traffic. Ensure FLMIC/CIC is aware of and concurs with traffic management activities.

(6) Initiate flow control initiatives as required to ensure optimum utilization of airspace and airport capacity. Coordinate with MIA ARTCC TMU whenever SWAP procedures are implemented/terminated and/or runway changes are implemented.

(7) Provide traffic analysis as directed by the Operations Manager.

(8) Inform FLMIC/CIC whenever ground stops and/or airborne holding procedures are implemented.

- OPSNET.
- (9) Record traffic delays and input delay information into the OPSNET.
 - (10) Update the following information in the IDS4:

 - (a) In-trail restrictions.
 - (b) Speed restrictions.
 - (c) Stratifications.
 - (d) TA change/reroutes.
 - (e) EDCT's, ground stops or reroutes.
 - (f) Any FLL spacing and speed restriction information
 - (g) Other information as assigned by the FLMIC/CIC.
 - (11) Maintain Traffic Management Log & attach to daily MT Form 7230-4, Daily Record of Shift Activities.
 - (12) Obtain the FLMIC/CIC's approval, prior to combining TMU functions with the FLMIC/CIC. Inform FLMIC/CIC of any remaining flow restrictions an/or traffic delays.
 - (13) When flight data is not staffed the TMC must gather the scanned tower Flight Progress Strips from the TRACON for retention.
 - (14) When the ARMT computer is connected and automatically computing taxi times, TMC's must derive the delays from the ARMT computer.
 - (15) Ensure that the ARMT equipment is operational and report malfunctions to the facility automation specialist.
 - (16) Notify the cab FLM when the Flight Plan Drop Interval (FPDI) is increased/decreased by MIA ARTCC.
 - (17) Monitor system performance and ensure that ARMT data is accurate.
 - (18) Adjust ARMT FPDI as required.
 - (19) Input traffic management restrictions into the ARMT.
 - (20) Monitor system performance and transfer delay information to the OPSNET.

(21) When ARMT is out of service, manually calculate delay data and input into OPSNET.

(22) Report any malfunctions of the ARMT system to the TRACON OM/FLMIC/CIC.

(23) Update IDS and ARMT computers to reflect applicable traffic management initiatives.

(24) Input hourly traffic count into Operational Information System (OIS).

3-4. TMB Arrival/Departure Radar

a. Position of Operation.

(1) TRACON position AR-1

(2) RADAR scope H

(3) STARS symbol 1H

(4) RDVS position 002

b. Frequencies.

(1) UHF 317.7

(2) VHF 125.25

c. Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

d. Responsibilities: TMB and X51 arrivals and departures.

3-5. TMB Arrival/Departure Handoff

a. Position of Operation.

(1) TRACON position CI-1 (HH)

(2) STARS symbol 2H

(3) RDVS position 001

- b.** Responsibilities.
 - (1) Initiate/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) Disseminate flight progress strips as appropriate.
 - (4) During changes in the direction of operation, inform the FLMIC/CIC when arrivals/departures are clear of arrival/departure airspace and hold departures until released by the FLMIC/CIC.

3-6. Miami South Departure Radar

- a.** Position of Operation.
 - (1) TRACON position DR-1
 - (2) RADAR scope W
 - (3) STARS symbol 1W
 - (4) RDVS position 004
- b.** Frequencies.
 - (1) VHF 125.5
 - (2) UHF 354.1
- c.** Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.
- d.** Responsibilities: departures within assigned airspace.
- e.** Must coordinate with the appropriate Local Control position prior to entering that airspace delegated for the dispersal of departures from MIA (Appendix 10).
- f.** Must not alter the course of a departure aircraft from the tower assigned heading until assured of separation from any preceding/succeeding departures.
- g.** Vector aircraft that cannot fly the Miami SID as follows:
 - (1) Runways 8L/R and 9: No right turn until leaving 900 feet.
 - (2) Runway 12: No left turn until leaving 900 feet.

3-7. Miami South Departure Handoff

- a.** Position of Operation.
 - (1) TRACON position CI-2 (HW)
 - (2) STARS symbol 2W
 - (3) RDVS position 003

- b.** Responsibilities.
 - (1) Initiate/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) Disseminate flight progress strips as appropriate.
 - (4) During changes in the direction of operation, inform the FLMIC/CIC when departures are clear of arrival airspace and hold departures until released by the FLMIC/CIC.

3-8. Miami North Departure Radar

- a.** Position of Operation.
 - (1) TRACON DR-2
 - (2) RADAR D
 - (3) STARS symbol 1D
 - (4) RDVS 006
- b.** Frequencies.
 - (1) VHF 119.45
 - (2) UHF 290.325
- c.** Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.
- d.** Responsibilities. Departures within assigned airspace and DEKAL arrivals assigned 6,000 feet (east) and 5,000 feet (west).
- e.** Must coordinate with the appropriate Local Control position prior to entering that airspace delegated for the dispersal of departures from MIA (Appendix 10).
- f.** Must not alter the course of a departure aircraft from the tower assigned heading until assured of separation from any preceding/succeeding departures.
- g.** Vector aircraft that cannot fly the Miami SID as follows:
 - (1) Runway 8L/8R/9: No right turn until leaving 900 feet.
 - (2) Runway 12: No left turn until leaving 900 feet.

3-9. Miami North Departure Handoff

- a.** Position of Operation.
 - (1) TRACON position CI-3 (HD)
 - (2) STARS symbol 2D
 - (3) RDVS position 005

- b. Responsibilities.**
- (1) Effect/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) Disseminate flight progress strips as appropriate.
 - (4) During changes in the direction of operation, inform the FLMIC/CIC when departures are clear of arrival airspace and hold departures until released by the FLMIC/CIC

3-10. Miami South Feeder Radar

- a. Position of Operation.**
- (1) TRACON position AR-2
 - (2) RADAR scope S
 - (3) STARS symbol 1S
 - (4) RDVS position 025
- b. Frequencies.**
- (1) VH - 120.5
 - (2) UHF - 350.2
- c. Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.**
- d. Responsibilities.**
- (1) Arrivals: WEVER ATA, JUNUR ATA, and WORPP ATA as assigned by the Sector FLMIC/CIC.
 - (2) Establish arrival flow and ensure that in-trail capability and required separation exists at time of hand-off.
 - (3) Establish an STARS data block for Class B Airspace arrivals.

3-11. Miami South Feeder/Final Handoff

- a.** Position of Operation.
 - (1) TRACON position - CI-8 (HS)
 - (2) STARS symbol - 1Y
 - (3) RDVS position - 024
- b.** Responsibilities.
 - (1) Effect/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) During changes in the direction of operation, inform the FLMIC/CIC when arrivals are clear of departure airspace.
 - (4) When operating in the ESL mode, forward arrival sequence to the appropriate Cab Coordinator position.
 - (5) Runway/Approach scratch pad information as specified in Appendix 2, must be entered in field two of aircraft's STARS Data block.

3-12. Miami South Final Radar

- a.** Position of Operation.
 - (1) TRACON position AR-3
 - (2) RADAR scope A
 - (3) STARS symbol 1A
 - (4) RDVS position 023
- b.** Frequencies.
 - (1) VHF 133.05
 - (2) UHF 379.9
- c.** Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

d. Responsibilities.

(1) Vector arrivals to the appropriate final approach course and provide vertical separation until other approved separation has been applied to the adjacent final.

Note: On an West operation, when the North Final (V) and the South Final (A) responsibilities are split; South Final has the primary responsibility to ensure compliance with this procedure.

(2) When simultaneous ILS approaches are in use, arrivals to 9/27 must be level at 3,000 feet no less than three (3) NM from the 8R/26L final approach course and established on the localizer prior to 15 NM. The pilot must be instructed to contact the appropriate tower frequency prior to 15NM and report the appropriate final approach fix . South Final Radar must obtain acknowledgement of this instruction.

Note: Aircraft turned on to the final inside of 15 NM must be coordinated with the appropriate monitor position.

(3) Use the STARS quick look function to display the appropriate north arrival positions.

(4) Retain responsibility for separation of arrivals to the runway threshold when wake turbulence separation standards are required.

(5) Communication transfer will be accomplished prior to transfer of control, but not so far from the runways as to impair the approach/local controller's ability to provide service to the aircraft (i.e., traffic information).

Note: Approach must transfer communications between 10 and 7 miles from the airport.

(6) Ensure that vertical separation exists during turns to base leg unless the aircraft will intercept the final approach course no closer than 5nm from traffic on the parallel final approach course. Vertical separation may be discontinued after other approved separation is established.

Note: On an East operation, when the North Final (V) and the South Final (A) responsibilities are split; North Final has the primary responsibility to ensure compliance with this procedure.

3-13. Miami North Feeder Radar

a. Position of Operation.

(1) TRACON position - AR-5

(2) RADAR scope - N

(3) STARS symbol - 1N

(4) RDVS position - 020

b. Frequencies.

(1) VHF 125.75

(2) UHF 322.2

c. Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

d. Responsibilities.

(1) Arrivals – WORPP ATA and HILEY ATA or as assigned by the FLMIC/CIC.

(2) Establish arrival flow and ensure that in-trail capability and required separation exists at time of hand-off.

(3) Establish an STARS data block for Class B Airspace arrivals.

3-14. Miami North Feeder/Final Handoff

a. Position of Operation.

(1) TRACON position - CI-9 (HN)

(2) STARS symbol - 1K

(3) RDVS position - 021

b. Responsibilities.

(1) Effect/accept hand-offs and coordinate with other positions/facilities.

(2) If a target does not auto-acquire, ensure that it is tagged with the proper information.

(3) During changes in the direction of operation, inform the FLMIC/CIC when arrivals are clear of departure airspace.

(4) When operating in the ESL mode, forward arrival sequence to the appropriate Cab Coordinator position.

(5) Runway/Approach scratch pad information as specified in appendix 2, must be entered in field two of aircraft STARS Data block.

3-15. Miami North Final Radar

a. Position of Operation.

(1) TRACON position - AR-4

(2) RADAR scope - V

(3) STARS symbol - 1V

(4) RDVS position - 022

b. Frequencies.

(1) VHF 124.85

c. Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

d. Responsibilities.

(1) Vector arrivals to the appropriate final approach course and provide vertical separation until other approved separation has been applied to the adjacent final.

Note: *On an East operation, when the North Final (V) and the South Final (A) responsibilities are split; North Final has the primary responsibility to ensure compliance with this procedure.*

(2) When simultaneous ILS approaches are in use, arrivals to 8R/26L must not be descended below 4,000 feet until established on the localizer and within 15 NM of the airport. The pilot must be instructed to contact the appropriate tower frequency prior to 15 NM and report the final approach fix. North Final Radar must obtain acknowledgment of these instructions.

Note: *Aircraft turned on to the final inside of 15 NM must be coordinated with the appropriate monitor position.*

(3) Use the STARS quick look function to display the appropriate south arrival positions.

(4) Miami arrivals must be assigned 210 knots or less abeam the airport on downwind. This requirement may be discontinued between the hours of 2300 and 0700 local, at the discretion of the FLMIC/CIC.

(5) Retain responsibility for separation of arrivals to the runway threshold when wake turbulence separation standards are required.

(6) Ensure that aircraft landing on runway 12 are separated from all traffic landing runway 9 and unable to hold short of runway 12.

(7) Communication transfer will be accomplished prior to transfer of control, but not so far from the runways as to impair the approach/local controller's ability to provide service to the aircraft (i.e., traffic information).

Note: Approach must transfer communications between 10 and 7 miles from the airport.

(8) Ensure that vertical separation exists during turns to base leg unless the aircraft will intercept the final approach course no closer than 5nm from traffic on the parallel final approach course. Vertical separation may be discontinued after other approved separation is established.

3-16. Monitor North and South.

a. Positions of Operation (both).

(1) TRACON position - M1/2

(2) RADAR scope - 2J 3J

(3) STARS symbol - 2J 3J

(4) RDVS position

(a) Monitor North 026

(b) Monitor South 027

b. Frequencies.

(1) Monitor North 118.3

(2) Monitor South 123.9

c. Airspace: That airspace one and one-half mile either side of the final approach when simultaneous ILS approaches are in use. The airspace within the no transgression zone is shared.

d. Equipment: A check of the override capability at each monitor position must be completed before monitoring begins.

e. Responsibilities: The monitor position must be responsible for the separation of aircraft established on the final approach course from 15 NM to the runway. Actions taken to maintain separation must be coordinated with affected positions.

(1) Except when simultaneous ILS approaches are in progress, Final Monitor controllers must monitor arrival in-trail spacing to ensure required separation is maintained. Monitoring must begin when aircraft are established on final approach course and end at the runway threshold when wake turbulence separation is required or at 5nm when the local controller is able to provide visual separation.

(2) Advise final/local controller when separation is likely to compress below required minima, in time for alternate instructions to be issued. *Note: The primary responsibility for separation on final approach rests with the final/local controller. Once a potential for compressed separation on final is detected, monitor controllers are responsible for informing the appropriate controllers. Notification should be accomplished prior to 1/2 mile of the prescribed separation minimum.*

(3) Use the STARS TPA function or other STARS distance-detection features to monitor required spacing on final.

f. Procedures.

(1) Monitoring must be performed with the scope off-centered, scanning a maximum of 20 miles using two-mile range marks.

(2) Monitor North/South must obtain the arrival sequence by quick looking the appropriate arrival position. When STARS FSL is inoperative, the FLM must be responsible for relaying the approach sequence.

(3) Any aircraft turned on to the final approach course inside 15 NM will be coordinated with the appropriate monitor position.

(4) The Arrival Control positions will ensure that aircraft are instructed to contact the appropriate local control frequency when issuing the approach clearance. MONITOR NORTH/SOUTH will advise the appropriate Arrival Control position when aircraft are not on Local Control frequency by the 15 NM range mark.

(5) Should it become necessary for either monitor position to turn an arrival that is deviating, or an aircraft on the adjacent final approach course, this information will be immediately coordinated with the tower and arrival control positions.

3-17. Satellite Sector FLM/CIC

Responsibilities.

a. Provide supervision for positions, Z, Q, L, G, R, F, FD-1, FD-2 and associated hand-off/coordinator positions.

- b.** Supervise and direct the overall operation in the satellite sector to assure an equitable flow of traffic including traffic management initiatives.
- c.** Make position assignments consistent with operational needs.
- d.** Rotate personnel so as to provide appropriate relief periods
- e.** Assume the duties of the FLMIC/CIC as directed.
- f.** Performs the necessary coordination for opposite direction traffic.
- g.** Update the following information in the IDS4:
 - (1)** Equipment outages.
 - (2)** Runway/taxiway closures.
 - (3)** Direction of landing.
- h.** Ensure that the information shown on the IDS4 is current.
- i.** Advise Ft. Lauderdale Tower of Miami TRACON configuration.
- j.** Advise the Miami Sector FLMIC/CIC of changes in direction of operation.
- k.** Ensure all frequencies in the RDVS checklist are selected or in loudspeaker as appropriate.
- l.** Normally combine or de-combine positions considering such factors as traffic, weather, and special operations and notify the Cab FLMIC/CIC and FLMIC/CIC as necessary.
- m.** Inform the satellite towers of the STARS position being utilized for their arrivals and departures.
- n.** Inform the satellite towers of a Fort Lauderdale or, if appropriate, a Miami RADAR outage.
- o.** Advise the appropriate departure position of any change in position configuration/airspace configuration that will affect the Prearranged Coordination Procedures.

3-18. FLL South East Departure/West Arrival Radar

- a.** Position of Operation.
 - (1)** TRACON position - DR-4

- (2) RADAR scope - Z
- (3) STARS symbol - 1Z
- (4) RDVS position - 007

b. Frequencies.

- (1) VHF - 128.6
- (2) UHF - 306.975

c. Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

d. Responsibilities.

(1) **FLL**

- (a) FLL East: FLL departures routed South.
- (b) FLL West: FLL arrivals into runway 27L/31 providing separation from runway 27R.
- (c) DEKAL arrivals assigned 4,000 feet and below.
- (d) Maintain vertical separation until other approved separation has been applied or coordinate for an instrument approach with the appropriate adjacent sector.

Note: *When clearing aircraft for a Visual Approach with parallel IFR traffic to the adjacent runway, use 30 degrees or less intercept angle to the final approach course when visual separation is not being applied by Ft. Lauderdale Tower for parallel IFR traffic. Ensure these Aircraft are at or below 2000' prior to being 3 miles laterally from the RY9L/27R final approach course.*

(2) **OPF**

- (a) OPF East: OPF departures.
- (b) OPF West: OPF arrivals.
- (c) DEKAL arrivals assigned 4,000 feet and below.
- (3) Class B and Class C Airspace service in assigned airspace.
- (4) FLL to MIA turbojet traffic must be assigned 4,000 feet.

(5) Use the STARS quick look function to display the appropriate north arrival positions.

3-19. FLL South East Departure/West Arrival Handoff

- a.** Position of Operation.
- (1) TRACON position - CI-4 (HZ)
 - (2) STARS symbol - 2Z
 - (3) RDVS position - 007
- b.** Responsibilities.
- (1) Effect/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) Disseminate flight progress strips as appropriate.
 - (4) During changes in the direction of operation, inform the FLMIC/CIC when departures are clear of arrival airspace and hold departures until released by the FLMIC/CIC.
 - (5) Assist FLL South West Departure/East Arrival Radar when the associated arrival hand-off position is not staffed.

3-20. FLL South West Departure/East Arrival Radar

- a.** Position of Operation.
 - (1) TRACON position - AR-8
 - (2) RADAR scope - Q
 - (3) STARS symbol - 1Q
 - (4) RDVS position - 010

- b.** Frequencies.
 - (1) VHF - 126.85
 - (2) UHF - 306.975

- c.** Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

- d.** Responsibilities.
 - (1) **FLL**
 - (a) FLL West: FLL departures routed South.
 - (b) FLL East: FLL arrivals into runway 9R providing separation from runway 9L/13.
 - (c) Maintain vertical separation until other approved separation has been applied or coordinate for an instrument approach with the appropriate adjacent sector.

 - Note: When clearing aircraft for a Visual Approach with parallel IFR traffic to the adjacent runway, use 30 degrees or less intercept angle to the final approach course when visual separation is not being applied by Ft. Lauderdale Tower for parallel IFR traffic. Ensure these Aircraft are at or below 2000' prior to being 3 miles laterally from the RY9L/27R final approach course.*

 - (2) **OPF**
 - (a) OPF West: OPF departures.
 - (b) OPF East: OPF arrivals.
 - (c) Kubic arrivals assigned 5,000 feet and below

- (3) **HWO**
 - (a) HWO Arrivals/Departures.
- (4) Class B and Class C Airspace service in assigned airspace.
- (5) Use the STARS quick look function to display the appropriate north arrival positions.
- (6) TNT arrivals, departures and practice approaches.
- (7) FLL to MIA turbojet traffic must be assigned 4,000 feet.

3-21. FLL South West Departure/East Arrival Handoff

- a. Position of Operation.
 - (1) TRACON position - CI-5 (HQ)
 - (2) STARS symbol - 2Q
 - (3) RDVS position - 009
- b. Responsibilities.
 - (1) Effect/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) Disseminate flight progress strips as appropriate.
 - (4) During changes in the direction of operation, inform the FLMIC/CIC when arrivals are clear of departure airspace.

3-22. FLL North Departure Radar

- a. Position of Operation.
 - (1) TRACON position - DR-3
 - (2) RADAR scope - L
 - (3) STARS symbol - 1L

- (4) RDVS position - 018
- b. Frequencies.
 - (1) VHF - 126.05
 - (2) UHF - 251.1
- c. Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.
- d. Responsibilities.
 - (1) FLL IFR/Class C Airspace departures routed North.
 - (2) Class C Airspace service in assigned airspace.

3-23. FLL North Departure Handoff

- a. Position of Operation.
 - (1) TRACON position - CI-6 (HL)
 - (2) STARS symbol - 2L
 - (3) RDVS position - 017
- b. Responsibilities.
 - (1) Effect/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) Disseminate flight progress strips as appropriate.
 - (4) During changes in the direction of operation, inform the FLMIC/CIC when departures are clear of arrival airspace and hold departures until released by the Area FLMIC/CIC.
 - (5) Enter the aircraft identification and obtain a beacon code when the FLL Tower STARS keyboard is inoperative.

3-24. FXE Arrival/Departure Radar

- a.** Position of Operation.
 - (1) TRACON position - DR-5
 - (2) RADAR scope - G
 - (3) STARS symbol - 1G
 - (4) RDVS position - 016
- b.** Frequencies.
 - (1) VHF - 119.7
 - (2) UHF - 306.3
- c.** Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.
- d.** Responsibilities.
 - (1) FXE and PMP arrivals and departures, GILBI and PBI arrivals and overflights assigned 3,000 and 4,000 feet.
 - (2) Class C Airspace service in assigned airspace.

3-25 FXE Arrival/Departure Handoff

- a.** Position of Operation.
 - (1) TRACON position - CI-7 (HG)
 - (2) STARS symbol - 2G
 - (3) RDVS position - 015
- b.** Responsibilities
 - (1) Effect/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) Disseminate flight progress strips as appropriate.

3-26. FLL North Feeder Radar

- a.** Position of Operation.
 - (1) TRACON position - AR-7
 - (2) RADAR scope - R
 - (3) STARS symbol - 1R
 - (4) RDVS position - 012

- b.** Frequencies.
 - (1) VHF - 133.775
 - (2) UHF - 380.2

- c.** Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

- d.** Responsibilities.
 - (1) Arrivals – KUBIC 6000 and above, FISEL ATA and PBI arrivals within the HILEY ATA.
 - (2) Establish arrival flow and ensure that in-trail capability and required separation exists at time of hand-off.
 - (3) Establish an STARS data block for Class C Airspace arrivals.
 - (4) Use the STARS quick look function to display the appropriate south arrival positions.
 - (5) Class C Airspace service in assigned airspace

3-27. FLL North Feeder Handoff

- a.** Position of Operation.
 - (1) TRACON position - CI-10 (HR)
 - (2) STARS symbol - 2R
 - (3) RDVS position - 011

- b.** Responsibilities.
 - (1) Initiate/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, insure that it is tagged with the proper information.
 - (3) During changes in the direction of operation, inform the FLMIC/CIC when arrivals are clear of departure airspace.
 - (4) Enter the aircraft identification and obtain a beacon code when the FLL Tower STARS keyboard is inoperative.

3-28. FLL North Final Handoff

- a.** Position of Operation.
 - (1) TRACON position - CI-11 (HF)
 - (2) STARS symbol - 2F
 - (3) RDVS position - 013
- b.** Responsibilities.
 - (1) Effect/accept hand-offs and coordinate with other positions/facilities.
 - (2) If a target does not auto-acquire, ensure that it is tagged with the proper information.
 - (3) During changes in the direction of operation, inform the FLMIC/CIC when arrivals are clear of departure airspace
 - (4) Enter the aircraft identification and obtain a beacon code when the FLL Tower STARS keyboard is inoperative.

3-29. FLL North Final Radar

- a.** Position of Operation.
 - (1) TRACON position - AR-6
 - (2) RADAR scope - F
 - (3) STARS symbol - 1F

(4) RDVS position - 014

b. Frequencies.

(1) VHF 118.1

(2) UHF 285.6

c. Airspace jurisdiction includes that area within the solid lines as depicted on the chart for this position in Appendix 1.

d. Responsibilities.

(1) Sequence arrivals to runway 9L/13/27R at Fort Lauderdale. When utilizing runways 9L/27R, vector arrivals to the appropriate final approach course and provide vertical separation until other approved separation has been applied to the adjacent final.

Note: When clearing aircraft for a Visual Approach with parallel IFR traffic to the adjacent runway, use 30 degrees or less intercept angle to the final approach course when visual separation is not being applied by Ft. Lauderdale Tower for parallel IFR traffic.

(2) Use the STARS quick look function to display the appropriate south arrival positions.

(3) Class C Airspace service in assigned airspace.

3-30. Data Distribution 1

a. Position of Operation.

(1) TRACON position - FD-1

(2) RDVS position - 019

b. Responsibilities.

(1) Remove and prepare strips from the FDIO printer and distribute them to the appropriate positions.

(2) When the IDS4 is not operational, disseminate SIGMETS, PIREPS, Center Weather Advisories (CWA's), operational equipment outages, and weather information as directed by the OM/FLMIC/CIC.

(3) When the TMC position is not staffed, forward Flow GI messages to the OM/FLMIC/CIC.

- (4) Serve as the primary means of moving flight progress strips between positions.
- (5) Replace FDIO/EFSTS strips as necessary.
- (6) Update the following information in the IDS4 when necessary:
 - (a) Weather and satellite airport information.
 - (b) NOTAMS.
 - (c) Other information as assigned by OM/FLMIC/CIC.
- (7) Collect, bundle, and date flight progress strips (except arrival strips) hourly, and deliver these strips to MIA TMU or OM/FLMIC/CIC as appropriate.

3-31. Data Distribution 2

- a. Position of Operation
 - (1) TRACON position FD-2
- b. Responsibilities.
 - (1) Remove and prepare strips from the FDIO printer and distribute them to the appropriate positions.
 - (2) Hand-write flight progress strips; Class B Airspace, Class C Airspace, IFR originals and/or duplicates, to assist controllers as required.
 - (3) During equipments outages, relay departure clearances obtained by FDIO to the appropriate satellite facility at least fifteen (15) minutes prior to the proposed departure time.
 - (4) Serve as the secondary means of moving flight progress strips between positions.
 - (5) Replace FDIO/EFSTS strips as necessary.

3-32. Radar Coordinator Positions (CI-1; CI-2; CI-3;)

FLL Coordinator (CI 1) (Location: over 'L')

- a. Duties and responsibilities are IAW JO 7110.65, Terminal RADAR Team position responsibilities.

- b. Monitor the radar positions when not on interphone/override.
- c. Assist in effecting coordination and/or radar handoffs between adjacent sectors/facilities as required.
- d. Implement flow control procedures as necessary

Miami Arrival Coordinator (CI 2) (Location: over 'V')

- a. Duties and responsibilities are IAW JO 7110.65, Terminal RADAR Team position responsibilities.
- b. Monitor the radar positions when not on interphone/override.
- c. Assist in effecting coordination and/or radar handoffs between adjacent sectors/facilities as required.
- d. Implement flow control procedures as necessary.

Miami Departure Coordinator (CI 3) (Location: over 'A')

- a. Duties and responsibilities are IAW JO 7110.65, Terminal RADAR Team position responsibilities.
- b. Monitor the radar positions when not on interphone/override.
- c. Assist in effecting coordination and/or radar handoffs between adjacent sectors/facilities as required.
- d. Implement flow control procedures as necessary.

3-33 thru 3-99 Reserved

*Intentionally
Left
Blank*

CHAPTER 4. Automation Procedures

Section 1. General

4-1. Radar Equipment Operation

a. Controllers must:

(1) When both the Miami and Fort Lauderdale radar systems are operational, Radar Control positions will be operated on the ASR system appropriate for the control function assigned. (MT7110.65 par. 1-21)

(2) Operate with a minimum of code 1200 selected in the systems data area.

4-2. TMB ASRS 4/QMA Site Procedures

a. The FLMIC/CIC must:

(1) Be responsible for implementing/terminating use of TMB ASRS 4.

(2) Notify the TRACON/Cab FLMIC/CIC and all satellite towers of planned TMB ASRS 4/QMA SITE implementation and termination.

(3) Notify the AOCC of system outages.

(4) Make an entry on the Daily Record of Facility Operation, FAA Form 7230-4, and explain the reasons for TMB ASRS 4/QMA SITE operation. Make an "E" entry on the log if the change was necessitated by equipment failure. Include implementation and termination times.

(5) Ensure that TMU notifies ZMA of TMB ASRS 4/QMA SITE being enabled and that no adjustments or changes affecting QMA SITE presentation be made without first advising the Miami TRACON.

(6) Ensure all operating positions and satellite facilities are thoroughly briefed on the increased separation requirements prior to implementation of TMB ASRS 4/QMA SITE.

(7) If primary target processing is not available, ensure that a NOTAM is issued and that an ATIS is made containing the following information:

(a) Class B and C services not available to VFR aircraft until further advised.

(b) VFR services are available only to aircraft with transponders and are limited to safety alerts and traffic advisories.

NOTAM Example: “Miami Approach primary radar out of service. Class B and C services not available to VFR aircraft until further advised. Safety alerts and traffic advisories on transponder equipped aircraft only.”

ATIS Example: “Primary radar out of service. Class B and C services not available to VFR aircraft until further advised. VFR services are available only to aircraft with transponders and are limited to safety alerts, traffic advisories, and sequencing to Miami International Airport.”

4-3. STARS Display Data.

a. Controllers must display:

(1) Mode C on all targets in accordance with current directives.

(2) The following elements of the System Status Area:

(a) Weather

(b) Time

(c) Altimeter

(d) SPC Codes

(e) SYS OFF indications

(f) TW OFF

(3) The GI text line for airports that lie within that positions area of jurisdiction (not required when towers are closed).

b. Controllers must ensure that a brightness intensity level that makes Limited Data Blocks (LDB) readily discernible is selected. Selectable values of 40 or greater must be used. Since this is a value stored in preferable settings, all “pref sets” must be adjusted by one of the following methods:

(1) On the DCB panel select BRITE, LDB, use the keyboard to manually type in the selected brightness level value of 40 percent or greater and then press the enter key, or use the slew ball to select the required intensity level and press the enter key located beside the slew ball.

(2) Limited data block intensity values may also be selected by use of the associated knob on the brightness control panel located on the left side of the radar display. Use of the control knob on the intensity panel is only authorized when used in

conjunction with the DCB BRITE intensity level readout since no values can be determined by use of the LDB intensity knob alone.

4-4 Automated Point Out Procedures.

- a. The initiating controller must:
 - (1) Ensure that either a Departure Transition Area (DTA) or destination identifier is entered in the scratch pad.
 - (2) If the aircraft is not in level flight, indicate the climbing/descending to altitude via the assigned or requested altitude scratch pads (not required for departure aircraft assigned 16,000).
- b. The receiving controller must via automation either:
 - (1) Approve the point out.
 - (2) Disapprove the point out.
 - (3) Accept control of the aircraft

4-5 STARS Mode of Operation.

- a. STARS must only be operated in the FSL mode unless a failure occurs. In the event of an FSL failure controllers must change to ESL mode.
- b. Change from ESL to FSL mode must only be done after coordination with the OM/FLMIC/CIC on duty.
- c. Prior to the use of the Multi Sensor mode OM/FLMIC/CIC approval must be obtained.

Note: LRR and Multi sensor modes require increased separation standards.

4-6 MSAW/CA Warning Aural Alarm Volume.

MSAW/CA must not be inhibited and the alarm volume must not be set below level # 1.

4-7 Scratch Pad Entries.

Scratch pad entries are limited to approved contractions, abbreviations, or location identifiers.

4-8 thru 4-19 RESERVED.

Section 2. Electronic Flight Strip Transfer System (EFSTS)

4-20 Responsibilities.

a. The TRACON FLMIC/CIC must:

(1) Configure the EFSTS printers in the TRACON to ensure proper dissemination of flight progress strips.

(2) Switch EFSTS channels in the event of a failure/malfunction.

