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15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

INSTRUMENT APPROACH PROCEDURE CHARTS



IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR takeoff minimums other than standard, are listed below. Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are textually described below, or published separately as a graphic procedure. If the ODP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or the applicable military volume, as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not specifically assigned an ODP, SID, or radar vector as part of an IFR clearance, an ODP may be required to be flown for obstacle clearance, even though not specifically stated in the IFR clearance. When doing so in this manner, ATC should be informed when the ODP being used contains a specified route to be flown, restrictions before turning, and/or altitude restrictions.

Some ODPs, which are established solely for obstacle avoidance, require a climb in visual conditions to cross the airport, a fix, or a NAVAID in a specified direction, at or above a specified altitude. These procedures are called Visual Climb Over Airport (VCOA). To ensure safe and efficient operations, the pilot must verbally request approval from ATC to fly the VCOA when requesting their IFR clearance.

At some locations where an ODP has been established, a diverse vector area (DVA) may be created to allow radar vectors to be used in lieu of an ODP. DVA information will state that headings will be as assigned by ATC and climb gradients, when applicable, will be published immediately following the specified departure procedure.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard takeoff rules and establishes takeoff minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) takeoff minima are published below. For military takeoff minima, refer to appropriate service directives.

NAME	TAKEOFF MINIMUMS	NAME	TAKEOFF MINIMUMS
AGUADILLA, PR		APALACHICOLA, FL	
RAFAEL HERNANDEZ (BQN)		APALACHICOLA RGNL-CLEVE	
TAKEOFF MINIMUMS AND (OBSTACLE)		RANDOLPH FIELD (AAF)	
DEPARTURE PROCEDURES		TAKEOFF MINIMUMS AND (OBSTACLE)	
ORIG 09071 (FAA)		DEPARTURE PROCEDURES	
DEPARTURE PROCEDURE: Rwy 8 , climb on a		AMDT 1A 14205 (FAA)	
heading between 262° CW to 158° from DER. Rwy		NOTE: Rwy 6 , trees beginning 1152' from DER, 97'	
26 , climb on a heading between 230° CW to 082°		left of centerline, up to 83' AGL/101' MSL. Trees	
from DER.		beginning 22' from DER, 14' right of centerline, up to	
NOTE: Rwy 8 , vehicles on roadway beginning 1489'		89' AGL/108' MSL. Rwy 14 , trees beginning 32' from	
from DER, left and right of centerline, up to 15'		DER, 63' left of centerline, up to 78' AGL/97' MSL.	
AGL/242' MSL. Rwy 26 , vehicles on roadway		Trees beginning 2137' from DER, 67' right of	
beginning 751' from DER, left and right of centerline,		centerline, up to 89' AGL/99' MSL. Rwy 18 , tree	
up to 17' AGL/275' MSL. Trees beginning 939' from		beginning 513' from DER, 193' right of centerline,	
DER, 447' right of centerline, up to 100' AGL/343'		100' AGL/120' MSL. Rwy 24 , trees beginning 71'	
MSL.		from DER, 77' left of centerline, up to 76' AGL/88'	
		MSL. Poles beginning 583' from DER, 268' left of	
		centerline, up to 28' AGL/47' MSL. Bush 1018' from	
		DER, 394' left of centerline, 30' AGL/47' MSL. Rwy	
		32 , trees beginning 52' from DER, 88' left of	
		centerline, up to 69' AGL/82' MSL. Trees beginning	
		137' from DER, 75' right of centerline, up to 71'	
		AGL/87' MSL. Rwy 36 , trees beginning 3408' from	
		DER, 327' left of centerline, 100' AGL/113' MSL. Tree	
		1397' from DER, 441' right of centerline, 100'	
		AGL/109' MSL.	

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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

APOPKA, FL

ORLANDO APOPKA (X04)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 12264 (FAA)

TAKEOFF MINIMUMS: **Rwy 15**, 300-2 or std. w/min. climb of 263' per NM to 400. **Rwy 33**, 400-1% or std. w/min. climb of 325' per NM to 600.

NOTE: **Rwy 15**, trees beginning at DER, 173' left of centerline, up to 100' AGL/229' MSL. Railroad and vehicles beginning at DER, 181' left of centerline, up to 23' AGL/152' MSL. Trees beginning 214' from DER, 552' right of centerline, up to 100' AGL/189' MSL.

Poles beginning 230' from DER, 239' left of centerline, up to 49' AGL/178' MSL. Tower 5781' from DER, 1326' left of centerline, 19' AGL/317' MSL. **Rwy 33**, trees beginning 2' from DER, 183' left of centerline, up to 100' AGL/249' MSL. Poles beginning 7' from DER, 61' right of centerline, up to 49' AGL/198' MSL. Railroad and vehicles beginning 36' from DER, 90' right of centerline, up to 23' AGL/172' MSL. Antenna 1166' from DER, 538' left of centerline, 29' AGL/173' MSL. Tower 1.2 NM from DER, 2338' left of centerline, 350' AGL/421' MSL.

ARCADIA, FL

ARCADIA MUNI (X06)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14149 (FAA)

NOTE: **Rwy 5**, trees beginning 6' from DER, 107' left of centerline, up to 20' AGL/81' MSL. **Rwy 23**, vehicle on road 234' from DER, 538' right of centerline 15' AGL/74' MSL. Trees beginning 315' from DER, 120' left of centerline, up to 50' AGL/109' MSL. Trees beginning 340' from DER, 435' right of centerline, up to 40' AGL/95' MSL. Building 449' from DER, 409' left of centerline, 25' AGL/84' MSL.

AVON PARK, FL

AVON PARK EXECUTIVE (AVO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 09351 (FAA)

TAKEOFF MINIMUMS: **Rwy 5**, 300-1 or std. w/ min. climb of 430' per NM to 500. **Rwy 10**, 300-1 or std. w/ min. climb of 230' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to DER. **Rwy 19**, 300-1 or std. w/ min. climb of 230' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to DER. **Rwy 28**, 300-1 or std. w/ min. climb of 230' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to DER. Numerous trees beginning 298' from DER, 149' right to 229' left of centerline, up to 100' AGL/269' MSL. **Rwy 23**, trees beginning 52' from DER, 118' right of centerline, up to 26' AGL/186' MSL. Trees beginning 23' from DER, 93' left of centerline, up to 38' AGL/198' MSL. Power lines beginning 2691' from DER, 1019' left to 2034' right of centerline, up to 79' AGL/235' MSL. Buildings and light poles beginning 1491' from DER, 187' left of centerline, up to 40' AGL/194' MSL. Power pylons beginning 2082' from DER, 935' left to 252' right of centerline, up to 79' AGL/233' MSL.

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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BARTOW, FL

BARTOW MUNI (BOW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 08157 (FAA)

NOTE: **Rwy 5**, trees beginning 816' from DER, 7' left of centerline, up to 79' AGL/198' MSL. Trees beginning 164' from DER, 9' right of centerline, up to 65' AGL/184' MSL.

Rwy 9L, vehicles on roadway and trees beginning 16' from DER, 19' left of centerline, up to 55' AGL/174' MSL. Trees beginning 49' from DER, 54' right of centerline, up to 54' AGL/173' MSL. **Rwy 9R**, trees beginning 637' from DER, 113' left of centerline, up to 64' AGL/173' MSL. Trees beginning 1311' from DER, 253' right of centerline, up to 69' AGL/178' MSL. **Rwy 23**, trees beginning 143' from DER, 87' left of centerline, up to 72' AGL/191' MSL. Trees beginning 419' from DER, 33' right of centerline, up to 100' AGL/239' MSL. **Rwy 27L**, trees beginning 939' from DER, 644' left of centerline, up to 100' AGL/249' MSL. Trees beginning 2007' from DER, 517' right of centerline, up to 36' AGL/175' MSL. Tower 2880' from DER, 1015' left of centerline, 50' AGL/188' MSL. **Rwy 27R**, trees beginning 2433' from DER, 1069' left of centerline, up to 100' AGL/249' MSL. Vehicles on roadway, poles and multiple trees beginning 1179' from DER, 260' right of centerline, up to 100' AGL/249' MSL.

BOCA RATON, FL

BOCA RATON (BCT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 06271 (FAA)

TAKEOFF MINIMUMS: **Rwy 23**, 300-1, or std. w/ a min. climb of 230' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to DER.

NOTE: **Rwy 5**, numerous trees and poles beginning 185' from DER, 20' left of centerline, up to 35' AGL/49' MSL. Numerous trees and poles beginning 6' from DER, 267' right of centerline, up to 28' AGL/45' MSL. **Rwy 23**, numerous trees, poles, and buildings beginning 278' from DER, 41' left of centerline, up to 137' AGL/154' MSL. Numerous trees, poles and buildings beginning 626' from DER, 171' right of centerline, up to 154' AGL/171' MSL.

BONIFAY, FL

TRI COUNTY (1J0)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 88098 (FAA)

DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 2000 before turning west.



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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BROOKSVILLE, FL

BROOKSVILLE-TAMPA BAY RGNL (BKV) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG-A 14205 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, 300-1½ or std. w/ a min. climb of 220' per NM to 300, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1200' prior to DER.

NOTE: **Rwy 3**, obstruction light and trees beginning 297' from DER, 34° right of centerline, up to 81' AGL/151' MSL. Trees beginning 1681' from DER, 29° left of centerline, up to 82' AGL/153' MSL. **Rwy 9**, trees 9' from DER, 287' right of centerline, up to 69' AGL/73' MSL. Trees beginning 2021' left and right of centerline, up to 92' AGL/171' MSL. **Rwy 21**, pole and trees beginning 46' from DER, 27° right of centerline, up to 70' AGL/138' MSL. Building and trees beginning 108' from DER, 39° left of centerline, up to 85' AGL/155' MSL. **Rwy 27**, trees 2143' from DER, 891' left of centerline, up to 89' AGL/189' MSL. Trees 475' from DER, 1684' right of centerline, up to 99' AGL/199' MSL.

CAPE CANAVERAL AFS SKID STRIP (KXMR)

COCOA BEACH, FL TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 1, 14261

DEPARTURE PROCEDURES: **Rwy 13**, diverse departure authorized. **Rwy 31**, diverse departure authorized 322° CCW to 143° only.

TAKE-OFF OBSTACLES: **Rwy 13**, terrain 254' from DER, 568' right of cntrln, 16' MSL. Terrain 12' from DER, 372' right of cntrln, 13' MSL. Terrain at DER, 434' right of cntrln, 13' MSL. **Rwy 31**, contour and trees 3783' from DER, 1325' left of cntrln, 0' AGL/22' MSL. Contour and trees 4269' from DER, 236' right of cntrln, 0' AGL/27' MSL. Light pole 1795' from DER, 498' left of cntrln, 0' AGL/8' MSL. Pylon 4172' from DER, 380' right of cntrln, 56' AGL/79' MSL. Contour and trees 4276' from DER, 545' left of cntrln, 0' AGL/20' MSL. Pylon 3795' from DER, 363' left of cntrln, 56' AGL/77' MSL. Contour and trees 2042' from DER, 162' right of cntrln, 0' AGL/47' MSL. Contour and trees 2909' from DER, 1618' left of cntrln, 0' AGL/28' MSL. Pylon 3974' from DER, 8' right of cntrln, 56' AGL/83' MSL. Pylon 3426' from DER, 1073' left of cntrln, 56' AGL/66' MSL. Pylon 3627' from DER, 688' left of cntrln, 56' AGL/71' MSL.

CHARLOTTE AMALIE, ST. THOMAS, VI

CYRIL E. KING (STT) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 1 08157 (FAA)

TAKEOFF MINIMUMS: **Rwy 10**, 400-1 with minimum climb of 462' per NM to 1400 or 2100-2½ for climb in visual conditions. **Rwy 28**, 800-3 or std. w/ min. climb of 366' per NM to 1000.

DEPARTURE PROCEDURE: **Rwy 10**, climbing right turn heading 120° to 2000 before turning north or for climb in visual conditions, cross Cyril E King airport at or above 2000 before proceeding on course. **Rwy 28**, climb heading 280° to 2000 before turning north.

NOTE: **Rwy 10**, antenna on building 258' from DER, 485' left of centerline, 25' AGL/41' MSL. Multiple trees beginning 729' from DER, 244' right of centerline up to 100' AGL/259' MSL. Pole 300' from DER, 430' right of centerline, 23' AGL/39' MSL. **Rwy 28**, antenna 33' from DER, 412' left of centerline, 16' AGL/29' MSL. Bush 175' from DER, 178' right of centerline, 2' AGL/29' MSL. Bush 206' from DER, 121' left of centerline, 2' AGL/29' MSL. Trees beginning 2,39 NM from DER, 4351' right of centerline, 100' AGL/710' MSL.

CHRISTIANSTED, ST. CROIX, VI

HENRY E. ROHLSEN (STX) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 9, 14149 (FAA)

TAKEOFF MINIMUMS: **Rwy 10**, 300-1½ or std. w/min. climb of 300' per NM to 300.

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 108° to 1300 before proceeding on course. **Rwy 28**, climb heading 277° to 1200 before proceeding on course.

NOTE: **Rwy 10**, bushes beginning 103' from DER, 283' right of centerline, up to 10' AGL/32' MSL. Pole 794' from DER, 572' right of centerline, up to 29' AGL/44' MSL. Bushes beginning 127' from DER, 324' left of centerline, up to 10' AGL/34' MSL. Pole 595' from DER, 653' left of centerline, up to 41' AGL/62' MSL. Trees beginning 935' from DER, 562' left of centerline, up to 29' AGL/70' MSL. Refinery buildings beginning 5289' from DER, 798' left of centerline, up to 203' AGL/231' MSL. **Rwy 28**, trees beginning 517' from DER, 553' right of centerline, up to 53' AGL/114' MSL. Tower 1499' from DER, 802' right of centerline, 50' AGL/140' MSL.

CLEWISTON, FL

AIRGLADES (2IS) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG 09071 (FAA)

NOTE: **Rwy 31**, vehicle on road, 362' from DER, 578' right of centerline, 15' AGL/38' MSL.

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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND**DIVERSE VECTOR AREA (RADAR VECTORS)****CRESTVIEW, FL**

BOB SIKES (CEW)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 08213 (FAA)

NOTE: **Rwy 17**, trees beginning 92' from DER, 248' right of centerline up to 100' AGL/203' MSL. Trees beginning 171' from DER, 9' left of centerline, up to 100' AGL/205' MSL. **Rwy 35**, trees beginning 329' from DER, 222' right of centerline up to 100' AGL/272' MSL. Trees beginning 152' from DER, 184' left of centerline, up to 100' AGL/278' MSL.

CROSS CITY, FL

CROSS CITY (CTY)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG 08157 (FAA)

NOTE: **Rwy 4**, trees beginning 527' from DER, left and right of centerline, up to 100' AGL/149' MSL. **Rwy 13**, trees beginning 158' from DER, left and right of centerline, up to 100' AGL/149' MSL. Tank 3302 from DER, 927' right of centerline, 101' AGL/141' MSL.

Rwy 22, trees beginning 1510' from DER, left and right of centerline, up to 100' AGL/149' MSL. Power lines 2807' from DER, 58' left of centerline, 73' AGL/114' MSL. **Rwy 31**, trees beginning 195' from DER, left and right of centerline, up to 100' AGL/149' MSL.

CRYSTAL RIVER, FL

CRYSTAL RIVER-CAPTAIN TOM DAVIS

FIELD (CGC)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG-A 14345 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, std. w/ min. climb of 260' per NM to 600, or 500-2% with min. climb of 210' per NM to 900, or 900-2% for climb in visual conditions. **Rwys 18, 36**, NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 096° to 700 before turning right, or for climb in visual conditions cross Crystal River-Tom Davis Field at or above 800 before proceeding on course.

NOTE: **Rwy 9**, vehicles on road beginning 6' from DER, from left to right of centerline, up to 15' AGL/24' MSL. Multiple trees beginning 364' from DER, from 680' left of centerline to 820' right of centerline, up to 100' AGL/129' MSL. **Rwy 27**, trees 17' from DER, 484' right of centerline, up to 100' AGL/109' MSL. Vehicles on road beginning 368' from DER, from left to right of centerline, up to 15' AGL/24' MSL. Power line beginning 474' from DER, from left to right of centerline, up to 26' AGL/45' MSL. Building 916' from DER, on centerline, 26' AGL/35' MSL. Multiple trees beginning 762' from DER, from 915' left of centerline to 641' right of centerline, up to 100' AGL/119' MSL.

DAYTONA BEACH, FL

DAYTONA BEACH INTL (DAB)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 4 09239 (FAA)

NOTE: **Rwy 7L**, multiple trees beginning 1834' from DER, 646' right of centerline, up to 64' AGL/95' MSL. **Rwy 7R**, tower, trees beginning 1042' from DER, 413' right of centerline, up to 100' AGL/135' MSL. Hanger, multiple trees beginning 901' from DER, 55' left of centerline, up to 67' AGL/101' MSL.

Rwy 16, multiple trees beginning 57' from DER, 19' left of centerline, up to 75' AGL/104' MSL. Multiple trees beginning 871' from DER, 3' right of centerline, up to 83' AGL/112' MSL.

Rwy 25L, multiple trees beginning 123' from DER, 75' left of centerline, up to 80' AGL/109' MSL. Multiple trees and antenna beginning 1002' from DER, 85' right of centerline, up to 72' AGL/101' MSL. **Rwy 25R**, multiple trees, signs, and poles beginning 428' from DER, 38' right of centerline, up to 88' AGL/115' MSL. Multiple trees beginning 1254' from DER, 41' left of centerline, up to 84' AGL/108' MSL. **Rwy 34**, multiple trees, building and obstruction light beginning 1013' from DER, 90' left of centerline, up to 82' AGL/111' MSL. Multiple trees, beginning 1108' from DER, 6' right of centerline, up to 78' AGL/107' MSL.

DEFUNIAK SPRINGS, FL

DEFUNIAK SPRINGS (54J)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 09127 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, 400-2½ or std. w/ min. climb of 254' per NM to 800. **Rwys 18,36**, NA - dirt.

NOTE: **Rwy 9**, multiple roads, railroad, building, fence, light on pole, poles, signs, towers and trees beginning 25' from DER, 1' left of centerline, up to 431' AGL/617' MSL. Multiple trees and roads beginning 71' from DER, 118' right of centerline, up to 74' AGL/343' MSL. **Rwy 27**, multiple trees, poles, fences, roads and building beginning 8' from DER, 39' left of centerline, up to 64' AGL/353' MSL. Multiple trees, poles, roads, buildings and light on pole beginning 82' from DER, 15' right of centerline, up to 53' AGL/342' MSL.

DELAND, FLDELAND MUNI/SIDNEY H. TAYLOR FIELD
(DED)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 3 06159 (FAA)

DEPARTURE PROCEDURE: **Rwy 5**, climb via heading 054° to 1800 before proceeding on course. **Rwy 12**, climb via heading 122° to 1800 before proceeding on course. **Rwy 23**, climb via heading 234° to 1800 before proceeding on course. **Rwy 30**, climb via heading 302° to 1800 before proceeding on course.

NOTE: **Rwy 5**, numerous trees beginning 64' from DER, 245' left of centerline, up to 100' AGL/143' MSL. Numerous trees beginning 869' from DER, 410' right of centerline, up to 100' AGL/154' MSL. **Rwy 12**, numerous trees beginning 154' from DER, 129' left of centerline, up to 100' AGL/153' MSL. Numerous trees beginning 456' from DER, 289' right of centerline, up to 100' AGL/162' MSL. **Rwy 30**, numerous trees beginning 624' from DER, 9' left of centerline, up to 100' AGL/156' MSL. Numerous trees beginning 159' from DER, 341' right of centerline, up to 100' AGL/162' MSL. **Rwy 23**, light pole and numerous trees beginning 381' from DER, 44' right of centerline, up to 100' AGL/132' MSL. Pole, building, vent on building, hangar, and trees beginning 164' from DER, 26' left of centerline, up to 100' AGL/129' MSL.





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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

DESTIN, FL

DESTIN-FORT WALTON BEACH (DTS)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG-A 10182 (FAA)

TAKEOFF MINIMUMS: **Rwy 14**, 200-1 or std. w/ min. climb of 252' per NM to 300.

DEPARTURE PROCEDURE: **Rwy 14**, climb runway heading to 400 before making turn.

NOTE: **Rwy 14**, trees beginning 175' from DER, 351' left of centerline, up to 50' AGL/71' MSL. Buildings/rods beginning 3753' from DER, 76' left of centerline, up to 150' AGL/176' MSL. Buildings/rods 261' from DER, 76' right of centerline, up to 129' AGL/139' MSL.

Rwy 32, trees beginning 65' from DER, 14' left of centerline, up to 50' AGL/83' MSL. Buildings/poles beginning 240' from DER, 457' left of centerline, up to 30' AGL/54' MSL. Trees beginning 78' from DER, 17' right of centerline, up to 50' AGL/84' MSL.

DUNNELLON, FL

MARION COUNTY (X35)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 12152 (FAA)

NOTE: **Rwy 5**, trees beginning 308' from DER, 265' right of centerline, 100' AGL/179' MSL. Trees beginning 114' from DER, 170' left of centerline, 100' AGL/199' MSL. **Rwy 9**, trees beginning 85' from DER, 276' right of centerline, 100' AGL/164' MSL. Trees beginning 82' from DER, 311' left of centerline, 100' AGL/164' MSL. **Rwy 23**, trees beginning 1100' from DER, 431' right of centerline, 100' AGL/179' MSL. Trees beginning 601' from DER, 610' left of centerline, 100' AGL/169' MSL. **Rwy 27**, trees beginning 268' from DER, 404' right of centerline, 100' AGL/169' MSL. Trees beginning 363' from DER, 273' left of centerline, 100' AGL/179' MSL.

FERNANDINA BEACH, FL

FERNANDINA BEACH MUNI (FHB)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
AMDT 1 13262 (FAA)

NOTE: **Rwy 4**, trees beginning 317' from DER, 11' left of centerline, up to 100' AGL/110' MSL. Wall 77' from DER, 301' left of centerline, 6' AGL/20' MSL. Vehicle on road 552' from DER, 437' left of centerline, 15' AGL/29' MSL. Poles beginning 178' from DER, 441' left of centerline, 39' AGL/52' MSL. Fence 71' from DER, 311' left of centerline, 10' AGL/23' MSL. Trees beginning 660' from DER, 4' right of centerline, up to 105' AGL/115' MSL. Signs beginning 112' from DER, 292' right of centerline, up to 78' AGL/92' MSL. **Rwy 9**, trees beginning 210' from DER, 15' left of centerline, up to 92' AGL/107' MSL. Vehicle on road 463' from DER, 252' left of centerline, 15' AGL/30' MSL. Trees beginning 39' from DER, 17' right of centerline, up to 82' AGL/97' MSL. Vehicle on road beginning 422' from DER, 129' right of centerline, 15' AGL/30' MSL. **Rwy 13**, trees beginning 503' from DER, 7' left of centerline, up to 84' AGL/99' MSL. Vehicle on road beginning 426' from DER, 309' left of centerline, 15' AGL/up to 35' MSL. Trees beginning 19' from DER, 12' right of centerline, up to 85' AGL/100' MSL. Vehicle on road beginning 355' from DER, 70' right of centerline, up to 15' AGL/31' MSL. Multiple buildings beginning 4513' from DER, 286' right of centerline, up to 119' AGL/141' MSL. **Rwy 22**, trees beginning 55' from DER, 118' left of centerline, up to 78' AGL/83' MSL. Fence beginning 64' from DER, 267' left of centerline, 10' AGL/22' MSL. Trees beginning 42' from DER, 210' right of centerline, up to 95' AGL/100' MSL. Navaid 10' from DER, 85' right of centerline, 2' AGL/14' MSL. Boat mast 2903' from DER, 336' right of centerline, up to 86' MSL. **Rwy 27**, trees beginning 195' from DER, 30' left of centerline, up to 99' AGL/104' MSL. Trees beginning 836' from DER, 42' right of centerline, up to 96' AGL/101' MSL. Bush 338' from DER, 186' right of centerline, 11' AGL/21' MSL. **Rwy 31**, trees beginning 29' from DER, 216 left of centerline, up to 96' AGL/101' MSL. Bush 24' from DER, 379' left of centerline, 11' AGL/21' MSL. Trees beginning 646' from DER, 561' right of centerline, up to 71' AGL/81' MSL.





15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

FORT LAUDERDALE, FL

FORT LAUDERDALE EXECUTIVE (FXE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 14261 (FAA)

DEPARTURE PROCEDURE: **Rwy 27**, climb heading 271° to 600 before turning left.

NOTE: **Rwy 9**, building 833' from DER, 721' left of centerline, 40' AGL/51' MSL. Tree 1903' from DER, 484' right of centerline, 85' AGL/89' MSL. Building 4130' from DER, 41' right of centerline, 122' AGL/129' MSL. Building 4720' from DER, 78' right of centerline 150' AGL/159' MSL. **Rwy 13**, buildings beginning 2' from DER, 465' left and 303' right of centerline, up to 32' AGL/42' MSL. Trees, poles and buildings beginning 452' from DER, 290' left and 167' right of centerline up to 45' AGL/54' MSL. Trees beginning 1976' from DER, 259' right of centerline, up to 92' AGL/101' MSL. Tower 5130' from DER, 1826' right of centerline, 139' AGL/147' MSL.

Rwy 27, trees beginning 2048' from DER, 256' left of centerline up to 105' AGL/116' MSL. **Rwy 31**, trees and pole beginning 703' from DER, 338' right of centerline, up to 66' AGL/81' MSL. Building 1289' from DER, 290' left of centerline, 43' AGL/53' MSL.

FORT LAUDERDALE-HOLLYWOOD INTL (FLL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 14261 (FAA)

DEPARTURE PROCEDURE: **Rwy 28L**, climb heading 276° to 700 before turning left. **Rwy 28R**, climb heading 276° to 500 before turning left.

NOTE: **Rwy 10L**, approach light 296' from DER, on centerline, 11' AGL/15' MSL. Building 469' from DER, 378' left of centerline, 13' AGL/18' MSL. Lights beginning 496' from DER, from 28' left to 27' right of centerline, up to 16' AGL/20' MSL. Train on railroad beginning 510' from DER, from 632' left to on centerline, 23' AGL/30' MSL. Light poles beginning 666' from DER, on centerline, up to 32' AGL/36' MSL. Poles and trees beginning 1290' from DER, 548' left and 633' right of centerline, up to 49' AGL/53' MSL. Trees and pole beginning 1975' from DER, 827' left and 271' right of centerline, up to 79' AGL/83' MSL. Bridge 2429' from DER, 1123' left of centerline, 65' AGL/70' MSL. **Rwy 10R**, trees beginning 199' from DER, 259' left of centerline, up to 21' AGL/86' MSL. Trees beginning 273' from DER, 181' right of centerline, up to 31' AGL/96' MSL. Trees beginning 495' from DER, 144' left of centerline, up to 44' AGL/109' MSL. **Rwy 28L**, tree 491' from DER, 444' left of centerline, 24' AGL/34' MSL. Trees beginning 773' from DER, 399' left of centerline, up to 80' AGL/90' MSL. Poles and trees beginning 865' from DER, 534' right of centerline, up to 81' AGL/91' MSL. Buildings, trees, and signs beginning 1317' from DER, 455' left of centerline, up to 100' AGL/109' MSL. Trees and pole beginning 1636' from DER, 290' right of centerline, up to 90' AGL/100' MSL. Towers beginning 3190' from DER, 666' right of centerline, up to 108' AGL/114' MSL. **Rwy 28R**, building and light pole beginning 260' from DER, 253' left of centerline and on centerline, up to 14' AGL/18' MSL. Vehicles on road beginning 323' from DER, from 28' left to 281' right of centerline, 15' AGL/21' MSL. Approach lights beginning 441' from DER, from 28' left to 27' right of centerline, up to 16' AGL/25' MSL. Vehicles on road beginning 455' from DER, from 647' left to 685' right of centerline, up to 17' AGL/33' MSL. Approach lights beginning 652' from DER, on centerline, up to 24' AGL/33' MSL. Train on railroad beginning 849' from DER, from 683' left to 379' right of centerline, up to 23' AGL/34' MSL. Trees and sign beginning 1017' from DER, 122' left of centerline, up to 63' AGL/72' MSL. Trees beginning 2231' from DER, 354' left of centerline, up to 88' AGL/97' MSL. Trees beginning 2286' from DER, 530' right of centerline, up to 108' AGL/112' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



FORT MYERS, FL

PAGE FIELD (FMY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 09239 (FAA)

NOTE: **Rwy 5**, bush, train, and multiple trees beginning 81' from DER, 52' right of centerline, up to 73' AGL/90' MSL. Multiple antennas and trees beginning 330' from DER, 81' left of centerline, up to 70' AGL/86' MSL.

Rwy 13, bush, road, buildings and multiple trees beginning 66' from DER, 138' right of centerline, up to 52' AGL/66' MSL. Rod on light pole 306' from DER, 375' right of centerline, up to 22' AGL/37' MSL. Trees 644' from DER, 375' right of centerline, up to 72' AGL/87' MSL. Fence 241' from DER, 138' left of centerline, 10' AGL/24' MSL. Obstruction light on building 829' from DER, 447' left of centerline, 34' AGL/48' MSL. **Rwy 23**, sign, concrete pole, obstruction light on pole, tree and antenna beginning 98' from DER, 95' right of centerline, up to 36' AGL/49' MSL. Vehicles, concrete pole, obstruction light on pole, and trees beginning 288' from DER, 8' left of centerline, up to 62' AGL/75' MSL. **Rwy 31**, concrete pole, power poles, light poles, floodlights, vehicles, trees, antenna towers and bridge beginning 5' from DER, 285' right of centerline up to 113' AGL/126' MSL. Power poles, concrete pole and trees beginning 67' from DER, 235' left of centerline, up to 74' AGL/88' MSL.

SOUTHWEST FLORIDA INTL (RSW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 07074 (FAA)

NOTE: **Rwy 6**, trees beginning 1398' from DER, 582' left of centerline, up to 84' AGL/104' MSL. Trees beginning 1763' from DER, 860' right of centerline, up to 95' AGL/115' MSL. **Rwy 24**, tree 1692' from DER, 916' right of centerline, 78' AGL/98' MSL.



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

FORT PIERCE, FL

ST. LUCIE COUNTY INTL (FPR) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 4 12152 (FAA)

TAKEOFF MINIMUMS: **Rwys 10L, 28R, NA-Environmental.**

NOTE: **Rwy 10R**, fence, bush, pole, and trees beginning 24' from DER, 195' left of centerline, up to 79' AGL/133' MSL. Tower and trees beginning 287' from DER, 265' right of centerline, up to 98' AGL/117' MSL. **Rwy 14**, trees beginning 1081' from DER, 528' left of centerline, up to 39' AGL/63' MSL. Pole and trees beginning 274' from DER, 488' right of centerline, up to 57' AGL/81' MSL. **Rwy 28L**, airport sign and trees beginning 41' from DER, 256' left of centerline, up to 72' AGL/91' MSL. Navaid and trees beginning 40' from DER, 152' right of centerline, up to 58' AGL/77' MSL. **Rwy 32**, trees beginning 1344' from DER, 123' left of centerline, up to 62' AGL/86' MSL. Fence and trees beginning 186' from DER, 153' right of centerline, up to 72' AGL/96' MSL.

GAINESVILLE, FL

GAINESVILLE RGNL (GNV) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

NOTE: **Rwy 7**, multiple trees beginning 1397' from DER, 348' left of centerline, up to 99' AGL/229' MSL. Multiple trees beginning 1444' from DER, 144' right of centerline, up to 72' AGL/202' MSL. **Rwy 11**, multiple trees beginning 653' from DER, 438' right of centerline, up to 30' AGL/134' MSL. Tree 522' from DER, 402' left of centerline, 18' AGL/122' MSL. **Rwy 25**, tower and multiple trees beginning 2415' from DER, 9' left of centerline, up to 126' AGL/291' MSL. Obstruction light on localizer and multiple trees beginning 208' from DER, 463' right of centerline, up to 82' AGL/243' MSL. **Rwy 29**, multiple trees beginning 1279' from DER, 8' right of centerline, up to 76' AGL/233' MSL. Multiple trees beginning 2679' from DER, 366' left of centerline, up to 88' AGL/240' MSL.

HOLLYWOOD, FL

NORTH PERRY (HWO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 5 13234 (FAA)

TAKEOFF MINIMUMS: **Rwys 10L, 10R**, std. w/min. climb of 500' per NM to 1400 or 1400-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 1R**, climb heading 006° to 900 before turning right. **Rwy 1L**, climb heading 006° to 900 before turning right. **Rwys 10R, 10L**, for climb in visual conditions cross North Perry airport at or above 1400 before proceeding on course, when executing VCOA, notify ATC prior to departure. **Rwys 19R, 19L**, climb heading 186° to 1300 before turning left. **Rwys 28R, 28L**, climb heading 276° to 1000 before proceeding on course.

NOTE: **Rwy 1R**, multiple trees beginning 54' from DER, 215' right of centerline, up to 60' AGL/68' MSL. Multiple trees beginning 1312' from DER, 85' left of centerline, up to 68' AGL/74' MSL. Multiple poles beginning 50' from DER, 341' right of centerline up to 62' AGL/68' MSL. Multiple poles beginning 979' from DER, 646' left of centerline, up to 49' AGL/55' MSL. Sign 106' from DER, 342' right of centerline, 7' AGL/13' MSL. **Rwy 1L**, vehicles on roadway beginning 45' from DER, 322' left of centerline, up to 15' AGL/22' MSL. Multiple trees beginning 169' from DER, 284' left of centerline up to 31' AGL/39' MSL. Multiple poles beginning 740' from DER, 376' left of centerline, up to 48' AGL/56' MSL. Multiple buildings beginning 163' from DER, 375' right of centerline up to 36' AGL/43' MSL. Multiple poles beginning 765' from DER, 386' right of centerline, up to 48' AGL/55' MSL. Multiple trees beginning 860' from DER, 2' left of centerline, up to 58' AGL/66' MSL. Multiple trees beginning 886' from DER, 46' right of centerline, up to 68' AGL/74' MSL. Crane 3214' from DER, 762' left of centerline, 111' AGL/117' MSL. Tower 3233' from DER, 1264' left of centerline, up to 150' AGL/158' MSL. **Rwy 10R**, pole 168' from DER, 543' right of centerline, 31' AGL/38' MSL. Buildings beginning 541' from DER, 377' right of centerline, up to 25' AGL/33' MSL. Multiple trees beginning 649' from DER, 20' right of centerline, up to 77' AGL/85' MSL. Multiple poles beginning 168' from DER, 543' left of centerline, up to 62' AGL/70' MSL. Multiple trees beginning 847' from DER, 152' left of centerline, up to 76' AGL/84' MSL. **Rwy 10L**, fence 113' from DER, 325' left of centerline, 8' AGL/14' MSL. Multiple trees beginning 272' from DER, 359' left of centerline, up to 39' AGL/46' MSL. Multiple poles beginning 660' from DER, 515' right of centerline, up to 61' AGL/69' MSL. Multiple trees beginning 1124' from DER, 67' right of centerline, up to 77' AGL/84' MSL. Pole 1085' from DER, 450' left of centerline, 40' AGL/47' MSL. Multiple trees beginning 1100' from DER, 44' left of centerline, up to 72' AGL/80' MSL. Tower 1.2 NM from DER, 2371' left of centerline, 194' AGL/204' MSL. **Rwy 19L**, vehicles on roadway 174' from DER, 222' right of centerline, up to 15' AGL/22' MSL. Multiple trees beginning 217' from DER, 35' right of centerline, up to 78' AGL/85' MSL. Multiple trees beginning 369' from DER, 20' left of centerline, up to 75' AGL/82' MSL. Building 288' from DER, 448' right of centerline, 15' AGL/23' MSL. Multiple buildings beginning 459' from DER, 478' left of centerline, up to 25' AGL/32' MSL. Multiple poles beginning 521' from DER, 29' left of centerline, up to 39' AGL/46' MSL. Multiple poles beginning 848' from DER, 99' right of centerline, up to 35' AGL/41' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

HOLLYWOOD, FL (CON'T)

NORTH PERRY (CON'T)

Rwy 19R, multiple poles beginning 843' from DER, 35° right of centerline, up to 36' AGL/43' MSL. Multiple poles beginning 1070' from DER, 49° left of centerline, up to 36' AGL/43' MSL. Multiple trees beginning 962' from DER, 24° right of centerline, up to 68' AGL/76' MSL. Multiple trees beginning 1169' from DER, 165° left of centerline, up to 78' AGL/85' MSL. Tower 1335' from DER, 211° left of centerline, 68' AGL/74' MSL.
Rwy 28L, tower 911' from DER, 605° right of centerline, 55' AGL/61' MSL. Multiple poles beginning 978' from DER, 39° right of centerline, up to 72' AGL/80' MSL. Multiple poles beginning 1115' from DER, 49° left of centerline, up to 39' AGL/48' MSL. Multiple trees beginning 1259' from DER, 309° left of centerline, up to 82' AGL/90' MSL. Multiple trees beginning 1309' from DER, 391° right of centerline, up to 104' AGL/112' MSL. Building 1626' from DER, 29° left of centerline, 60' AGL/69' MSL. Multiple buildings beginning 1996' from DER, 22° right of centerline, up to 60' AGL/67' MSL. **Rwy 28R**, multiple trees beginning 15' from DER, 28° left of centerline, up to 105' AGL/112' MSL. Multiple trees beginning 17' from DER, 116° right of centerline, up to 82' AGL/90' MSL. Multiple poles beginning 687' from DER, 38° left of centerline, up to 59' AGL/65' MSL. Multiple poles beginning 965' from DER, 65° right of centerline, up to 39' AGL/47' MSL. Building 1804' from DER, 981° left of centerline, 50' AGL/59' MSL.

HOMESTEAD, FL

HOMESTEAD GENERAL AVIATION (X51)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG-A 13346 (FAA)

DEPARTURE PROCEDURE: **Rwy 36**, climb on a heading between 186° CW 046° from DER or minimum climb of 461' per NM to 2500 for headings 047° through 185°. **Rwy 10**, climb on a heading between 096° CW 275° from DER or minimum climb of 512' per NM to 2500 for headings 276° through 095°. **Rwy 18**, climb heading 185° to 1100 before proceeding North or Northeast. **Rwy 28**, climb heading 276° to 1100 before proceeding East or Northeast.

NOTE: **Rwy 36**, fence 231' from DER, 457° left of centerline, 5' AGL/14' MSL. **Rwy 10**, building 170' from DER, 415° right of centerline, 17' AGL/26' MSL.

Rwy 28, light pole 118' from DER, 371° left of centerline, 26' AGL/35' MSL.

HOMESTEAD ARB (KHST)

HOMESTEAD, FL

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14317

DEPARTURE PROCEDURE: **Rwy 6**, Climb on a heading between 351° CW to 232° from DER. **Rwy 24**, Climb on a heading between 259° CCW to 053° from DER.