(3) Advise the FLL ATCT FLMIC/CIC prior to changing EFSTS channels.

(4) Notify the MIA ARTCC Systems Engineer to enable normal FSP processing in the event of a FLL or MIA EFSTS malfunction

b. The MIA Tower FLMIC/CIC must:

(1) Ensure that all scanners are operational.

(2) Ensure that backup strips are available in the tower cab.

(3) Inform Ground Controllers when to scan strips to generate taxi times as required.

(4) When scanners are out of service, resume manual strip marking procedures.

c. Clearance Delivery must:

(1) Enter VFR flight plans into the NAS (FDIA or F9 entry) to generate a bar-coded departure strip.

(2) Avoid writing on bar codes

(3) Replace FDIO/EFSTS strips and ribbons as required.

d. Ground Control North/South/West must:

(1) Scan flight progress strips to generate taxi times.

(2) When scanners are out of service, resume manual strip marking procedures.

e. Local Control North/South must:

(1) Scan each departure strip prior to transfer of communications.

(2) Ensure that non-standard heading/altitude information is forwarded to the departure controller prior to transfer of communications. This must be accomplished by scanning an implied function via the associated keypad, scanning a control strip, or verbally via the override circuit.

(3) Place the flight progress strip in the designated storage container after the aircraft is transferred to Departure Control.

(4) Forward to the departure controller the call sign, aircraft type and DTA on all timed out flight plans.

(5) Use “control strips” to direct flight plans to the appropriate printer in the TRACON (Redirect. Fix Gate/Swap).

Note 1 – “control strips” are not needed for standard headings as set forth in paragraph 2-6. Additionally, heading 105 for SKIPS props will be considered a standard heading for the EFSTS.

Note 2 – Keypads may be used for non-standard headings using an implied two or three digit entry. (16 = H160; 245 = H245)

4-21 thru 4-29. Reserved.

Section 3. Airport Resource Management Tool (ARMT)

4-30 Responsibilities.

- a.** The TRACON OM/FLMIC/CIC must:
 - (1) Ensure that the ARMT equipment is operational and report malfunctions to the facility automation specialist.
 - (2) Notify the cab FLM when the Flight Plan Drop Interval (FPDI) is increased/decreased by MIA ARTCC.

- b. The Cab FLMIC/CIC must:**
 - (1) Monitor system performance and ensure that ARMT data is accurate.
 - (2) Adjust ARMT FPDI as required.
 - (3) Ensure that taxi/departure times are manually entered on the FSP when the EFSTS system is inoperative.

- c. TMCs must:**
 - (1) Input traffic management restrictions into the ARMT.
 - (2) Monitor system performance and transfer delay information to the OPSNET.
 - (3) When ARMT is out of service, manually calculate delay data and input into OPSNET.
 - (4) Report any malfunctions of the ARMT system to the TRACON FLMIC/CIC

4-31 thru 4-39. Reserved.

Section 4. Minimum Safe Altitude Warning (MSAW) Tower Aural Alert Awareness

4-41 MSAW Tower Alert Area

a. PMP, FXE, HWO, OPF, TMB and HST tower alert areas consist of a ten mile ring around the center of each airport. MSAW area depicted in Appendix 13.

(1) MSAW alert scratch pad data in Appendix 14.

b. FLL and MIA tower alert areas consist of a ten mile ring around the center of each airport with a six mile extension, six miles wide (three miles wide each side of the runway centerlines). MSAW area depicted in Appendix 13.

(1) MSAW alert scratch pad data is contained in Appendix 15.

4-42 Procedures

a. TRACON and ATCT controllers must issue MSAW safety alerts per JO Order 7110.65, paragraph 2-1-6 and FAA Order 7210.3 Facility Operation and Administration, paragraph 11-2-7 and 11-8-7.

b. If in the controllers judgment aircraft are in a position/altitude that places them in unsafe proximity to terrain and/or obstructions, the controllers are required to relay alerts to remote towers, or advise aircraft regardless of where aircraft are located at the time inside or outside of remote towers adapted MSAW areas.

c. MIA Approach has the responsibility for issuing safety alerts if the STARS TDM/TDW is out of service and/or MSAW/CA is not available to an ATCT facility. During these outages, MIA approach control must immediately inform the appropriate ATCT of any safety alerts received for aircraft on the tower's frequency.

4-43 thru 4-99. Reserved

CHAPTER 5. Dual ATIS

Section 1. General

5-1. Digital ATIS

a. The Digital-ATIS is the primary source for ATIS broadcasts. When using free text, ensure the message sounds the same as you intended. Since the ATIS is digitally produced, some words may be pronounced different than what you intended.

Note: In the event of a TDLS/Digital ATIS outage the departure ATIS frequency 133.675 will not be available. Both arrival and departure ATIS messages must be broadcast via the analog ATIS and transmitted on the arrival ATIS frequency.

1. Arrival ATIS broadcasts must be identified by phonetic alphabet code letters "Alpha" through "Mike," in sequential order.
2. Departure ATIS broadcasts must be identified by phonetic alphabet code letters "November" through "Zulu," in sequential order.
3. Ensure that, prior to recording being transmitted, the ATIS recording is reviewed for accuracy by the FLM/CIC. When appropriate, the voice/text should be cross-checked to ensure the message content is the same.
4. After the ATIS is monitored for accuracy, ensure that the ATIS is broadcasting.

5-2 thru 5-99. Reserved

CHAPTER 6. GROUP 6 AIRCRAFT OPERATIONS

Section 1. General

6-1. General Operations.

- a. Runway Use: The preferred runway for Group 6 aircraft operations is runway 9/27. Runway 8R/26L may be used for Group 6 aircraft operations only if runway 9/27 is closed or otherwise operationally unavailable. Group 6 aircraft must not use any other runways.
- b. Restrictions: Runway 12/30 is unusable when the A388/B748 is on “Q” west of the bend and when it is on “S” between “V” and “Q”, due to the Obstacle Free Zone (OFZ).
- c. Phraseology: The term “Super” must be used immediately after the aircraft call sign in all communications with or about an A388.
- d. A ‘Follow-Me’ Ramp vehicle will assist the A388/B748 to and from RY 8R/26L.
- e. LAHSO procedures are NOT authorized with the A388/B748.
- f. After every A388/B748 departure, a full runway inspection MUST be conducted for foreign object debris (FOD).
- g. Approach Control should give tower a 15 mile gap after each A388/B748 arrival to allow for the A388/B748 to roll to the end of the runway.
- h. TRACON OM/FLM must call the Tower FLM/CIC when A388/B748 is no closer than 20 MILES out. Tower FLM/CIC must then notify J Tower prior to A388/B748 reaching 15 mile final (service roads will then be closed, if applicable, by MDAD).
- i. J Tower will notify MIA Tower when A388/B748 is pushing back.
- j. Taxiway “P” east of taxiway “U” is closed to **all** aircraft while A388/B748 is on taxiway “Q”.
- k. When the A388/B748 is using taxiway “N”, as it approaches Spots 5/6/7, other aircraft larger than a B737 cannot be pushed back from those spots. DCAD and the ‘Follow Me’ vehicle will verify this and coordinate with American Airlines ramp tower.
- l. Two A388 or B748 aircraft, or a combination of these two aircraft types, must not be on a runway and taxiway or a taxiway and taxiway next to each other.
- m. Taxiway “T” is closed to A388/B748 while A388/B748 operates on Runway 9-27.

n. Runway 8R/26L is closed to Group 6 aircraft when another Group 6 aircraft is operating on Taxiway “M” or Taxiway “L”.

o. Group 6 aircraft taxiing layout is depicted in Appendix 20.

p. Visual separation rules MUST NOT be applied with aircraft operating directly behind and less than 1000 feet.

6-2. Procedures.

a. Runway 9, arrival to J17, Taxi Instructions:

(1) Arrivals: Group 6 aircraft must be directed to taxi to the end of the runway and exit at “Q8”. Group 6 aircraft will follow the 14C centerline only for a few feet and then be directed to J17. Group 6 arrival aircraft will not be using Spots 14 or 15.

Phraseology: *“LUFTHANSA 462 SUPER, MIAMI GROUND, TAXI TO THE RAMP VIA “Q” or TAXI TO THE RAMP STRAIGHT AHEAD”*

(2) Departures: Group 6 aircraft departing from spot 14C must be directed to turn right onto taxiway “Q”, then right to “P” (using Group 6 transition), then turn left on “S” and hold short of runway 12. Group 6 aircraft will follow the red line depicting the Group 6 transition from Q to P. (The service road will be closed to allow aircraft to be on taxiway “P”. RY9 and RY12 remain usable).

Phraseology: *“LUFTHANSA 463 SUPER, MIAMI GROUND, RUNWAY 9, TAXI VIA, “Q”, Group 6 Transition to “P”, “S”, HOLD SHORT OF RUNWAY 12”*

b. Runway 27 Taxi Instructions:

(1) Arrivals: Group 6 aircraft must land RY27 then proceed on taxiway “S” and hold short of taxiway “V”. After obtaining runway crossing approval, aircraft must continue on “S” and turn right on “P”, Group 6 transition to “Q” towards spot 14C. Note: Holding short of “V” protects the OFZ. Group 6 aircraft will follow 14C centerline only for a few feet and then be directed to J17. Group 6 arrival aircraft will not be using Spots 14 or 15.

Phraseology: *“LUFTHANSA 462 SUPER, TAXI VIA “S” HOLD SHORT OF TAXIWAY “V”.*

“LUFTHANSA 462 SUPER, TAXI VIA “S”, CROSS RUNWAY 12, TAXI VIA “P”, Group 6 transition to “Q” TO THE RAMP.”

Note: When Group 6 aircraft are crossing runway 12/30: If eastbound, aircraft cross at “S”, join “P”, Group 6 transition to “Q”. If westbound, aircraft joins “Q”, Group 6 transition to “P”, and cross at “S”. If the Group 6 aircraft is not crossing or planning on crossing RY 12/30, it must be directed to remain on taxiway “Q” the entire time.

(2) Departures: Group 6 aircraft, from Spot 14C, must be directed to RY27 via taxiway “Q”.

Phraseology: *“LUFTHANSA 463 SUPER, MIAMI GROUND, RUNWAY 27, TAXI VIA “Q8” or STRAIGHT AHEAD”*.

c. Runway 8R Taxi Instructions to spot 14C:

(1) Arrivals: Group 6 aircraft landing RY8R must exit at M10 or M11, then join “M”. Turn left on “Y” then left on “Q”, and taxi towards spot 14C. When Group 6 aircraft are on taxiway “Q”, RY12 is unusable until the Group 6 aircraft turns east at the bend.

Phraseology: *“LUFTHANSA 462 SUPER, MIAMI GROUND, FOLLOW THE FOLLOW-ME TRUCK TO PARKING”*.

(2) Departures: Group 6 aircraft taxiing out of spot 14C must be directed to turn right onto taxiway “Q”. When Group 6 aircraft are on “Q” northwest bound RY12 is unusable.

Phraseology: *“LUFTHANSA 463 SUPER, MIAMI GROUND, RUNWAY 8R TAXI, FOLLOW THE FOLLOW-ME TRUCK”*

d. Runway 26L Taxi Instructions:

(1) Arrivals: When Group 6 aircraft land 26L and exit “M1” or “M2”, direct aircraft to turn left, join “Q” towards spot 14C. (RY 30 is unusable while A388/B748 is on “Q” until they turn east at the bend).

Phraseology: *“LUFTHANSA 462 SUPER, MIAMI GROUND, FOLLOW THE ‘FOLLOW-ME’ TRUCK TO PARKING”*

(2) Departures: When Group 6 aircraft taxi out of spot 14C, they must be directed to turn right onto taxiway “Q”. Turn right on “Y”, turn right on to taxiway “M” and hold short of RY26L at “M11”. RY 30 is unusable when a Group 6 aircraft turns northwest bound at the bend.

Phraseology: *“LUFTHANSA 462 SUPER, MIAMI GROUND, RY 26L TAXI, FOLLOW THE FOLLOW-ME TRUCK”*.

6-3. Vectoring Across the MIA Final Approach Courses Involving Group 6 Aircraft.

All transitioning IFR aircraft at or below 2,000’ must be vectored outside of the 20nm range mark when crossing the MIA final approach courses for the runways in use, unless the appropriate approach control positions are Quick Looked to ensure that wake turbulence separation will be maintained between the transitioning aircraft and MIA arrivals.

Note: For Heavy/B757 Aircraft, the separation is reduced to the 15nm range mark instead of 20nm range mark. (See MT 7110.65W, Chapter 1, paragraph 1-34).

6-4. B748 Aircraft Operations.

a. Taxi B748 aircraft from Eastern U or Western U to runway 9 via "S". From Cargo City, B748 must be taxied via "R", "Y" and "S" (R service road will be closed).

b. Taxi B748 arriving RY8R/26L to follow the same route as A388 inbound but instruct aircraft to hold short of RY12 at "Y" if taxiing to Cargo City. If destination is Eastern U/Western U, then taxi via "Y" and "S".

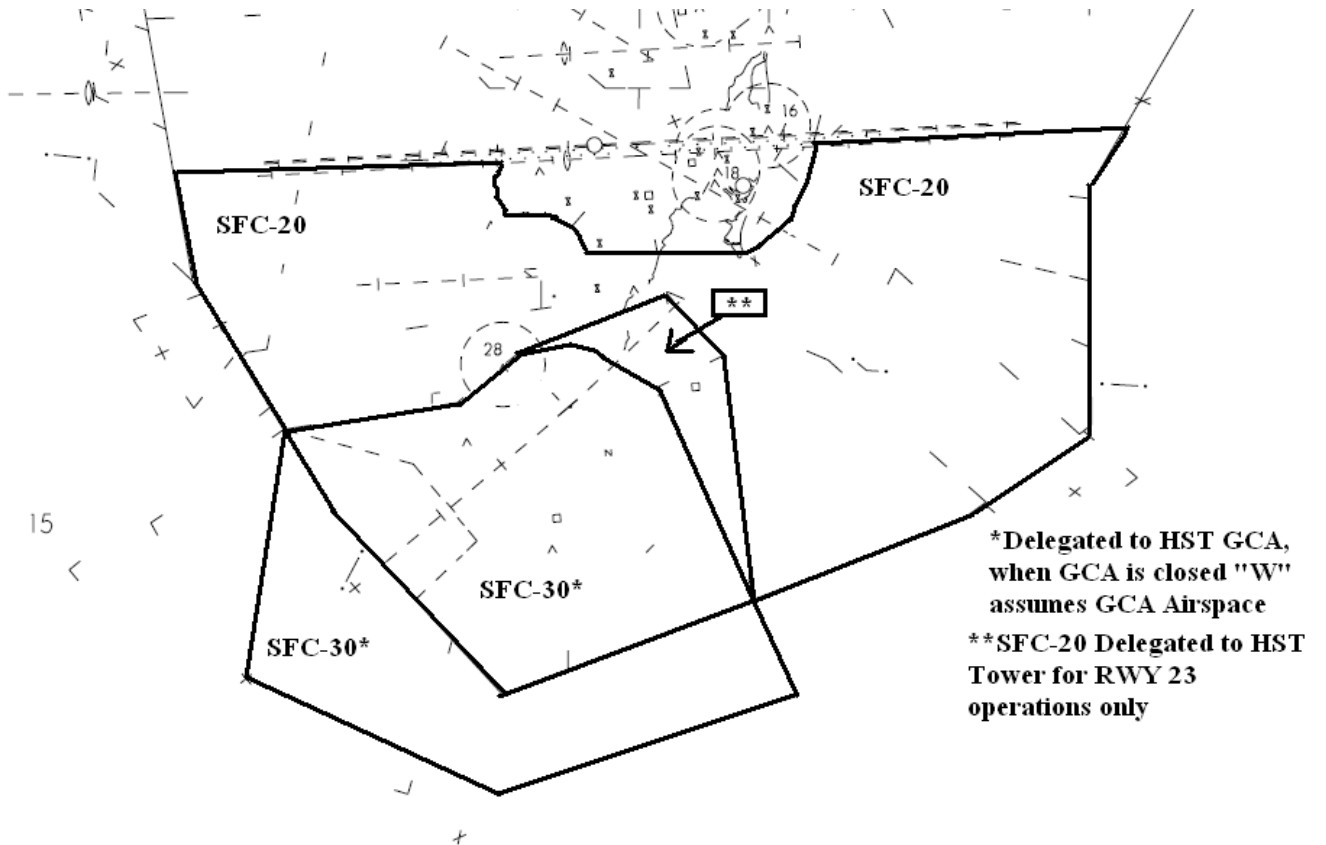
c. Taxi B748 arriving RY9 will taxi to the end of the runway, exit at "Q8" then follow same route as for outbound A388 to hold short of RY12. ("Q", Group 6 Transition to "P", "S" hold short RY12). If parking Eastern U/Western U, cross RY12 via "S" to parking. If parking at Cargo City, cross RY12 then taxi via "S", "Y", "R" to parking.

d. Taxi B748 arriving RY27 to Western U or Eastern U: via "S". Arriving RY27 to Cargo City: via "S", "Y", "R".

6-5 thru 6-99. Reserved

APPENDIX 1 - Airspace Delegation

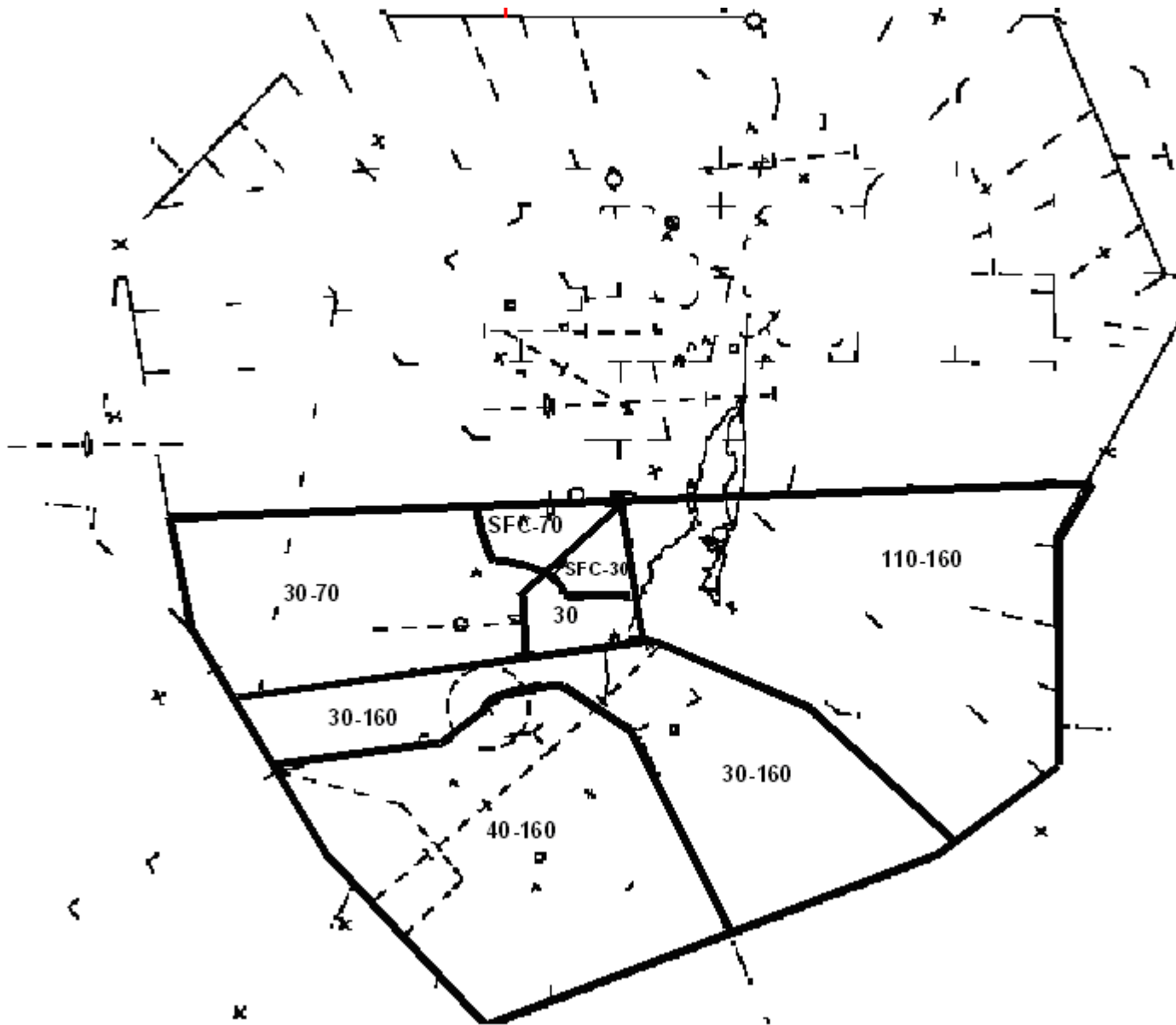
Tamiami Arrival Radar - H



Miami South Departure Radar – W

Miami West Configuration

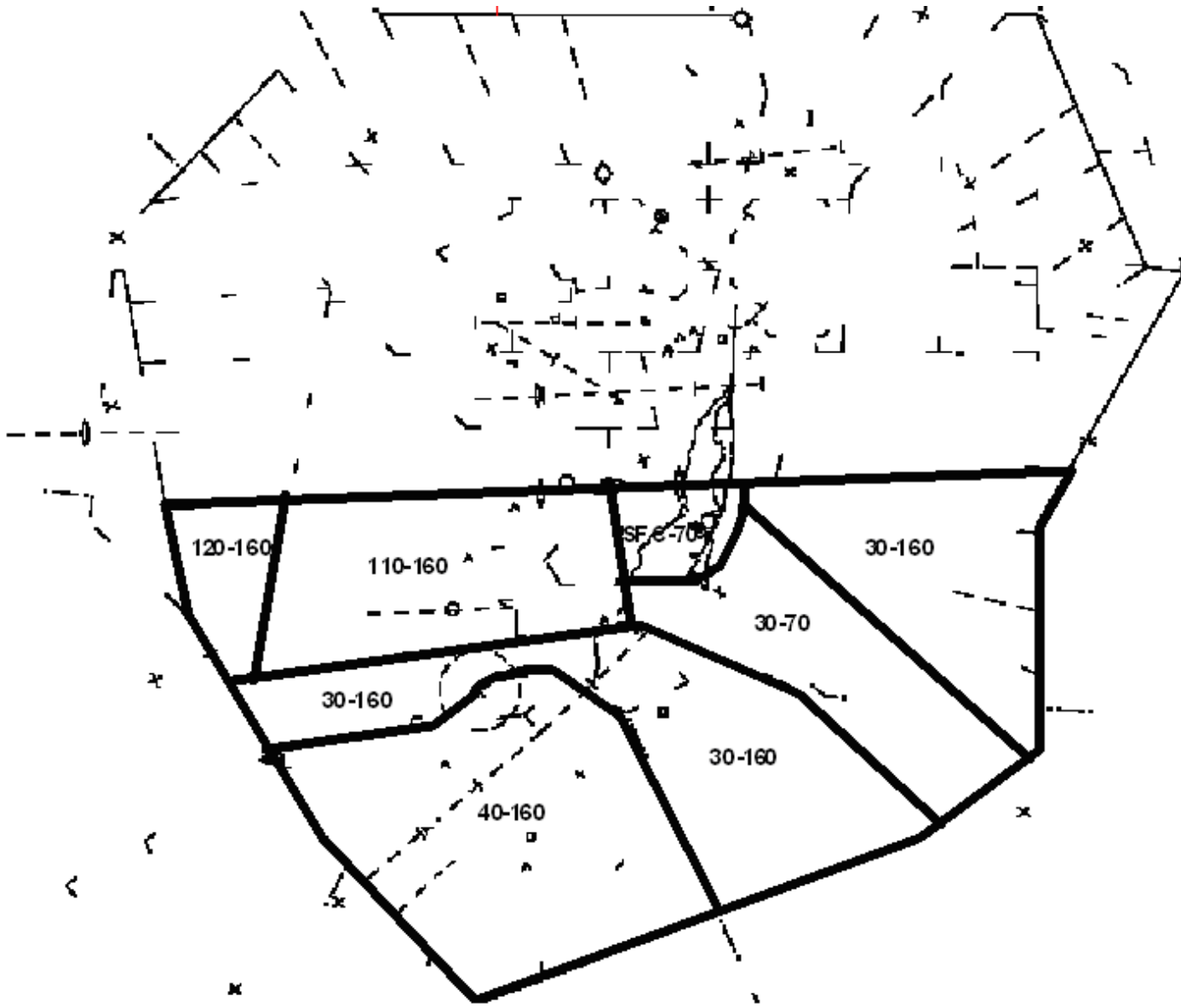
Excludes Airspace Delegated to MIA Tower



Miami South Departure Radar – W

Miami East Configuration

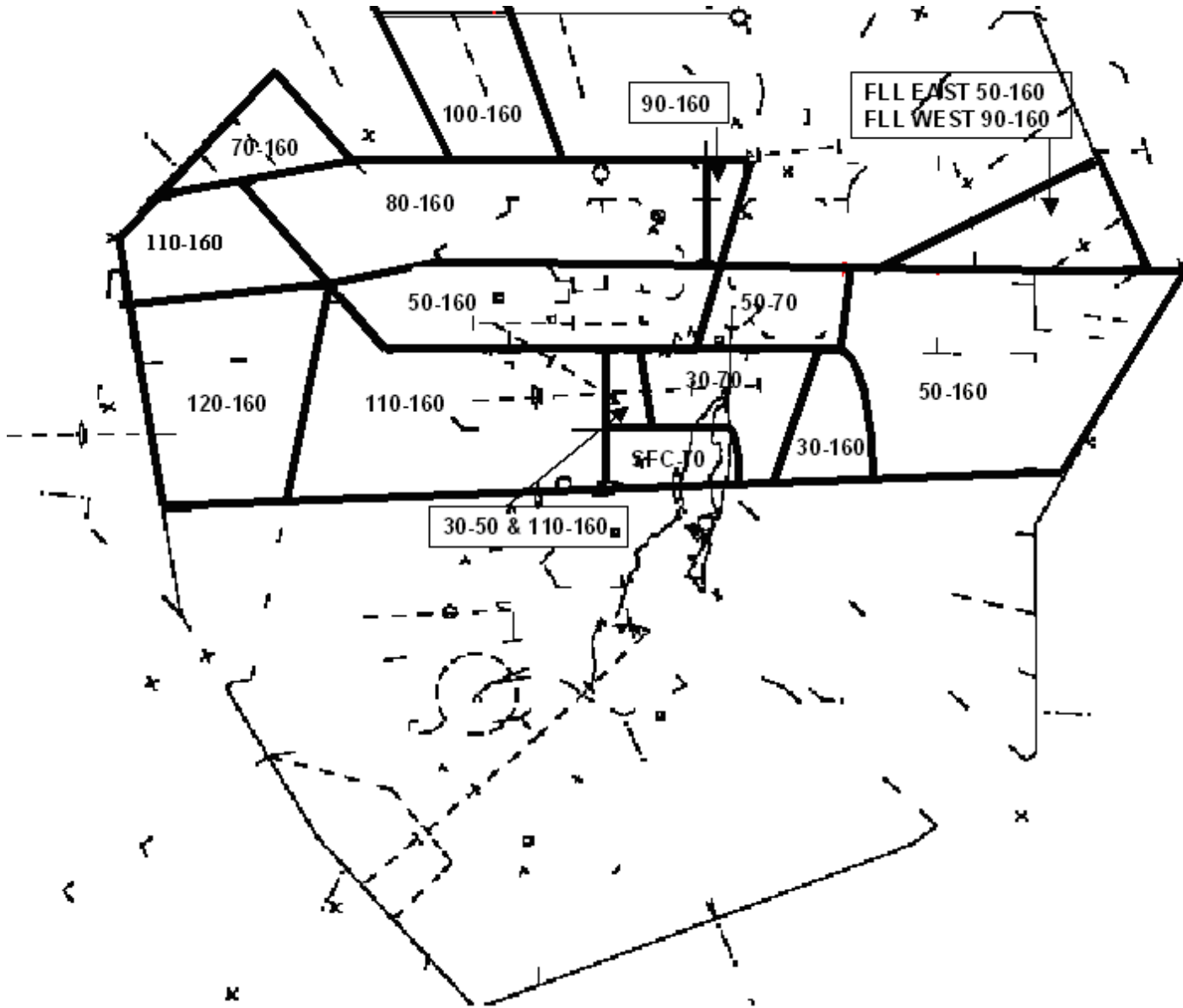
Excludes Airspace Delegated to MIA Tower



Miami North Departure Radar – D

Miami East Configuration

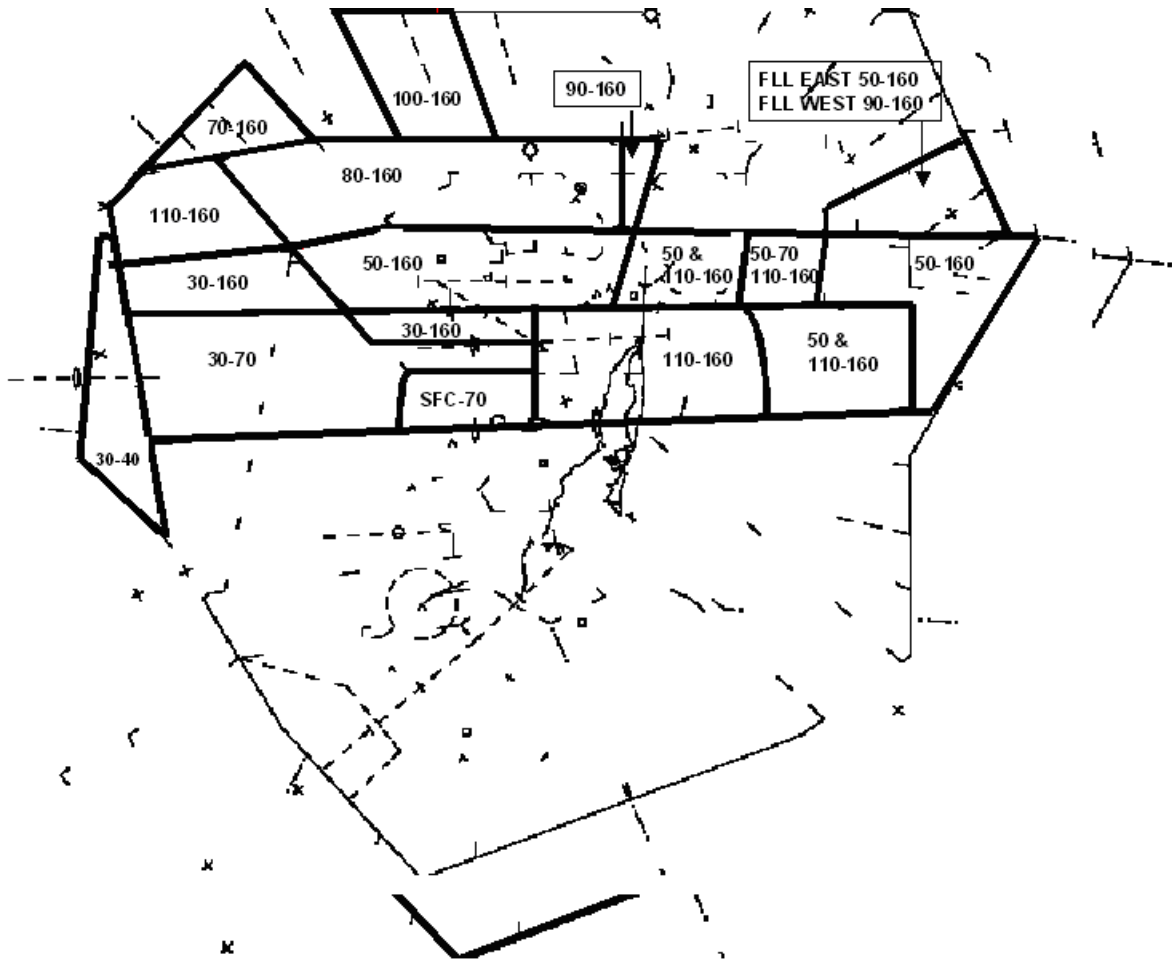
Excludes Airspace Delegated to MIA Tower



Miami North Departure Radar – D

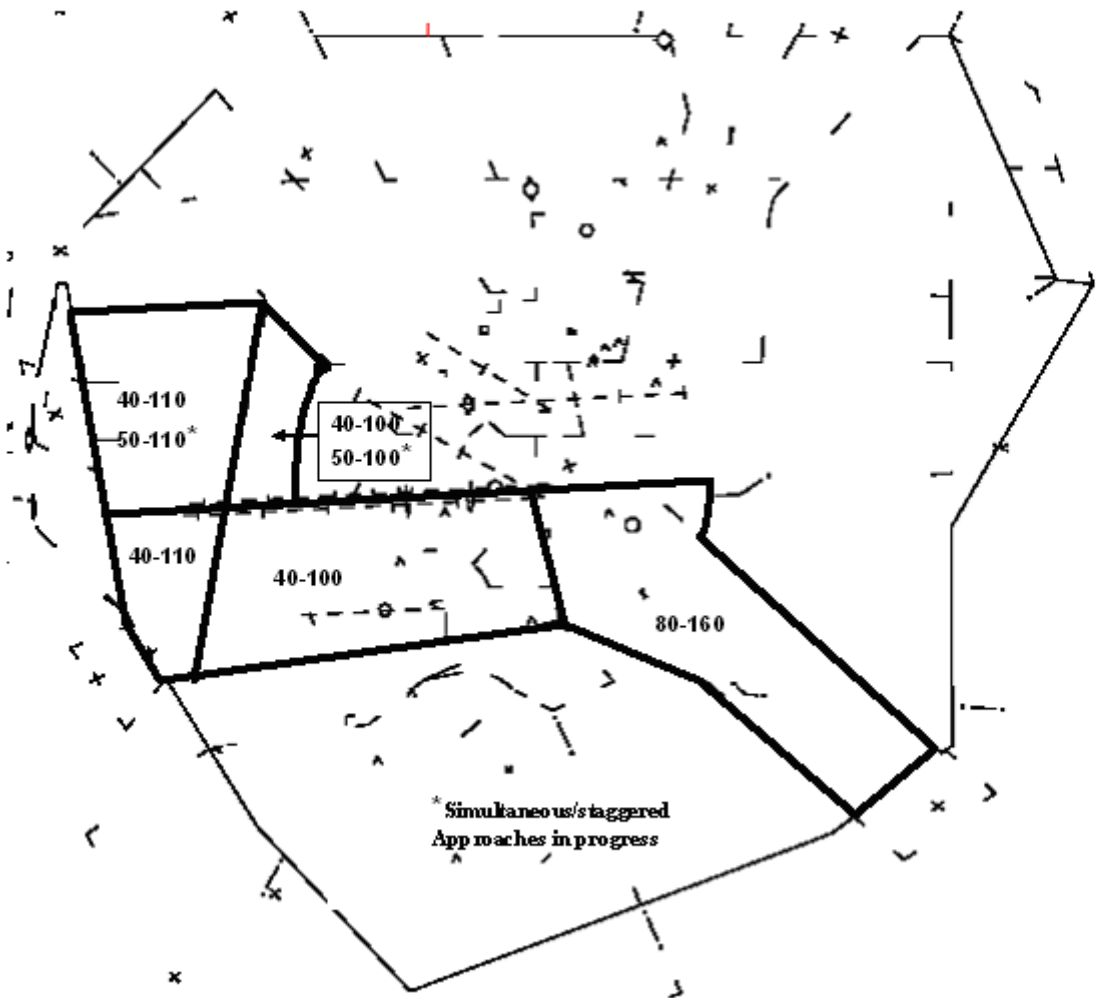
Miami West Configuration

Excludes Airspace Delegated to MIA Tower



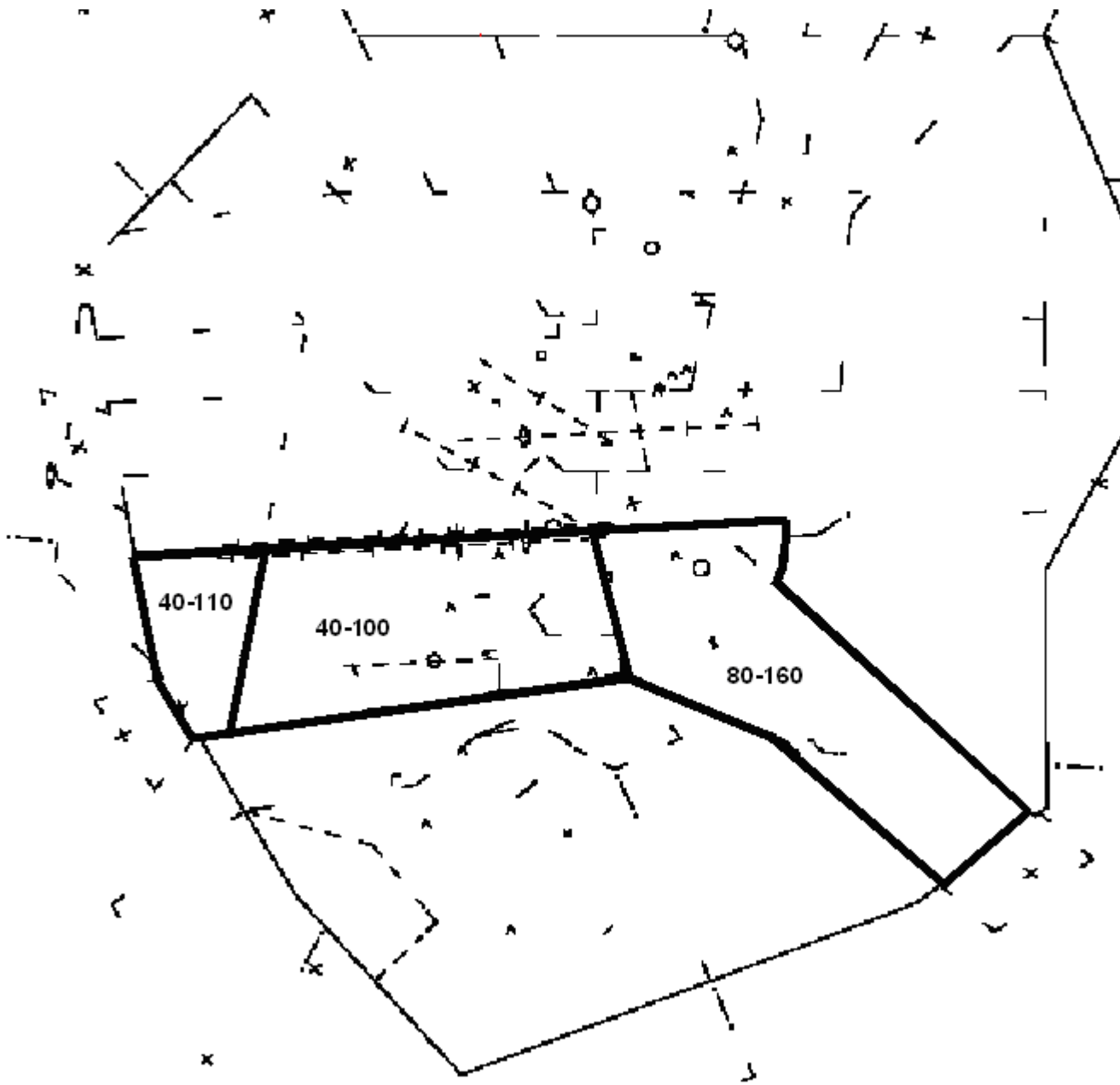
Miami South Feeder Radar- S

Miami East with WORPP Arrivals



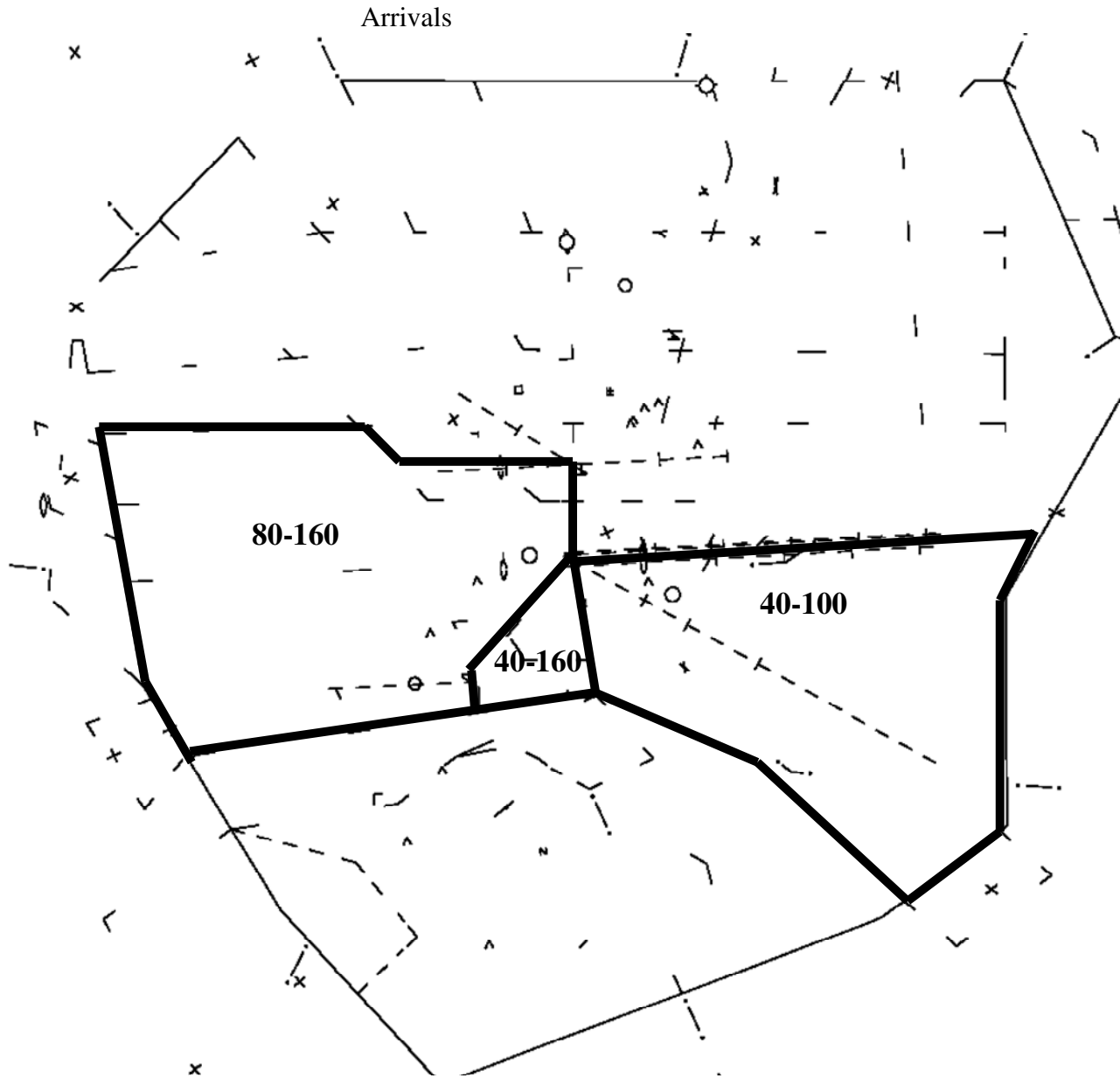
Miami South Feeder Radar – S

Miami East without WORPP Arrivals



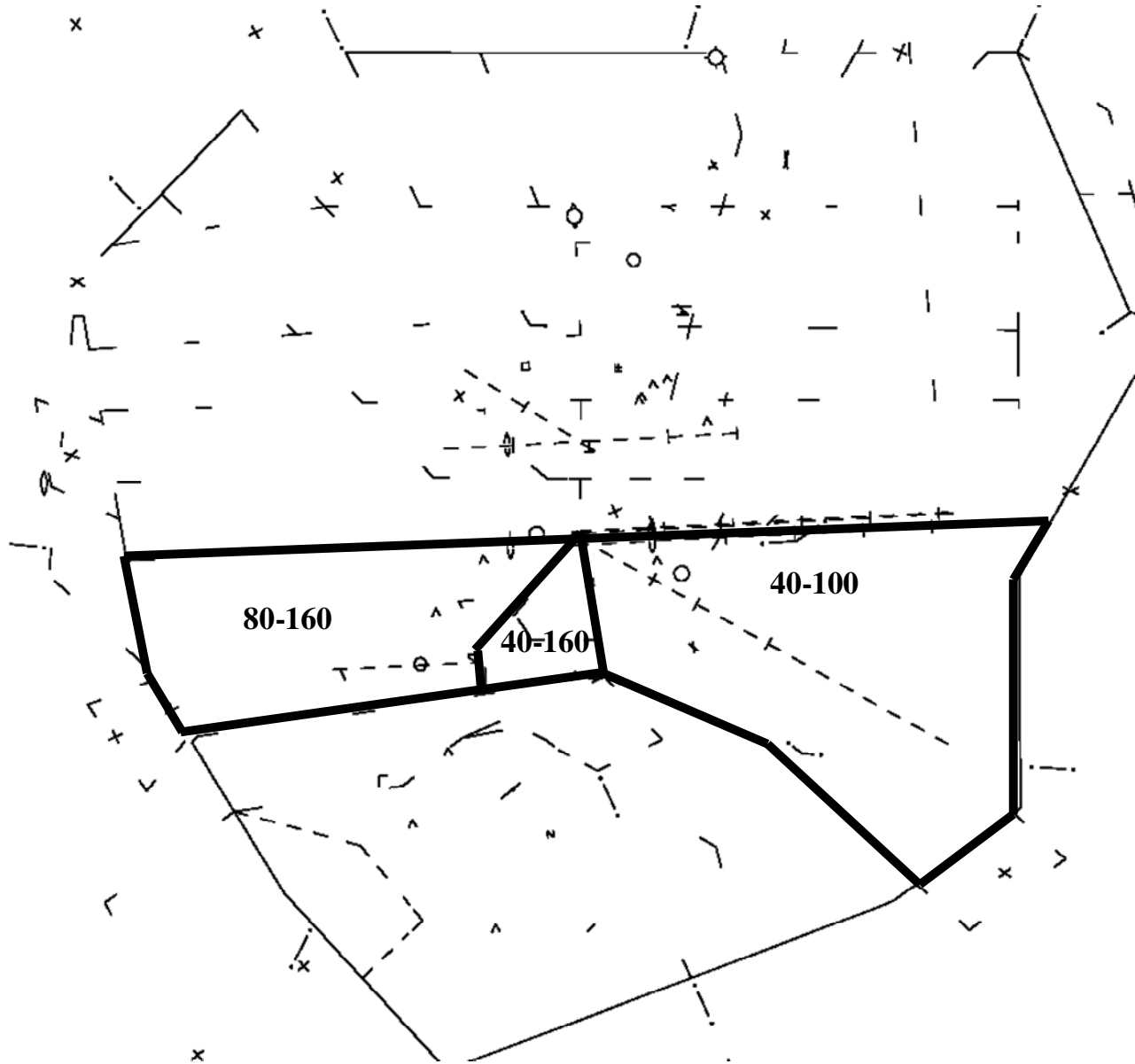
Miami South Feeder Radar – S

Miami West with WORPP



Miami South Feeder Radar - S

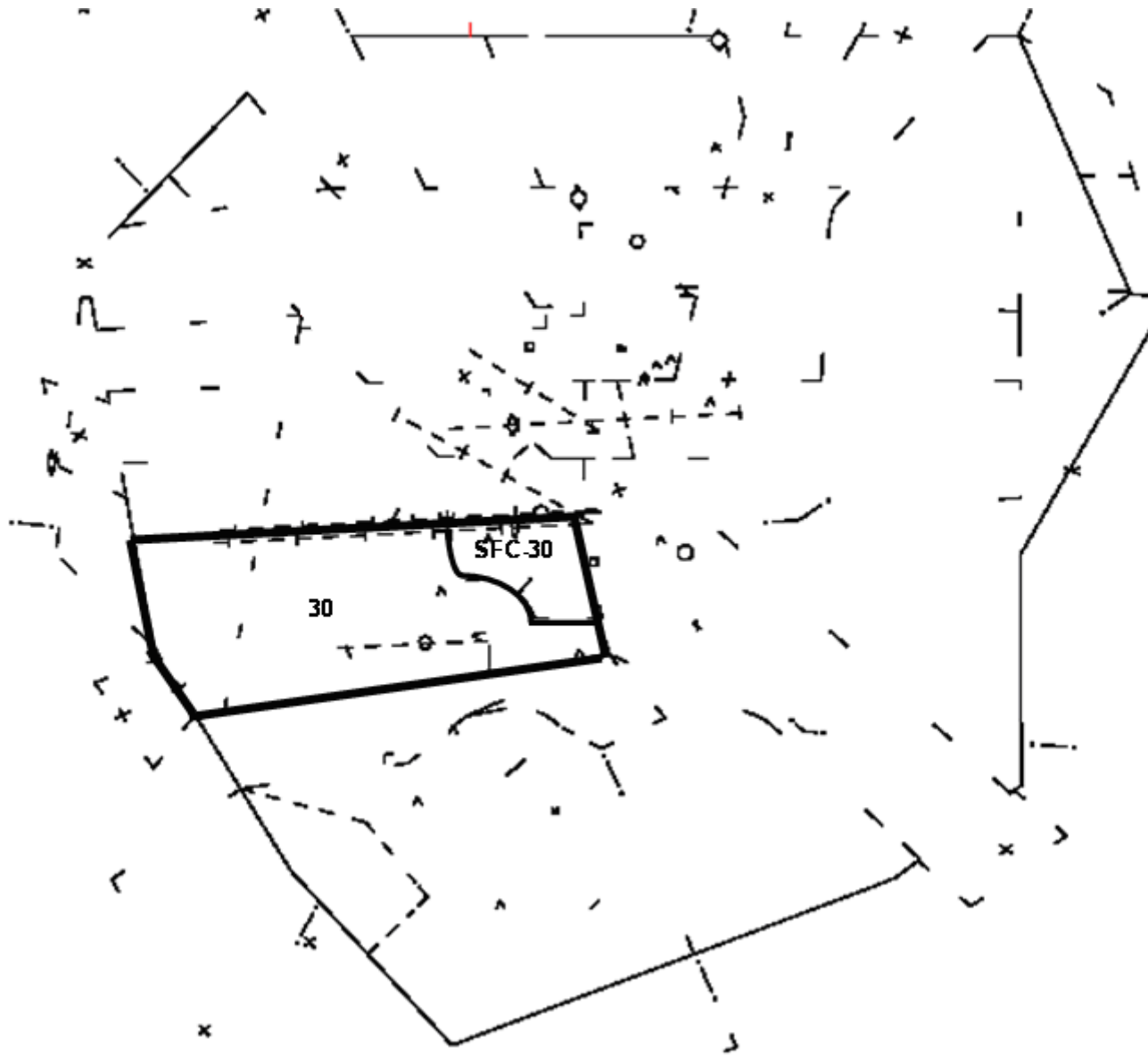
Miami West without WORPP Arrivals



Miami South Final Radar – A

Miami East Configuration

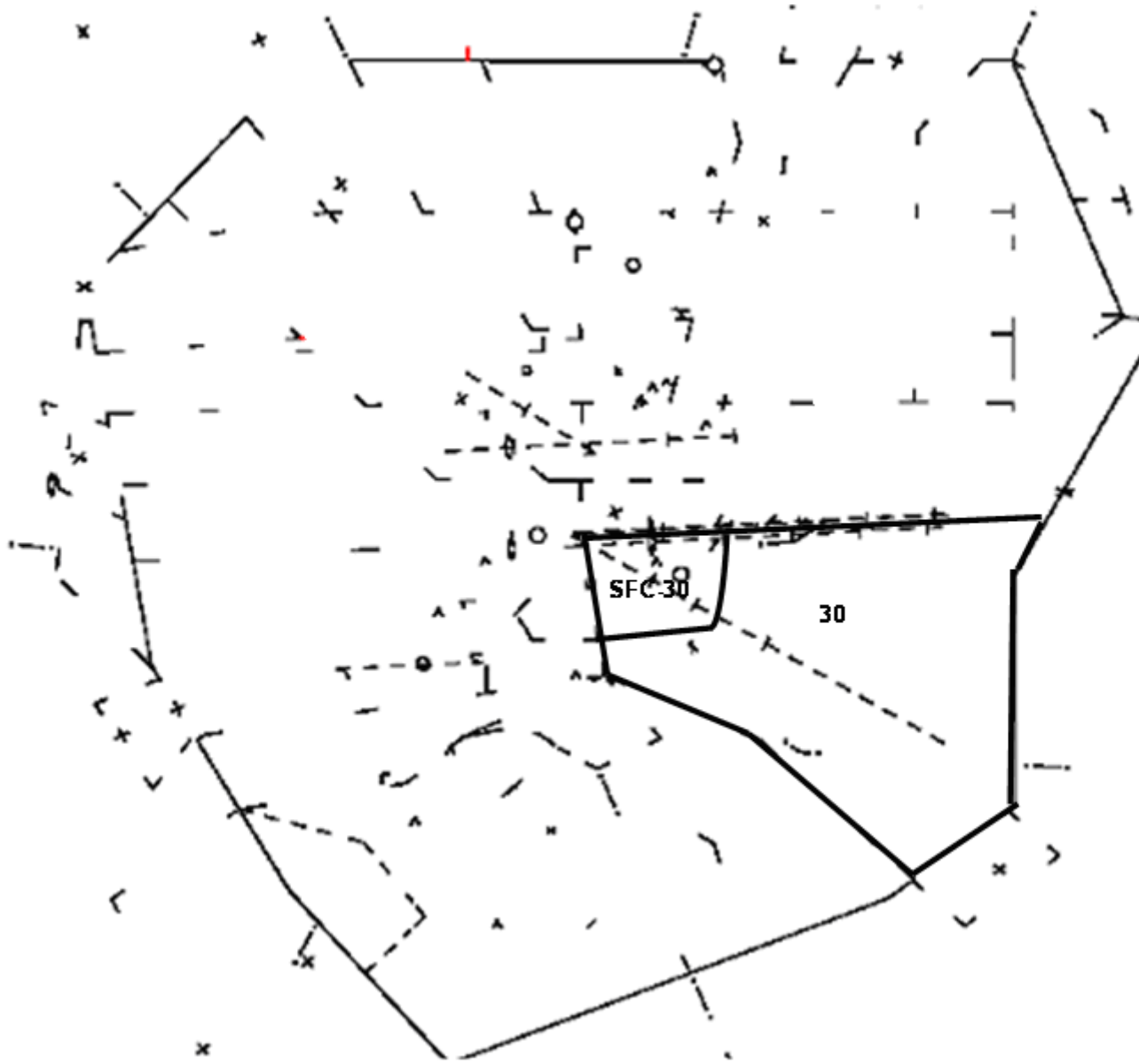
Excludes Airspace Delegated to MIA Tower