TAKE-OFF OBSTACLES: **Rwy 6**, Aircraft 37° inward of DER, 273° left of centerline, 65' AGL/70' MSL. Aircraft 37° inward of DER, 521° left of centerline, 65' AGL/70' MSL. Sign 54' from DER, 310° right of centerline, 5' AGL/8' MSL. Multiple trees 1697' from DER, 211° right of centerline, 25' AGL/28' MSL. Multiple trees 2005' from DER, 984° right of centerline, 89' AGL/94' MSL. Multiple trees 3468' from DER, 1335° right of centerline, 89' AGL/94' MSL. Multiple trees 3558' from DER, 355° left of centerline, 89' AGL/94' MSL. Multiple trees 3562' from DER, 394° right of centerline, 89' AGL/94' MSL. **Rwy 24**, Aircraft 37° inward of DER, 273° right of centerline, 65' AGL/70' MSL. Aircraft 37° inward of DER, 521° right of centerline, 65' AGL/70' MSL. Multiple trees 2401' from DER, 1143° right of centerline, up to 52' AGL/62' MSL. Multiple trees 2481' from DER, 790° right of centerline, up to 62' AGL/67' MSL.

HURLBURT FLD (KHRT)

MARY ESTHER, FL

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

TAKEOFF OBSTACLES: **Rwy 36**, 85' AGL tree, 3140' from DER, 707° right of centerline.

IMMOKALEE, FL

IMMOKALEE RGNL (IMM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 09239 (FAA)

TAKEOFF MINIMUMS: **Rwy 18**, 300-2½ or std. with a min. climb of 221' per NM to 500, or alternatively, with standard TAKEOFF minimums and a normal 200' per NM climb gradient, TAKEOFF must occur no later than 1900' prior to DER.

NOTE: **Rwy 9**, tree 45' from DER, 438° right of centerline, 4' AGL/38' MSL. Trees beginning 1144' from DER, 312° left of centerline, up to 100' AGL/134' MSL. **Rwy 18**, buildings beginning 255' from DER, 475° left of centerline, up to 16' AGL/50' MSL. Tree 2844' from DER, 1235° right of centerline, 100' AGL/134' MSL. Tower 1.7 NM from DER, 2984° right of centerline, 297' AGL/322' MSL. **Rwy 27**, fence 4' from DER, 473° right of centerline, 6' AGL/41' MSL. Trees beginning 187' from DER, 150° right of centerline, up to 40' AGL/79' MSL. Vehicle on road beginning 669' from DER, 508° right of centerline, 15' AGL/54' MSL. Trees beginning 732' from DER, 231° left of centerline, up to 53' AGL/87' MSL. Pole 1223' from DER, 50° right of centerline, 35' AGL/70' MSL. Pole 1320' from DER, 258° left of centerline, 35' AGL/69' MSL. **Rwy 36**, trees beginning 192' from DER, 262° left of centerline, up to 22' AGL/61' MSL. Trees beginning 411' from DER, 173° right of centerline, up to 23' AGL/57' MSL.





15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

INVERNESS, FL

INVERNESS (INF)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG 12096 (FAA)

TAKEOFF MINIMUMS: **Rwy 1**, 300-1% or std. w/min. climb of 420' per NM to 500'.

NOTE: **Rwy 1**, terrain beginning 110' from DER, 27' left of centerline, up to 49' MSL. Terrain beginning 137' from DER, 238' right of centerline, up to 49' MSL. Trees beginning 110' from DER, 293' left of centerline, up to 100' AGL/149' MSL. Vehicles on roadway 598' from DER, across centerline, up to 15' AGL/65' MSL. Trees beginning 785' from DER, on centerline, up to 100' AGL/149' MSL. Tower 5479' from DER, 1312' left of centerline, up to 220' AGL/279' MSL. Tower 5764' from DER, 1596' left of centerline, up to 164' AGL/250' MSL. Trees beginning 164' from DER, 238' right of centerline, up to 100' AGL/149' MSL. **Rwy 19**, trees beginning 340' from DER, 239' left of centerline, up to 100' AGL/169' MSL. Trees beginning 793' from DER, 596' right of centerline, up to 100' AGL/189' MSL. Trees beginning 2066' from DER, on centerline, up to 100' AGL/209' MSL. Trees beginning 2523' from DER, 274' right of centerline, up to 100' AGL/209' MSL.

ISLA DE VIEQUES, PR

ANTONIO RIVERA RODRIGUEZ (VQS)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2 10042 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, 500-2½ w/ min. climb of 260' per NM to 900 or 1600-2½ for climb in visual conditions. **Rwy 27**, 500-2½ w/ min. climb of 280' per NM to 2700 or std. w/ min. climb of 570' per NM to 1300 or 1600-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 9**, climb heading 090° to 900 before proceeding on course or for climb in visual conditions, cross Antonio Rivera Rodriguez airport at or above 1500 before proceeding on course. **Rwy 27**, climb heading to 270° to 2700 before proceeding on course or for climb in visual conditions, cross Antonio Rivera Rodriguez airport at or above 1500 before proceeding on course.

NOTE: **Rwy 9**, vehicles on roadway beginning 26' from DER, left and right of centerline, up to 15' AGL/80' MSL. Trees beginning 70' from DER, 504' right of centerline, up to 100' AGL/165' MSL. Trees beginning 579' from DER, on centerline, up to 100' AGL/165' MSL. Trees beginning 1750' from DER, 956' right of centerline up to 100' AGL/493' MSL. **Rwy 27**, trees beginning 15' from DER, 225' left of centerline, up to 100' AGL/165' MSL. Trees beginning 16' from DER, 274' right of centerline, up to 100' AGL/165' MSL. Trees beginning 186' from DER, left and right of centerline, up to 100' AGL/165' MSL. Trees beginning 1206' from DER, 794' left of centerline, up to 100' AGL/493' MSL.

JACKSONVILLE, FL

CECIL (VQQ)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG 07186 (FAA)

NOTE: **Rwy 18L**, tree 1499' from DER, 699' right of centerline, 34' AGL/113' MSL.

HERLONG RECREATIONAL (HEG)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2 12096 (FAA)

DEPARTURE PROCEDURE: **Rwy 7**, climb heading 071° to 800 before turning right. **Rwy 11**, climb heading 116° to 700 before turning left.

NOTE: **Rwy 7**, trees beginning 236' from DER, 53' right of centerline, up to 100' AGL/184' MSL. Trees beginning 376' from DER, 237' left of centerline, up to 100' AGL/179' MSL. **Rwy 11**, trees beginning 18' from DER, 70' left of centerline, up to 100' AGL/184' MSL. Trees beginning 163' from DER, 77' right of centerline, up to 100' AGL/184' MSL. **Rwy 25**, trees beginning 436' from DER, 433' right of centerline, up to 100' AGL/174' MSL. Trees beginning 1363' from DER, 355' left of centerline, up to 100' AGL/174' MSL. **Rwy 29**, trees beginning 1491' from DER, 178' right of centerline, up to 100' AGL/184' MSL. Trees beginning 1872' from DER, 64' left of centerline, up to 100' AGL/179' MSL.

JACKSONVILLE EXECUTIVE AT CRAIG (CRG)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 4 13066 (FAA)

TAKEOFF MINIMUMS: **Rwy 23**, std. w/min. climb of 360' per NM to 1500 or 1300-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 23**, for climb in visual conditions: cross Jacksonville Executive at Craig airport at or above 1200 before proceeding on course. When executing VCOA, notify ATC prior to departure. **Rwy 5**, climb heading 051° to 500 before proceeding on course.

Rwy 14, climb heading 141° to 700 before turning right.

NOTE: **Rwy 5**, trees beginning 1617' from DER, 182' right of centerline, up to 100' AGL/143' MSL. Terrain beginning 17' from DER, beginning 179' left and right of centerline, 9' MSL. Trees beginning 1911' from DER, 113' left of centerline, up to 100' AGL/143' MSL. Pole and navaid beginning 571' from DER, 560' left of centerline, up to 41' AGL/82' MSL. **Rwy 14**, tree 2375' from DER, 905' right of centerline, 100' AGL/119' MSL. Terrain beginning 5' from DER, beginning 44' right and left of centerline, 56' MSL. Trees beginning 1848' from DER, 610' left of centerline, up to 100' AGL/128' MSL. **Rwy 23**, trees beginning 1601' from DER, 15' right of centerline, up to 100' AGL/119' MSL. Terrain beginning 9' from DER, beginning 278' left and right of centerline, 53' MSL. Trees beginning 519' from DER, 510' left of centerline, up to 100' AGL/133' MSL. Pole 1994' from DER, 580' left of centerline, 47' AGL/85' MSL. **Rwy 32**, trees beginning 494' from DER, 104' right of centerline, up to 67' AGL/99' MSL. Building 501' from DER, 251' right of centerline, 16' AGL/52' MSL. Terrain beginning 117' from DER, beginning 51' left and right of centerline, 50' MSL. Trees and bushes beginning 218' from DER, 222' left of centerline, up to 100' AGL/101' MSL.



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

JACKSONVILLE, FL (CON'T)

JACKSONVILLE INTL (JAX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 11349 (FAA)

NOTE: **Rwy 8**, bush 82' from DER, 261' right of centerline, 6' AGL/ 30' MSL. Trees beginning 2736' from DER, 428' right of centerline, up to 89' AGL/ 118' MSL. **Rwy 14**, electric equipment 79' from DER, 292' left of centerline, 3' AGL/27' MSL. Pole 754' from DER, 699' left of centerline, 33' AGL/ 52' MSL. Trees beginning 1761' from DER, 562' left of centerline, up to 100' AGL/ 121' MSL. Trees beginning 899' from DER, 151' right of centerline, up to 102' AGL/ 121' MSL. **Rwy 26**, Trees beginning 2340' from DER, 792' right of centerline, up to 80' AGL/ 102' MSL. **Rwy 32**, tree 2815' from DER, 690' left of centerline, 83' AGL/ 102' MSL. Trees beginning 2227' from DER, 575' right of centerline, up to 89' AGL/ 108' MSL.

JACKSONVILLE NAS (TOWERS FIELD) (KNIP)

JACKSONVILLE, FL

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

09155

DEPARTURE PROCEDURES: **Rwy 10**, Diverse departures only between 095° through 275° CW. **Rwy 14**, Diverse departures only between 095° through 320° CW. **Rwy 32**, Diverse departures only between 351° through 141° CCW. TAKEOFF OBSTACLES: **Rwy 28**: Pole 1064' from DER, 782' left of centerline, 65' MSL. **Rwy 32**: Tree 222' from DER, 241' right of centerline, 56' MSL. Trees 430' from DER, 226' right of centerline, 46' MSL. Trees 680' from DER, 530' right of centerline, 59' MSL. Pole 750' from DER, 559' right of centerline, 67' MSL. Road and vehicle 769' from DER at Rwy centerline, 35' MSL. Trees 819' from DER, 642' left of centerline, 84' MSL. Pole 872' from DER, 285' left of centerline, 59' MSL. Trees 945' from DER, 137' left of centerline, 77' MSL. Trees 1048' from DER, 98' right of centerline, 72' MSL. Trees 1081' from DER, 185' right of centerline, 48' MSL. Trees 1317' from DER, 366' left of centerline, 94' MSL. Trees 1547' from DER, 421' left of centerline, 104' MSL. Trees 1737' from DER, 131' left of centerline, 108' MSL. Trees 1907' from DER, 462' left of centerline, 128' MSL. Trees 2037' from DER, 321' left of centerline, 130' MSL. Trees 2497' from DER, 561' left of centerline, 133' MSL. Tower 2744' from DER, 616' left of centerline, 87' MSL.

KEY WEST, FL

KEY WEST INTL (EYW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 06159

DEPARTURE PROCEDURE: **Rwys 9, 27**, climb on a heading between 087° clockwise to 033° from DER to avoid R-2916 and unmarked tethered balloon up to 14000 MSL. NOTE: **Rwy 9**, rod on antenna, dome on building, poles, and numerous trees beginning 38' from DER, 199' right of centerline, up to 75' AGL/82' MSL. Obstruction light on building, pole, and numerous trees beginning 4' from DER, 220' left of centerline, up to 38' AGL/45' MSL. **Rwy 27**, pole and numerous trees beginning 27' from DER, 116' right of centerline, up to 83' AGL/90' MSL. Numerous bushes and trees beginning 202' from DER, 78' left of centerline, up to 37' AGL/44' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

KEY WEST NAS(BOCA CHICA FLD) (KNQX)

KEY WEST, FL

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

10042

DEPARTURE PROCEDURE: **Rwy 3**, Cross DER at or above 25' AGL/31' MSL. Diverse departures authorized between 028° CCW 216°. Left turn to departure heading only. **Rwy 7**, Diverse departures authorized 087° CW 257°. Crossing DER climb on heading 065° until reaching 3 DME from NQX TACAN, then turn right to departure heading. Other headings and left turns on departure expect radar vectors. Do not exceed 310 KIAS until established on heading or receiving radar vectors. If no vectors are received within 6 DME of NQX TACAN or 12 DME of EYW VORTAC, make climbing right turn direct EYW VORTAC for enroute aircraft and NQX TACAN for military aircraft intending use of local special use airspace. Turboprop cross VORTAC or TACAN at or above 3000'. Turbojet cross VORTAC or TACAN at or above 5000'. Do not exceed 310 KIAS until crossing VORTAC or TACAN. **Rwy 13**, Diverse departures authorized 084° CW 315°. **Rwy 21**, Diverse departures authorized 084° CW 315°. **Rwy 25**, Diverse departures authorized 084° CW 315°. **Rwy 31**, Diverse departures authorized 035° CCW 084°.

TAKEOFF OBSTACLES: **Rwy 3**, Mast 58' AGL/63' MSL, 1374' from DER, 323' left of centerline. **Rwy 31**, Bldg 39' AGL/43' MSL, 1058' from DER, 558' right of centerline. Pole 54' AGL/58' MSL, 1551' from DER, 474' right of centerline.

KEYSTONE HEIGHTS, FL

KEYSTONE AIRPARK (42J)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 09015 (FAA)

NOTE: **Rwy 5**, trees beginning 363' from DER, 503' left of centerline, up to 100' AGL/309' MSL. Trees beginning 1165' from DER, 331' right of centerline, up to 100' AGL/309' MSL. **Rwy 11**, trees beginning 995' from DER, on centerline, up to 100' AGL/309' MSL.

Rwy 23, trees beginning 375' from DER, on centerline, up to 87' AGL/257' MSL. Power lines beginning 2436' from DER, 24' right of centerline, up to 100' AGL/279' MSL. **Rwy 29**, trees beginning 0' from DER, 263' right of centerline, up to 100' AGL/289' MSL. Trees beginning 563' from DER, on centerline, up to 100' AGL/289' MSL. Power lines beginning 3048' from DER, 122' left of centerline, up to 100' AGL/279' MSL.



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LA BELLE, FL

LA BELLE MUNI (X14)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 08045 (FAA)

NOTE: **Rwy 14**, vehicles on roadway, beginning 98' from DER, 483' left of centerline, up to 15' AGL/39' MSL. Trees beginning 70' from DER, 357' right of centerline, up to 100' AGL/124' MSL. Poles and trees beginning 305' from DER, 157' left of centerline, up to 40' AGL/94' MSL. Building 562' from DER, 238' left of centerline, 14' AGL/38' MSL. Poles and trees beginning 745' from DER, 93' right of centerline, up to 40' AGL/60' MSL. **Rwy 32**, airplanes on taxiway beginning 18' from DER, 130' left of centerline, up to 12' AGL/31' MSL. Trees beginning 35' from DER, 135' right of centerline, up to 100' AGL/19' MSL. Trees beginning 61' from DER, 6' left of centerline, up to 100' AGL/19' MSL. Vehicle on roadway beginning 136' from DER, 450' right of centerline, up to 15' AGL/34' MSL. Building 446' from DER, 214' right of centerline, 18' AGL/37' MSL. Pole 1578' from DER, 789' left of centerline, 43' AGL/62' MSL.

LAKE CITY, FL

LAKE CITY GATEWAY (LCQ)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 14149 (FAA)

NOTE: **Rwy 5**, trees beginning 1358' from DER, 522' right of centerline, up to 100' AGL/294' MSL. **Rwy 10**, trees beginning 2490' from DER, 32' right of centerline, up to 94' AGL/284' MSL. Trees beginning 84' from DER, 58' left of centerline, up to 83' AGL/273' MSL. **Rwy 23**, trees beginning 575' from DER, 363' right of centerline, up to 100' AGL/285' MSL. Trees beginning 1139' from DER, 88' left of centerline, up to 100' AGL/285' MSL. **Rwy 28**, trees, pole and tower beginning 1001' from DER, 23' right of centerline, up to 158' AGL/350' MSL. Trees beginning 981' from DER, 4' left of centerline, up to 94' AGL/292' MSL.

LAKE WALES, FL

LAKE WALES MUNI (X07)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 03255 (FAA)

NOTE: **Rwy 6**, trees beginning 1403' from DER, 165' left of centerline, up to 100' AGL/229' MSL. Trees beginning 2739' from DER, 899' right of centerline, up to 100' AGL/234' MSL. **Rwy 17**, trees beginning 534' from DER, 642' right of centerline, up to 100' AGL/224' MSL. **Rwy 24**, trees beginning 2462' from DER, 836' left of centerline, up to 100' AGL/224' MSL. **Rwy 35**, trees beginning 2567' from DER, 468' left of centerline, up to 100' AGL/234' MSL. Buildings beginning 691' from DER, 1' right of centerline up to 74' AGL/205' MSL.

LAKELAND, FL

LAKELAND LINDER RGNL (LAL)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 13262 (FAA)

NOTE: **Rwy 5**, poles beginning 1099' from DER, 475' left of centerline, up to 33' AGL/175' MSL. Pole 1144' from DER, 746' right of centerline, 42' AGL/185' MSL. Trees beginning 1261' from DER, 427' left of centerline, up to 36' AGL/180' MSL. Trees beginning 720' from DER, 49' right of centerline, up to 47' AGL/191' MSL. **Rwy 9**, tree 2551' from DER, 582' left of centerline, 66' AGL/210' MSL. Trees beginning 2520' from DER, 259' right of centerline, up to 68' AGL/212' MSL.

LEESBURG, FL

LEESBURG INTL (LEE)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 4 11349 (FAA)

TAKEOFF MINIMUMS: **Rwy 3**, 400-2 1/4 or std. w/ min. climb of 223' per NM to 500, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to DER.

NOTE: **Rwy 3**, vehicles on roadway, 176' from DER, left and right of centerline, up to 15' AGL/90' MSL. Blast wall 78' from DER, on centerline, up to 10' AGL/85' MSL. Poles beginning 248' from DER, 372' right of centerline, up to 44' AGL/119' MSL. Trees beginning 61' from DER, 495' right of centerline, up to 67' AGL/137' MSL. Trees beginning 272' from DER, 386' left of centerline, up to 56' AGL/131' MSL. **Rwy 13**, trees beginning 493' from DER, 444' left of centerline, up to 43' AGL/106' MSL. **Rwy 21**, vehicles on roadway, 74' from DER, 389' left of centerline, up to 15' AGL/82' MSL. Trees beginning 775' from DER, 473' left of centerline, up to 100' AGL/179' MSL. Trees beginning 3614' from DER, 126' right of centerline, up to 113' AGL/173' MSL. **Rwy 31**, trees beginning 61' from DER, 401' left of centerline, up to 74' AGL/159' MSL. Trees beginning 531' from DER, 564' right of centerline, up to 100' AGL/173' MSL. Poles beginning 1273' from DER, 469' right of centerline, up to 60' AGL/131' MSL. Poles beginning 2893' from DER, 265' left of centerline, up to 74' AGL/159' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LIVE OAK, FL

SUWANNEE COUNTY (24J)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG 13346 (FAA)

DEPARTURE PROCEDURE: **Rwy 7**, Climb heading 074° to 600 before turning right.