Miami South Final Radar – A

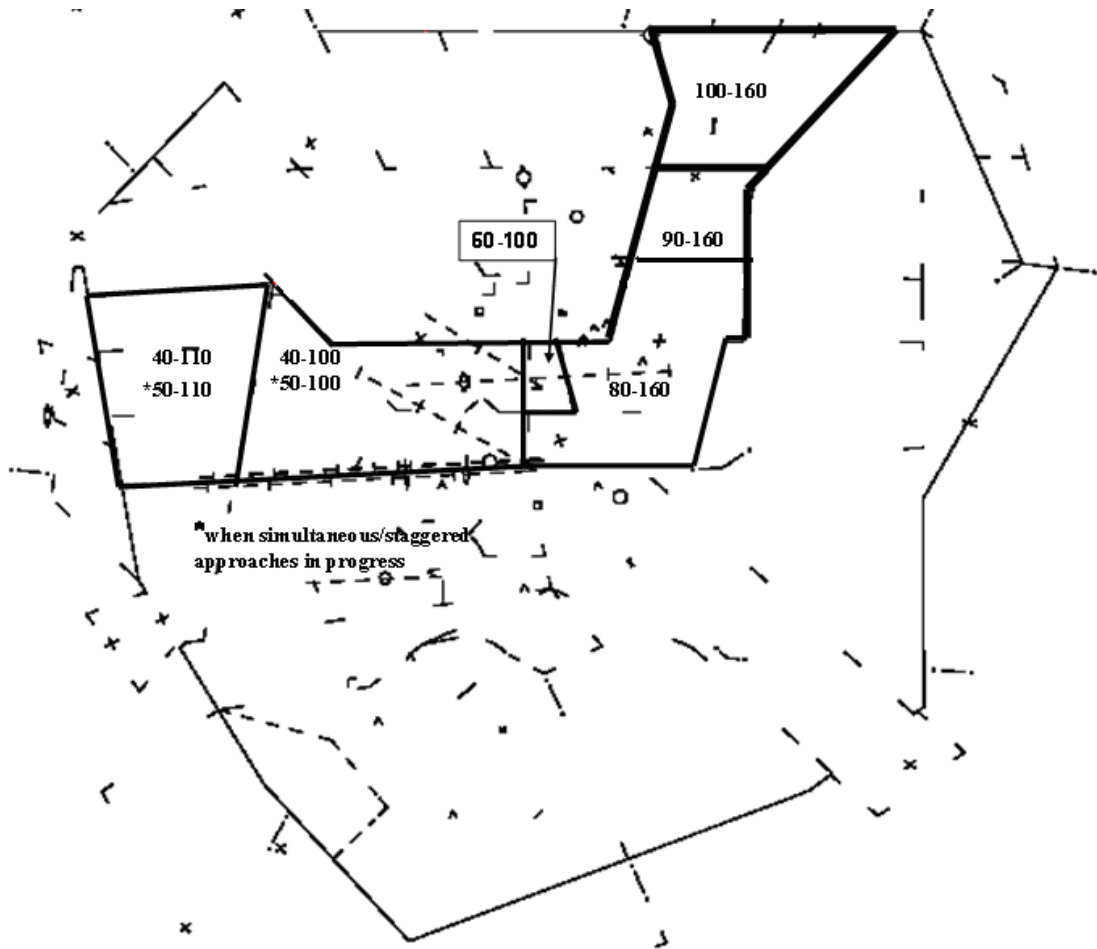
Miami West Configuration

Excludes Airspace Delegated to MIA Tower



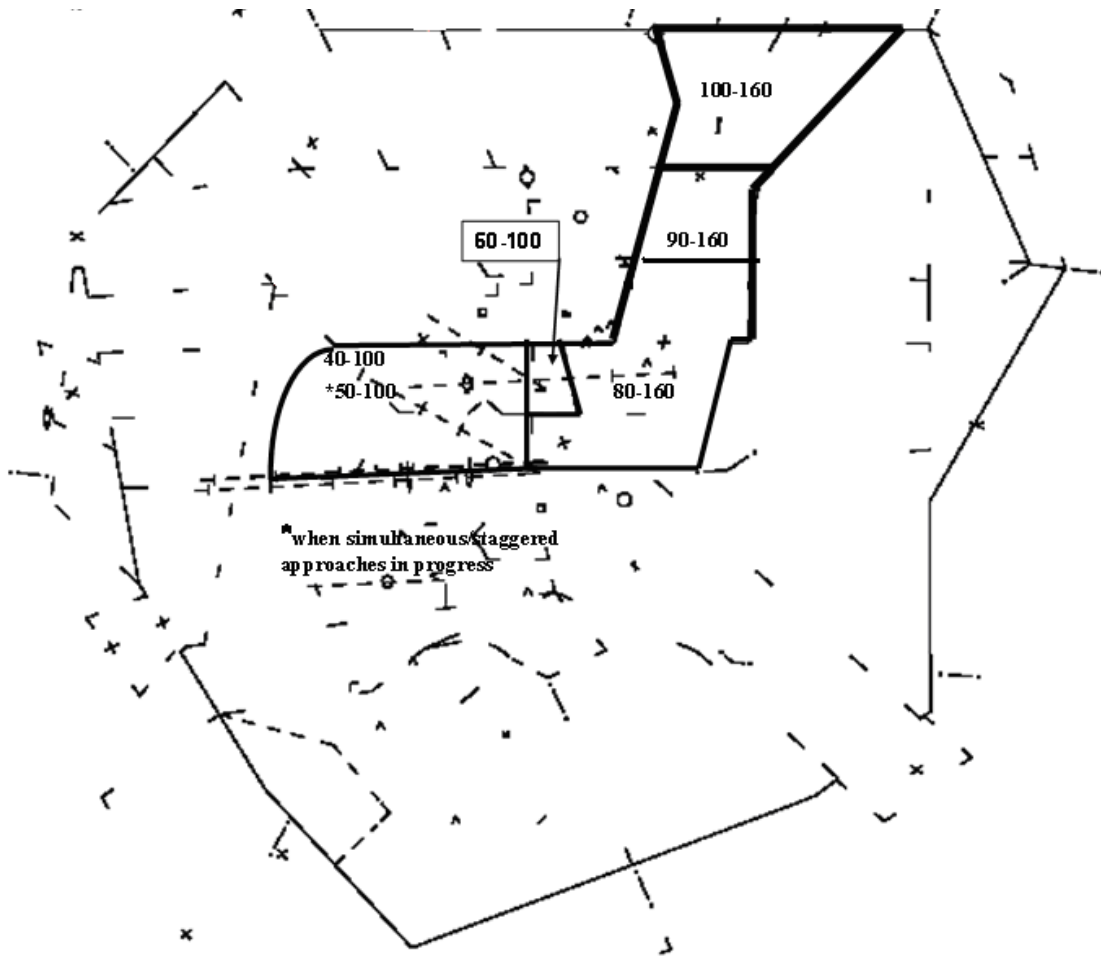
Miami North Feeder Radar – N

Miami East with WORPP Arrivals



Miami North Feeder Radar – N

Miami East without WORPP Arrivals



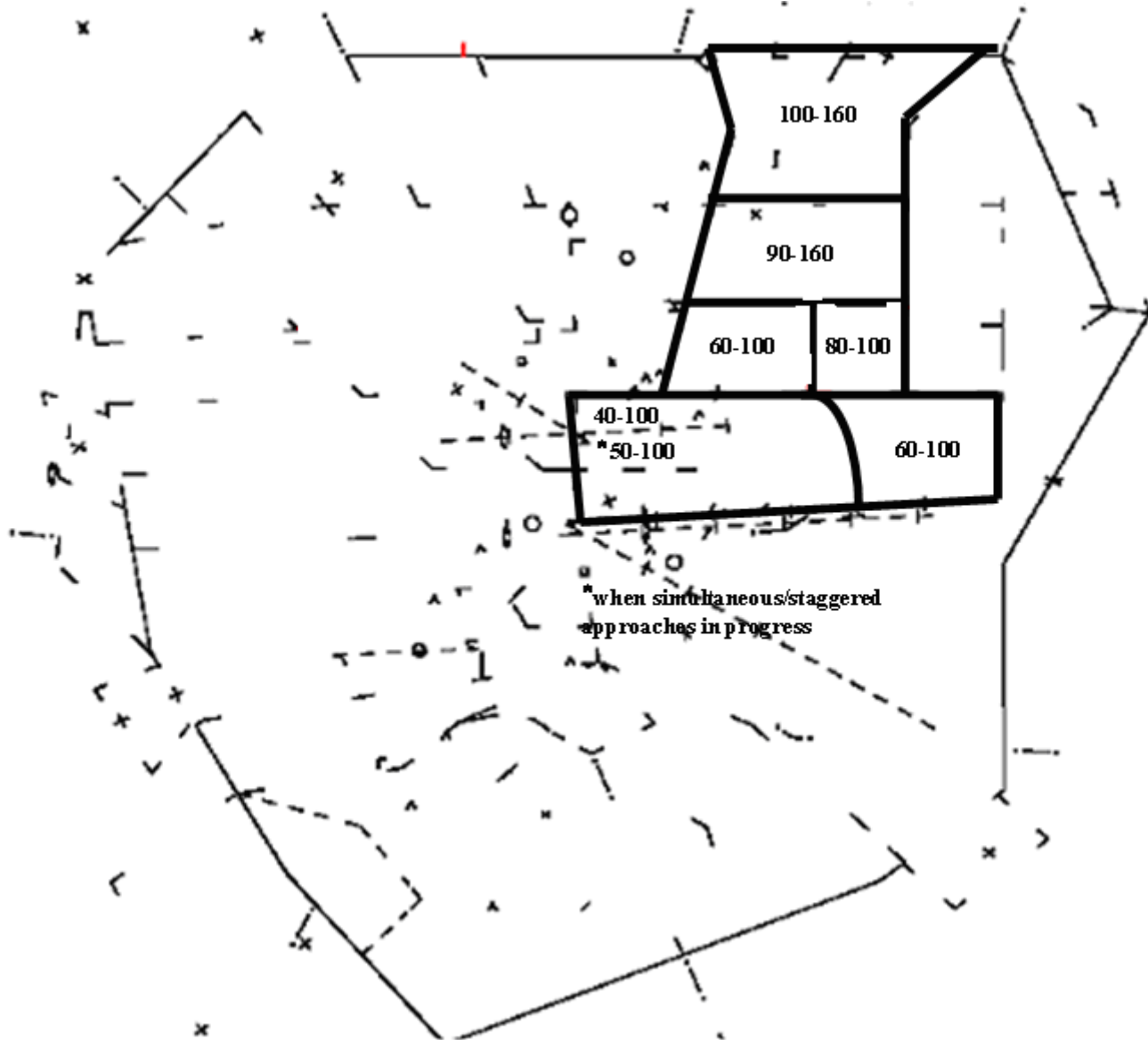
Miami North Feeder Radar- N

Miami West with WORPP



Miami North Feeder Radar – N

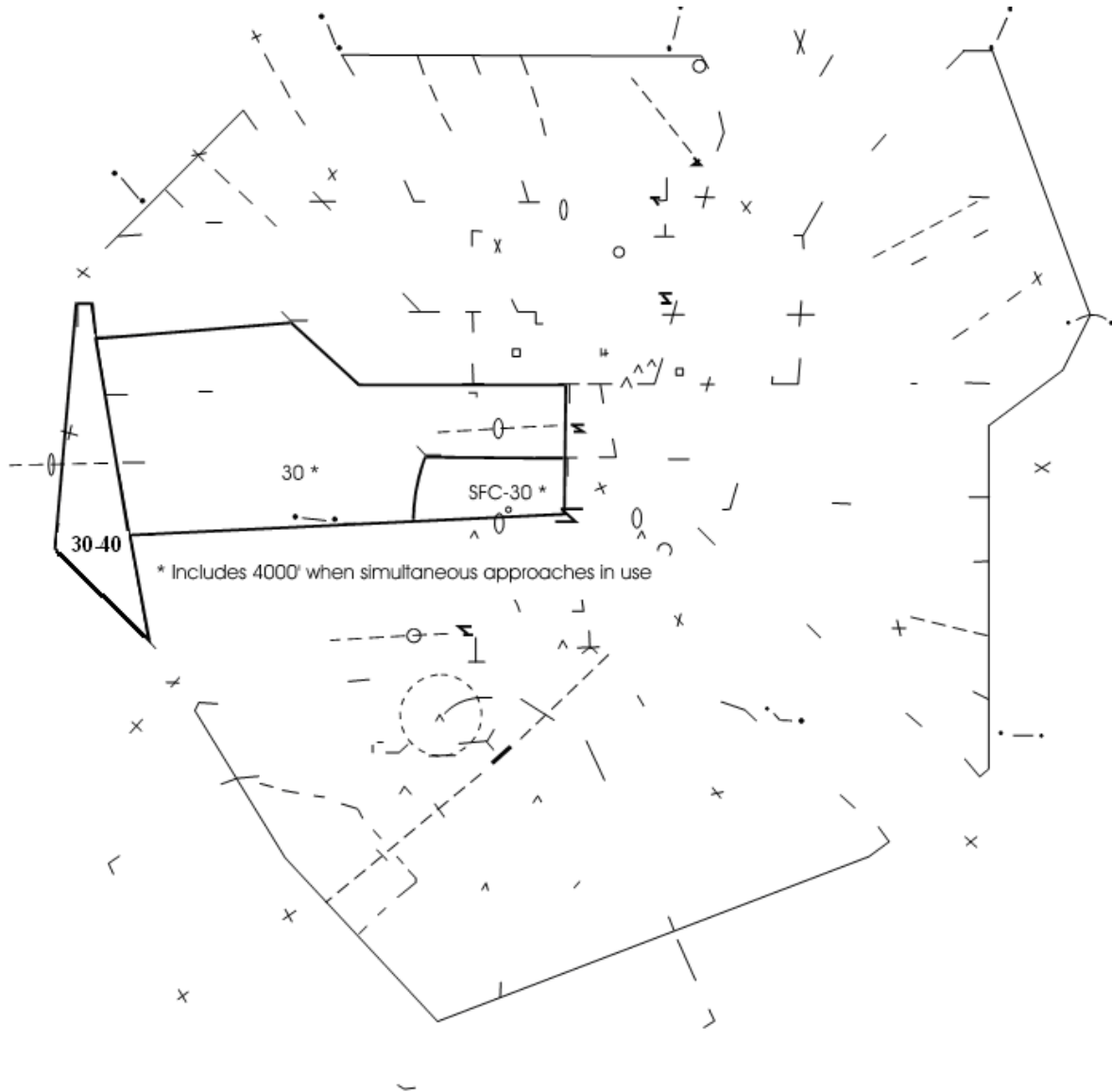
Miami West without WORPP Arrivals



Miami North Final Radar – V

Miami East Configuration

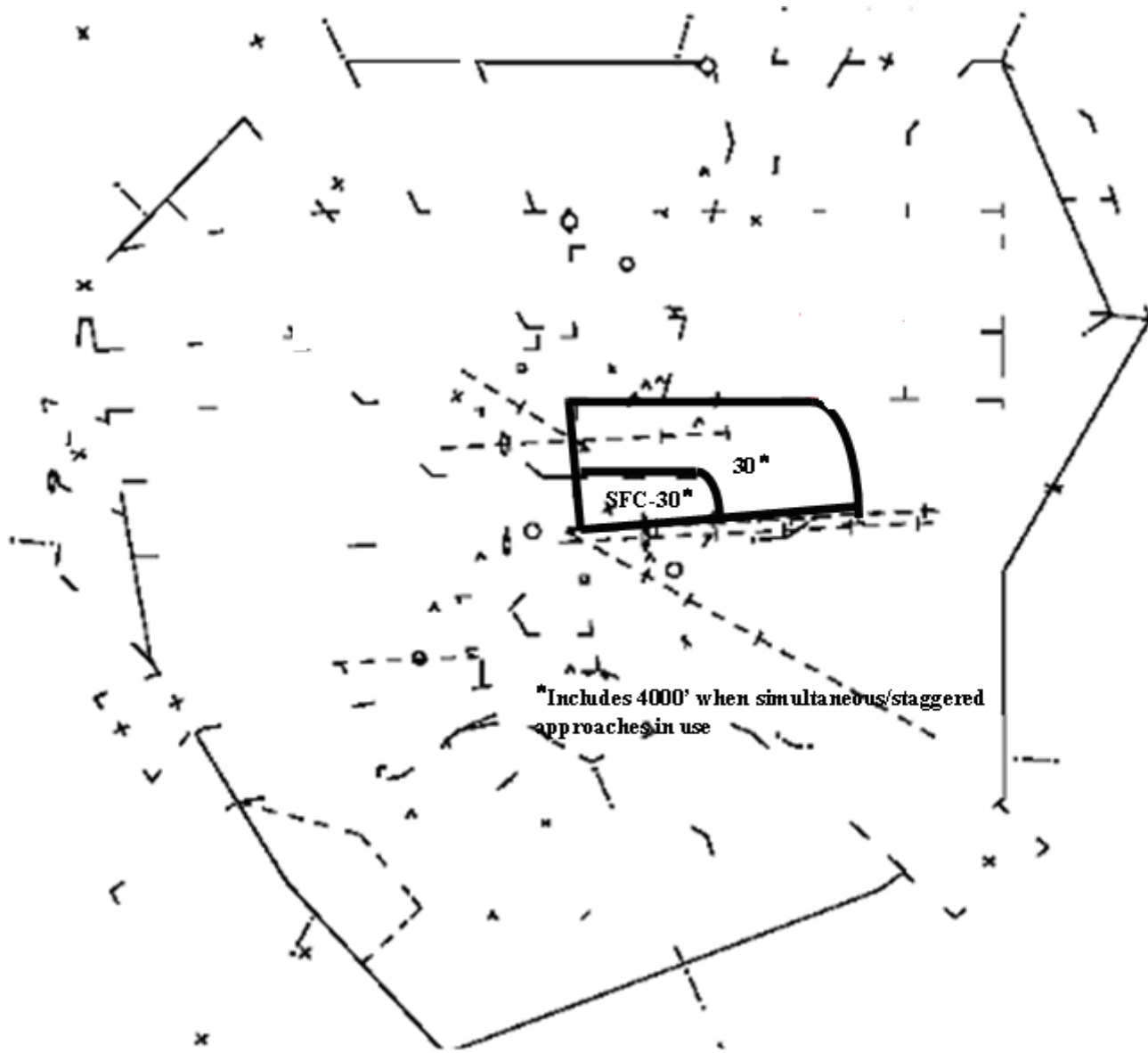
Excludes Airspace Delegated to MIA Tower



Miami North Final Radar – V

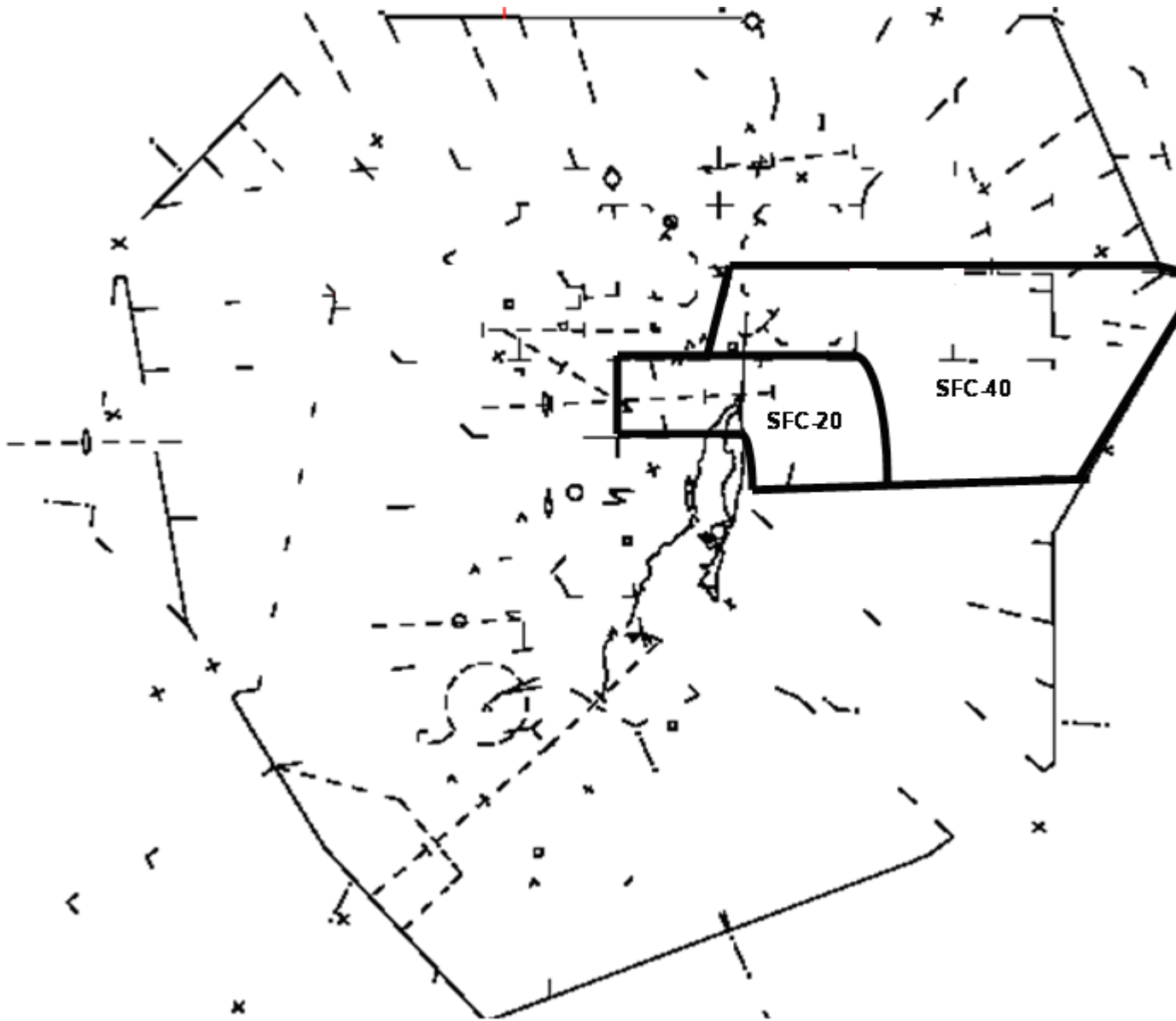
Miami West Configuration

Excludes Airspace Delegated to MIA Tower



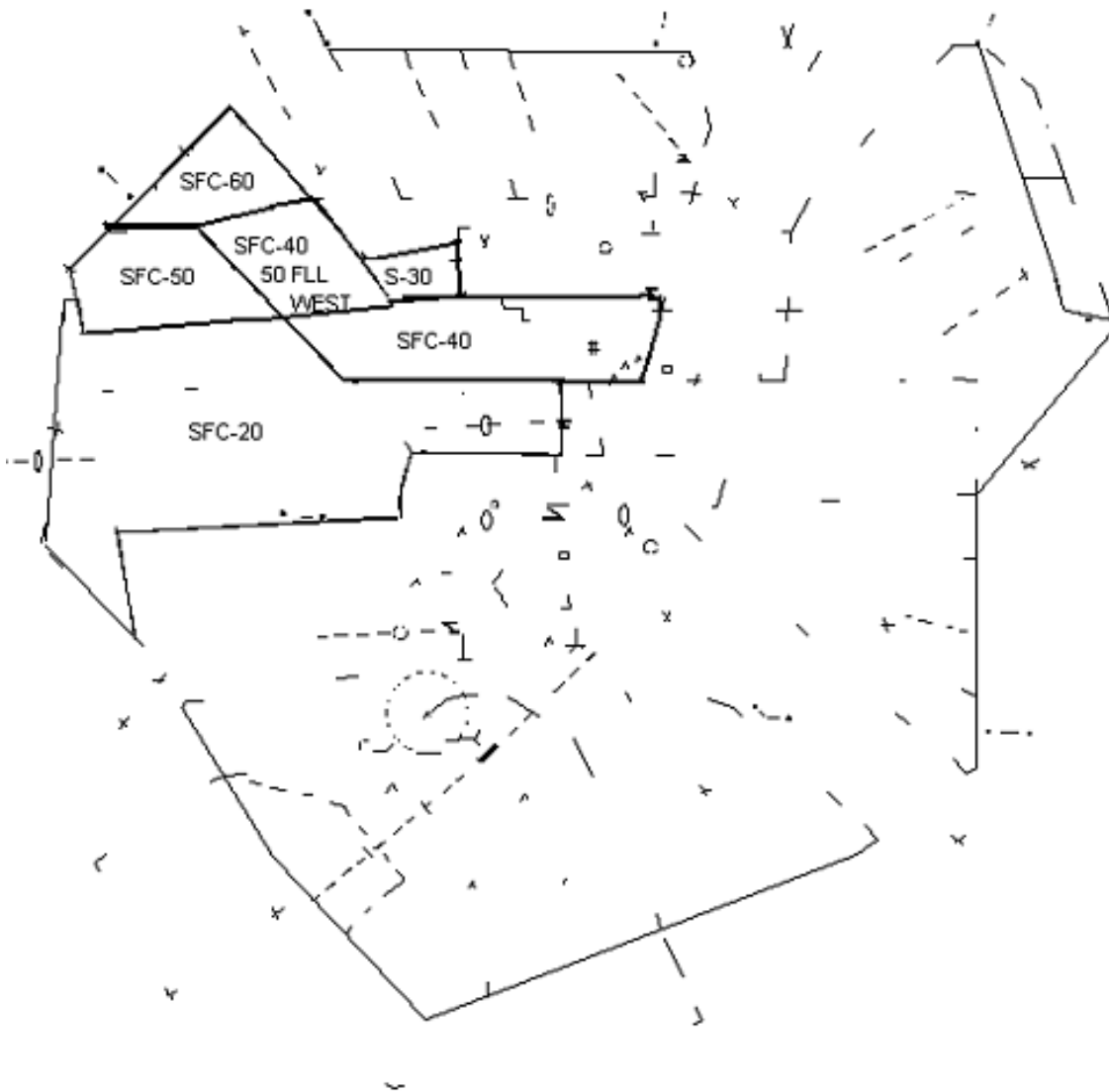
FLL South East Departure/West Arrival Radar – Z

Excludes airspace delegated to FLL Tower



FLL South West Departure/East Arrival Radar – Q

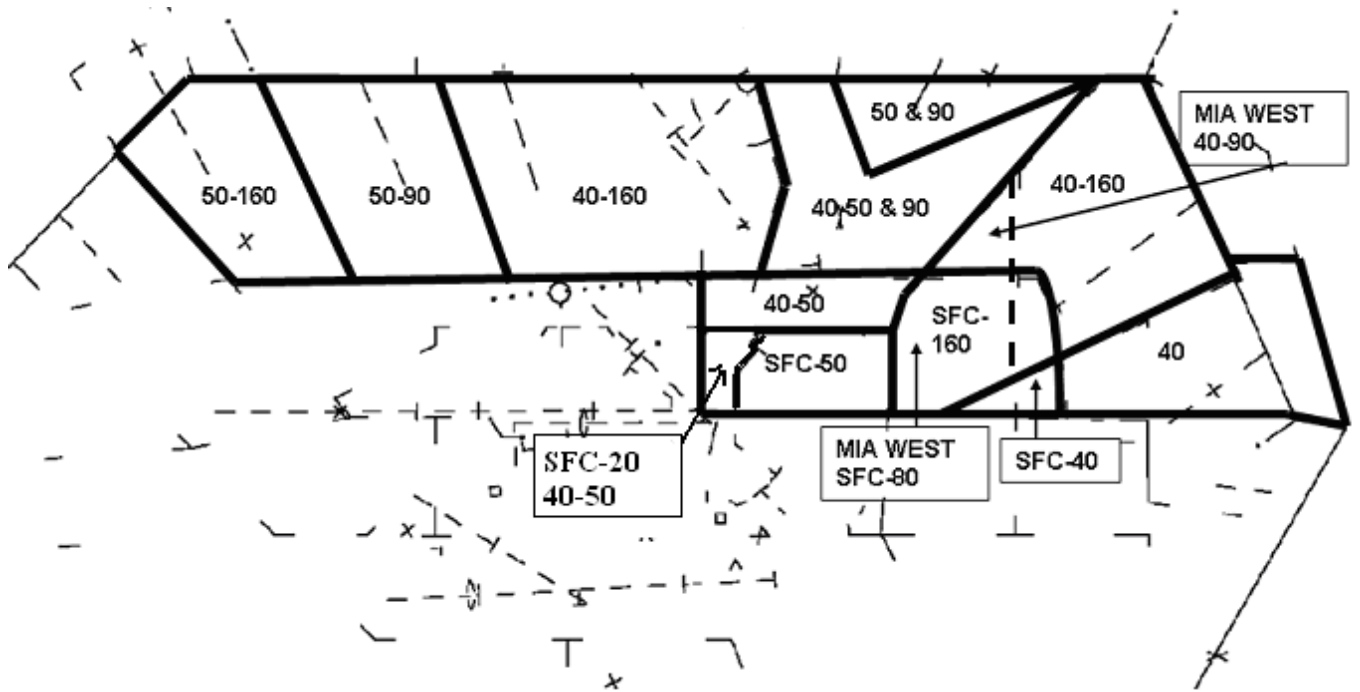
Excludes airspace delegated to FLL Tower



Fort Lauderdale North Departure Radar – L

Fort Lauderdale East Configuration

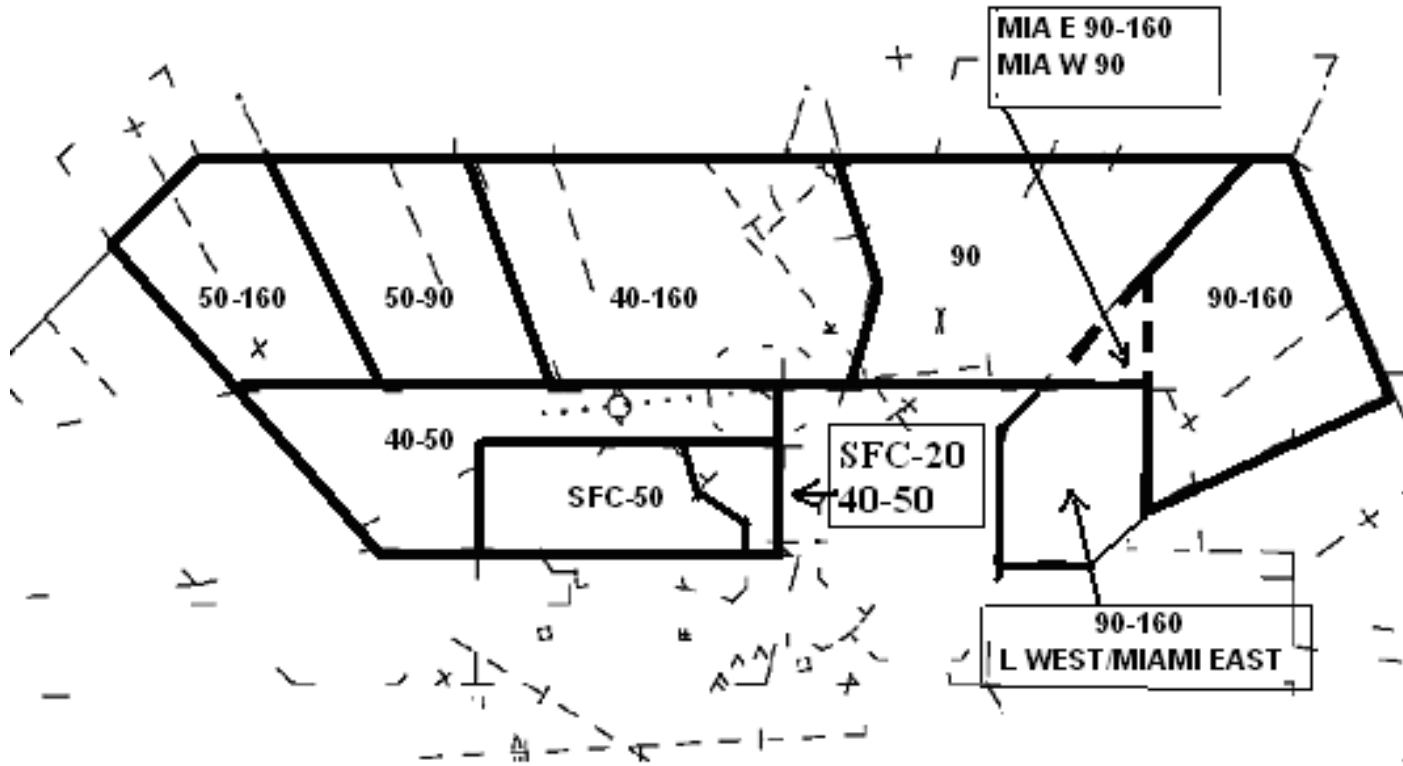
Excludes Airspace Delegated to FLL Tower



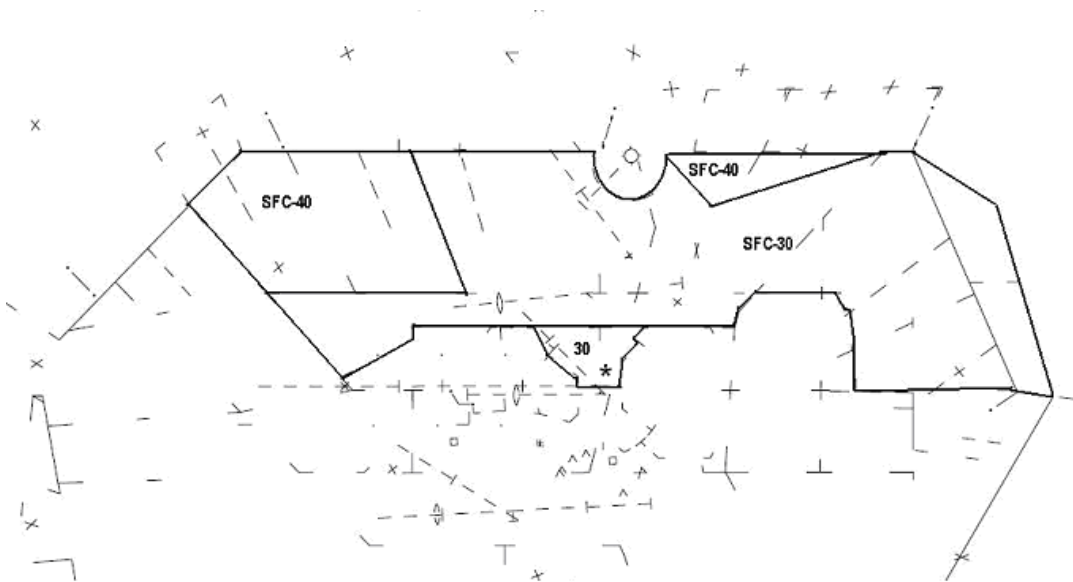
Fort Lauderdale North Departure Radar – L

Fort Lauderdale West Configuration

Excludes Airspace Delegated to FLL Tower



Fort Lauderdale Executive Arrival/Departure Radar – G

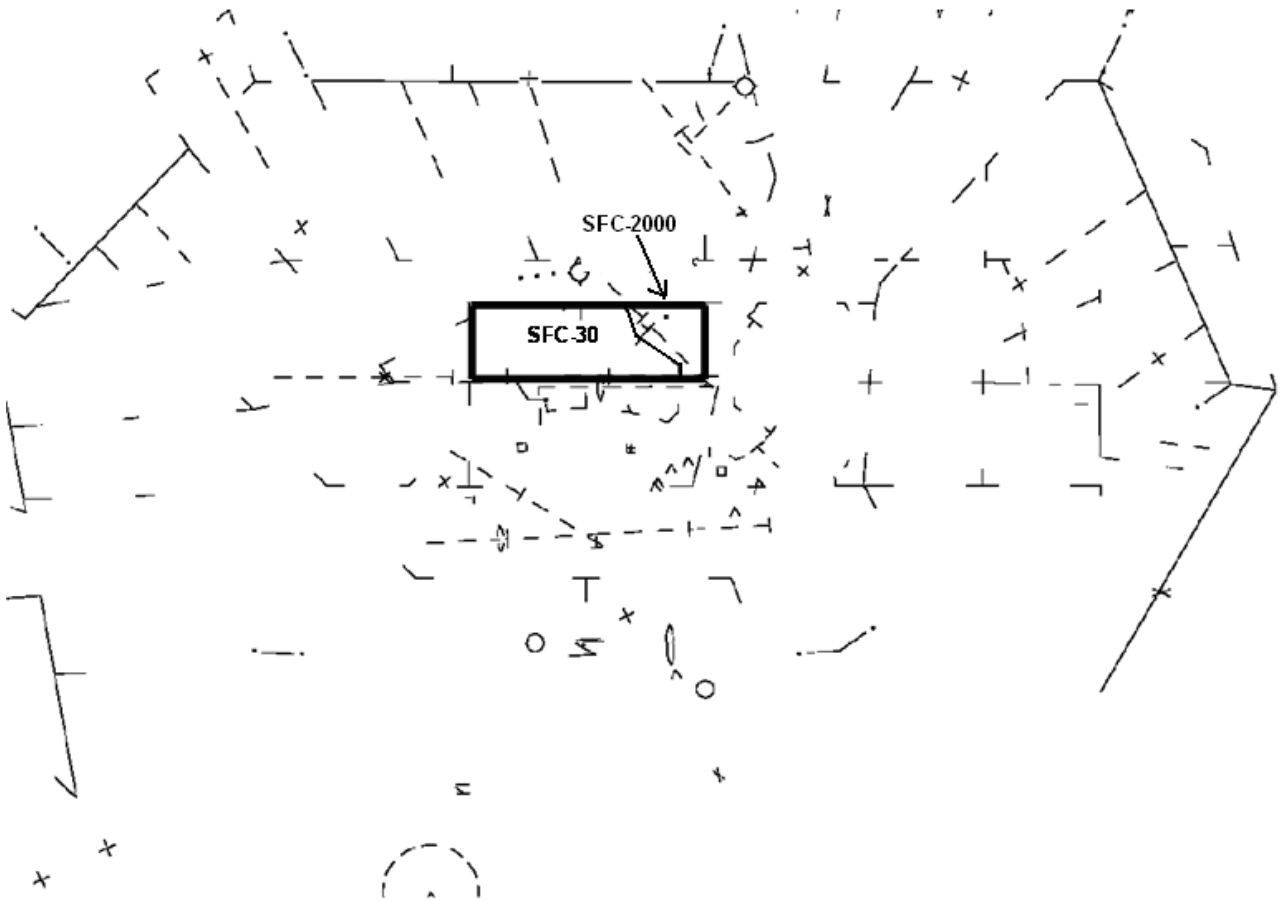


*** For use by VFR A/C @ 2500. IFR transitions @ 3000 will be vectored on the approach side of FLL and coordinated with the arrival controller**

Fort Lauderdale North Final Radar - F

Fort Lauderdale East Configuration

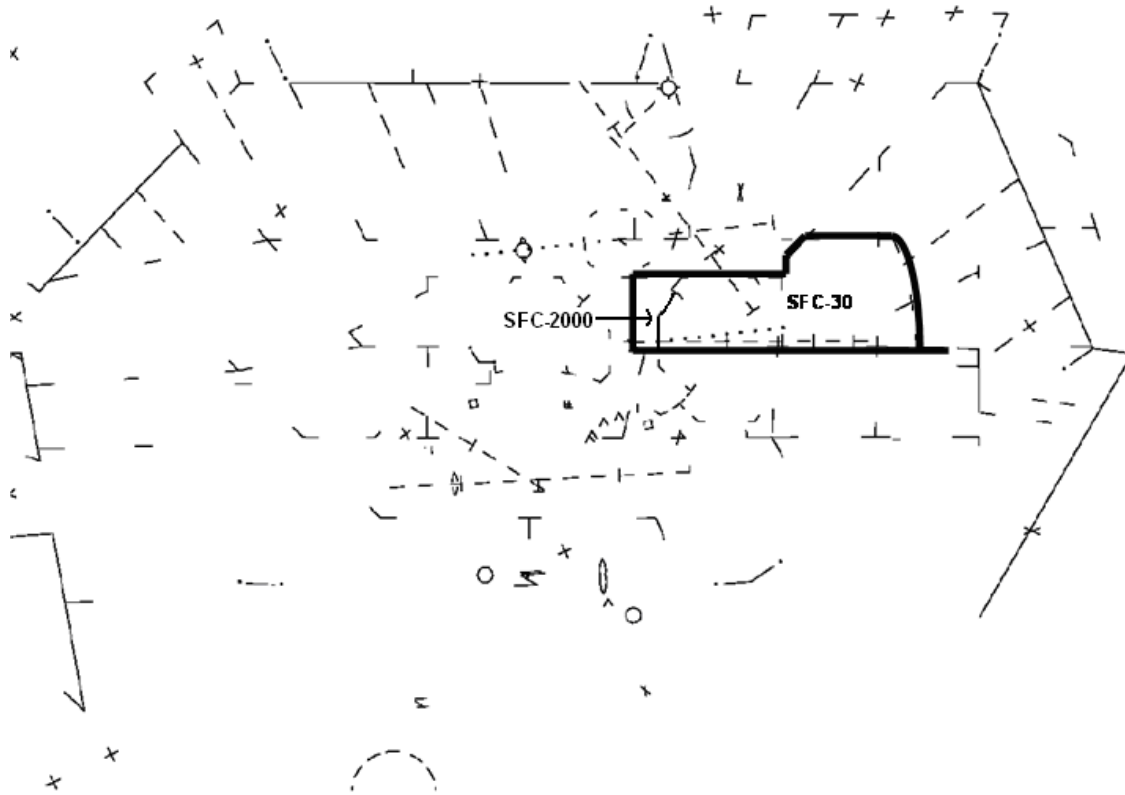
Excludes Airspace Delegated to FLL Tower



Fort Lauderdale North Final Radar - F

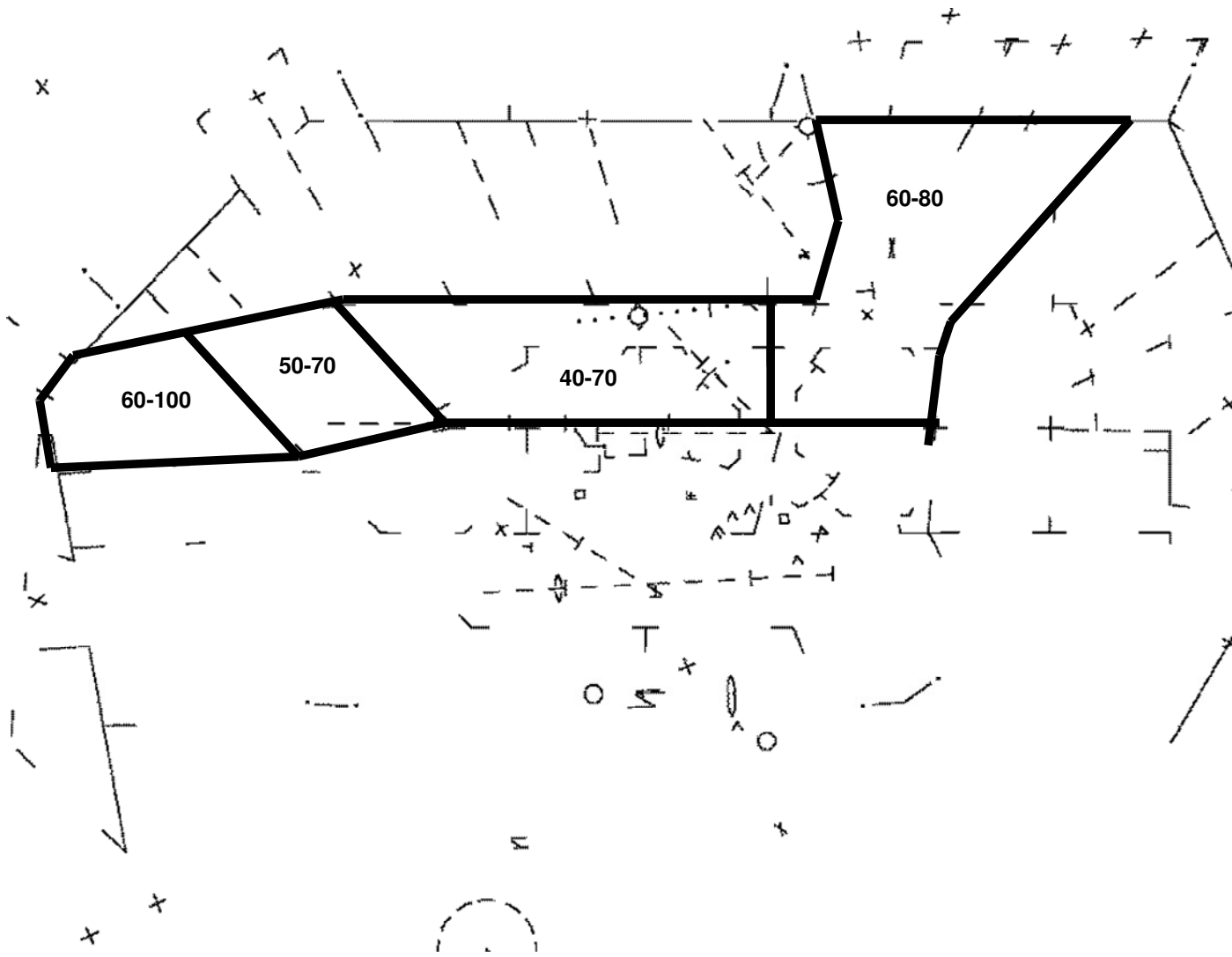
Fort Lauderdale West Configuration

Excludes Airspace Delegated to FLL Tower



Fort Lauderdale North Feeder Radar - R

Fort Lauderdale East Configuration



Fort Lauderdale North Feeder Radar - R

Fort Lauderdale West Configuration



APPENDIX 2 – Identifiers and Scratch Pad Entries

1. DTA/ATA Identifiers

ATA	ID		DTA	ID	
DEKAL	DEK		HEDLY ARKES	HED ARK	(MIA) (FLL)
WORPP	WOR		VALLY ZAPPA PADUS PREDA	VAL ZAP PAD PRE	(MIA) (FLL) (MIA to FPO)) (FLL to FPO)
			BEECH	BEE	(MIA, OPF, HWO, FLL) ZBV
			BAHAMA	BAH	(FLL WEST)
JUNUR	JUN		EONNS	EON	
WEVER	WEV		DORMY	DOR	(MIA WEST)
GILBI	GIL		WINCO	WIN	(MIA)
KUBIC	KUB		THNDR	THN	(FLL)
HEATT	HEA		MNATE	MNA	
MRLIN	MRL		SKIPS	SKI	

2. STARS Scratch Pad Contractions

Miami		FLL	
VL	VISUAL APPROACH 8L/26L	VL	VISUAL APPROACH 9L/27L
VR	VISUAL APPROACH 8R/26R	VR	VISUAL APPROACH 9R/27R
V	VISUAL APPROACH 12/30	V	VISUAL APPROACH 13
L	PUB. INST. APPROACH 8L/26L	V	VISUAL APPROACH 31
R	PUB. INST. APPROACH 8R/26R	FLL	IFR PRIMARY RUNWAY
R12	PUB. INST. APPROACH 12	F	CLASS C ARRIVAL 9L
R30	PUB. INST. APPROACH 30	FR	CLASS C ARRIVAL 9R
		FL	CLASS C ARRIVAL 27L
9N	ILS APPROACH 9 UNABLE HOLD SHORT 12 (NOT REQUIRED FOR FOREIGN AIR CARRIERS)	F13	CLASS C ARRIVAL 13
VN	VISUAL APPROACH 12 UNABLE HOLD SHORT 9	F31	CLASS C ARRIVAL 31
12N	ILS 12 UNABLE HOLD SHORT 9		
V9N	VISUAL APPROACH 9R UNABLE HOLD SHORT 12		
R9	ILS APPROACH 9		
R27	ILS APPROACH 27.		
V9	VISUAL APPROACH 9		
V27	VISUAL APPROACH 27		
MIA	Generic.		

3. MIA and FLL VISUAL APPROACH Scratch Pad Entries.

Unless otherwise verbally coordinated, in addition to the scratch pad entries contained in the Scratch Pad section 2 of this Appendix (see above), the following scratch pad entries must be utilized when a succeeding arrival is instructed to follow or maintain visual separation from the preceding arrival to the same runway/runway complex (runway 8L and 8R) or a parallel runway complex (9L and 9R or 8L/R and 9):

Note: Scratch pad entries identified herein must not be made until the succeeding aircraft has accepted responsibility for visual separation.

a. Miami:

Visual approach 8L/26L	AL
Visual approach 8R/26R	AR
Visual approach 12/30	AV
Visual approach 12 unable hold short 9	AN
Visual approach runway 9	A9
Visual approach 9 unable hold short 12	A9N
Visual approach runway 27	A27

b. Fort Lauderdale-Hollywood International:

Visual approach 9L/27L	AL
Visual approach 9R/27R	AR
Visual approach 13/31	AV

c. Situations not covered under a or b above – such as an arrival on an instrument approach instructed to maintain visual separation from another instrument approach to the same/parallel runway – must be verbally coordinated before transferring communications to the tower.

APPENDIX 3 – Strip Marking

1	5	8	9			10	11	12
2								
3	6	8a				13	14	15
4								
	4a	7	8b	9a		16	17	18
					9b			

ARRIVALS AND DEPARTURES

1. Aircraft Identification
2. Revision Number (FDIO)
3. Number of Aircraft/Type/Suffix
4. Computer Identification Number
- 4a. Departure Bar Code
5. Assigned Beacon Code

ARRIVALS

6. Previous Inbound Fix/Airway
7. Previous Coordination Fix
8. ETA at Coordination Fix
9. Altitudes
- 9a. Destination Airport
- 9b. Not Designated
- 10-15 Speed Restrictions

DEPARTURES

6. Proposed Departure Time
7. Requested Altitude
8. Departure Airport
- 8a. Gate
- 8b. Runway Assignment
9. Destination, Route and Altitude Restriction
- 9a. Remarks
- 9b. Non-Standard Heading
10. ATIS Code
11. "RLS" Time from Tower/Center
12. Initial Request for Engine Start
13. Estimated Engine Start Time
14. Revised Engine Start Time
15. Approved Engine Start Time
16. Taxi Time
17. Release Time
18. Departure Time

VFR PRACTICE APPROACH

1. Aircraft Identification
2. Not Used
3. Aircraft Type/Suffix
4. Not Used
5. Assigned Beacon Code
6. Not Used
7. Pick-up Point (optional)
8. Pick-up Time (optional)
9. Altitude, Type Approach
- 9a. Destination Airport
- 9b. Not Used
- 10-15 Speed Restrictions
- 16-18 Heading (optional)


Write type of approach requested, preceded by a "P" in box 9 and check mark at right indicating inbound passed to tower.


Write new requested altitude in box 7. When the altitude is coordinated, **line out** previous altitude.


NOTE: Indicate IFR inbound passed to the tower by placing a check mark to the right of the type of approach.


One strip may be used for aircraft on multiple approaches by circling the last number entered to indicate total number of approaches.


1. Departure Strip Marking

AAL684 B738/Q 403 	2334	K MIA D39 R	+VALLY1 VALLY PERMT+	C		
	P1900		MIA VALLY PERMT AR16 ILM			
	330		J40 RIC OJAAY1 DCA			


TPA731 H/B762/Q 689 	1425	MIA WU 9	KMIA SKIPS1 SKIPS BR53V	B		
	P2130		SWIMM A315 MEDON UA315			
	310		VESKA A315 PJG G446***SVM			

FDX243 B757/W 644 	1122	MIA FDX L (R)	+WINCO+	A		
	P1505		MIA DHP J73 SZW VUZ HLI1			
	310		MEM			

DAL412 H/B767/R 590 	4545	MIA H18 12	MIA PBI	N		
	P1603					
	50		0FRC			

N12310 PA32/A 945 	4651	MIA SIG Lx	MIA FXE	O		
	P1055					
	30					

2. Class B Airspace Departure

N402MF C402/A 363 	0331	MIA	MIA MYAT	Q		
	P1445	GAC				
	VFR/75	L	TN			

N 7462R PA-28	0362	1120	25 LOC	<input checked="" type="checkbox"/>		
			22 ILS			
	GILBI		FXE			

N 7462R PA-28	0362	1120	15			
			OPF			
	GILBI					

3. Gate Hold Strip Marking

10. ATIS CODE	11. ESTIMATED RELEASE TIME FROM TWR/ZMA (EDC ETC)	12. INITIAL REQUEST FOR ENGINE START
13. ESTIMATED ENGINE START TIME	14. REVISED ENGINE START TIME	15. APPROVED ENGINE START TIME
16. TAXI TIME	17. ACTUAL RELEASE	18. AIRBORNE TIME

APPENDIX 4 – Local Control/Ground Control Tablet

8L/8R/26L/26R AA126 KLM602	12/30 GFT2157	9/27 USA1257 DAL1221
TUG2333 F14/J		

APPENDIX 5 – Distance Remaining – EAST

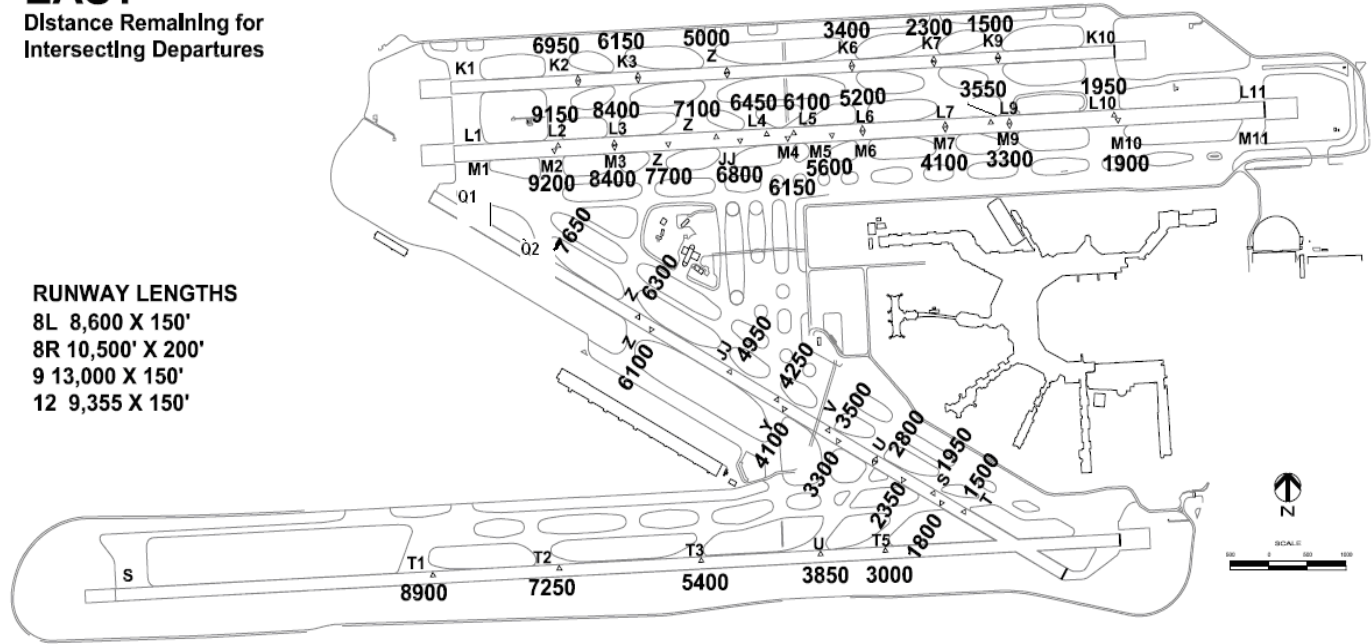
EAST

Distance Remaining for Intersecting Departures

ALD FOR LAHSO

Landing RY 9 Holding Short of RY 12 9,750'

Landing RY 12 Holding Short of RY 9 8,100'



RUNWAY LENGTHS

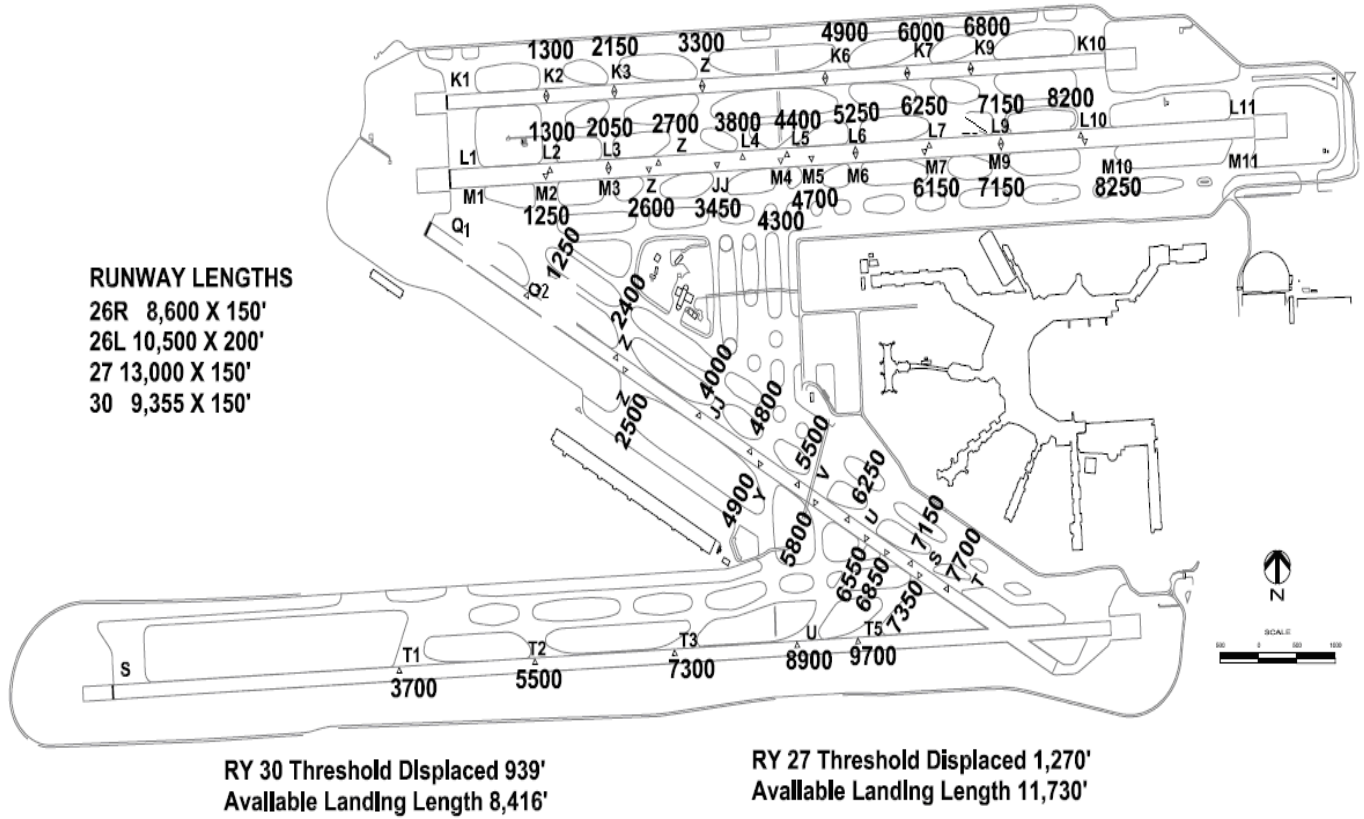
- 8L 8,600 X 150'
- 8R 10,500' X 200'
- 9 13,000 X 150'
- 12 9,355 X 150'

RY 9 threshold displaced 1,352'. Available landing length 11,650'.

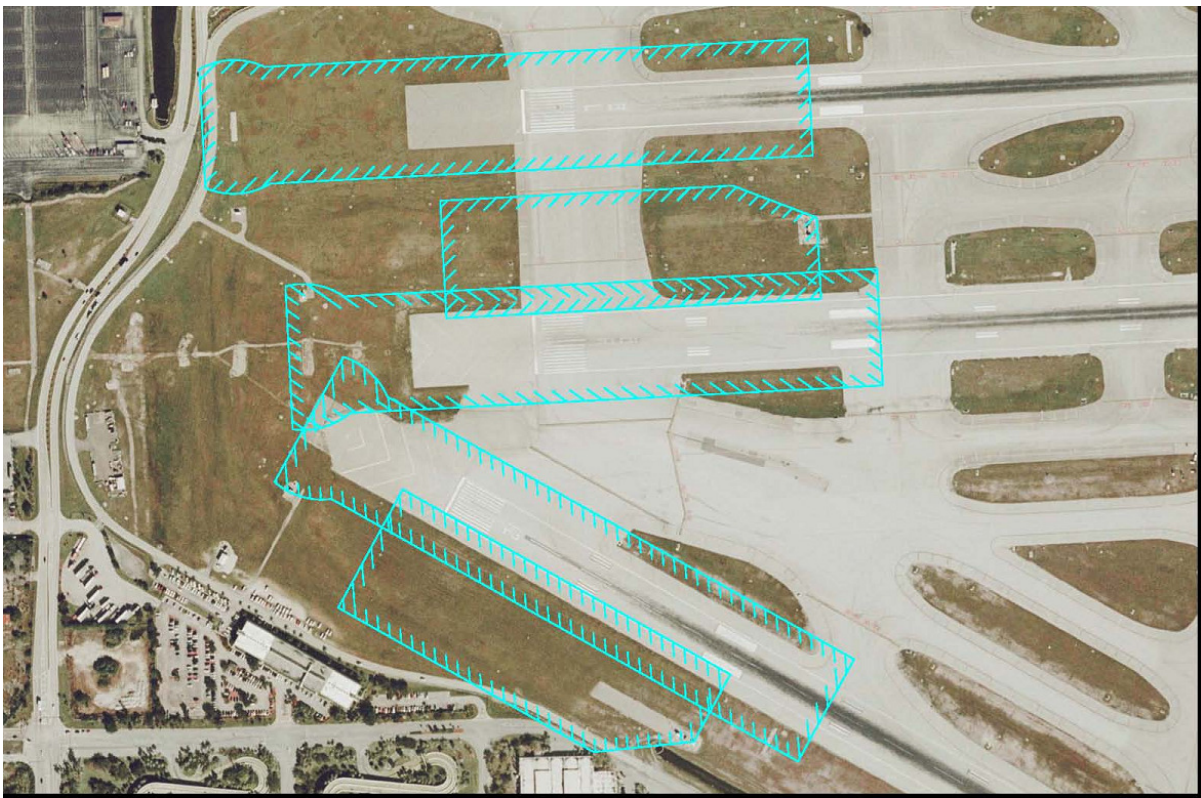
Distance between Runway centerlines RY 8R & RY 9 5,098'
RY 8L & RY 8R 800'

APPENDIX 5 – Distance Remaining - WEST

WEST



APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones.



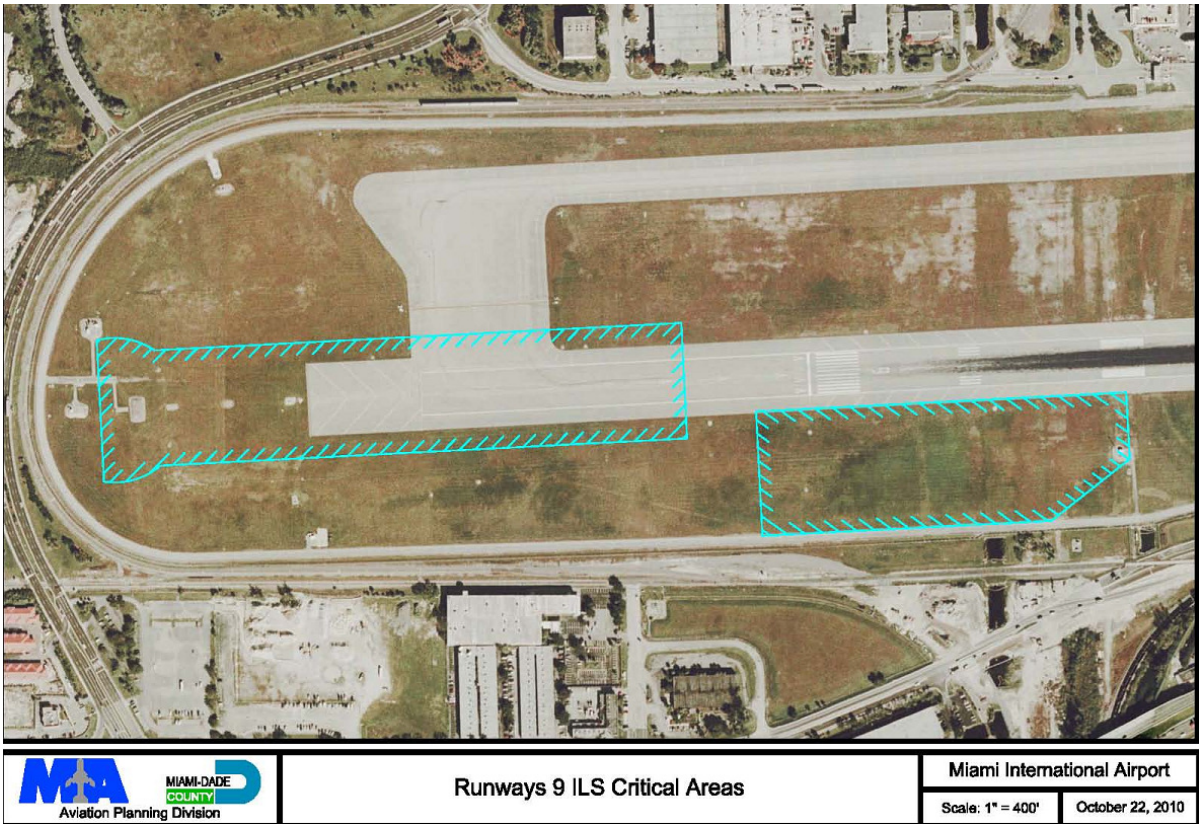
Runways 8L, 8R & 12 ILS Critical Areas

Miami International Airport

Scale: 1" = 400'

October 22, 2010

APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones.



APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones.



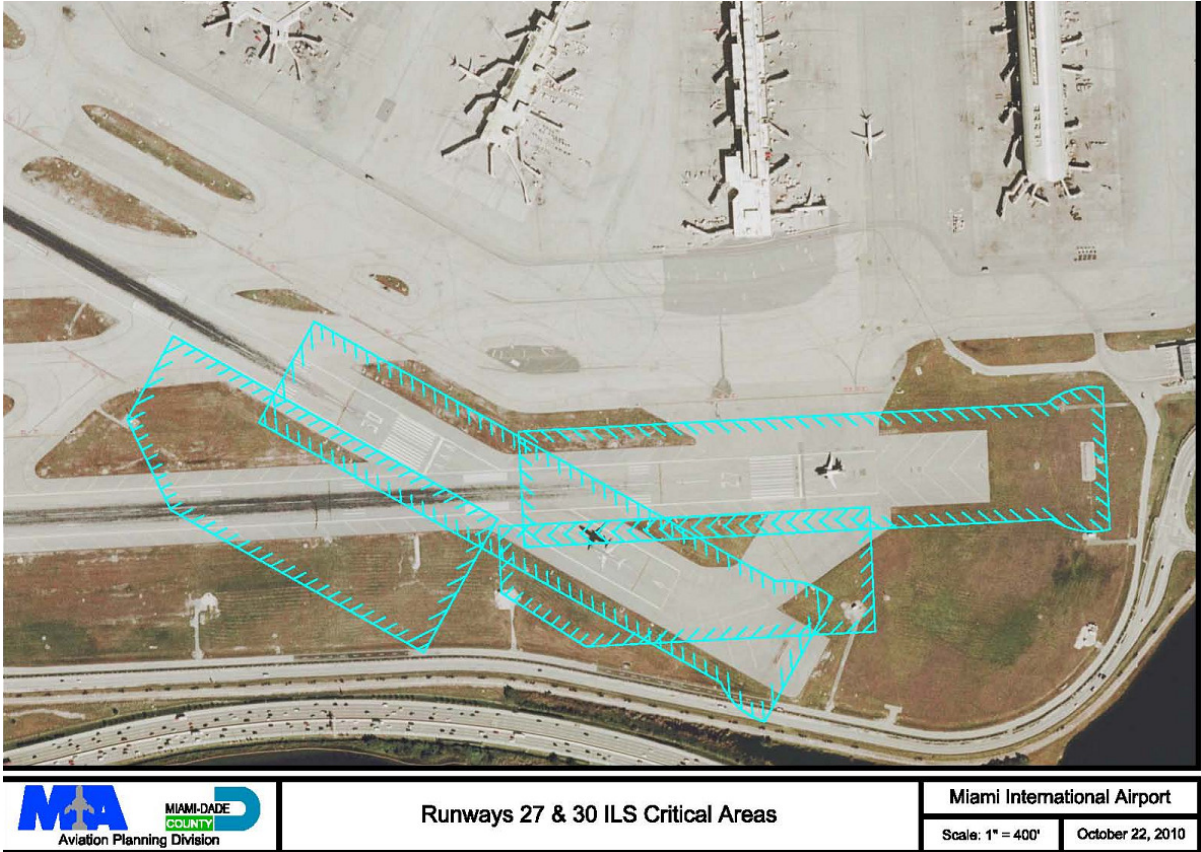
Runways 26R & 26L ILS Critical Areas

Miami International Airport

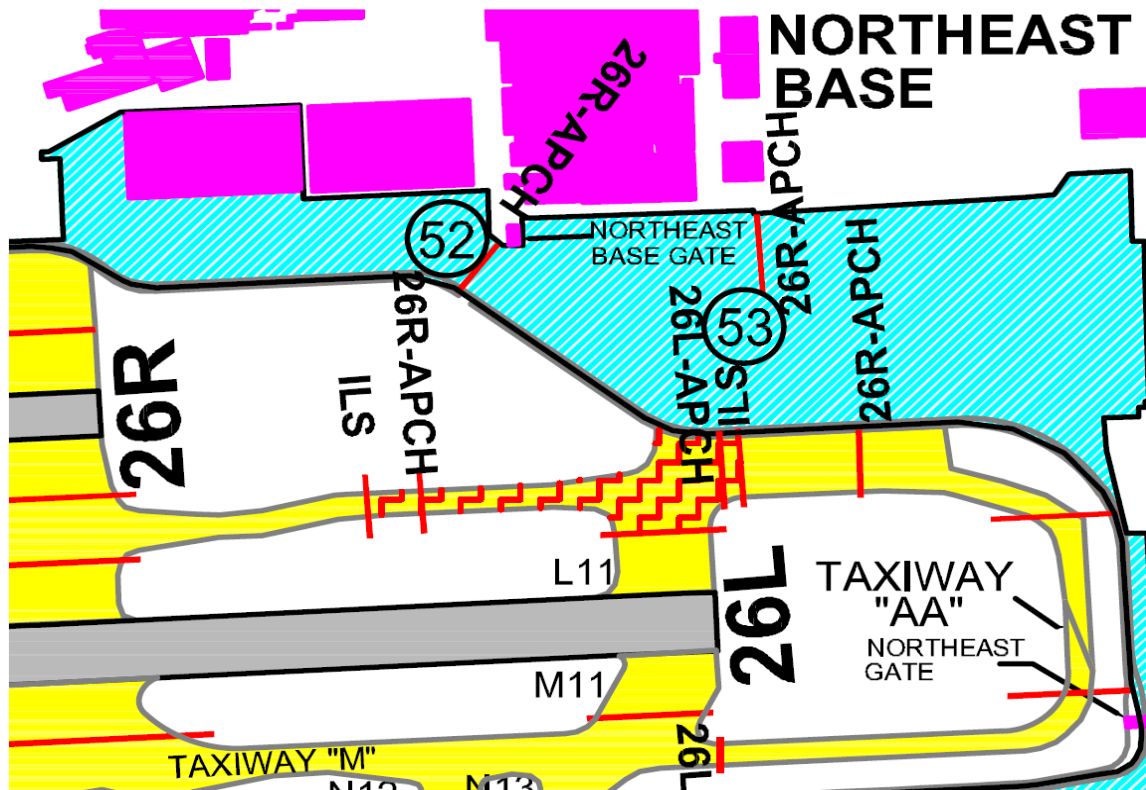
Scale: 1" = 400'

October 22, 2010

APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones.