NOTE: **Rwy 7**, REILs, fence and taxiway sign beginning 21' from DER, left and right of centerline, up to 5' AGL/106' MSL. Tree 53' from DER, 438' left of centerline, 50' AGL/152' MSL. Building and pole beginning 123' from DER, 448' left of centerline, up to 21' AGL/126' MSL. Trees beginning 189' from DER, 237' right of centerline, up to 18' AGL/106' MSL. Poles beginning 334' from DER, 484' left of centerline, up to 13' AGL/118' MSL. Trees beginning 420' from DER, 398' left of centerline, up to 71' AGL/173' MSL. Trees beginning 1041' from DER, 25' left of centerline, up to 66' AGL/179' MSL. Trees beginning 1340' from DER, 4' right of centerline, up to 61' AGL/170' MSL. Trees beginning 2643' from DER, 820' right of centerline, up to 70' AGL/179' MSL. **Rwy 25**, REILs beginning 20' from DER, left and right of centerline, 103' MSL. Trees and pole beginning 104' from DER, 230' left of centerline, up to 84' AGL/193' MSL. Tree 452' from DER, 489' right of centerline, 39' AGL/141' MSL. Trees beginning 1070' from DER, 445' right of centerline, up to 60' AGL/165' MSL. Trees beginning 1079' from DER, 416' left of centerline, up to 74' AGL/187' MSL. Trees beginning 1507' from DER, left and right of centerline, up to 83' AGL/195' MSL.

MARATHON, FL

THE FLORIDA KEYS MARATHON (MTH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 1 07354 (FAA)

DEPARTURE PROCEDURE: **Rwy 7**, climbing right turn direct MTH NDB then via 307° bearing from MTH NDB to TIGAR Int before proceeding on course. **Rwy 25**, climb direct MTH NDB then via 307° bearing from MTH NDB to TIGAR Int before proceeding on course.

NOTE: **Rwy 7**, trees beginning 337' from DER, 324' right of centerline, up to 74' AGL/81' MSL, bush 166' from DER, 323' right of centerline, 9' AGL/16' MSL, pole 726' from DER, 589' right of centerline, 39' AGL/46' MSL, rod on obstruction light 1404' from DER, 655' right of centerline, 55' AGL/62' MSL, transmission pole 2360' from DER, 1029' right of centerline, 89' AGL/96' MSL, rod on obstruction light antenna 3366' from DER, 1010' right of centerline, 136' AGL/143' MSL, antenna 3270' from DER, 1253' right of centerline, 121' AGL/128' MSL, tower 3427' from DER, 1033' right of centerline, 115' AGL/121' MSL, trees beginning 242' from DER, 99' left of centerline, up to 75' AGL/82' MSL, antennas 1660' from DER, 371' left of centerline, up to 86' AGL/93' MSL, pole 876' from DER, 468' left of centerline, 39' AGL/46' MSL, concrete pole 1391' from DER, 534' left of centerline, 51' AGL/58' MSL. Pole 1441' from DER, 566' right of centerline, 55' AGL/62' MSL. **Rwy 25**, trees beginning 122' from DER, 224' right of centerline, up to 65' AGL/72' MSL, poles beginning 702' from DER, 470' right of centerline, up to 37' AGL/44' MSL, antenna 1752' from DER, 135' right of centerline, 49' AGL/56' MSL, trees beginning 223' from DER, 324' left of centerline, up to 66' AGL/73' MSL, rod on obstruction light antenna beginning 2353' from DER, 22' right of centerline, up to 138' AGL/145' MSL, antenna 2953' from DER, 745' left of centerline, 75' AGL/82' MSL, transmission pole 1545' from DER, 693' left of centerline, 60' AGL/67' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

MARCO ISLAND, FL

MARCO ISLAND (MKY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 2 09351 (FAA)

DEPARTURE PROCEDURE: **Rwy 35**, climb heading 005° to 700 before turning west. **CAUTION:** Strobe light and unmarked balloon on cable to 14000' in R-2916, 78 NM south of Marco Island. All aircraft should establish positive course guidance to ensure avoidance of this obstacle.

NOTE: **Rwy 17**, trees beginning 79' from DER, left and right of centerline, up to 48' AGL/52' MSL. Wind sock 76' from DER, 310' right of centerline, 21' AGL/25' MSL.

Rwy 35, antenna 11' from DER, 384' left of centerline, 53' AGL/57' MSL. Sign 16' from DER, 255' left of centerline, 5' AGL/9' MSL. Trees beginning 64' from DER, left and right of centerline up to 51' AGL/55' MSL.

MARIANNA, FL

MARIANNA MUNI (MAI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG 09071 (FAA)

TAKEOFF MINIMUMS: **Rwy 18**, 300-1½ or std. w/ min. climb of 222' per NM to 400.

NOTE: **Rwy 8**, trees beginning 2518' from DER, 1016' right of centerline, up to 100' AGL/219' MSL. **Rwy 18**, trees beginning 57' from DER, 275' right of centerline, up to 100' AGL/279' MSL. Trees beginning 1241' from DER, 366' left of centerline, up to 100' AGL/209' MSL. **Rwy 26**, trees beginning 3180' from DER, 1278' right of centerline, up to 100' AGL/209' MSL. **Rwy 36**, trees beginning 2230' from DER, 1003' left of centerline, up to 100' AGL/209' MSL. Trees beginning 2352' from DER, 1007' right of centerline, up to 100' AGL/209' MSL.

MAYAGUEZ, PR

EUGENIO MARIA DE HOSTOS (MAZ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 3 92289 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, 1400-3 or std. with a min. climb of 500' per NM to 1400.

DEPARTURE PROCEDURE: **Rwy 9**, climb via MAZ R-083 to 2500, aircraft northeast bound on G633 continue climb on course. All others turn left direct MAZ VOR/DME before proceeding on course. **Rwy 27**, climb via MAZ R-277 to 1500. Aircraft westbound on G633 continue climb on course. All others climbing right turn direct MAZ VOR/DME so as to cross at or above MEA for direction of flight.

MAYPORT NS (ADM DAVID L. MC DONALD FLD)(KNRB)

MAYPORT, FL

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES 08073

TAKEOFF OBSTACLES: **Rwy 5**, Vessels with masts to 150' MSL, 500' to 2900' from DER. **Rwy 23**, Vessels with masts to 150' MSL, 1600' right of rwy centerline to 4000' from DER.



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND**DIVERSE VECTOR AREA (RADAR VECTORS)****MELBOURNE, FL**

MELBOURNE INTL (MLB)

**TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES**

NOTE: **Rwy 5**, multiple trees 1584' from DER, 222' left of centerline, up to 43' AGL/64' MSL. **Rwy 9L**, tree 108' from DER, 479' left of centerline, 25' AGL/62' MSL.

Rwy 9R, multiple trees 1855' from DER, 434' left of centerline, up to 43' AGL/73' MSL. Tree 1332' from DER, 434' right of centerline, 36' AGL/56' MSL. **Rwy 23**, bush 20' from DER, 217' right of centerline, 8' AGL/33' MSL, tower 6034' from DER, 750' right of centerline, 152' AGL/177' MSL. Multiple trees beginning 284' from DER, 121' left of centerline, up to 47' AGL/72' MSL. **Rwy 27R**, multiple trees beginning 543' from DER, 169' left of centerline, up to 51' AGL/81' MSL. Multiple trees beginning 1202' from DER, 114' right of centerline, up to 58' AGL/88' MSL.

MERRITT ISLAND, FL

MERRITT ISLAND (COI)

**TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES**

ORIG 06103 (FAA)

NOTE: **Rwy 29**, rod on airport beacon obstruction light, 138' from DER, 514' right of centerline, 61' AGL/67' MSL; pole, 82' from DER, 403' left of centerline, 34' AGL/40' MSL; pole, 468' from DER, 508' right of centerline, 37' AGL/43' MSL; hangar, 221' from DER, 278' right of centerline, 22' AGL/28' MSL; pole 490' from DER, 306' left of centerline, 28' AGL/34' MSL; tree, 987' from DER, 476' left of centerline, 40' AGL/46' MSL; tree 1287' from DER, 432' left of centerline, 47' AGL/53' MSL; tree 1415' from DER, 560' left of centerline, 48' AGL/54' MSL; building, 556' from DER, 530' right of centerline, 25' AGL/31' MSL; tree, 1654' from DER, 464' right of centerline, 48' AGL/54' MSL; obstruction light on windsock, 551' from DER, 234' right of centerline, 19' AGL/25' MSL; pole, 1306' from DER, 259' right of centerline, 37' AGL/43' MSL; building, 429' from DER, 436' right of centerline, 15' AGL/21' MSL; tree, 1953' from DER, 524' left of centerline, 49' AGL/55' MSL.

MIAMI, FL

KENDALL-TAMiami EXECUTIVE (TMB)

**TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES**

AMDT 8 09295 (FAA)

DEPARTURE PROCEDURE: **Rwy 9L**, climb heading 093° to 800 before turning right. **Rwy 9R**, climb heading 093° to 900 before turning right. **Rwy 13**, climb heading 133° to 1400 before turning right. **Rwy 27L**, climb heading 273° to 1400 before turning left. **Rwy 27R**, climb heading 273° to 1300 before turning left. **Rwy 31**, climb heading 313° to 900 before turning left.

NOTE: **Rwy 9L**, trees beginning 1731' from DER, 717' left of centerline, up to 100' AGL/119' MSL. Tree 3013' from DER, 687' right of centerline, 100' AGL/119' MSL. **Rwy 9R**, signs beginning 35' from DER, 182' left of centerline, up to 3' AGL/11' MSL. Trees beginning 1296' from DER, 516' left of centerline, up to 100' AGL/119' MSL. Tree 2712' from DER, 1185' right of centerline, 100' AGL/119' MSL. **Rwy 13**, tree 1100' from DER, 764' right of centerline, 100' AGL/119' MSL. Pole 1249' from DER, 588' right of centerline, 56' AGL/70' MSL. **Rwy 27L**, transmission towers beginning 1858' from DER, 910' left of centerline, up to 72' AGL/82' MSL. Tree 2106' from DER, 998' right of centerline, 100' AGL/119' MSL. **Rwy 27R**, trees beginning 149' from DER, 352' right of centerline, up to 100' AGL/119' MSL. Obstruction light on tower 372' from DER, 458' right of centerline, 54' AGL/64' MSL. Obstruction light antenna 385' from DER, 450' right of centerline, 49' AGL/59' MSL. **Rwy 31**, trees beginning 163' from DER, 410' left of centerline, up to 100' AGL/119' MSL. Tree 3583' from DER, 360' right of centerline, 100' AGL/119' MSL.

15064

**TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND
DIVERSE VECTOR AREA (RADAR VECTORS)**



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND

DIVERSE VECTOR AREA (RADAR VECTORS)

MIAMI, FL (CONT'D)

MIAMI INTL (MIA)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 17A 12124 (FAA)

TAKEOFF MINIMUMS: **Rwy 8L**, 300-1½ or std. w/ min. climb of 382' per NM to 300. **Rwy 9**, std. w/ min. climb of 240' per NM to 1200.DEPARTURE PROCEDURE: **Rwys 8L,8R**, climb heading 092° to 1000 before turning right. **Rwy 12**, climbing right turn to intercept DHP VORTAC R-125 to 1100 before turning left. **Rwys 26L,26R**, climb heading 272° to 600 before turning left. **Rwy 27**, climb heading 272° to 600 before turning right.

NOTE: **Rwy 8L**, multiple buildings with antennas and towers beginning 1350' from DER, 690' left of centerline, up to 160' AGL/172' MSL. **Rwy 8R**, tree 4064' from DER, 958' right of centerline, 93' AGL/112' MSL. Multiple power lines, antennas and trees beginning 1856' from DER, 238' left of centerline, up to 150' AGL/153' MSL. Navaid and rod on obstruction light GS 804' from DER, 500' right of centerline, 46' MSL. **Rwy 9**, light windsock 21' from DER, 437' right of centerline, 21' AGL/30' MSL. Pole 702' from DER, 600' right of centerline, 21' AGL/38' MSL. Antenna 4035' from DER, 1528' right of centerline, 108' AGL/125' MSL. Electrical system 1231' from DER, 785' left of centerline 32' AGL/48' MSL. **Rwy 12**, train 3' from DER, 436' right of runway, 23' AGL/51' MSL. Antenna 2917 from DER, 1140' right of centerline, 89' AGL/106' MSL. Antenna on building 3164' from DER, 992' right of centerline, 91' AGL/108' MSL. Trees beginning 114' from DER, 117' right of centerline, up to 20' AGL/37' MSL. Sign 1191' from DER, 438' right of centerline, 32' AGL/49' MSL. Windsock 680' from DER, 345' left of centerline, 16' AGL/30' MSL. **Rwy 26L**, pole 1080' from DER, 680' left of centerline, 33' AGL/47' MSL. Light pole 1773' from DER, 825' left of centerline, 34' AGL/53' MSL. Tree 1405' from DER, 848' left of centerline 30' AGL/44' MSL. Rod on tower 1305' from DER, 638' right of centerline, 34' AGL/48' MSL. Tree 2459' from DER, 1070' right of centerline, 63' AGL/71' MSL. **Rwy 26R**, numerous poles beginning 1090' from DER, 36' right of centerline, up to 44' AGL/59' MSL. Building 740' from DER, 511' right of centerline, 14' AGL/28' MSL. Trees beginning 1047' from DER, 272' right of centerline, up to 66' AGL/80' MSL. Tree 888' from DER, on centerline, 21' AGL/35' MSL. Rod on tower 1304' from DER, 160' left of centerline, 34' AGL/48' MSL. **Rwy 27**, train on tracks 750' from DER, 576' left of centerline 23' AGL/53' MSL. Tree 1067' from DER, 680' left of centerline 23' AGL/37' MSL. Roadway beginning 1874' from DER, 502' left of centerline up to 71' AGL/85' MSL. Numerous poles and signs beginning 1876' from DER, 93' left of centerline up to 63' AGL/77' MSL. Poles beginning 2056' from DER, 95' right of centerline up to 46' AGL/60' MSL. **Rwy 30**, pole 560' from DER, 563' left of centerline, 33' AGL/47' MSL. Rod on tower 2451' from DER, 434' right of centerline, 34' AGL/48' MSL. Antenna on tower 1733' from DER, 911' right of centerline, 41' AGL/55' MSL. Antenna on tower 4427' from DER, 1451' right of centerline, 109' AGL/123' MSL. Trees beginning 2658' from DER, 188' right of centerline, up to 63' AGL/77' MSL.

MIAMI, FL (CONT'D)

OPA-LOCKA EXECUTIVE (OPF)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 9 11349 (FAA)

DEPARTURE PROCEDURE: **Rwy 9L**, climb heading 093° to 1100 before turning north. **Rwy 9R**, climb heading 093° to 1000 before turning north. **Rwy 12**, climb heading 128° to 600 before turning north.**Rwy 27R**, climb heading 273° to 500 before turning north.NOTE: **Rwy 9L**, fence 48' from DER, 498' left of centerline, 10' AGL/17' MSL. Utility line 57' from DER, 505' left of centerline, 9' AGL/16' MSL. Airport sign 40' from DER, 311' right of centerline, 2' AGL/9' MSL. Tree 103' from DER, 481' left of centerline, 9' AGL/16' MSL. Trees beginning 1632' from DER, 657' left of centerline, up to 43' AGL/57' MSL. Trees beginning 3215' from DER, 885' right of centerline, up to 81' AGL/95' MSL. **Rwy 9R**, airfield light 6' from DER, 59' right of centerline, 1' AGL/7' MSL. Light pole 1439' from DER, 739' right of centerline, 38' AGL/45' MSL. Pole 1436' from DER, 735' right of centerline, 40' AGL/47' MSL. Pole 1581' from DER, 892' left of centerline, 40' AGL/47' MSL. Tree 11' from DER, 502' right of centerline, 8' AGL/15' MSL. Trees beginning 1590' from DER, 511' left of centerline, up to 109' AGL/116' MSL. Trees beginning 1577' from DER, 243' right of centerline, up to 57' AGL/64' MSL.

Rwy 12, REIL 3' from DER, 118' left of centerline 1' AGL/9' MSL. REIL 3' from DER, 118' right of centerline, 1' AGL/9' MSL. Poles 1560' from DER, 266' right of centerline, 40' AGL/48' MSL. Pole 461' from DER, 609' right of centerline, 31' AGL/39' MSL. Trees beginning 1080' from DER, 118' right of centerline, up to 62' AGL/70' MSL. Trees beginning 1051' from DER, 93' left of centerline, up to 56' AGL/64' MSL. **Rwy 27L**, fence 194' from DER, 483' right of centerline, 10' AGL/16' MSL. Poles beginning 336' from DER, 94' left and 530' right of centerline, up to 67' AGL/73' MSL. Trees beginning 1056' from DER, 756' left of centerline, up to 37' AGL/43' MSL. Building 1106' from DER, 739' right of centerline, 36' AGL/42' MSL. **Rwy 27R**, airport sign 38' from DER, 310' left of centerline, 1' AGL/8' MSL. Antenna on building 1568' from DER, 756' left of centerline, 44' AGL/51' MSL. Trees beginning 165' from DER, 45' left of centerline, up to 115' AGL/122' MSL. Trees beginning 1059' from DER, 229' right of centerline, up to 107' AGL/114' MSL. **Rwy 30**, airport sign 40' from DER, 233' right of centerline, 1' AGL/9' MSL. Tower 2543' from DER, 565' right of centerline, 76' AGL/84' MSL. Antenna on building 2526' from DER, 572' right of centerline, 74' AGL/82' MSL. Tower 3760' from DER, 969' right of centerline, 100' AGL/105' MSL. Trees beginning 1312' from DER, 590' left of centerline, up to 43' AGL/51' MSL. Trees beginning 1711' from DER, 614' right of centerline, up to 78' AGL/86' MSL.



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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND

DIVERSE VECTOR AREA (RADAR VECTORS)



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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

MILTON, FL

PETER PRINCE FIELD (2R4)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG-A 10182 (FAA)

NOTE: **Rwy 18**, trees beginning 102' from DER, 51' left of centerline, up to 93' AGL/163' MSL. Trees beginning 1014' from DER, 13' right of centerline, up to 83' AGL/153' MSL. Pole 711' from DER, 164' left of centerline, 40' AGL/106' MSL. Poles beginning 766' from DER, 68' right of centerline, 40' AGL/109' MSL. Railroad 572' from end of runway, 23' AGL/110' MSL. Road 549' from DER, 17' AGL/94' MSL. **Rwy 36**, trees beginning 27' from DER, 329' left of centerline up to 45' AGL/101' MSL. Trees beginning 40' from DER, 98' right of centerline, up to 30' AGL/90' MSL.

NAPLES, FL

NAPLES MUNI (APF)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2 09351 (FAA)

DEPARTURE PROCEDURE: **Rwy 14**, climb heading 137° to 600 before turning left.

NOTE: **Rwy 5**, trees beginning 92' from DER, left and right of centerline, up to 82' AGL/92' MSL. Tanks 1308' from DER, 293' left of centerline, up to 34' AGL/44' MSL. **Rwy 14**, trees beginning 97' from DER, left and right of centerline, up to 101' AGL/108' MSL. **Rwy 23**, trees beginning 126' from DER, left and right of centerline, up to 66' AGL/70' MSL. **Rwy 32**, trees beginning 339' from DER, left and right of centerline, up to 119' AGL/123' MSL.

NEW SMYRNA BEACH, FL

NEW SMYRNA BEACH MUNI (EVB)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2 11013 (FAA)

NOTE: **Rwy 2**, tree 1816' from DER, 584' right of centerline, 48' AGL/56' MSL. Numerous trees beginning 455' from DER, 232' left of centerline, up to 84' AGL/93' MSL. Pole 1470' from DER, 22' left of centerline, 41' AGL/49' MSL. **Rwy 7**, trees beginning 345' from DER, 214' right of centerline, up to 40' AGL/48' MSL. Transmission tower 347' from DER, 553' right of centerline, 43' AGL/51' MSL. Transmission tower 890' from DER, 151' right of centerline, 50' AGL/58' MSL. Vehicle on road 209' from DER, 20' right of centerline, 17' AGL/43' MSL. Trees beginning 311' from DER, 214' left of centerline, up to 41' AGL/49' MSL. Numerous transmission towers beginning 915' from DER, 149' left of centerline, up to 53' AGL/61' MSL. Pole 1972' from DER, 144' left of centerline, 42' AGL/60' MSL. **Rwy 11**, trees beginning 1273' from DER, 350' right of centerline, up to 55' AGL/62' MSL. Trees beginning 508' from DER, 395' left of centerline, up to 55' AGL/62' MSL. Pole 556' from DER, 401' left of centerline, 42' AGL/50' MSL. Vehicle on road 408' from DER, 400' left of centerline, 17' AGL/44' MSL. **Rwy 20**, trees beginning 542' from DER, 187' right of centerline, up to 66' AGL/80' MSL. Train 410' from DER, 71' right of centerline, 23' AGL/61' MSL. Vehicle on road 316' from DER, 89' right of centerline, 17' AGL/44' MSL. Pole 479' from DER, 307' right of centerline, 18' AGL/32' MSL. Trees beginning 359' from DER, 27' left of centerline, up to 64' AGL/81' MSL. **Rwy 25**, trees beginning 300' from DER, 120' right of centerline, up to 73' AGL/96' MSL. Pole 265' from DER, 388' right of centerline, 24' AGL/44' MSL. Trees beginning 432' from DER, 104' left of centerline, up to 76' AGL/100' MSL. Flag pole 200' from DER, 250' left of centerline, 17' AGL/37' MSL. **Rwy 29**, trees beginning 1289' from DER, 317' right of centerline, up to 73' AGL/86' MSL. Trees beginning 4' from DER, 172' left of centerline, up to 87' AGL/100' MSL.

MASSEY RANCH AIRPARK (X50)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG 09323 (FAA)

NOTE: **Rwy 18**, trees beginning 132' from DER, left and right of centerline, up to 70' AGL/84' MSL. Vehicles on road beginning 23' from DER, left and right of centerline, up to 15' AGL/29' MSL. Power line, 2358' from DER, right and left of centerline, up to 100' AGL/109' MSL. **Rwy 36**, trees beginning 300' from DER, left and right of centerline, up to 70' AGL/84' MSL. Vehicles on road beginning 23' from DER, 156' right of centerline, up to 15' AGL/29' MSL. Building 962' from DER, 167' right of centerline, 33' AGL/45' MSL. Tower 5101' from DER, 401' right of centerline, 152' AGL/162' MSL.

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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

OCALA, FL

OCALA INTL-JIM TAYLOR FLD (OCF)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 09015 (FAA)

DEPARTURE PROCEDURE: **Rwy 8**, climb heading 069° to 500 before proceeding on course.

NOTE: **Rwy 18**, trees beginning 316' from DER, 527' right of centerline, up to 30' AGL/106' MSL. **Rwy 26**, trees beginning 83' from DER, 255' left of centerline, up to 100' AGL/204' MSL. Trees beginning 272' from DER, 10' right of centerline, up to 100' AGL/194' MSL. **Rwy 36**, taxiing aircraft, 43' from DER, 305' right of centerline, up to 10' AGL/94' MSL. Trees beginning 196' from DER, 500' left of centerline, up to 70' AGL/164' MSL. Trees beginning 2668' from DER, 305' right of centerline, up to 70' AGL/162' MSL.

ORLANDO, FL

EXECUTIVE (ORL)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 4 12320 (FAA)

DEPARTURE PROCEDURE: **Rwy 25**, climb heading 253° to 700 before turning right. **Rwy 31**, climb heading 317° to 600 before turning left.

NOTE: **Rwy 7**, trees beginning 189' from DER, 542' right of centerline, up to 114' AGL /132' MSL. Tree 882' from DER, 709' left of centerline, 44' AGL/143' MSL. **Rwy 25**, trees beginning 1314' from DER, 597' right of centerline, up to 119' AGL /191' MSL. **Rwy 13**, numerous roads, poles, towers, signs, trees and buildings left and right of centerline, beginning 300' from DER, 481' right of centerline, up to 119' AGL /173' MSL. **Rwy 31**, building 2.1 NM from DER, 5569' left of centerline, 435' AGL/524' MSL. Numerous trees, poles, towers, antennas and buildings left and right of centerline, beginning 613' from DER, 442' left of centerline, up to 126' AGL /189' MSL.

KISSIMMEE GATEWAY (ISM)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

TAKEOFF MINIMUMS: **Rwy 6**, 300-1.

ORLANDO INTL (MCO)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2 12208 (FAA)

NOTE: **Rwy 17L**, Trees beginning 1072' from DER, 123' left of centerline, up to 67' AGL/151' MSL. **Rwy 17R**, Trees 1783' from DER, 964' right of centerline, up to 64' AGL/138' MSL. **Rwy 35L**, Electrical system and bushes beginning 133' from DER, 455' left of centerline, up to 43' AGL/129' MSL. **Rwy 35R**, Trees beginning 2707' from DER, 54' left of centerline, up to 81' AGL/170' MSL.

Trees beginning 2163' from DER, 607' right of centerline, up to 95' AGL/184' MSL. **Rwy 36L**, Light on sign 1063' from DER, 775' right of centerline, 34' AGL/123' MSL. **Rwy 36R**, Light on sign 1063' from DER, 725' left of centerline, 34' AGL/123' MSL. Trees beginning 1364' from DER, 193' right of centerline, up to 64' AGL/153' MSL.

ORLANDO, FL (CON'T)

ORLANDO SANFORD INTL (SFB)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 10 13122 (FAA)

DEPARTURE PROCEDURE: **Rwy 27L**, climb heading 275° to 800 before proceeding northbound. **Rwy 27C**, climb heading 275° to 900 before proceeding northbound. **Rwy 27R**, climb heading 275° to 900 before proceeding northbound. **Rwy 36**, climb heading 005° to 2000 before proceeding on course.

NOTE: **Rwy 9R**, pole at DER, 277' left of centerline, 7' AGL/25' MSL. Utilities beginning 430' from DER, 206' left of centerline, up to 39' AGL/55' MSL. Utilities beginning 430' from DER, 109' right of centerline, up to 39' AGL/55' MSL. Trees beginning 986' from DER, 13' left of centerline, up to 52' AGL/83' MSL. Trees beginning 1078' from DER, 463' right of centerline, up to 66' AGL/80' MSL. **Rwy 9C**, vehicles on roadway beginning 22' from DER, left and right of centerline, up to 15' AGL/62' MSL. Bush 163' from DER, 276' left of centerline, 9' AGL/57' MSL. Pole 1079' from DER, 314' right of centerline, 36' AGL/78' MSL. Trees beginning 1130' from DER, 90' right of centerline, up to 82' AGL/112' MSL. **Rwy 27R**, antenna on building 131' from DER, 441' right of centerline, 18' AGL/67' MSL. Poles and trees beginning 1157' from DER, 146' left of centerline, up to 65' AGL/120' MSL. Trees beginning 1395' from DER, 66' right of centerline, up to 67' AGL/116' MSL. **Rwy 27C**, buildings beginning 1548' from DER, 336' left of centerline, up to 47' AGL/101' MSL. Trees beginning 1753' from DER, 295' right of centerline, up to 76' AGL/105' MSL. Towers and antenna beginning 2340' from DER, 544' left of centerline, up to 135' AGL/194' MSL. **Rwy 27L**, approach lights beginning 32' from DER, on centerline, up to 17' AGL/56' MSL. Fence 229' from DER, 16' right of centerline, 12' AGL/51' MSL. Vehicles on roadway beginning 359' from DER, left and right of centerline, up to 15' AGL/60' MSL. Trees beginning 865' from DER, 574' left of centerline, up to 50' AGL/94' MSL. Pole 1006' from DER, 692' right of centerline, 43' AGL/86' MSL. Trees beginning 2733' from DER, left and right of centerline, up to 91' AGL/135' MSL. **Rwy 18**, poles beginning 945' from DER, 482' left of centerline, up to 44' AGL/71' MSL. Trees beginning 997' from DER, 280' left of centerline, up to 63' AGL/93' MSL. Trees beginning 1277' from DER, 621' right of centerline, up to 83' AGL/112' MSL. **Rwy 36**, trees beginning 330' from DER, 508' right of centerline, up to 43' AGL/77' MSL. Trees beginning 1104' from DER, 617' left of centerline, up to 85' AGL/114' MSL.

ORMOND BEACH, FL

ORMOND BEACH MUNI (OMN)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG 09211 (FAA)

NOTE: **Rwy 8**, trees beginning 8' from DER, left and right of centerline, up to 100' AGL/124' MSL. **Rwy 26**, trees beginning 20' from DER, left and right of centerline, up to 100' AGL/129' MSL. **Rwy 17**, trees beginning 23' from DER, left and right of centerline, up to 100' AGL/129' MSL. Power poles beginning 540' from DER, 589' right of centerline, up to 36' AGL/60' MSL. Building 640' from DER, 660' right of centerline, 21' AGL/45' MSL. **Rwy 35**, trees beginning 208' from DER, left and right of centerline, up to 100' AGL/129' MSL. Light poles beginning 1231' from DER, 571' left of centerline, up to 70' AGL/99' MSL.

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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



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TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PALATKA, FL

PALATKA MUNI-LT KAY LARKIN FIELD
(28J)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG-A 13262 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, 200'-1% or std. w/ min. climb of 207' per NM to 300, or alternatively, with standard TAKEOFF minimums and a normal 200'/NM climb gradient, TAKEOFF must occur no later than 1300' prior to DER.

NOTE: **Rwy 9**, trees beginning 558' from DER, 39' right of centerline, up to 100' AGL/105' MSL. Trees beginning 625' from DER, 7' left of centerline, up to 100' AGL/137' MSL. Tower 1.1 NM from DER, 1398' right of centerline, 164' AGL/199' MSL. **Rwy 17**, trees beginning 237' from DER, 100' right of centerline, up to 100' AGL/164' MSL. Trees beginning 796' from DER, 478' left of centerline, up to 100' AGL/169' MSL.

Rwy 27, trees beginning 15' from DER, 56' left of centerline, up to 78' AGL/112' MSL. Trees beginning 49' from DER, 269' right of centerline, up to 72' AGL/101' MSL. **Rwy 35**, buildings beginning 504' from DER, 403' right of centerline, up to 75' AGL/104' MSL. Trees beginning 788' from DER, 222' left of centerline, up to 100' AGL/129' MSL. Trees beginning 1387' from DER, 81' right of centerline, up to 100' AGL/119' MSL. Buildings beginning 1454' from DER, 850' left of centerline, up to 75' AGL/104' MSL.

PALM COAST, FL

FLAGLER COUNTY (FIN)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 14317 (FAA)

DEPARTURE PROCEDURE: **Rwy 24**, climb heading 241° to 700 before turning right. **Rwy 29**, climb heading 280° to 1600 before turning.

NOTE: **Rwy 6**, trees beginning 705' from DER, 80' right of centerline, up to 36' AGL/61' MSL. Tree 767' from DER, 43' left of centerline, 34' AGL/159' MSL. Tree 1258' from DER, 99' left of centerline, 56' AGL/81' MSL. Tree 1537' from DER, 31' right of centerline, 59' AGL/84' MSL. Trees beginning 1796' from DER, 363' left of centerline, up to 82' AGL/107' MSL. Tree 1905' from DER, 192' right of centerline, 63' AGL/88' MSL. Trees beginning 2578' from DER, 442' right of centerline, up to 83' AGL/108' MSL. Tree 3253' from DER, 564' left of centerline, 83' AGL/115' MSL.

Rwy 11, tree 59' from DER, 274' right of centerline, 42' AGL/67' MSL. Tree 736' from DER, 281' right of centerline, 54' AGL/29' MSL. Tree 1596' from DER, 392' right of centerline, 82' AGL/57' MSL. Tree 1958' from DER, 47' right of centerline, 69' AGL/94' MSL.

Trees beginning 1977' from DER, 63' left of centerline, up to 76' AGL/101' MSL. Trees beginning 2550' from DER, 441' right of centerline, up to 90' AGL/110' MSL.

Rwy 24, tree 142' from DER, 441' right of centerline, 63' AGL/88' MSL. Tree 1314' from DER, 839' left of centerline, 86' AGL/111' MSL. **Rwy 29**, tree 31' from DER, 275' left of centerline, 59' AGL/84' MSL. Tree 415' from DER, 585' right of centerline, 57' AGL/82' MSL. Trees beginning 1195' from DER, 774' left of centerline, up to 90' AGL/110' MSL. Trees beginning 1289' from DER, 308' right of centerline, up to 86' AGL/111' MSL. Trees beginning 1538' from DER, 523' left of centerline, up to 89' AGL/109' MSL. Tree 1831' from DER, 48' right of centerline, 61' AGL/86' MSL.

PAHOKEE, FL

PALM BEACH COUNTY GLADES (PHK)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 02220 (FAA)

NOTE: **Rwy 17**, tower 1600' from DER, 690' left of centerline, 127' AGL/143' MSL.

PANAMA CITY, FL

NORTHWEST FLORIDA BEACHES INTL
(ECP)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1 10322 (FAA)

TAKEOFF MINIMUMS: **Rwys 3, 21**, NA-Environmental.
NOTE: **Rwy 16**, trees beginning 2644' from DER, 382' right of centerline, up to 82' AGL/131' MSL.

PATRICK AFB (KCOF)

COCOA BEACH, FL

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 1, 14289

DEPARTURE PROCEDURE: **Rwy 2**, Diverse departure authorized. **Rwy 11**, Diverse departure authorized. **Rwy 20**, Diverse departure authorized. **Rwy 29**, Diverse departure authorized.

TAKE-OFF OBSTACLES: **Rwy 2**, antenna 3074' from DER, 1290' left of centerline, 84' MSL. Trees 2816' from DER, 1136' left of centerline, 75' AGL/79' MSL. Trees 1901' from DER, 994' left of centerline, 50' AGL/56' MSL. Trees 2749' from DER, 731' left of centerline, 70' AGL/76' MSL. Terrain 16' from DER, 500' left of centerline, 16' MSL. Terrain 46' from DER, 512' left of centerline, 16' MSL. Flag pole 3334' from DER, 1273' left of centerline, 76' MSL. Road and truck 756' from DER, 574' right of centerline, 28' MSL. Road and truck 756' from DER, 574' right of centerline, 12' AGL/28' MSL. Road and truck 735' from DER, 620' right of centerline, 25' MSL. Trees 2881' from DER, 1254' left of centerline, 75' AGL/80' MSL. **Rwy 11**, road and truck 621' from DER, 212' left of centerline, 0' AGL/29' MSL. Road and truck 512' from DER, 437' left of centerline, 0' AGL/29' MSL. Road and truck 1031' from DER, 664' right of centerline, 0' AGL/29' MSL. Road and truck 832' from DER, 240' right of centerline, 0' AGL/29' MSL. Road and truck 666' from DER, 91' right of centerline, 0' AGL/37' MSL. Terrain 26' from DER, 13' right of centerline, 16' MSL. Terrain at DER, 500' left of centerline, 16' MSL. Road and truck 640' from DER, 90' right of centerline, 0' AGL/26' MSL. **Rwy 20**, sailboat mast 1787' from DER, 984' right of centerline, 43' MSL. Terrain at DER, 500' left of centerline, 20' MSL. Terrain 14' from DER, 302' left of centerline, 20' MSL. Terrain 127' from DER, 534' right of centerline, 17' MSL. **Rwy 29**, fiber optic 299' from DER, 107' right of centerline, 0' AGL/9' MSL. Road and truck 352' from DER, 11' right of centerline, 0' AGL/20' MSL. Road and truck 418' from DER, 162' right of centerline, 0' AGL/18' MSL. Road and truck 444' from DER, 310' right of centerline, 0' AGL/8' MSL. Terrain at DER, 500' left of centerline, 13' MSL. Terrain 95' from DER, 326' left of centerline, 13' MSL. Terrain at DER, 25' right of centerline, 16' MSL. Patrol boat 362' from DER, 476' left of centerline, 0' AGL/10' MSL. Bird cannon 98' from DER, 455' right of centerline, 0' AGL/8' MSL. Fiber optic 177' from DER, 133' left of centerline, 0' AGL/10' MSL. Shrubs 389' from DER, 350' left of centerline, 45' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PENSACOLA, FL

PENSACOLA INTL (PNS)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 1 12208 (FAA)

DEPARTURE PROCEDURE: **Rwy 26**, climb heading 260° to 600 before turning south.

NOTE: **Rwy 26**, trees beginning 84' from DER, left and right of centerline, up to 100' AGL/146' MSL. Rod 398' from DER, 596' left of centerline, 56' AGL/132' MSL. **Rwy 35**, trees beginning 490' from DER, left and right of centerline, up to 100' AGL/182' MSL.

PERRY, FL

PERRY-FOLEY (40J)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 1 14317 (FAA)

DEPARTURE PROCEDURE: **Rwy 6**, climb heading 063° to 500 before turning left. **Rwy 36**, climb heading 350° to 600 before turning right.

NOTE: **Rwy 6**, trees beginning 850' from DER, 386' left of centerline, up to 100' AGL/144' MSL. Trees beginning 1575' from DER, 636' right of centerline, up to 100' AGL/144' MSL. Trees beginning 2109' from DER, left and right of centerline, up to 100' AGL/159' MSL. **Rwy 12**, trees beginning 1227' from DER, left and right of centerline, up to 100' AGL/144' MSL. **Rwy 18**, trees and road beginning 5' from DER, 122' right of centerline, up to 15' AGL/55' MSL. Trees beginning 800' from DER, 6' right of centerline, up to 78' AGL/113' MSL. Trees beginning 833' from DER, 84' left of centerline, up to 75' AGL/114' MSL. Trees beginning 2718' from DER, 478' right of centerline, up to 100' AGL/155' MSL. **Rwy 24**, trees and road beginning 24' from DER, 63' left of centerline, up to 15' AGL/55' MSL. Trees beginning 1070' from DER, 330' left of centerline, up to 75' AGL/114' MSL. Trees beginning 1201' from DER, 219' right of centerline, up to 73' AGL/106' MSL. Trees beginning 1915' from DER, left and right of centerline, up to 100' AGL/139' MSL. **Rwy 30**, trees beginning 857' from DER, 384' left of centerline, up to 72' AGL/132' MSL. Trees and pole beginning 1093' from DER, 292' right of centerline, up to 77' AGL/123' MSL. Trees beginning 1660' from DER, left and right of centerline, up to 100' AGL/139' MSL. **Rwy 36**, trees beginning 335' from DER, 506' right of centerline, up to 69' AGL/113' MSL. Trees beginning 875' from DER, 644' left of centerline, up to 72' AGL/116' MSL. Trees beginning 1009' from DER, 76' left of centerline, up to 79' AGL/123' MSL. Trees and poles beginning 1517' from DER, 22' right of centerline, up to 100' AGL/149' MSL. Trees beginning 2075' from DER, 205' left of centerline, up to 100' AGL/146' MSL. Tower 2.4 NM from DER, 4367' right of centerline, 415' AGL/454' MSL

PLANT CITY, FL

PLANT CITY (PCM)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG 09127 (FAA)

NOTE: **Rwy 10**, trees beginning 264' from DER, 561' left of centerline, up to 100' AGL/229' MSL. Trees beginning 490' from DER, 13' right of centerline, up to 100' AGL/239' MSL. **Rwy 28**, trees beginning 50' from DER, 278' right of centerline, up to 100' AGL/254' MSL. Trees beginning 515' from DER, 15' left of centerline, up to 100' AGL/249' MSL. Train on railroad tracks, 380' from DER, 547' left of centerline, up to 23' AGL/172' MSL. Vehicles on roadway, 266' from DER, 137' left of centerline, up to 15' AGL/169' MSL.