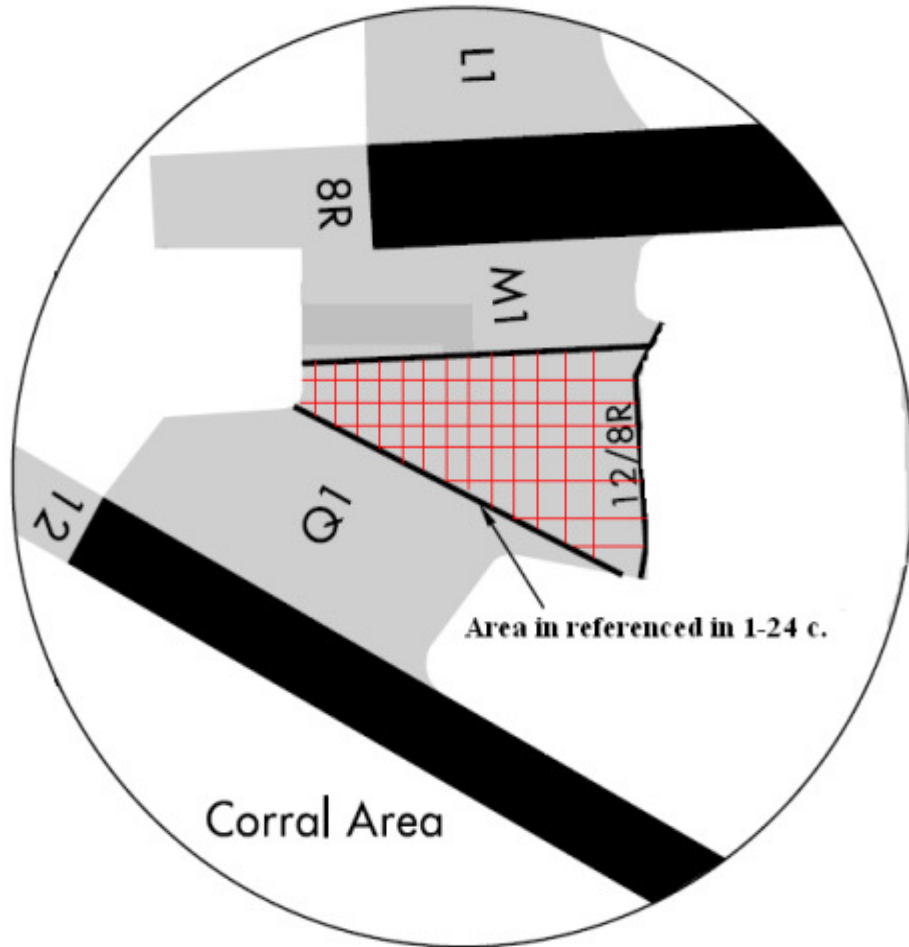


APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones.

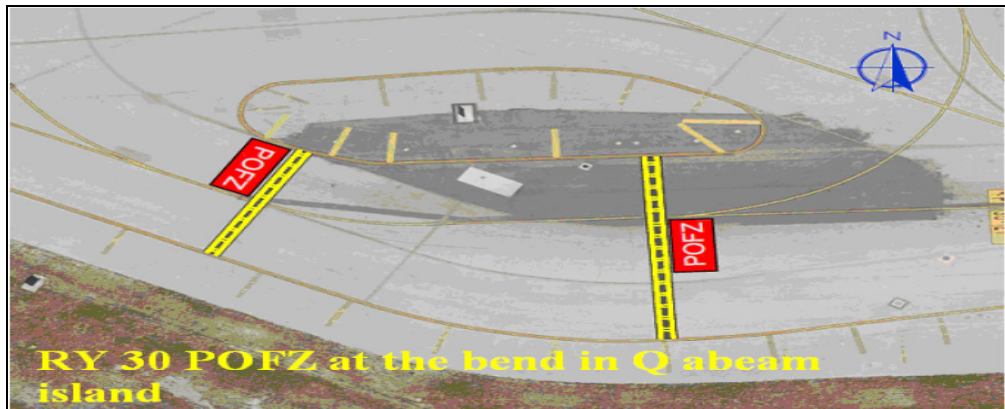
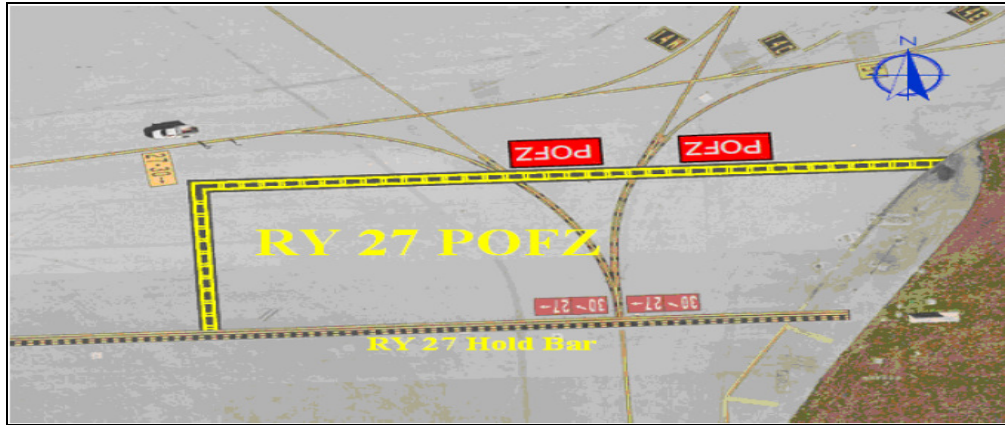


Note: Runway 26R Clear Zone includes the ramp depicted between Spots 52 and 53

APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones.



APPENDIX 6 – Obstacle Identification Surfaces, Obstacle Free Zones, Runway Safety Areas and Clear Zones.



APPENDIX 7 - Checklists

FLMIC/CIC TOWER CHECKLIST

Day Shift

Crash phone and Emergency Klaxon (0700L)
ASDE-X correct configuration, aural test
ARMT (online)
ITWIS (correct configuration)
Approach lights and Runway lights (on/off, or correct setting)
PET 2000 (tested on Monday)
Emergency Frequencies Selected (tested on Monday)
MSAW check each position (Multi-function **Z, A**)

Evening Shift

ASDE-X correct configuration, aural test
ARMT (online)
ITWIS (correct configuration)
Approach Lights and Runway lights (on/off, or correct setting)
MSAW check each position (Multi-function **Z, A**)

Midnight Shift

ASDE-X correct configuration, Aural test
Bundle strips, date, time and initial it
Approach Lights and Runway lights (on/off, or correct setting)
MSAW check each position (Multi-function **Z, A**)

APPENDIX 7 - Checklists

TRACON FLMIC/OMIC CHECKLIST

Day Shift

- a. Certify/Status T/A's (Other Duties, Time Outside Shift (TOS) Requests/Approvals, Leave Requests/Approvals.
- b. Check NOTAMS
- c. Review outages in Daily log and ensure entry into the IDS4
- d. Confirm ASR panel settings (Mode S for 40/60 mile radar use).
- e. TMC and WX briefing
- f. Verify Leave entries into WEB-SCHEDULE and CRU-ART
- g. Verify/Correct all spreaders for proper assignment
- h. Emergency Frequencies Selected (Tested on Monday)
- i. PET 2000/Backup Radios (Tested on Monday)
- j. MSAW checks on each position (Multi-function **Z, A**)
- k. Log Overtime
- l. Enter WCLC on FAA 7230-4 (1035z/1135z)

Evening Shift

- a. Certify/Status T/A's (Other Duties, Time Outside Shift (TOS) Requests/Approvals, Leave Requests/Approvals.
- b. TMC Log
- c. Log over Time
- d. 7 days shift/RDO swap
- e. Verify Leave entries into WEB-SCHEDULE and CRU-ART
- f. Spreader assignment/5 copies
- g. MSAW checks on each position (Multi-function **Z, A**)
- h. RDVS (Configure for Dayshift)
- i. Enter WCLC on FAA 7230-4 (1835z/1935z)

Midnight Shift

- a. Certify/Status T/A's (Other Duties, Time Outside Shift (TOS) Requests/Approvals, Leave Requests/Approvals.
- b. Print and prepare FLMIC Worksheet
- c. Print the Daily Log (FAA Form 7230-4)
- d. Check and sign all pages of the Daily Log (FAA Form 7230-4)
- e. Prepare new Daily Log in CEDAR
- f. Post last 2 hours of traffic count TMC computer
- g. Set ASR panel settings (Mode S for 40/60 mile radar use)
- h. Collect Flight Progress Strips, Emergency/Alert Checklist and Daily Logs and all paperwork
- i. MSAW checks on each position (Multi-function **Z, A**).
- j. Enter WCLC on FAA 7230-4 (0235z/0335z)

APPENDIX 7 - Checklists

TOWER - POSITION RELIEF CHECKLIST

- (1) STATUS INFORMATION AREA (IDS-4).**
- (2) EQUIPMENT:**
- (3) ASDE-X STATUS (OPERATIONAL STATUS, RUNWAY CONFIGURATION PRESENTATIONS ON ASDE DISPLAY, TEST BUTTON, AURAL ALERT VOLUME)**
- (4) WEATHER TRENDS.**
- (5) FLOW CONTROL INITIATIVES, IS TOWER ABLE TO PROVIDE VISUAL?**
- (6) SPECIAL ACTIVITIES.**
- (7) STAFFING / TRAINING**
- (8) VERBALLY STATE RUNWAY STATUS.**
- (9) LINE UP AND WAIT PROCEDURES (LUAW) STATUS**
- (10) PERTINENT OPERATIONAL NOTAM'S, UNLESS PREVIOUSLY COVERED**
- (11) Communication Status and TRAFFIC.**
 - a. Point outs/ Primary targets**
 - b. Aircraft handed off but still in airspace.**
 - c. Aircraft standing by for service.**
 - d. Coordination agreement with other positions.**
 - e. Special problems, requests, or instructions.**

APPENDIX 7 - Checklists

CAB FLMIC/CIC RUNWAY CHANGE CHECKLIST

- (1) NOTIFY TRACON FLM OF RUNWAY CHANGE. PROVIDE TRACON FLMIC WITH CALL SIGN OF THE LAST EAST/WEST DEPARTURE.**
- (2) NOTIFY ALL CAB PERSONNEL OF RUNWAY CHANGE**
- (3) ADJUST ASDE-X** (Change operational direction after last departure)
- (4) TDWR/ITWS**
- (5) RUNWAY / LAHSO LIGHTS/TAXIWAY "AA" LIGHTS**
- (6) APPROACH LIGHTS**
- (7) RVR**
- (8) EFSTS**
- (9) CHANGE ASDE-X CONFIGURATION**
- (10) ATIS**
- (11) SYSTEMS STATUS AREA**
- (12) ARMT**

APPENDIX 7 - Checklists

TRACON –POSITION RELIEF CHECKLIST

- (1) STATUS INFORMATION AREA. (IDS-4)**
- (2) EQUIPMENT/ NAVAID's.**
- (3) AIRPORT CONDITIONS/STATUS.**
- (4) AIRPORT ACTIVITIES/IS TOWER ABLE TO PROVIDE VISUAL?**
- (5) ALTIMETER/TRENDS.**
- (6) WEATHER TRENDS.**
- (7) FLOW CONTROL**
- (8) SPECIAL ACTIVITIES, LAW ENFORCEMENT**
- (9) STAFFING/TRAINING.**
- (10) PERTINENT OPERATIONAL NOTAM'S, UNLESS PREVIOUSLY COVERED**
- (11) Communication Status and TRAFFIC**
 - a. Point outs/ Primary targets**
 - b. Aircraft handed off but still in airspace.**
 - c. Aircraft released but not airborne.**
 - d. Aircraft standing by for service.**
 - e. Coordination agreement with other positions.**
 - f. Special problems, requests, or instructions.**

APPENDIX 7 - Checklists

TRACON – FLMIC/CIC RUNWAY CHANGE CHECKLIST

Notify TMC and all affected positions of operation.

Ensure coordination with MIA ARTCC TMU is effected.

Advise Cab FLMIC/CIC when the last arrival has landed.

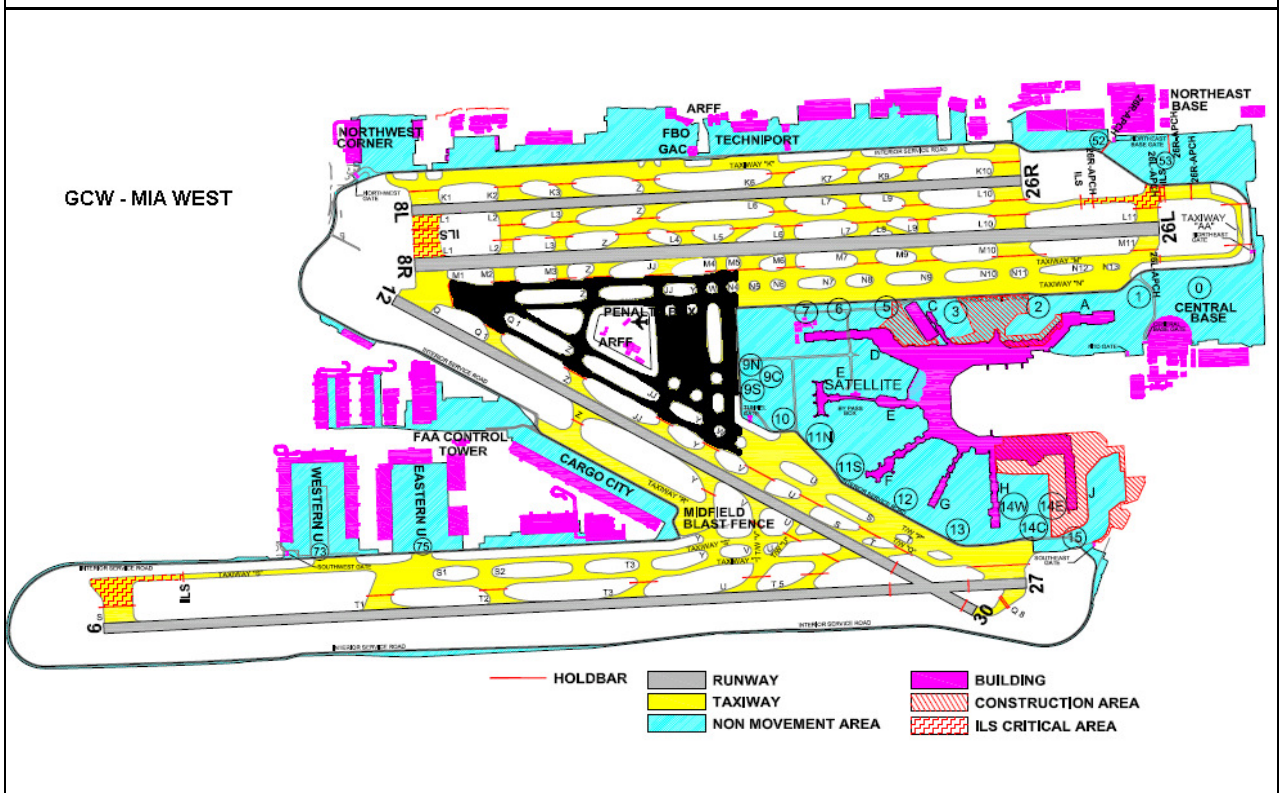
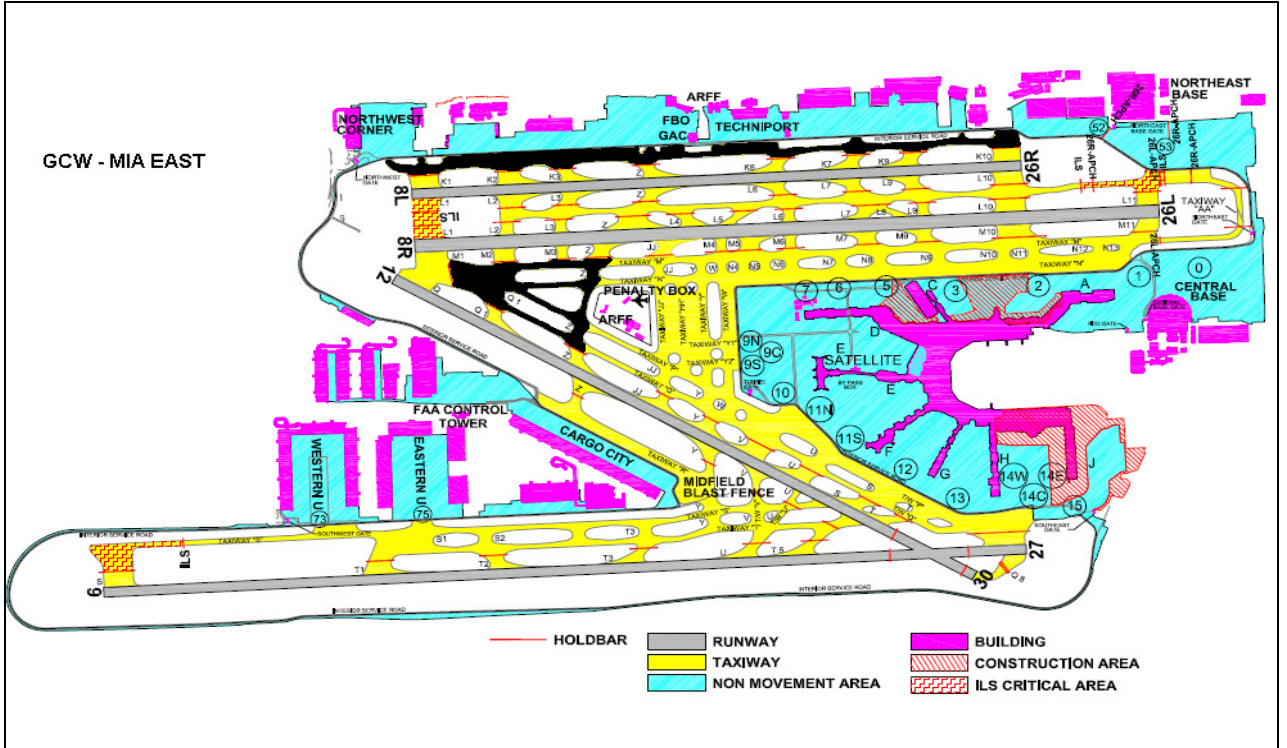
Change ILS configuration

Ensure RVRS indicators reflect correct airport configuration.

Log runway change in FAA Form 7230-4.

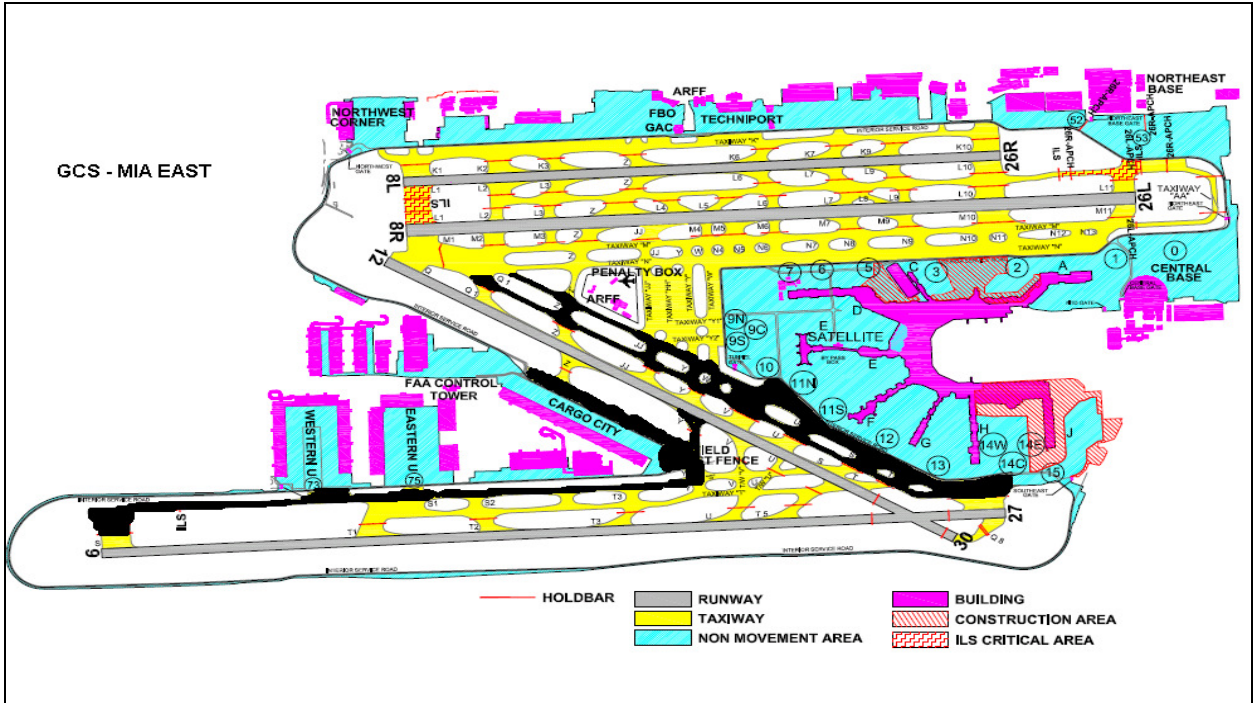
APPENDIX 8 - Movement Areas

GROUND CONTROL WEST



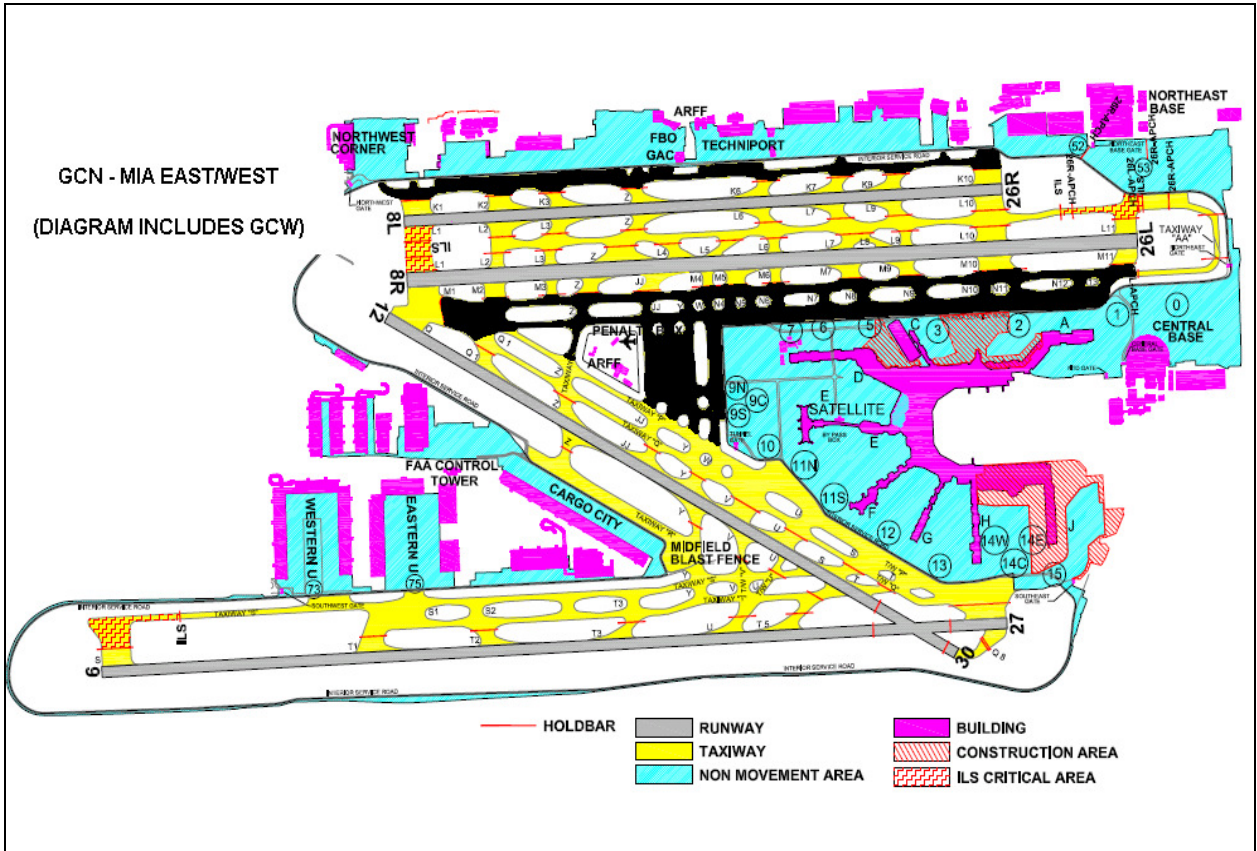
APPENDIX 8 - Movement Areas

GROUND CONTROL SOUTH



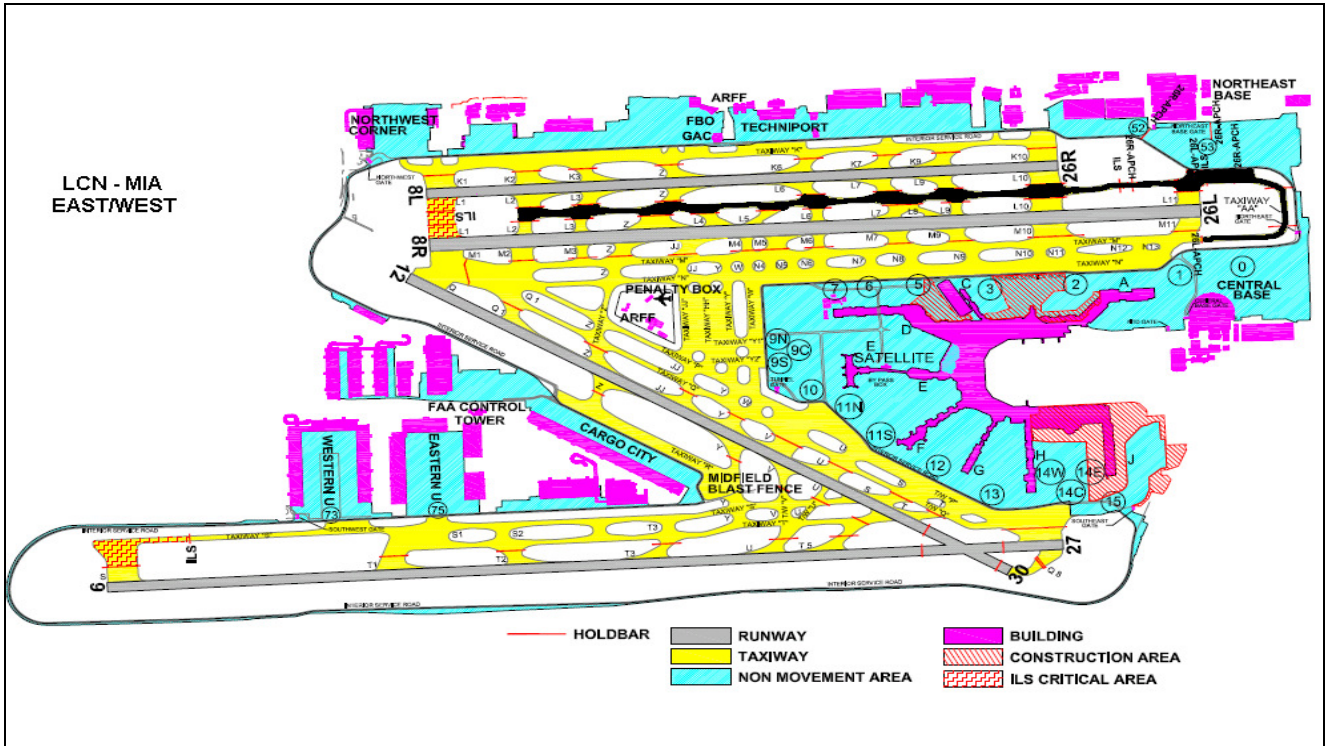
APPENDIX 8 - Movement Areas

GROUND CONTROL NORTH

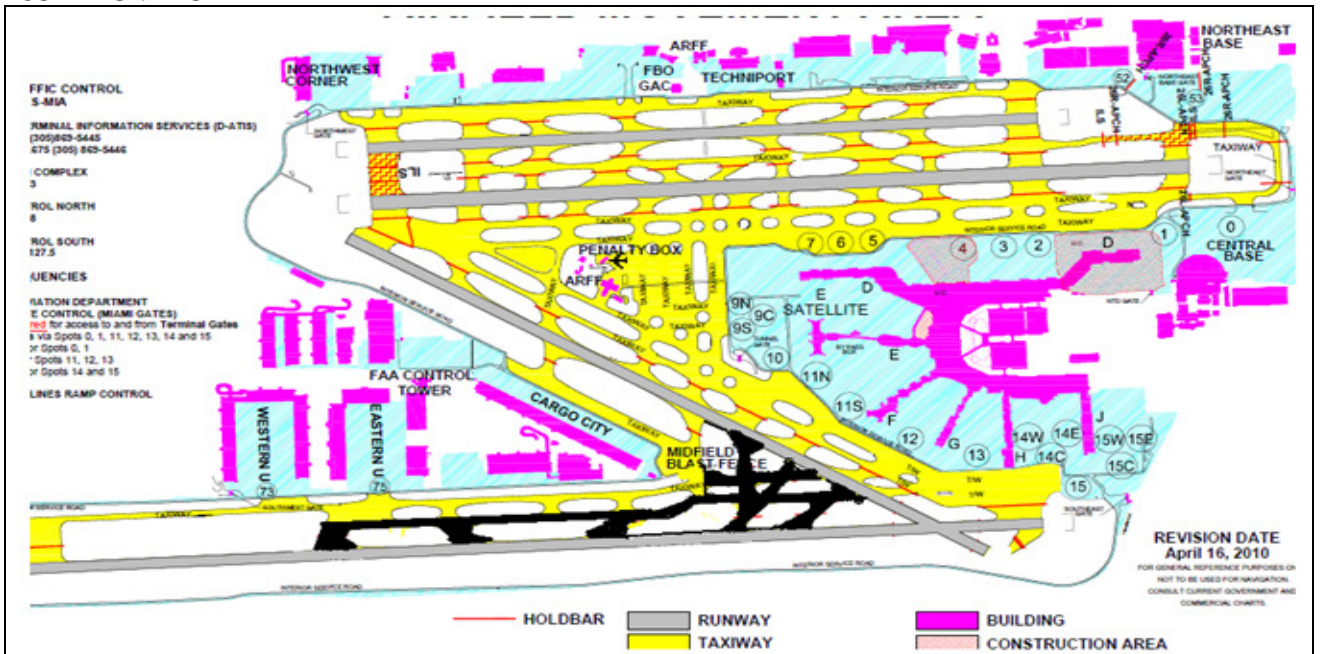


APPENDIX 8 - Movement Areas

LOCAL CONTROL NORTH & SOUTH

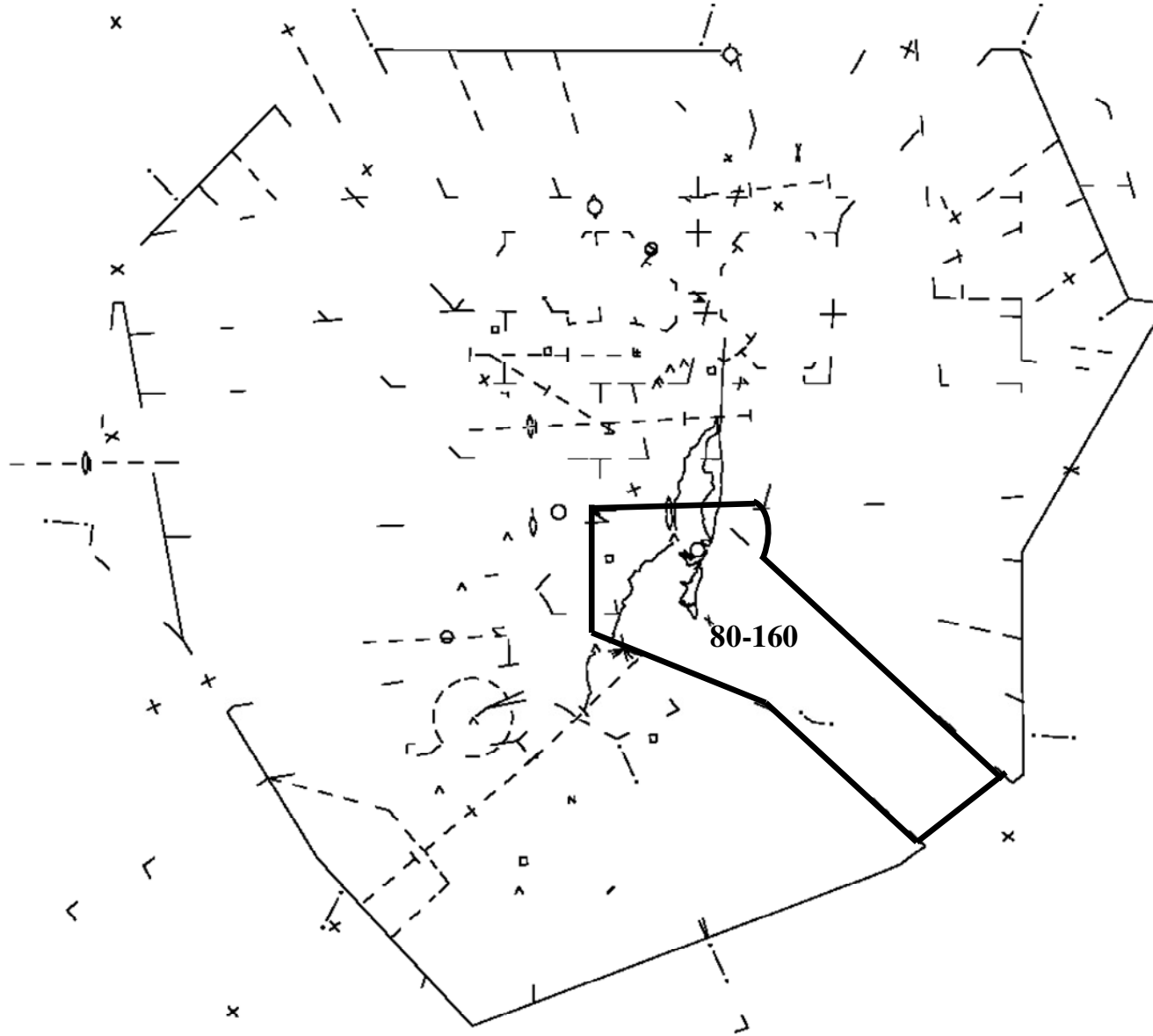


LCS - EAST/WEST



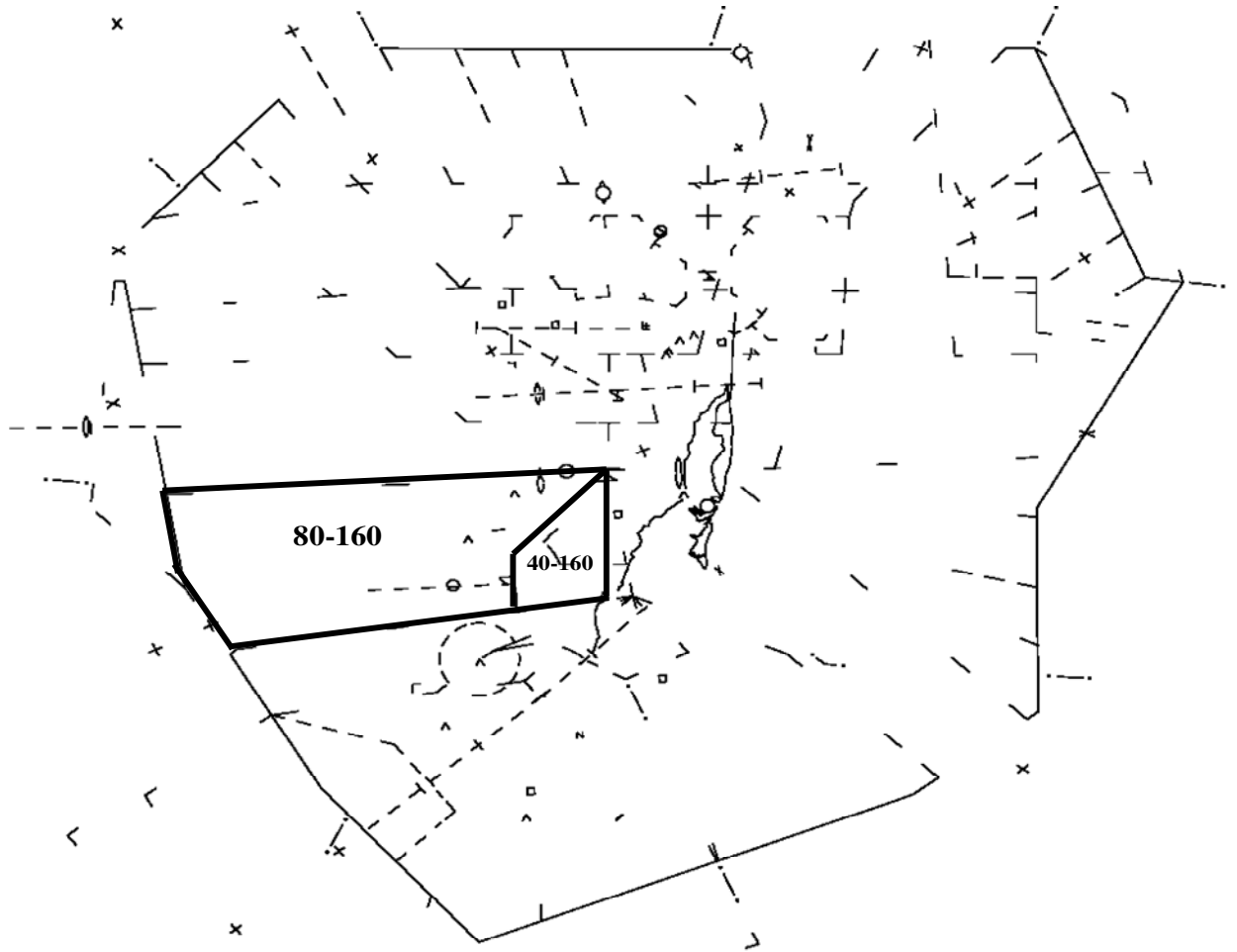
APPENDIX 9 – Pre-Arranged Coordination Airspace

Miami South Departure Radar - East



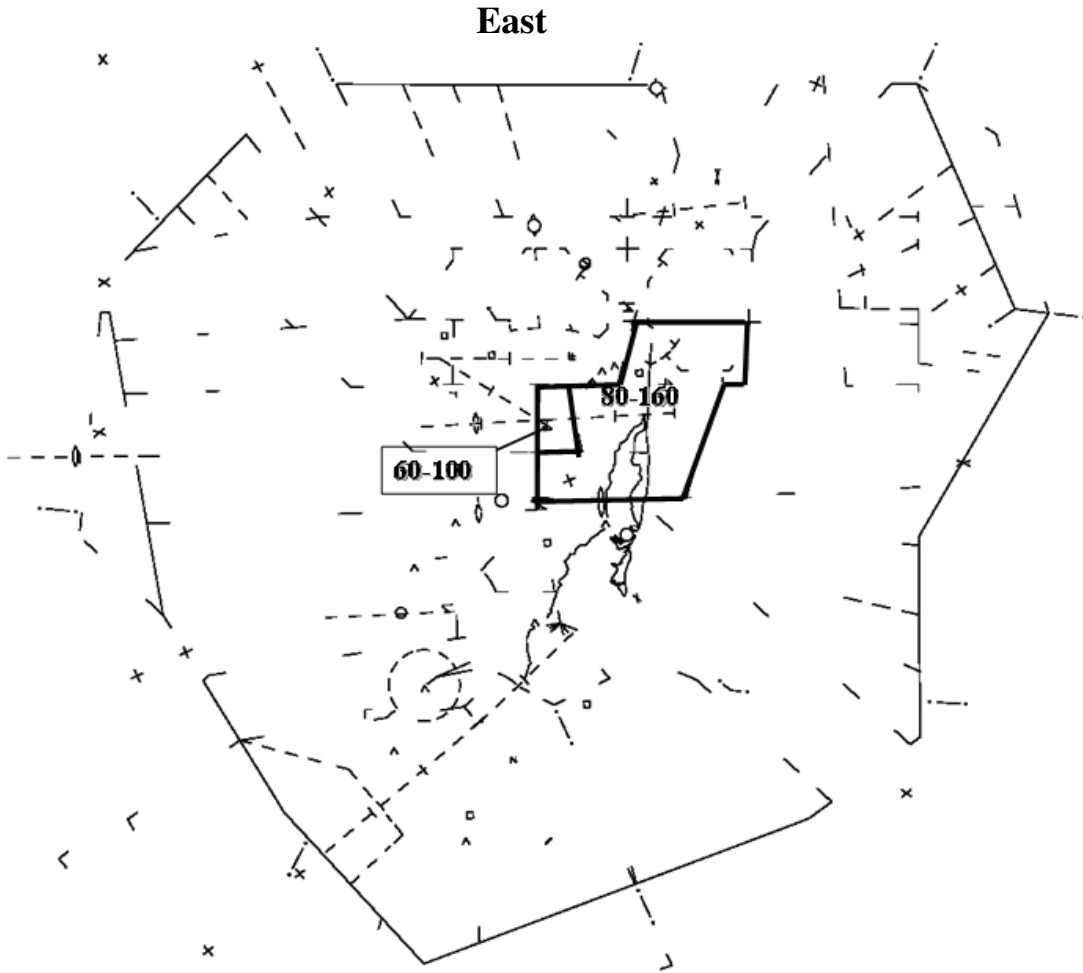
APPENDIX 9 – Pre-Arranged Coordination Airspace

Miami South Departure Radar – West



APPENDIX 9 – Pre-Arranged Coordination Airspace

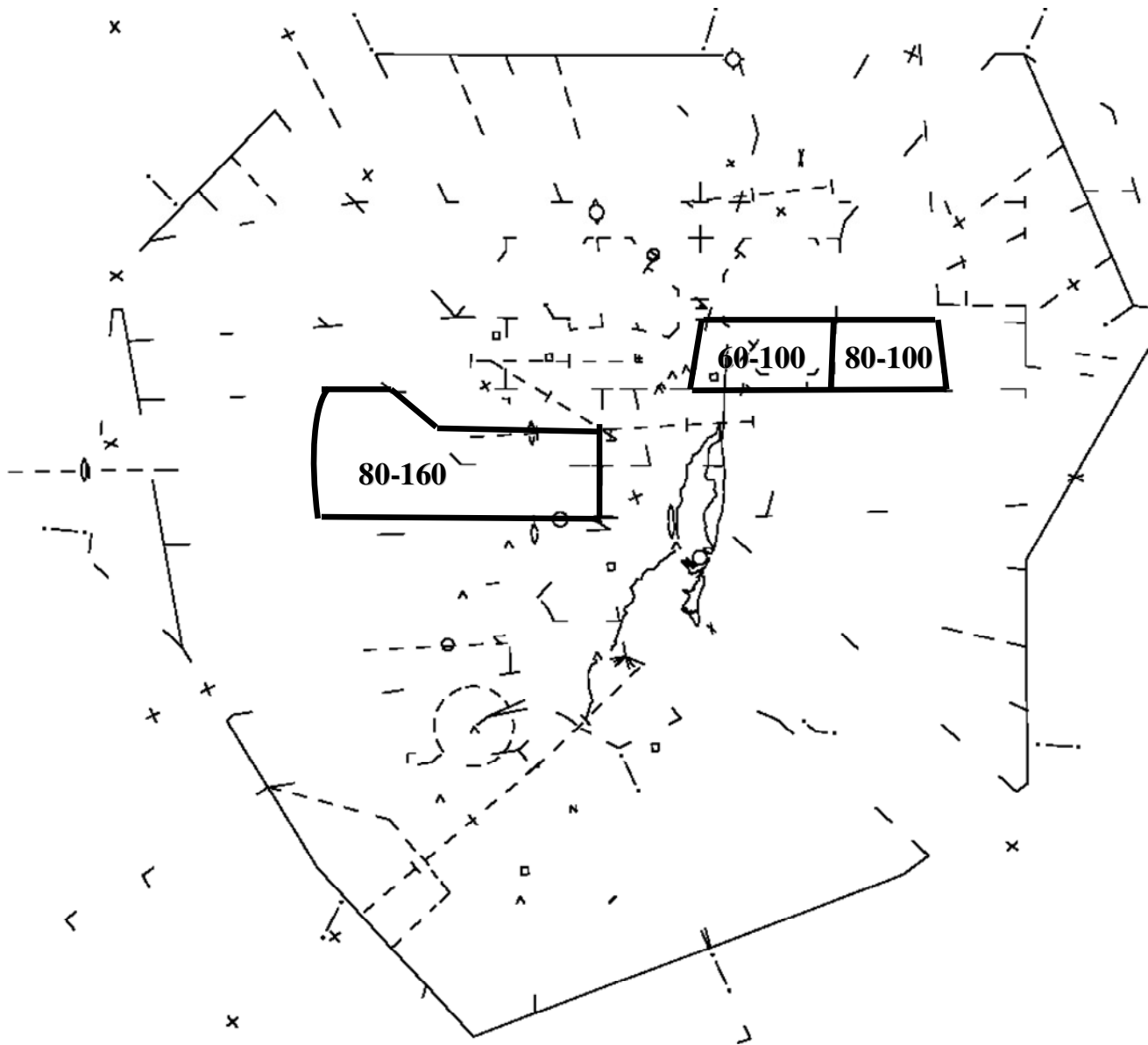
Miami North Departure Radar – D



APPENDIX 9 – Pre-Arranged Coordination Airspace

Miami North Departure Radar – D

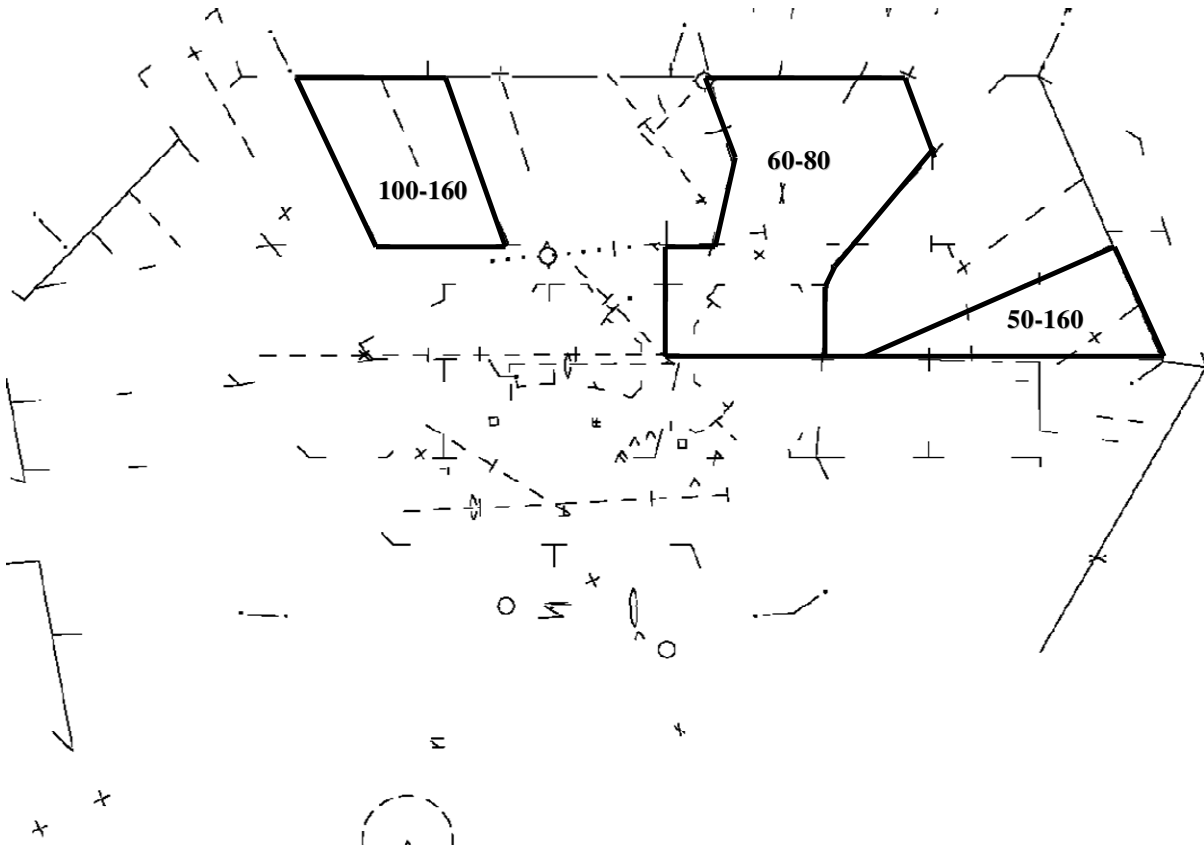
West



APPENDIX 9 – Pre-Arranged Coordination Airspace

Ft. Lauderdale North Departure Radar - L

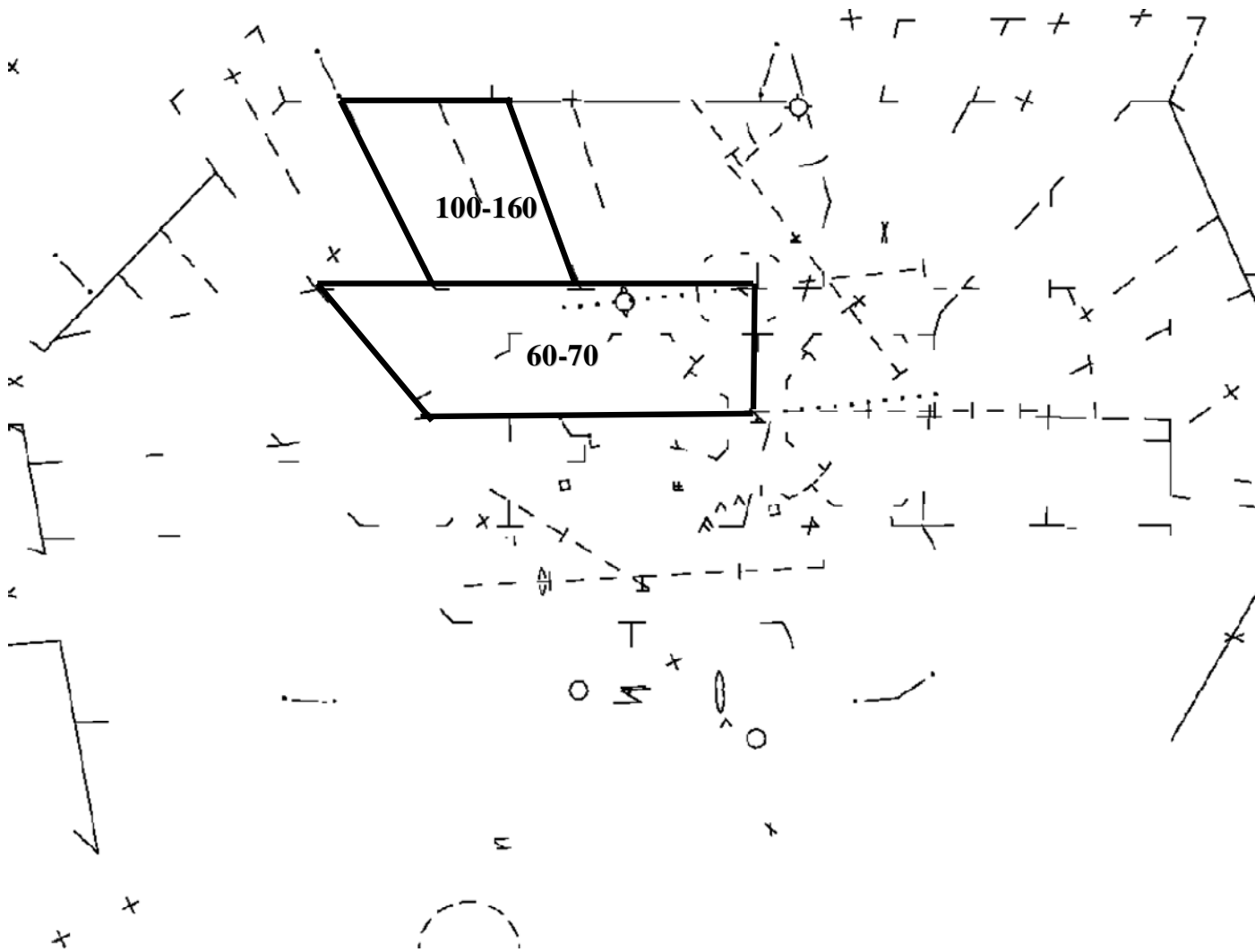
East



APPENDIX 9 – Pre-Arranged Coordination Airspace

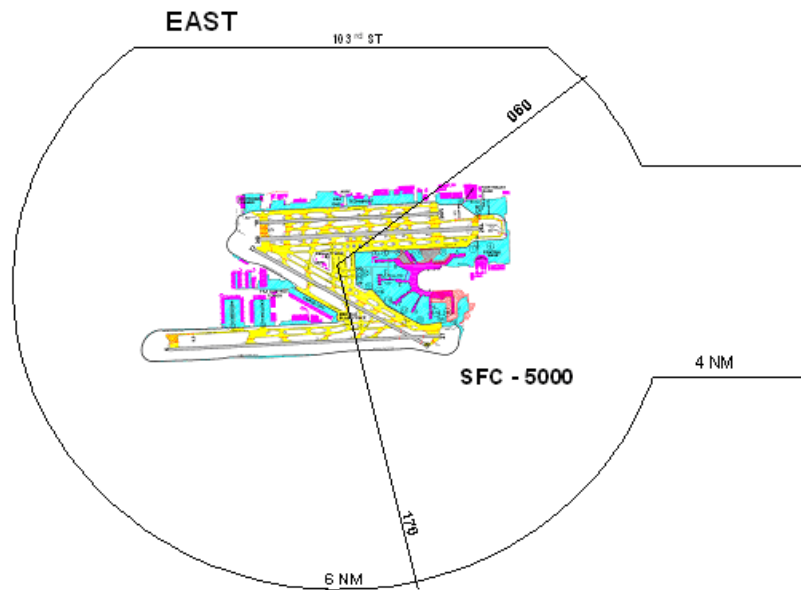
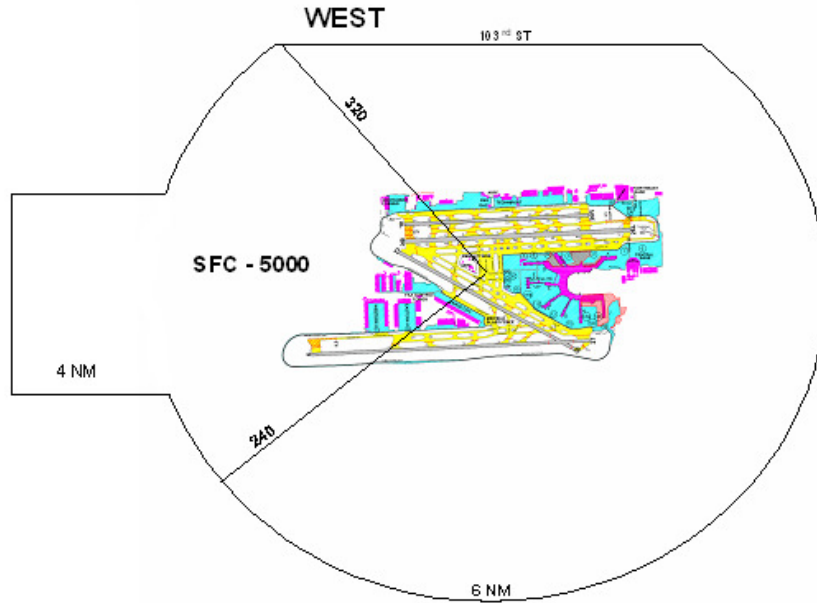
Ft. Lauderdale North Departure Radar - L

West



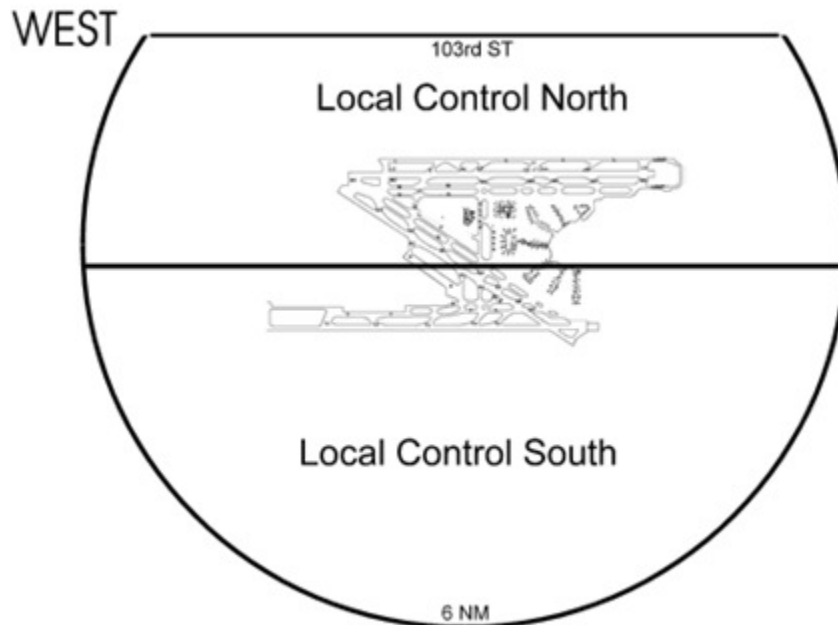
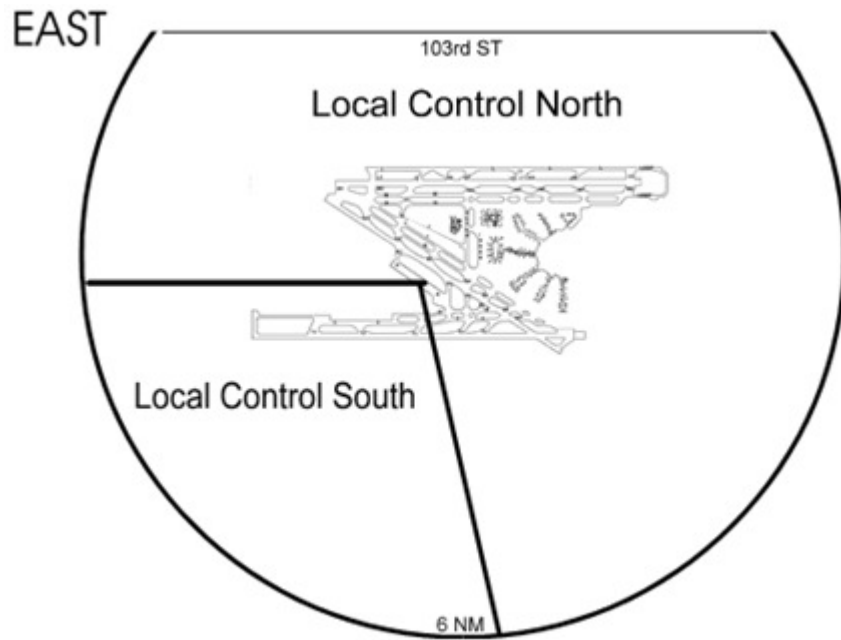
APPENDIX 10 – Tower Dispersal Area and Local Control Assigned Airspace.