POMPANO BEACH, FL

POMPANO BEACH AIRPARK (PMP)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 5 14261 (FAA)

TAKEOFF MINIMUMS: **Rwy 10**, 300-1½ or std. w/ min. climb of 261' per NM to 300. **Rwy 15**, 400-1½ or std. w/ min. climb of 441' per NM to 500.

NOTE: **Rwy 6**, trees beginning 101' from DER, 26' left and 232' right of centerline, up to 70' AGL/88' MSL.

Rwy 10, pole 154' from DER, 131' left of centerline, 9' AGL/18' MSL. Trees, pole, and building beginning 427' from DER, 12' left and 343' right of centerline, up to 49' AGL/63' MSL. Poles and buildings beginning 1264' from DER, 166' left and 286' right of centerline, up to 64' AGL/72' MSL. Building 5670' from DER, 604' right of centerline, 186' AGL/190' MSL. Buildings 1 NM from DER, 887' left of centerline, up to 201' AGL/210' MSL. **Rwy 15**, building, trees, and poles beginning 502' from DER, 306' left and 434' right of centerline, 44' AGL/54' MSL. Trees beginning 1229' from DER, 152' left and 190' right of centerline, up to 71' AGL/162' MSL. Building 5994' from DER, 1491' left of centerline, 213' AGL/221' MSL. Building 1.1 NM from DER, 1259' left of centerline, 300' AGL/310' MSL. Building 1.7 NM from DER, 1385' right of centerline, 255' AGL/265' MSL. **Rwy 24**, trees beginning 190' from DER, 304' right of centerline, up to 30' AGL/49' MSL. Trees beginning 423' from DER, 3' left of centerline, up to 47' AGL/66' MSL. Tanks, building, tree, and pole beginning 630' from DER, 23' right of centerline, 60' AGL/80' MSL. Trees beginning 2179' from DER, 253' left of centerline, up to 91' AGL/110' MSL. **Rwy 28**, trees beginning 358' from DER, 255' left of centerline, up to 25' AGL/44' MSL. Poles, buildings, trees, and tank beginning 722' from DER, 33' left and 238' right of centerline, up to 45' AGL/64' MSL. **Rwy 33**, buildings beginning 29' from DER, 398' left of centerline, 18' AGL/34' MSL. Trees beginning 629' from DER, 518' left of centerline, up to 59' AGL/77' MSL. Trees beginning 202' from DER, 548' right of centerline, up to 38' AGL/56' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)





15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PONCE, PR

MERCEDITA (PSE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 15064 (FAA)

TAKEOFF MINIMUMS: **Rwy 12**, std. w/min. climb of 300'/NM to 5200 or 3700-2½% for VCOA. **Rwy 30**, std. w/min. climb of 778'/NM to 6700 or 3700-2½% for VCOA. DEPARTURE PROCEDURE: **Rwy 12**, climb heading 119° to 2600 before proceeding on course between 299° CW to 257°. **Rwy 30**, climb heading 299° to 700 before proceeding on course between 296° CW to 119°.

VCOA: All runways - obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Mercedita at or above 3600 then climb heading 079° and SJU VORTAC R-239.20 to CLAYO INT/SJU 35 DME. Continue climb in CLAYO holding pattern (hold SW, left turns, 059° inbound) to cross CLAYO at or above MEA or assigned altitude for route of flight.

NOTE: **Rwy 12**, vehicles on road 27' from DER, 380' right of centerline, 15' AGL/42' MSL. Multiple poles 125' from DER, 432' right of centerline, up to 60' AGL/87' MSL. Trees beginning 126' from DER, 369' left of centerline, up to 33' AGL/71' MSL. Multiple poles and trees 317' from DER, 218' right of centerline, up to 65' AGL/88' MSL. Tree 2559' from DER, 448' right of centerline, 63' AGL/93' MSL. **Rwy 30**, poles beginning 95' from DER, 238' left of centerline, up to 43' AGL/76' MSL. Poles beginning 97' from DER, 281' right of centerline, up to 44' AGL/87' MSL. Buildings, poles, towers and trees beginning 4322' from DER, left and right of centerline, up to 154' AGL/521' MSL.

PUNTA GORDA, FL

PUNTA GORDA (PGD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 12152 (FAA)

TAKEOFF MINIMUMS: **Rwys 9, 27**, NA-airport authority request.

NOTE: **Rwy 4**, tree 822' from DER, 583' left of centerline, 35' AGL/59' MSL. Trees beginning 34' from DER, 292' right of centerline, up to 60' AGL/84' MSL.

Rwy 15, trees beginning 43' from DER, 129' left of centerline, up to 48' AGL/68' MSL. Trees beginning 133' from DER, 449' right of centerline, up to 84' AGL/104' MSL. **Rwy 22**, tree 138' from DER, 426' left of centerline, 14' AGL/29' MSL.

Rwy 33, tree 638' from DER, 618' left of centerline, 38' AGL/53' MSL. Tree 1170' from DER, 563' right of centerline, 35' AGL/54' MSL. Vehicle on road 273' from DER, 501' right of centerline, 15' AGL/29' MSL.

QUINCY, FL

QUINCY MUNI (2J9)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 09071 (FAA)

TAKEOFF MINIMUMS: **Rwy 32**, 300-2 or std. w/ min. climb of 217' per NM to 600, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to DER.

NOTE: **Rwy 14**, trees beginning abeam DER, 421' left of centerline, up to 100' AGL/299' MSL. Vehicles on road abeam DER, 340' left of centerline, 15' AGL/214' MSL. Trees beginning abeam DER, 255' right of centerline, up to 100' AGL/309' MSL. Vehicles on road abeam DER, 174' right of centerline, 15' AGL/224' MSL. **Rwy 32**, trees beginning abeam DER, 307' left of centerline, up to 100' AGL/329' MSL. Vehicles on road abeam DER, 398' left of centerline, 15' AGL/244' MSL. Trees beginning 910' from DER, 722' right of centerline, up to 100' AGL/329' MSL. Power line beginning 1225' from DER, left and right of centerline, up to 79' AGL/327' MSL.

ST. AUGUSTINE, FL

NORTHEAST FLORIDA RGNL (SGJ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 07298 (FAA)

NOTE: **Rwy 2**, trees 1355' from DER, 314' right of centerline, 100' AGL/104' MSL. **Rwy 20**, aircraft on ramp abeam DER, 158' right of centerline, up to 32' AGL/41' MSL. Aircraft on taxiway 182' from DER, on centerline, up to 32' AGL/42' MSL. Buildings beginning 220' from DER, 402' right of centerline, up to 34' AGL/44' MSL. Hangars beginning 174' from DER, 180' left of centerline, up to 16' AGL/26' MSL. Vehicles on road and train on railroad beginning 419' from DER, 599' right of centerline, up to 23' AGL/37' MSL. Numerous trees beginning 589' from DER, 652' right of centerline, up to 100' AGL/114' MSL. Numerous trees beginning 754' from DER, 586' left of centerline, up to 100' AGL/109' MSL. **Rwy 24**, hangars beginning abeam DER, 400' left of centerline, up to 16' AGL/26' MSL. Aircraft on ramp 55' from DER, 119' right of centerline up to 32' AGL/41' MSL. Buildings beginning 150' from DER, 191' right of centerline, up to 34' AGL/44' MSL. Vehicles on road and train on railroad beginning 571' from DER, on centerline, up to 23' AGL/37' MSL. Numerous trees beginning 742' from DER, left and right of centerline, up to 100' AGL/114' MSL. **Rwy 31**, numerous trees beginning 87' from DER, 418' left of centerline, up to 89' AGL/98' MSL. Vehicles on road and train on railroad beginning at DER, 237' left of centerline, up to 23' AGL/37' MSL. Numerous trees beginning 242' from DER, 2' right of centerline, up to 85' AGL/99' MSL.

ST. PETERSBURG, FL

ALBERT WHITTED (SPG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 01163 (FAA)

TAKEOFF MINIMUMS: **Rwy 36**, 300-1 or std. with a min. climb of 320' per NM until 500.

DEPARTURE PROCEDURE: **Rwys 18,25**, climb runway heading to 500 before turning right. **Rwys 7,36**, climb runway heading to 500 before turning left.

NOTE: **Rwy 25**, 70' MSL/63' AGL building 350' from DER, 375' left of runway centerline.





15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ST. PETERSBURG-CLEARWATER, FL

ST PETE-CLEARWATER INTL (PIE)

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

AMDT 3A 14093 (FAA)

TAKEOFF MINIMUMS: **Rwys 18R, 36L**, NA - VFR runway. **Rwy 22**, 200'-1/4 or std. w/min. climb of 230' per NM to 300, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to DER. DEPARTURE PROCEDURE: **Rwy 9**, climb heading 093° to 500 before proceeding southbound.
NOTE: **Rwy 4**, trees beginning 174' from DER, 279' right of centerline, up to 61' AGL/65' MSL. Bush 495' from DER, 258' right of centerline, 27' AGL/31' MSL. Bush 511' from DER, 326' left of centerline, 17' AGL/21' MSL. Trees beginning 523' from DER, 225' left of centerline, up to 17' AGL/21' MSL. Boats beginning 775' from DER, on centerline, up to 25' AGL/25' MSL. **Rwy 9**, trees beginning 805' from DER, 470' right of centerline, up to 47' AGL/51' MSL. Tree 1617' from DER, 816' left of centerline, 60' AGL/64' MSL. **Rwy 18L**, building 689' from DER, 418' right of centerline, 34' AGL/44' MSL. Signs beginning 909' from DER, 98' right of centerline, up to 50' AGL/58' MSL. Poles beginning 970' from DER, 114' right of centerline, up to 51' AGL/58' MSL. Poles beginning 1015' from DER, 103' left of centerline, up to 40' AGL/47' MSL. Sign 1336' from DER, 198' left of centerline, 46' AGL/53' MSL. Tree 2100' from DER, 996' right of centerline, 96' AGL/105' MSL. Antenna on hopper 2583' from DER, 801' right of centerline, 76' AGL/89' MSL. **Rwy 22**, tower 123' from DER, 359' left of centerline, 24' AGL/33' MSL. Trees beginning 1235' from DER, 270' left of centerline, up to 65' AGL/70' MSL. Tree 1629' from DER, 88' right of centerline, 61' AGL/70' MSL. Tower 5591' from DER, 266' right of centerline, 153' AGL/168' MSL. **Rwy 27**, poles beginning 188' from DER, 138' right of centerline, up to 69' AGL/75' MSL. Vehicles on road 200' from DER, 418' right of centerline, 10' AGL/24' MSL. Building 552' from DER, 450' right of centerline, 26' AGL/34' MSL. Poles beginning 605' from DER, 179' left of centerline, up to 40' AGL/49' MSL. Trees beginning 1540' from DER, 224' left of centerline, up to 57' AGL/66' MSL. Antenna on tank 2188' from DER, 712' left of centerline, 70' AGL/80' MSL. **Rwy 36R**, boats beginning 646' from DER, 655' left of centerline, up to 25' AGL/25' MSL.

SAN JUAN, PR

FERNANDO LUIS RIBAS DOMINICCI (SIG)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG 00027 (FAA)

TAKEOFF MINIMUMS: **Rwy 9**, 400-2 or std. with a min. climb of 290' per NM to 400. **Rwy 27**, 300-1.

NOTE: **Rwy 9**, numerous close-in trees and buildings to 177' AGL right of centerline within 3200' of departure end, additional buildings to 177' AGL left and right of centerline within 5500' of departure end. **Rwy 27**, ship maneuvering area within 5200' of DER.

SAN JUAN, PR (CON'T)

LUIS MUÑOZ MARIN INTL (SJU)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 7 09239 (FAA)

DEPARTURE PROCEDURE: **Rwy 8**, climb on a heading between 109° CCW to 258° from DER, or minimum climb of 381' per NM to 5000 for all other courses. **Rwy 10**, climb on a heading between 91° CCW to 281° from DER, or minimum climb of 390' per NM to 4900 for all other courses. **Rwy 26**, climb on a heading between 255° CW to 078° from DER, or minimum climb of 311' per NM to 4800 for all other courses. **Rwy 28**, climb on a heading between 260° CW to 101° from DER, or minimum climb of 323' per NM to 4800 for all other courses.

NOTE: **Rwy 8**, trees beginning 21' from DER, left and right of centerline, up to 84' AGL/107' MSL. **Rwy 10**, trees beginning 157' from DER, left and right of centerline, up to 54' AGL/61' MSL. **Rwy 26**, building and trees beginning 8' from DER, 339' right of centerline, up to 138' AGL/154' MSL. Sign and bushes beginning 381' from DER, 374' left of centerline, up to 28' AGL/35' MSL. **Rwy 28**, bush and trees beginning 159' from DER, 476' left of centerline, up to 61' AGL/71' MSL. Pole 438' from DER, 587' left of centerline, 31' AGL/38' MSL.

SARASOTA (BRADENTON), FL

SARASOTA/BRADENTON INTL (SRQ)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2A 11349 (FAA)

NOTE: **Rwy 4**, vehicles on road 79' from DER, 500' right of centerline, up to 17' AGL/42' MSL. Buildings beginning 142' from DER, 462' left of centerline, up to 23' AGL/48' MSL. Trees beginning 357' from DER, 356' right of centerline, up to 78' AGL/101' MSL. Trees beginning 925' from DER, 55' right of centerline, up to 79' AGL/102' MSL. Poles beginning 317' from DER, 461' right of centerline, up to 57' AGL/80' MSL. Poles beginning 1215' from DER, 113' left of centerline, up to 42' AGL/65' MSL. Camera 1012' from DER, 251' left of centerline, 29' AGL/52' MSL. **Rwy 14**, trees beginning 119' from DER, 430' left of centerline, up to 32' AGL/55' MSL. Trees beginning 345' from DER, 362' left of centerline, up to 74' AGL/94' MSL. Railroad 431' from DER, 533' left of centerline, 24' AGL/44' MSL. **Rwy 22**, vehicles on road 125' from DER, through centerline, up to 17' AGL/38' MSL. Trees beginning 235' from DER, 518' right of centerline, up to 103' AGL/113' MSL. Trees beginning 819' from DER, 18' left of centerline, up to 95' AGL/102' MSL. Poles/signs beginning 346' from DER, 528' right of centerline, up to 39' AGL/53' MSL. Poles/signs beginning 882' from DER, 38' left of centerline, up to 46' AGL/63' MSL. Buildings beginning 1689' from DER, 61' left of centerline, up to 65' AGL/75' MSL. Pole 2225' from DER, 751' left of centerline, 65' AGL/85' MSL. **Rwy 32**, wall 199' from DER, 465' left of centerline, up to 39' AGL/49' MSL. Antenna 732' from DER, 168' left of centerline, 44' AGL/54' MSL. Trees beginning 775' from DER, 274' left of centerline, up to 78' AGL/88' MSL. Trees beginning 606' from DER, 645' right of centerline, 61' AGL/71' MSL.





TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

SEBASTIAN, FL

SEBASTIAN MUNI (X26)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG-A 13010 (FAA)

TAKEOFF MINIMUMS: **Rwy 10**, 300-1 or std. w/min. climb of 270' per NM to 300.

NOTE: **Rwy 5**, trees beginning 1700' from DER, 494' right of centerline, up to 100' AGL/124' MSL. Trees beginning 4060' from DER, 391' right of centerline, up to 100' AGL/125' MSL. Trees beginning 3702' from DER, 1281' left of centerline, up to 100' AGL/125' MSL. **Rwy 10**, vehicles on roadway 388' from DER, across centerline, up to 15' AGL/40' MSL. Trees beginning 2970' from DER, 534' left of centerline, up to 100' AGL/125' MSL. Trees beginning 3047' from DER, 405' right of centerline, up to 100' AGL/125' MSL. Tower 5190' from DER, 1671' left of centerline, 173' AGL/198' MSL. **Rwy 23**, trees beginning 570' from DER, 225' right of centerline, up to 100' AGL/119' MSL. Trees beginning 647' from DER, 354' left of centerline, up to 100' AGL/124' MSL. **Rwy 28**, trees beginning 1035' from DER, 391' left of centerline, up to 100' AGL/119' MSL. Trees beginning 1057' from DER, 515' right of centerline, up to 100' AGL/119' MSL.

SEBRING, FL

SEBRING RGNL (SEF)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 1 13122 (FAA)

NOTE: **Rwy 1**, fence, sign, Navaid, and trees beginning 28' from DER, 108' left of centerline, up to 9' AGL/63' MSL. Tree 107' from DER, 263' right of centerline, 9' AGL/63' MSL. Trees beginning 938' from DER, 520' right of centerline, up to 43' AGL/102' MSL. Trees beginning 1184' from DER, 452' left of centerline, up to 45' AGL/104' MSL. **Rwy 14**, fence and trees beginning 12' from DER, 318' right of centerline, up to 10' AGL/65' MSL. Fence beginning 18' from DER, 320' left of centerline, up to 10' AGL/64' MSL. **Rwy 19**, trees beginning 11' from DER, 216' right of centerline, up to 10' AGL/66' MSL. Trees beginning 1891' from DER, 332' right of centerline, up to 77' AGL/132' MSL. **Rwy 32**, fence, train on track, vehicle on road, and trees beginning 66' from DER, 5' right of centerline, up to 26' AGL/79' MSL. Building, sign, pole, train on tracks, vehicles on road, fence, and trees beginning 105' from DER, 72' left of centerline, 39' AGL/91' MSL. Tank, building, poles, and trees beginning 576' from DER, 48' right of centerline, up to 82' AGL/126' MSL. Trees beginning 759' from DER, 2' left of centerline, up to 55' AGL/108' MSL.

STUART, FL

WITHAM FIELD (SUA)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2B 13122 (FAA)

DEPARTURE PROCEDURE: **Rwy 25**, climb heading 290° to 1700 before proceeding on course. **Rwy 30**, climb heading 296° to 1300 before proceeding on course.

NOTE: **Rwy 7**, trees beginning 75' from DER, 289' left of centerline, up to 100' AGL/114' MSL. Trees beginning 268' from DER, 287' right of centerline, up to 100' AGL/109' MSL. **Rwy 12**, pole and trees beginning 35' from DER, 55' left of centerline, up to 59' AGL/73' MSL. Trees beginning 763' from DER, 45' right of centerline, up to 67' AGL/81' MSL. **Rwy 16**, trees beginning 627' from DER, 42' left of centerline, up to 46' AGL/60' MSL. Trees beginning 70' from DER, 202' right of centerline, up to 92' AGL/106' MSL. **Rwy 25**, storage racks and trees beginning 176' from DER, 17' left of centerline, up to 36' AGL/55' MSL. Antenna tower 4948' from DER, 1539' left of centerline, 151' AGL/167' MSL. Trees beginning 123' from DER, 316' right of centerline, up to 55' AGL/79' MSL. **Rwy 30**, trees beginning 155' from DER, 47' left of centerline, up to 72' AGL/86' MSL. Poles and trees beginning 5' from DER, 28' right of centerline, up to 64' AGL/78' MSL. **Rwy 34**, trees beginning 362' from DER, 473' left of centerline, up to 100' AGL/109' MSL. Trees beginning 281' from DER, 385' right of centerline, up to 100' AGL/109' MSL.