A. Tower Dispersal Area.

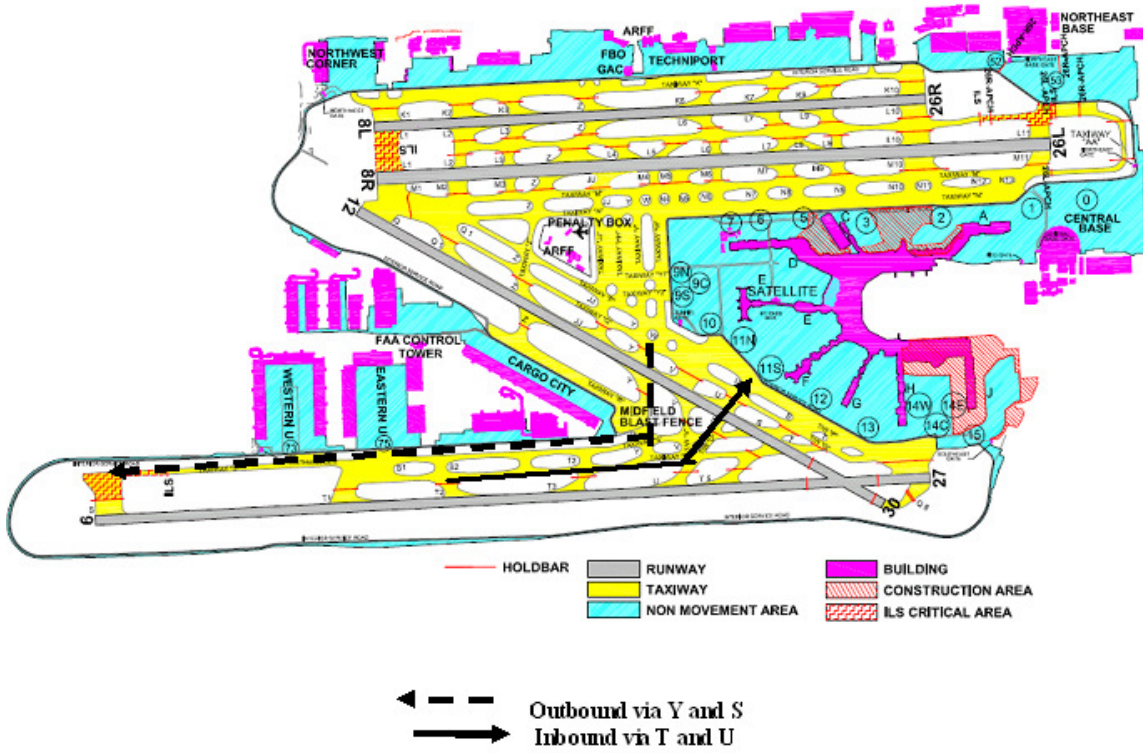


APPENDIX 10 – Tower Dispersal Area and Local Control Assigned Airspace.

B. Local Control Assigned Airspace.



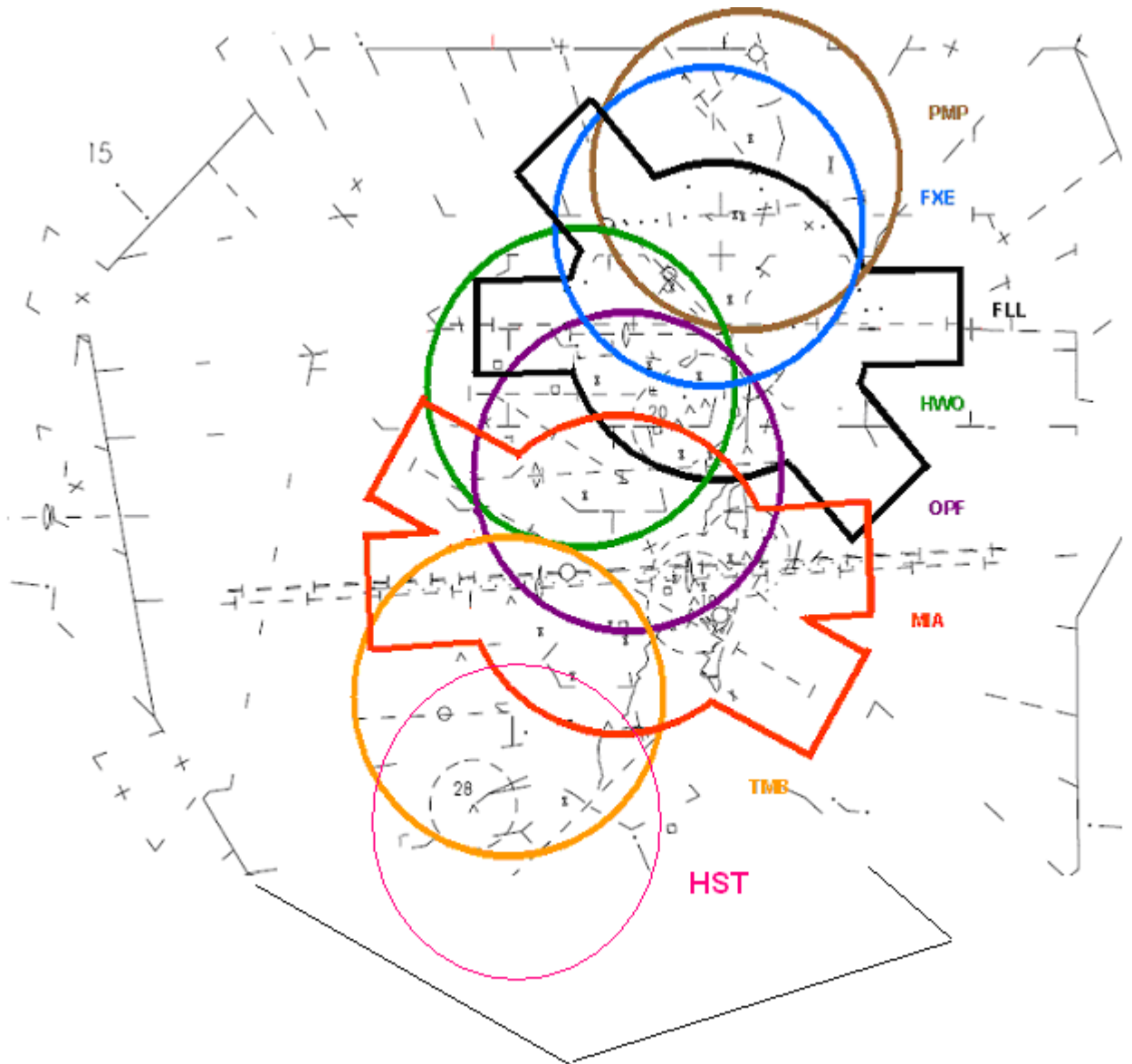
APPENDIX 11 – Runway 9 Preferential Taxi Routes



APPENDIX 12 – RDVS Monitor Codes

<u>Position</u>		<u>IA CODE</u>	<u>Position</u>	<u>IA CODE</u>
A		023	HQ	009
OM		032	HR	011
CC	North	043	HS	024
CC	South	049	HV	038
CD		051	HW	003
CIC1	SWS	031		
CIC6	CIC 1	033	HZ	007
CIC2	HN	021	L	018
CIC3	CIC 2	034	LCN	045
CIC4	CIC 3	035	LCS	048
CIC5	CIC 4	036		
D		006	M1S	027
F		014	M2N	026
FD1		019	MNTC	100
FD2		029	N	020
FD3		050	Q	010
G		016	R	012
GC3		044	S	025
GCN		046		
GCS		047	TMU1	028
GH		052	TMU2	029
HA		039	TSUP1	041
HD		005	TSUP2	053
SF/HF		013	TTMU3	040
HG		015	V	022
HH		001	W	004
H		002	WS	030
HL		017	Z	008
HN	CIC 2	021		

APPENDIX 13 – MSAW Tower Alert Area



APPENDIX 14 – Scratch Pad Entries

PMP	
IFR instrument approach	PMP
IFR practice approach	PMI
VFR practice approach	PPP
Visual approach	PMV
FXE	
IFR instrument approach	FXE
IFR practice approach	FXI
VFR practice approach	FXP
Visual approach	FXV
Holding	FXH
HWO	
IFR instrument arrival full stop	HWO
IFR practice approach	HWI
VFR practice approach	HWP
Visual approach	HWV
OPF	
IFR/VFR arrival full stop	OPF
IFR practice approach	OPI
VFR practice approach	OPP
Visual approach	OPV
TMB	
IFR/VFR arrival full stop	TMB
IFR practice approach	TMI
VFR practice approach	TMP
Visual approach	TMV
Holding	TMH

APPENDIX 15 – Scratch Pad Entries (MIA FLL)

MIA	
Visual approach 8L/26L	VL
Visual approach 8R/26R	VR
Visual approach 12/30	V
Published instrument approach 8L/26L	L
Published instrument approach 8R/26R	R
ILS approach 12	R12
ILS or Localizer approach 30	R30
ILS approach 9 unable hold short 12 (not required for foreign air carriers)	9N
Visual approach 12 unable hold short 9	VN
ILS 12 unable hold short 9	12N
Visual approach 9 unable hold short 12	V9N
ILS approach 9	R9
ILS approach 27	R27
Visual approach 9	V9
Visual approach 27	V27
Generic	MIA
<i>MSAW approach extensions</i>	<i>8L, 9 12, 26R, 27 and 30</i>
FLL	
IFR primary runway	FLL
Visual approach 9L/27L	VL
Visual approach 9R/27R	VR
Visual approach 13/31	V
Class C arrival 9L	F
Class C arrival 9R	FR
Class C arrival 27L	FL
Class C arrival 13	F13
Class C arrival 31	F31
<i>MSAW approach extensions</i>	<i>9, 9R, 13, 27R, 27L, and 31</i>

APPENDIX 16 – Best Operating Practices

ALL POSITIONS

1. Anticipate sector capacity (including adjacent areas) when high volume or severe weather is likely.
2. Request assistance early during adverse weather conditions or during unusual situations such as FLL east / MIA west configuration or special events (request staffing for a handoff position or an additional radar position, increased flow constraints, etc.).
3. Communicate approval for weather deviations clearly and precisely. Make sure pilots understand limits of approval to deviate.
4. Recognize that traffic other than yours may be deviating through the same break in the weather, and coordinate positively with the appropriate position(s).
5. Restrict traffic appropriately so that your ability to provide separation is not compromised (i.e. stop departures, request flow restrictions, terminate additional services, etc).
6. Ensure that instructions are read back correctly.
7. Consider aircraft performance characteristics as you work.
8. Use landlines to reduce room noise and the possibility of a miscommunication.
9. Don't be complacent during periods of light traffic. Many operational errors occur when traffic is light or moderate.
10. Use positive control (don't bet on the come). Issue control instructions early enough to be effective.
11. Be cautious after assuming position responsibilities. Errors often occur during the first few minutes after taking position.
12. Avoid vectoring too close to adjacent airspace when it is not necessary including the boundaries within Miami Approach airspace.
13. Use the STARS TPA function or other STARS distance-detection features to monitor required spacing on final and for passing behind wake turbulence and opposite direction lateral separation.
14. Use available STARS maps to ensure Class B airspace, noise abatement, and MVA requirements are met.

MIAMI ARRIVAL POSITION

1. Keep FLL arrival traffic over WEAVR above MIA and OPF arrivals.
2. Maintain vertical separation between base leg traffic and those established on final until in-trail spacing is positively achieved.
3. Set/coordinate arrival sequence as soon as possible.
4. When vectoring an aircraft that will cross the airport on the departure side, ensure that you force the data block to the departure sectors. This is especially important when aircraft have been handed off to another sector; i.e., HEATT arrival landing TMB or 07FA.
5. Sequence slow traffic by vectoring to the shortest possible final.
6. Balance traffic volume between final controllers to the extent possible.
7. Be cognizant of wind direction and speed when conducting LASHO operations.
8. Consider compression on final and assign speeds as necessary.
9. Ensure that two non-LAHSO aircraft are not vectored to RY12 or RY9 simultaneously.

MIAMI NORTH AND SOUTH DEPARTURE POSITIONS

1. Vector Runway 9L jet arrivals over DEKAL (MIA/FLL east) for left traffic, and hand them off to FLL arrival at 6,000 and force (back splat) the arrival data block to the FLL north departure position.
2. Do not vector through the main bang when handing off traffic to the L and R positions.
3. Consider restricting the altitude of PADUS propeller aircraft in order to allow the earliest possible turn for WINCO and HEDLY jet traffic.
4. Consider possible SFO and skydive traffic in the Homestead area when issuing clearances to MNATE traffic direct MTH or EYW.
5. When MIA is west, ensure that jet departure traffic routed VALLY and SKIPS are afforded sufficient mileage to cross the HEATT and JUNUR arrival corridors at or above 11,000.

6. Ensure northbound transitioning a/c that are routed east of MIA at 6000 or 7000 feet are descended in a timely manner to avoid "R" airspace; i.e. jet a/c that departed TMB landing PBI.

FLL SOUTH ARRIVAL/DEPARTURE OPF ARRIVAL/DEPARTURE (Z/Q)

1. Ensure that VFR aircraft receiving advisories remain in your area of jurisdiction, clear of Class B airspace and the Miami finals.
2. Do not vector through the main bang when handing off traffic to the R and L positions.
3. Ensure that traffic arriving from the southeast landing FXE, PMP, or BCT remains clear of "L" airspace.
4. Be aware of the proximity of the HWO traffic pattern and the FLL runway 9R final for IFR operations.
5. Vector visual approach aircraft to FLL Runway 9R/27L to join the final no further than a 10NM final.

FLL NORTH DEPARTURE, FLL ARRIVAL, FXE ARRIVAL/DEPARTURE (L, R/F, G)

L Position

1. When utilizing pre-arranged coordination procedures, be aware of traffic in the MRLIN arrival corridor handed off by R to other positions.
2. Be aware of DEKAL "R" arrivals.
3. Watch for slow climbing aircraft conflicting with "G" airspace.
4. Be alert for aircraft navigating off the wrong NAVAID. They may select VKZ instead of DHP.

R/F Position

1. Force (back splat) the data block of traffic in the MRLIN arrival corridor to L if the aircraft will be handed off to another position.
2. Use vertical separation between base leg traffic and those established on final until longitudinal separation is positively achieved.

3. Exercise extra caution when turning downwind five miles northeast of FLL-- this is the point where the majority of L departures turn on course and commence their climb.
4. Traffic arriving over GISHH landing FLL runway 9R, OPF, or HWO should be vectored so as to remain outside 20 miles east of FLL, handed off to "L" for FLL runway 9R; or be vectored to enter "Z" airspace in the vicinity of HOLID intersection southbound.

G Position

1. Be alert for conflicts between traffic on the approach to PMP and FXE departures.
2. Use the 2500-foot corridor over FXE for FLL Class C arrivals and over-flights.
3. Be alert for conflicts between PMP and FXE arrivals/departures.
4. Remember, WINCO departures @ 4000' require either a handoff or a point out to "Z".
5. Due to the proximity of airports in "G" airspace. Always make sure that all point-outs are made, and/or that appropriate instructions are given to remain clear of different airspace.
6. Always ensure that boundary integrity is maintained when vectoring southwest bound near the Boca Raton (BCT) airspace. Don't forget that PBI owns 3000' and below in the BCT airspace cutout.
7. If transitioning over FLL at 3,000 IFR, the aircraft should be on the arrival side of the airport and be pointed out to the "R" or "F" controller. You should not transition over the departure side at 3,000 or below to avoid conflicts with aircraft in the departure dispersal area.

LOCAL CONTROL

1. **SCAN, SCAN, SCAN.** Be vigilant of the surroundings. *You could make the difference.*
2. Consider aircraft performance for successive departures.
3. Do not overload the departure controllers.
4. Be aware of aircraft performance, language problems, etc. when arriving and departing from the same or intersecting runways with minimal separation.
5. Ensure traffic is issued to aircraft departing 8R when there is traffic on the AA taxiway.

6. If you intend to change an assigned departure runway, make sure you inform the crew as soon as possible so they can make computer changes in time to be ready upon reaching the runway.
7. Use “Memory Aids”
8. Local control should always check for ground traffic before exiting or crossing runways.
9. When possible check for timed out flight plans and compliance with flow control initiatives.

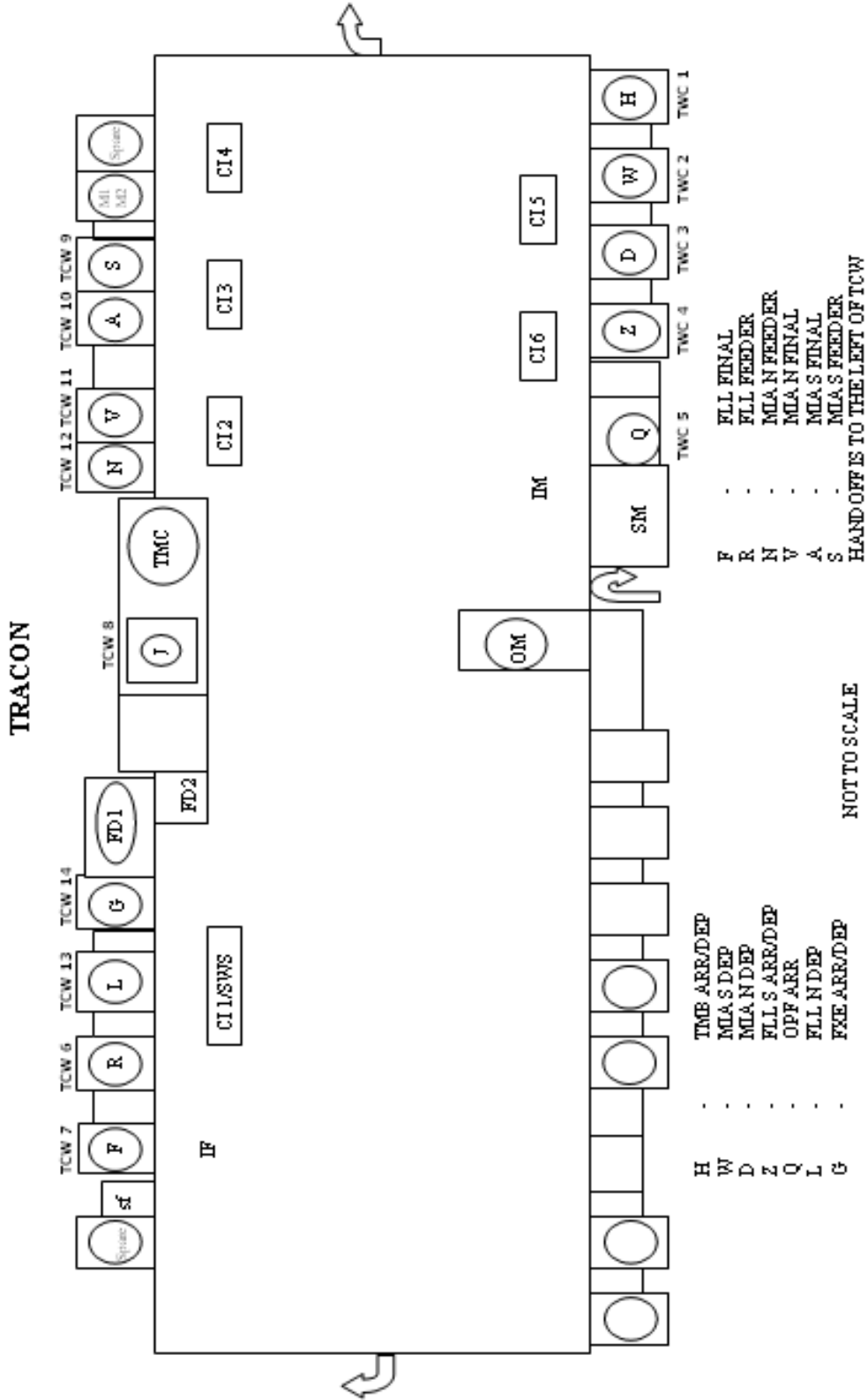
GROUND CONTROL

1. **SCAN, SCAN, SCAN.** Be vigilant of the surroundings. *You could make the difference.*
2. Ensure that taxi and tow operations do not block intersections for traffic crossing or clearing the runway. Do not block taxiway “Z” when MIA is west.
3. Inform the appropriate Local Controller and/or CC, of the intersection or intersections, you will be blocking.
4. Be alert for push-back traffic entering the movement area without authorization.
5. To the extent practicable, hold tow traffic at the departure end of the runway rather than the approach end or a midfield intersection.
6. Advise Local Control/CC of traffic that will use the AA taxiway.
7. Transfer communications to LC/GCW early enough to allow re-sequencing at the run-up pad.
8. Scan the appropriate final and runway prior to asking Local Control for permission to cross the runway. Must ensure that the runway and final approach are clear prior to requesting approval to cross runway. Use all available tools, that is, STARS, ASDE and visual scanning.
9. Ensure that you place the visual aid (towing across runway) strip in the LC bay.
10. Check flight progress strips to ensure proper marking for flow control initiatives and current proposed times.
11. Be aware of the hot spots on the airport. (i.e. M4, M5, S and T east of Runway 12, Runway 8R and Runway 12 run-up pad [corral area] and Q8).

CLEARANCE DELIVERY/FLIGHT DATA

1. **SCAN, SCAN, SCAN.** Be vigilant of the surroundings. *You could make the difference.*
2. Scan proposed departure times to allow for updating prior to timeout.
3. Ensure that TNT departures are in the correct tab list and have the correct frequency.
4. Offer pilots of aircraft with destination APF or MKY direct routing at 4000 so that the departure controller will not have to process a possible later request.
5. Use the F9 feature for VFR flight plans.
6. Review the changes and restrictions throughout the day. Ensure that they are updated in the STARS Systems Area and the IDS-4.

APPENDIX 17 – TRACON Layout



APPENDIX 18 – Beacon Code Allocation

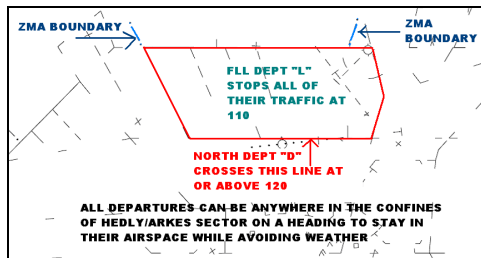
<u>BEACON CODE BLOCK</u>	<u>ASSIGNED TO</u>
0101-0112	HST GCA
0113-0144	AUTO TAG AIRCRAFT
0145-0177	SATELLITE TOWERS
0301-0374	Available VFR codes
0375-0377	AUTO TAG AIRCRAFT
4301-4304	AUTO TAG AIRCRAFT
4306-4347	Miami TRACON VFR
4366-4377	Miami TRACON IFR
4350-4365	VFR Practice Approaches
5201-5261	Available VFR codes
5262-5277	AUTO TAG AIRCRAFT
5551, 5570, 5571	AUTO TAG AIRCRAFT

APPENDIX 19 – Stratification

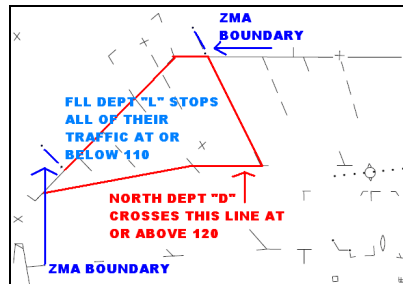
Stratification occurs when weather prevents aircraft from exiting the DTA on the transition or within the confines of the DTA.

DO NOT FORGET THAT THE ZMA LOA GIVES ZMA CONTROL FOR TURNS, SPEED ADJUSTMENTS AND CLIMBS WITHIN THE CONFINES OF THE DTA AS SPECIFIED.

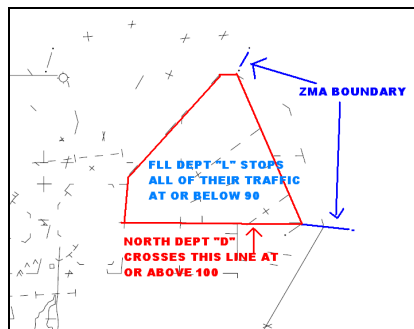
HEDLY/ARKES: D Traffic must cross the line at or above 12,000' and L traffic maintains 11,000' (or lower filed altitude). "D" needs to point out all aircraft requesting lower than 12,000'.



WINCO/THNDR: "D" crosses the line at or above 12,000' and "L" maintains 11,000' (or lower filed altitude).



ZAPPA/VALLY: D Traffic must cross the line at or above 10,000' and "L" traffic maintains 9,000' (or lower filed altitude).



APPENDIX 20 – Group 6 Aircraft Operations

VISUAL DEPICTIONS

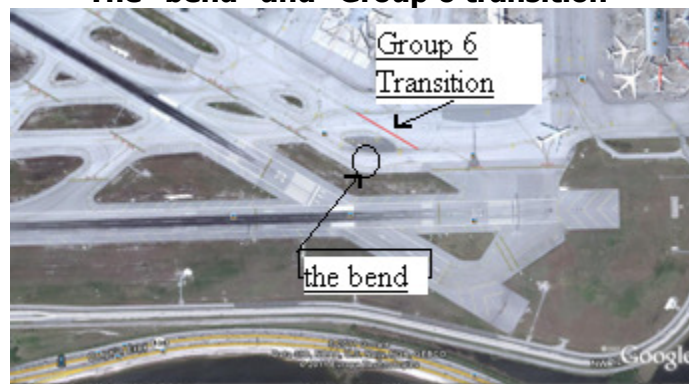
RY 9 Arrival to J17



RY 9 Departure



The "bend" and "Group 6 transition"



APPENDIX 20 - Group 6 Aircraft Operations

VISUAL DEPICTIONS

RY27 Arrival



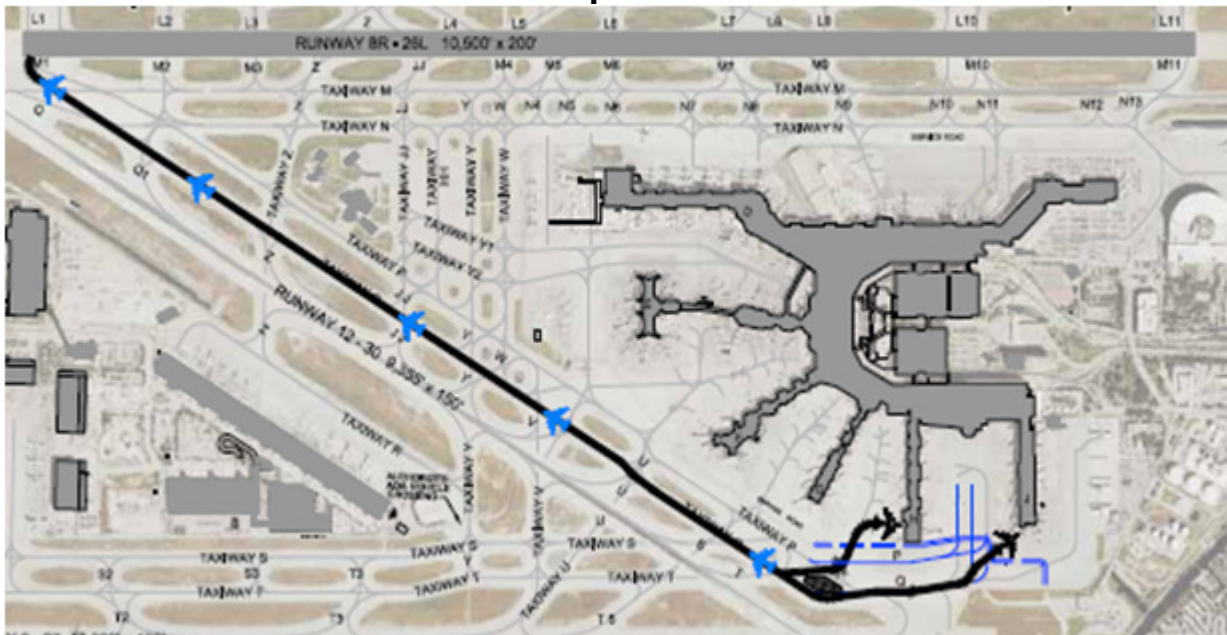
RY27 Departure



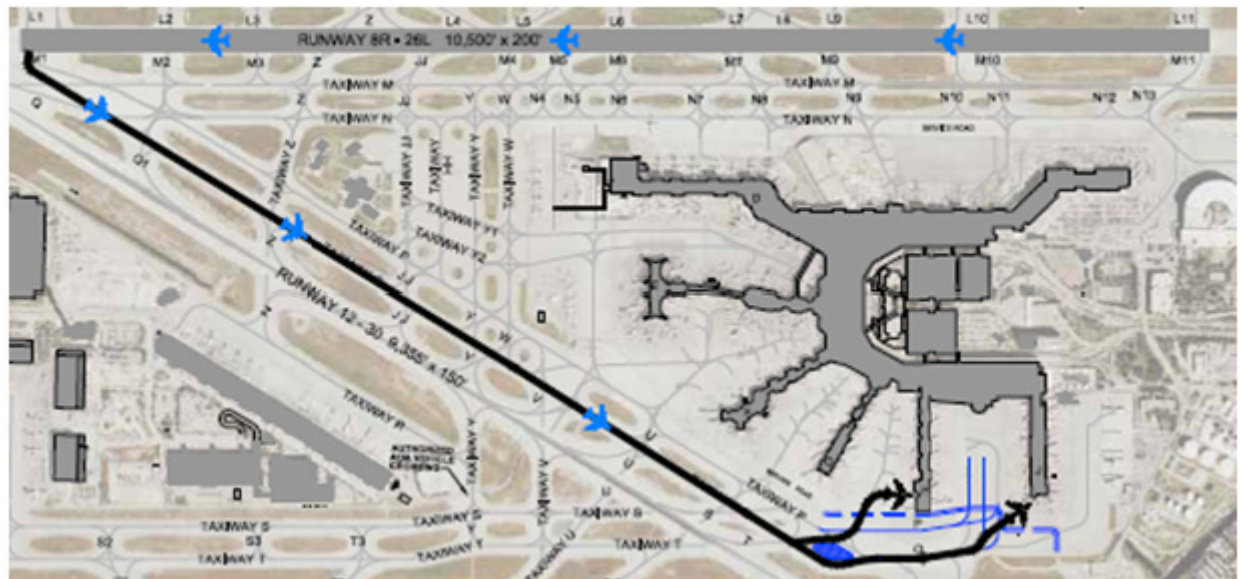
APPENDIX 20 - Group 6 Aircraft Operations

VISUAL DEPICTIONS

RY8R Departure



RY26L Arrivals



APPENDIX 21 - Miami ARTCC Airspace Sectors