TALLAHASSEE, FL

TALLAHASSEE RGNL (TLH)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 1 13010 (FAA)

NOTE: **Rwy 9**, control box 12' from DER, 123' right of centerline, 3' AGL/49' MSL. Trees beginning 732' from DER, 658' left of centerline, up to 62' AGL/121' MSL. Agricultural equipment, pole, mobile crane, and trees beginning 1237' from DER, 651' right of centerline, up to 74' AGL/134' MSL. **Rwy 18**, trees beginning 2358' from DER, 761' left of centerline, up to 84' AGL/143' MSL. Poles and trees beginning 1336' from DER, 790' right of centerline, up to 62' AGL/121' MSL. **Rwy 27**, trees beginning 2463' from DER, 9' left of centerline, up to 62' AGL/171' MSL. Trees beginning 2780' from DER, 3' right of centerline, up to 55' AGL/154' MSL. **Rwy 36**, trees beginning 1270' from DER, 198' left of centerline, up to 81' AGL/140' MSL. Trees beginning 1076' from DER, 94' right of centerline, up to 71' AGL/140' MSL.

TAMPA, FL

PETER O. KNIGHT (TPF)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 7 12152 (FAA)

TAKEOFF MINIMUMS: **Rwys 4, 36**, NA - Environmental. **Rwy 18**, 300-1 or std. w/ min. climb of 260' per NM to 300.

NOTE: **Rwy 18**, small boats beginning 250' from DER, left and right of centerline, up to 30' MSL. **Rwy 22**, trees/buildings beginning at DER, 180' right of centerline, up to 75' AGL/82' MSL. Small boats beginning 450' from DER, 380' left of centerline, up to 30' MSL.



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

TAMPA, FL (CON'T)

TAMPA EXECUTIVE (VDF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 11013 (FAA)

TAKEOFF MINIMUMS: **Rwy 18**, std. w/ min. climb of 230' per NM to 900, or 900-2½% for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5**, climb heading 046° to 500 before turning left. **Rwy 18**, for climb in visual conditions cross Tampa Executive Airport at or above 800 before proceeding on course.

NOTE: **Rwy 5**, trees beginning 1920' from DER, 45' right of centerline, up to 70' AGL/95' MSL. Trees beginning 925' from DER, 343' left of centerline, up to 64' AGL/149' MSL. **Rwy 18**, three light poles beginning 2894' from DER, 12' right of centerline, up to 149' AGL/149' MSL. Trees beginning 193' from DER, 287' left of centerline, up to 68' AGL/91' MSL.

Three light poles beginning 2894' from DER, 5' right of centerline, up to 129' AGL/149' MSL. Light on hanger 287' from DER, 336' left of centerline, 24' AGL/44' MSL. **Rwy 23**, trees beginning at DER, 421' right of centerline, up to 58' AGL/73' MSL. Obstruction light on navaid 611' from DER, 258' left of centerline, 23' AGL/37' MSL. Windsock 731' from DER, 258' right of centerline, 24' AGL/38' MSL. **Rwy 36**, trees beginning 37' from DER, 329' right of centerline, up to 72' AGL/82' MSL. Lighted tower 3260' from DER, 348' right of centerline, 105' AGL/122' MSL. Trees beginning 1273' from DER, 158' left of centerline, up to 76' AGL/86' MSL. Antenna 627' from DER, 629' left of centerline, 78' AGL/88' MSL.

TAMPA INTL (TPA)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 9 11013 (FAA)

DEPARTURE PROCEDURE: **Rwy 10**, climb heading 097° to 800 before turning right.

NOTE: **Rwy 1L**, tree 753' from DER, 697' right of centerline, 42' AGL/66' MSL. **Rwy 1R**, power lines 2091' from DER, 1018' right of centerline, 50' AGL/84' MSL. **Rwy 10**, trees beginning 1282' from DER, 1' right of centerline, up to 106' AGL/118' MSL. Tower 4214' from DER, 266' right of centerline, 105' AGL/145' MSL. Ground 135' from DER, 494' left of centerline, 30' MSL. Trees beginning 1643' from DER, 205' left of centerline, up to 103' AGL/114' MSL. **Rwy 19L**, antenna on building 3279' from DER, 1160' left of centerline, 145' AGL/155' MSL. Building 4755' from DER, 1523' left of centerline, 146' AGL/155' MSL.

Rwy 19R, trees beginning 482' from DER, 578' right of centerline, up to 33' AGL/37' MSL. **Rwy 28**, trees beginning 479' from DER, 359' right of centerline, up to 53' AGL/67' MSL. Sign 764' from DER, 436' right of centerline, 26' AGL/40' MSL. Multiple trees beginning 129' from DER, 84' left of centerline, up to 54' AGL/68' MSL. Pole 475' from DER, 437' left of centerline, 30' AGL/35' MSL. Plane on taxiway 1497' from DER, right and left of runway centerline, up to 65' AGL/74' MSL. Building 4355' from DER, 1647' left of centerline, 146' AGL/151' MSL. Antenna on pole 5583' from DER, 1162' left of centerline, 146' AGL/158' MSL.

TITUSVILLE, FL

ARTHUR DUNN AIR PARK (X21)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 11069 (FAA)

TAKEOFF MINIMUMS: **Rwy 15**, 400-2½ or std. w/min. climb of 350' per NM to 700.

NOTE: **Rwy 15**, trees beginning 40' from DER, left and right of centerline, up to 77' AGL/111' MSL. Towers beginning 4975' from DER, 132' right of centerline, up to 399' AGL/419' MSL. Buildings and poles beginning 170' from DER, left and right of centerline, up to 40' AGL/71' MSL. **Rwy 33**, signs, poles, and antennas beginning 7' from DER, left and right of centerline, up to 56' AGL/85' MSL. Trees beginning 128' from DER, left and right of centerline, up to 60' AGL/89' MSL. Vehicles beginning 414' from DER, left and right of centerline, up to 15' AGL/39' MSL.

NASA SHUTTLE LANDING FACILITY (TTS)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 1 10210 (FAA)

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 155° to 700 before turning Eastbound.

NOTE: **Rwy 15**, trees beginning 2177' from DER, across centerline, up to 100' AGL/104' MSL. **Rwy 33**, trees beginning 445' from DER, 482' right of centerline, up to 100' AGL/106' MSL. Trees beginning 1275' from DER, 80' left of centerline, up to 100' AGL/106' MSL.

SPACE COAST RGNL (TIX)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG (FAA) 99028

NOTE: **Rwy 36**, 60' AGL trees 254' from DER, 526' right of centerline.

TYNDALL AFB (KPAM)

PANAMA CITY, FL

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

ORIG, 14289

TAKE-OFF OBSTACLES: **Rwy 14L**, 25' MSL/ 10' AGL vehicle 124' from DER, 533' right of centerline. 15' MSL terrain 0' from DER, 500' right of centerline. **Rwy 32L**, 26' MSL/11' AGL building 188' from DER, 519' left of centerline. **Rwy 32R**, 25' MSL/10' AGL vehicle 15' inward of DER, 472' right of centerline.



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

UMATILLA, FL

UMATILLA MUNI (X23)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13346 (FAA)

NOTE: **Rwy 1**, trees beginning abeam DER, 319' right of centerline, up to 57' AGL/191' MSL. Trees beginning abeam DER, 240' left of centerline, up to 57' AGL/176' MSL. Fence beginning abeam DER, 233' left of centerline, up to 6' AGL/120' MSL. Fence beginning abeam DER, 196' right of centerline, up to 6' AGL/120' MSL. Terrain 275' from DER, 495' right of centerline, up to 131' MSL. **Rwy 19**, buildings beginning abeam DER, 258' right of centerline, up to 25' AGL/129' MSL. Vehicles on roadway, beginning abeam DER, 172' left of centerline, up to 15' AGL/114' MSL. Fence beginning abeam DER, 177' left of centerline, up to 6' AGL/105' MSL. Trees beginning abeam DER, 361' left of centerline, up to 57' AGL/156' MSL. Terrain 7' from DER, 417' right of centerline, 108' MSL.

VENICE, FL

VENICE MUNI (VNC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 13262 (FAA)

TAKEOFF MINIMUMS: **Rwy 23**, 300-1½ or std. w/min. climb of 248' per NM to 300'. **Rwy 31**, 300-1½ or std. w/min. climb of 237' per NM to 300'.

DEPARTURE PROCEDURE: **Rwy 5**, climb heading 050° to 800 before turning right. **Rwy 31**, climb heading 305° to 1500 before proceeding on course.

NOTE: **Rwy 5**, bush 5' from DER, 307' right of centerline, 12' AGL/27' MSL. Sign 50' from DER, 162' left of centerline, 2' AGL/19' MSL. Trees beginning 293' from DER, 172' left of centerline, up to 52' AGL/67' MSL. Poles and buildings beginning 1049' from DER, left and right of centerline, up to 65' AGL/67' MSL. Trees beginning 459' from DER, 356' right of centerline, up to 49' AGL/59' MSL. **Rwy 23**, trees beginning 8' from DER, 199' left of centerline, up to 42' AGL/47' MSL. Trees beginning 22' from DER, 196' right of centerline, up to 33' AGL/38' MSL. Pole 450' from DER, 594' left of centerline, 28' AGL/32' MSL. Ships beginning 6052' from DER, left and right of centerline, up to 200' AGL/200' MSL. **Rwy 13**, trees beginning 2' from DER, 225' left of centerline, up to 70' AGL/80' MSL. Trees beginning 4' from DER, 279' right of centerline, up to 75' AGL/85' MSL. Pole 747' from DER, 651' left of centerline, 33' AGL/51' MSL. **Rwy 31**, trees beginning abeam DER, 253' left of centerline, up to 67' AGL/77' MSL. Trees beginning 384' from DER, 627' left of centerline, up to 59' AGL/69' MSL. Trees beginning 608' from DER, 257' right of centerline, up to 73' AGL/83' MSL. Poles beginning 693' from DER, 262' left of centerline, up to 31' AGL/43' MSL. Poles beginning 804' from DER, 475' right of centerline, up to 30' AGL/44' MSL. Antennas/tower beginning 1015' from DER, 498' left of centerline, up to 52' AGL/63' MSL. Ships beginning 6035' from DER, left and right of centerline, up to 200' AGL/200' MSL.

VERO BEACH, FL

VERO BEACH MUNI (VRB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 14093 (FAA)

NOTE: **Rwy 4**, multiple trees beginning 813' from DER, 178' left of centerline, up to 100' AGL/120' MSL. Multiple trees beginning 3003' from DER, 93' right of centerline, up to 83' AGL/100' MSL. **Rwy 12L**, multiple trees beginning 171' from DER, 455' right of centerline, up to 57' AGL/74' MSL. Multiple trees and lights beginning 547' from DER, 259' left of centerline, up to 39' AGL/56' MSL. Storage tank 1813' from DER, 763' right of centerline, 45' AGL/74' MSL. **Rwy 12R**, pole 709' from DER, 522' left of centerline, 28' AGL/45' MSL. Spire 1622' from DER, 574' right of centerline, 44' AGL/61' MSL. **Rwy 22**, vehicles on road abeam DER, 421' left of centerline, up to 15' AGL/39' MSL. Vehicles on road 408' from DER, left and right of centerline, up to 15' AGL/39' MSL. Multiple trees beginning 1404' from DER, 272' left of centerline, up to 64' AGL/84' MSL. Multiple trees beginning 1989' from DER, 126' right of centerline, up to 68' AGL/88' MSL. **Rwy 30L**, multiple trees beginning 1206' from DER, 46' right of centerline, up to 100' AGL/120' MSL. Multiple trees beginning 1575' from DER, 135' left of centerline, up to 61' AGL/81' MSL. **Rwy 30R**, multiple antennas and trees beginning 1656' from DER, 111' right of centerline, up to 70' AGL/90' MSL. Multiple trees beginning 1782' from DER, 247' left of centerline, up to 65' AGL/85' MSL.

WAUCHULA, FL

WAUCHULA MUNI (CHN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 07018

NOTE: **Rwy 18**, trees 450' from DER, 130' left of centerline, 22' AGL/126' MSL. **Rwy 36**, tree 183' from DER, 350' left of centerline, 49' AGL/145' MSL. Power line 582' from DER, on centerline, 51' AGL/140' MSL. Tree, 323' from DER, 490' left of centerline, 100' AGL/200' MSL. Tree 39' from DER, 486' right of centerline, 100' AGL/185' MSL.



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



15064

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WEST PALM BEACH, FL

NORTH PALM BEACH COUNTY GENERAL AVIATION (F45)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG 09015 (FAA)

TAKEOFF MINIMUMS: **Rwys 8L, 26R**, NA-turf runway. NOTE: **Rwy 8R**, trees beginning 582' from DER, 47' right of centerline, up to 100' AGL/124' MSL. Trees beginning 950' from DER, 56' left of centerline, up to 100' AGL/124' MSL. **Rwy 13**, trees beginning at DER, 14' right of centerline, up to 100' AGL/124' MSL. Trees beginning 144' from DER, 29' left of centerline, up to 100' AGL/124' MSL. **Rwy 26L**, trees 43' from DER, 418' left of centerline, up to 8' AGL/23' MSL. **Rwy 31**, trees beginning 87' from DER, 26' right of centerline, up to 68' AGL/83' MSL. Craft 114' from DER, 425' left of centerline, up to 20' AGL/44' MSL. Trees beginning 458' from DER, 91' left of centerline, up to 100' AGL/124' MSL.

PALM BEACH COUNTY PARK (LNA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

TAKEOFF MINIMUMS: **Rwy 3**, 300-1 or std. with a min. climb of 330' per NM to 400. **Rwy 33**, 300-1 or std. with a min. climb of 460' per NM to 500.

DEPARTURE PROCEDURE: **Rwys 21, 33**, climb runway heading to 1000 before turning west. **Rwy 27**, climbing left turn to 1000 via heading 180° before proceeding on course.

NOTE: **Rwy 3**, crane 1.25 NM from DER, 1660' right of centerline, 260' AGL/285' MSL. **Rwy 33**, crane 4700' from DER, on centerline, 220' AGL/234' MSL.

PALM BEACH INTL (PBI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 09351 (FAA)

DEPARTURE PROCEDURE: **Rwy 28L**, climb heading 279° to 1200 before turning left. **Rwy 28R**, climb heading 279° to 1200 before turning left.

NOTE: **Rwy 10R**, antenna on hanger 177' from DER, 450' right of centerline, 38' AGL/57' MSL. **Rwy 10L**, light pole 1461' from DER, 843' right of centerline, 45 AGL/64' MSL. **Rwy 14**, transmission line tower, traffic signal, poles, and trees beginning 649' from DER, 24' left of centerline, up to 71' AGL/90' MSL. Vehicles on road, light poles, and trees beginning 168' from DER, 76' right of centerline, up to 87' AGL/106' MSL. **Rwy 28R**, light pole and trees beginning 1205' from DER, 323' left of centerline, up to 63' AGL/82' MSL. Sign, light pole, and trees beginning 1233' from DER, 155' right of centerline, up to 44' AGL/63' MSL. **Rwy 32**, trees beginning 1993' from DER, 444' left of centerline, up to 69' AGL/88' MSL. Trees beginning 1108' from DER, 548' right of centerline, up to 70' AGL/89' MSL.

WHITING FLD NAS-SOUTH (KNDZ)

MILTON, FL

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
12264

TAKEOFF OBSTACLES: **Rwy 5**, trees 809' from DER, 646' left of centerline, 82' AGL/233' MSL. **Rwy 32**, trees 540' from DER, 435' right of centerline, 64' AGL/262' MSL.

15064



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

WILLISTON, FL

WILLISTON MUNI (X60)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 07074 (FAA)

TAKEOFF MINIMUMS: **Rwy 5**, 400-2½ or std. w/ min. climb of 257' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 5**, climb heading 049° to 500 before proceeding on course. **Rwy 14**, climb heading 142° to 600 before proceeding on course. **Rwy 23**, climb on a heading between 253° clockwise 048° from DER, or minimum climb of 248' per NM to 1900 for all other courses.

NOTE: **Rwy 5**, brush and multiple trees beginning 38' from DER, 54' left of centerline, up to 100' AGL/179' MSL. Tower 2 NM from DER, 2343' left of centerline, 324' AGL/399' MSL. Brush and multiple trees beginning 49' from DER, 234' right of centerline, up to 100' AGL/179' MSL. **Rwy 14**, multiple trees 799' from DER, on centerline, up to 30' AGL/99' MSL. Multiple trees beginning 1143' from DER, 381' left of centerline, up to 100' AGL/174' MSL. Road and multiple trees beginning 13' from DER, 208' right of centerline, up to 100' AGL/179' MSL. **Rwy 23**, multiple trees beginning 445' from DER, 8' left of centerline, up to 100' AGL/184' MSL. Multiple trees beginning 430' from DER, 403' right of centerline, up to 100' AGL/189' MSL. **Rwy 32**, multiple trees 799' from DER, on centerline, up to 50' AGL/124' MSL. Multiple trees beginning 719' from DER, 288' left of centerline, up to 100' AGL/194' MSL. Multiple trees beginning 497' from DER, 442' right of centerline, up to 100' AGL/194' MSL.

WINTER HAVEN, FL

WINTER HAVEN'S GILBERT (GIF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 10210 (FAA)

TAKEOFF MINIMUMS: **Rwy 23**, 300-1½ or std. w/ min. climb of 325' per NM to 500. **Rwy 29**, std. w/ min. climb of 250' per NM to 700, or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 29**, for climb in visual conditions, cross Winter Haven's Gilbert Field at or above 900 before proceeding on course.

NOTE: **Rwy 5**, trees beginning 55' from DER, 340' left of centerline, up to 62' AGL/196' MSL. Trees 207' from DER, 465' right of centerline, up to 40' AGL/155' MSL. Vehicles on roadway, 227' from DER, 346' left of centerline, up to 17' AGL/151' MSL. Trees beginning 1712' from DER, 75' left of centerline, up to 81' AGL/200' MSL. **Rwy 11**, trees beginning 72' from DER, 330' left of centerline, up to 67' AGL/187' MSL. Vehicles on roadway 214' from DER, 277' right of centerline, up to 17' AGL/155' MSL. Trees beginning 445' from DER, 363' right of centerline, up to 82' AGL/203' MSL. **Rwy 23**, trees beginning 176' from DER, 345' left of centerline, up to 99' AGL/221' MSL. Tank 1.0 NM from DER, 972' left of centerline, 176' AGL/328' MSL. **Rwy 29**, trees beginning 75' from DER, 283' left of centerline, up to 59' AGL/187' MSL. Trees beginning 182' from DER, 284' right of centerline, up to 59' AGL/184' MSL. Tower 2.0 NM from DER, 2511' left of centerline, 310' AGL/457' MSL.





TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ZEPHYRHILLS, FL

ZEPHYRHILLS MUNI (ZPH)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 2 14261 (FAA)

NOTE: **Rwy 1**, trees beginning 836' from DER, 160' right of centerline, up to 77' AGL/157' MSL. Trees beginning 374' from DER, 586' left of centerline, up to 55' AGL/136' MSL. Trees beginning 1332' from DER, 7' left of centerline, up to 87' AGL/167' MSL. **Rwy 5**, trees beginning 1087' from DER, 101' left of centerline, up to 65' AGL/141' MSL. Trees beginning 455' from DER, 432' right of centerline, up to 53' AGL/125' MSL. Trees beginning 1030' from DER, 19' right of centerline, up to 77' AGL/151' MSL. **Rwy 19**, fence 77' from DER, 464' left of centerline, 6' AGL/90' MSL. Trees beginning 196' from DER, 339' left of centerline, up to 74' AGL/158' MSL. Trees beginning 1345' from DER, 188' left of centerline, up to 89' AGL/168' MSL. Tree 35' from DER, 423' right of centerline, 44' AGL/129' MSL. Trees beginning 266' from DER, 127' right of centerline, up to 72' AGL/151' MSL. **Rwy 23**, trees and poles beginning 1069' from DER, 75' left of centerline, up to 52' AGL/142' MSL. Trees beginning 478' from DER, 23' right of centerline, up to 78' AGL/168' MSL.



TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)



15008

LAND AND HOLD-SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold-Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	AVBL LDG DIST
DAYTONA BEACH, FL			
DAYTONA BEACH INTL (DAB)	07L	TWY W	7,500 feet
	16	07L-25R	2,900 feet
FORT LAUDERDALE, FL			
FORT LAUDERDALE EXECUTIVE (FXE)	26	13-31	3,000 feet
	31	09-27	3,250 feet
JACKSONVILLE, FL			
JACKSONVILLE EXECUTIVE	05	14-32	3,600 feet
AT CRAIG (CRG)	14	05-23	3,650 feet
LAKELAND, FL			
LAKELAND LINDER RGNL (LAL)	05	09-27	2,500 feet
	09	05-23	6,000 feet
MIAMI, FL			
MIAMI INTL (MIA)	09	12-30	9,749 feet
	12	09-27	8,100 feet
ORLANDO, FL			
EXECUTIVE (ORL)	25	13-31	4,150 feet
ORLANDO SANFORD (SFB)	09L	18-36	5,500 feet
	09C	18-36	3,150 feet
	18	09R-27L	4,624 feet
	36	09L-27R	5,300 feet
ST. PETERSBURG-CLEARWATER, FL			
ST. PETERSBURG-CLEARWATER			
INTL (PIE)	18L	04-22	7,557 feet
	22	18L-36R	4,514 feet
	36R	09-27	3,405 feet
SARASOTA (BRADENTON), FL			
SARASOTA/BRADENTON INTL (SRQ)	14	04-22	3,800 feet
TAMPA, FL			
TAMPA INTL (TPA)	19L	10-28	5,650 feet
	28	01R-19L	4,350 feet
TITUSVILLE, FL			
SPACE COAST RGNL (TIX)	09	18-36	4,225 feet
	36	09-27	3,750 feet
VERO BEACH, FL			
VERO BEACH MUNI (VRB)	30L	04-22	4,700 feet
WEST PALM BEACH,			
PALM BEACH INTL (PBI)	10L	14-32	3,140 feet
	14	10L-28R	4,360 feet
	28R	14-32	3,710 feet

15008

15008

HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DAYTONA BEACH, FL DAYTONA BEACH INTL (DAB)	HS 1	Int of Twy W and Twy S.
FORT LAUDERDALE, FL FORT LAUDERDALE EXECUTIVE (FXE)	HS 1 HS 2 HS 3 HS 4 HS 5	Int of Twy E and Rwy 09 at the apch end. Int of Twy B and Rwy 09-27. Int of Twy A and Rwy 13-31. Int of Twy C, Twy B and Rwy 13-31. Int of Twy B and Rwy 13-31.
FORT LAUDERDALE, FL FORT LAUDERDALE- HOLLYWOOD INTL (FLL)	HS 1 HS 2 HS 3 HS 4 HS 5	Twy E at Rwy 09L-27R. Twy D at Rwy 09L-27R. Twy Q at Rwy 09L-27R. Twy departure risk. Twy B instead of Rwy 09L. Twy D4: wrong rwy departure risk.
FORT MYERS, FL PAGE FIELD (FMY)	HS 1 HS 2	Twy A intersects Twy A2 and Twy D. Do not use Twy A2 to the rwy unless instructed. Multiple twy intersections.
FORT MYERS, FL SOUTHWEST FLORIDA INTL (RSW)	HS 1 HS 2	Twy G1 is directly aligned with Twy F2. When ldg Rwy 06, Twy F6 high speed exit sign is immediately before the Twy F5 reverse high speed.
GAINESVILLE, FL GAINESVILLE RGNL	HS 1 HS 2 HS 3	Rwy 11 Apch Hold Position. Rwy 07 and Rwy 11 apch ends. Twy A1 and Twy B lead to Rwy 25 and Rwy 29.
HOLLYWOOD, FL NORTH PERRY (HWO)	HS 1 HS 2 HS 3	Southbound on Twy D for Rwy 28R departures. The hold line for Rwy 01L is also the hold line for Rwy 10R. Aircraft taxiing on Twy L westbound to depart on Rwy 01L-19R.
MIAMI, FL KENDALL-TAMiami EXECUTIVE (TMB)	HS 1	Twy H and Twy E hold lines are in close proximity to Rwy 13-31.

(SEE CONTINUATION PAGE FOR MORE LISTINGS)

15008

15008

HOT SPOTS

(CONTINUED)

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
MIAMI, FL MIAMI INTL (MIA)	HS 1 HS 2 HS 3 HS 4 HS 5	Short twy risk. Short twy risk. Rwy 27 and Rwy 30 wrong rwy departure risk. Short twy between runways. Multiple rwy ends close together. Some hold lines dependent upon rwy in use.
MIAMI, FL OPA-LOCKA EXECUTIVE (OPF)	HS 1	Surface painted LOCATION and DIRECTION signs ONLY.
NEW SMYRNA BEACH, FL NEW SMYRNA BEACH MUNI (EVB)	HS 1	Twy E and Rwy 25 and Rwy 20.
ORLANDO, FL EXECUTIVE (ORL)	HS 1 HS 2 HS 3	Twy K and Twy A. Rwy 25 and Twy E. Rwy 07 and Twy A3.
ORLANDO SANFORD INTL (SFB)	HS 1 HS 2	Twy C is beyond the Rwy 09C APCH hold sign and marking. Hold line for Rwy 09R on Twy R northbound is adjacent to Twy S.
SARASOTA/BRADENTON SARASOTA/BRADENTON INTL (SRQ)	HS1	Intersection of Rwy 14-32 and Rwy 4-22.
STUART, FL WITHAM FIELD (SUA)	HS 1 HS 2	Intersecting runways, wrong rwy departure risk. Rwy 12 and Twy A1.
WEST PALM BEACH, FL PALM BEACH INTL (PBI)	HS 1 HS 2 HS 3 HS 4	Rwy 10L and Twy L. Missing left turn from Twy F to Twy L. Missing turn onto Twy G results in mid-field incursion. Twy L, Twy L3, Twy E and the general aviation parking ramp.

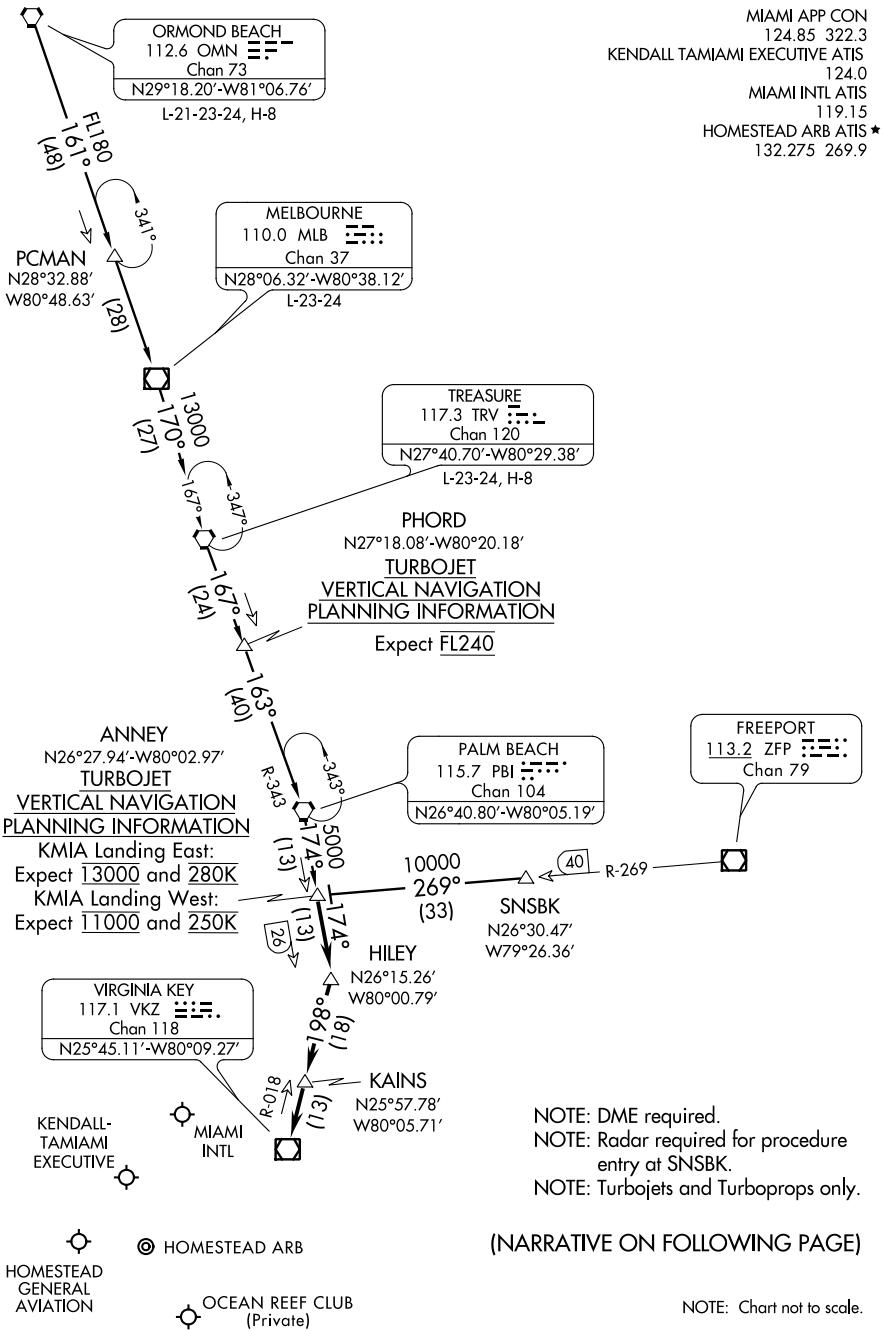
*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

15008

(ANNEY.ANNEY2) 13234
ANNEY TWO ARRIVAL

ST-257 (FAA)

MIAMI, FLORIDA



(ANNEY.ANNEY2) 12264
ANNEY TWO ARRIVAL

ST-257 (FAA)

MIAMI, FLORIDA

ARRIVAL ROUTE DESCRIPTION

MELBOURNE TRANSITION (MLB.ANNEY2): From over MLB VOR/DME on MLB R-170 to TRV VORTAC, then on TRV R-167 to PHORD, then on PBI R-343 to PBI VORTAC, then on PBI R-174 to ANNEY. Thence

ORMOND BEACH TRANSITION (OMN.ANNEY2): From over OMN VORTAC on OMN R-161 to MLB VORTAC, then on MLB R-170 to TRV VORTAC, then on TRV R-167 to PHORD, then on PBI R-343 to PBI VORTAC, then on PBI R-174 to ANNEY. Thence

SNSBK TRANSITION (SNSBK.ANNEY2): From over SNSBK on ZFP R-269 to ANNEY. Thence. . . .

TREASURE TRANSITION (TRV.ANNEY2): From over TRV VORTAC on TRV R-167 to PHORD, then on PBI R-343 to PBI VORTAC, then on PBI R-174 to ANNEY. Thence

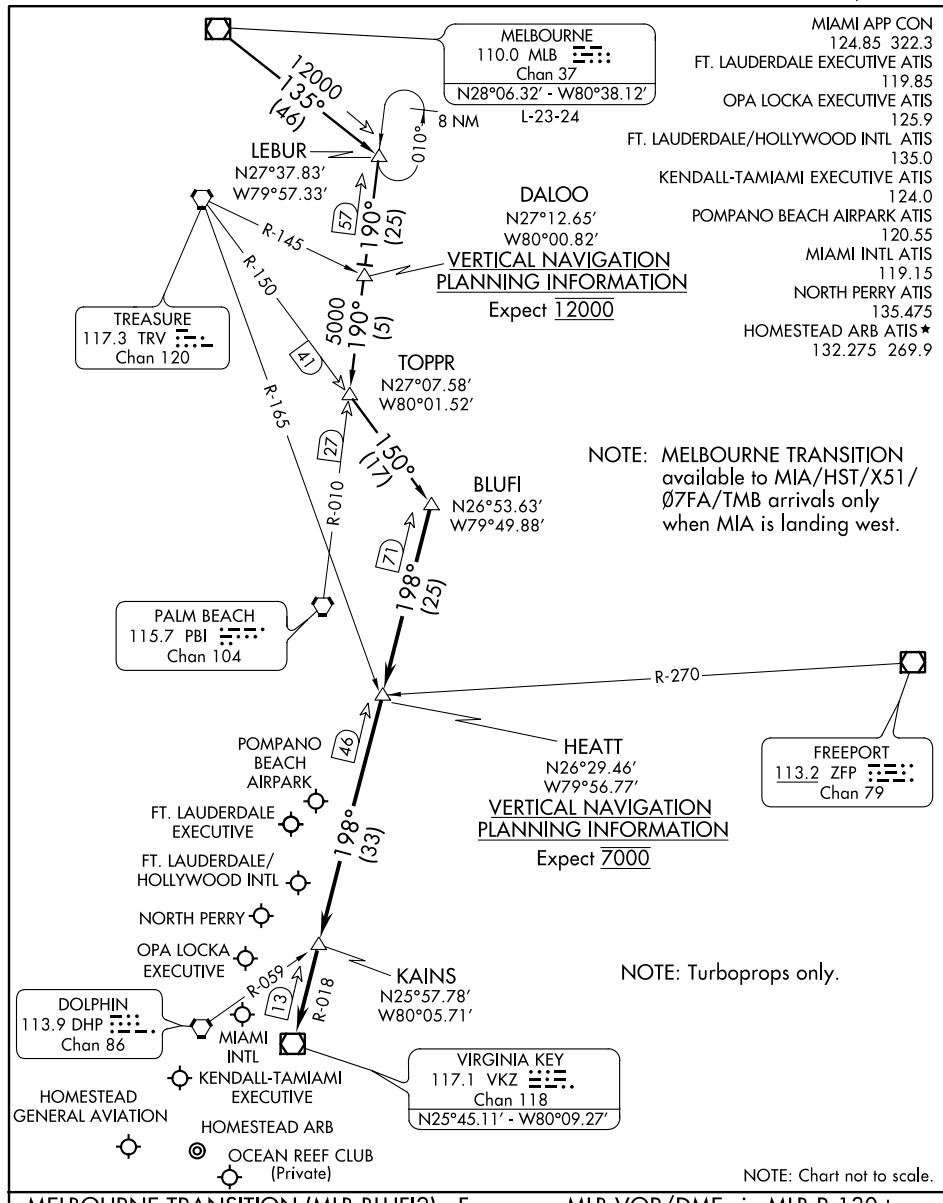
. . . . From over ANNEY on PBI R-174 to HILEY/PBI 25.8 DME, then on VKZ R-018 to KAINS/VKZ 13 DME, then on VKZ R-018 to VKZ VOR/DME. Expect radar vectors to final approach course after KAINS.

(BLUFI.BLUFI2) 12264

ST-744 (FAA)

BLUFI TWO ARRIVAL

FORT LAUDERDALE, FLORIDA



MELBOURNE TRANSITION (MLB.BLUFI2): From over MLB VOR/DME via MLB R-130 to LEBUR INT/MLB 57 DME, then via PBI R-010 to TOPPR INT/PBI 27 DME, then via TRV R-150 to BLUFI INT. Thence . . .

. . . from over BLUFI INT/VKZ 71 DME on VKZ R-018 to HEATT INT/VKZ 46 DME, then on VKZ R-018 to KAINS INT, then on VKZ R-018 to VKZ VOR/DME. Expect radar vectors to final approach course after KAINS INT.

BLUFI TWO ARRIVAL

(BLUFI.BLUFI2) 12264

FORT LAUDERDALE, FLORIDA

(CURSO.CURSO2) 10098

ST-257 (FAA)

CURSO TWO ARRIVAL (RNAV) (Transition Routes)

MIAMI, FLORIDA

MIAMI APP CON
124.85 322.3
MIAMI INTL ATIS
119.15
FORT LAUDERDALE-HOLLYWOOD INTL ATIS
135.0
FORT LAUDERDALE EXECUTIVE ATIS
119.85
KENDALL-TAMiami EXECUTIVE ATIS
124.0
NORTH PERRY ATIS
135.475
OPA LOCKA EXECUTIVE ATIS
125.9
HOMESTEAD ARB ATIS ★
132.275 269.9
POMPANO BEACH AIRPARK ATIS
120.55

KEY WEST TRANSITION (EYW.CURSO2):
MARATHON TRANSITION (MTH.CURSO2):

.... From over DVALL via 069° track to CURSO, then via 072° track to MNNDY, thence as depicted.

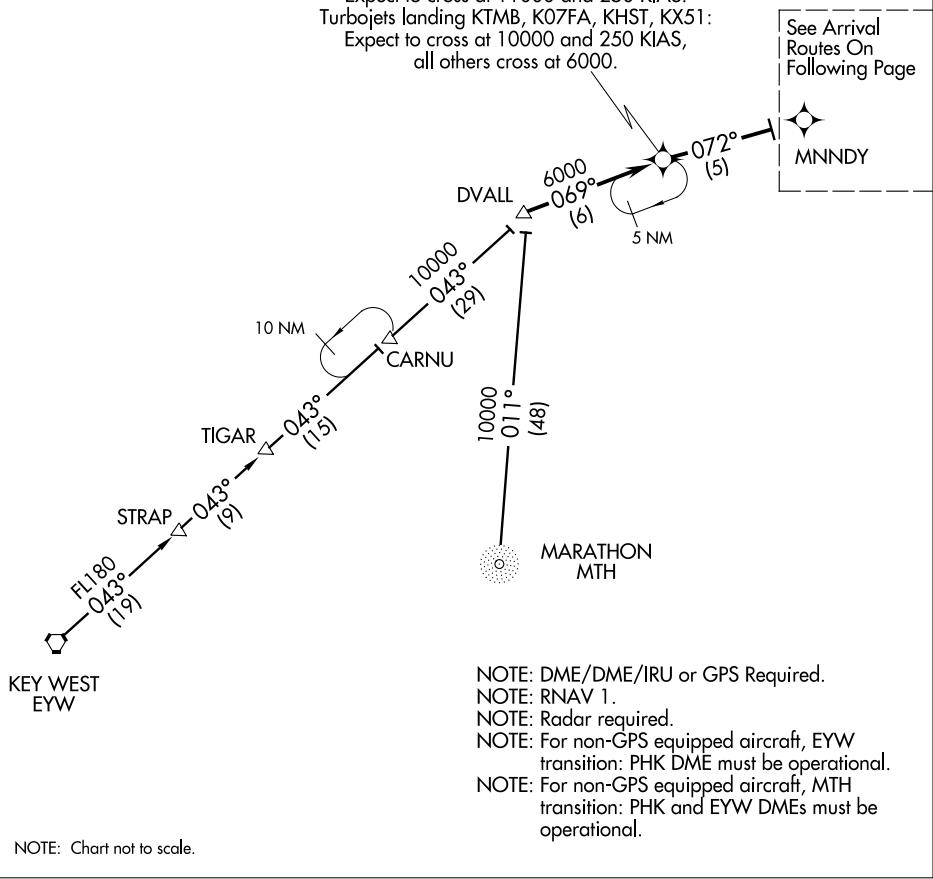
CURSO

Turbojets landing KMIA: Expect to cross at:
Landing East: 10000 and 250 KIAS.
Landing West: 14000 and 280 KIAS.
Turbojets Landing KOPF: Expect to cross at 10000.
Turbojets Landing KFL, KFXE, KPMP:
Expect to cross at 11000 and 250 KIAS.
Turbojets landing KTMB, K07FA, KHST, KX51:
Expect to cross at 10000 and 250 KIAS,
all others cross at 6000.

See Arrival
Routes On
Following Page

SE-3 05 MAR 2015 to 02 APR 2015

SE-3, 05 MAR 2015 to 02 APR 2015



CURSO TWO ARRIVAL (RNAV) (Transition Routes)
(CURSO.CURSO2) 10098

MIAMI, FLORIDA

(CURSO.CURSO2) 14261

ST-257 (FAA)

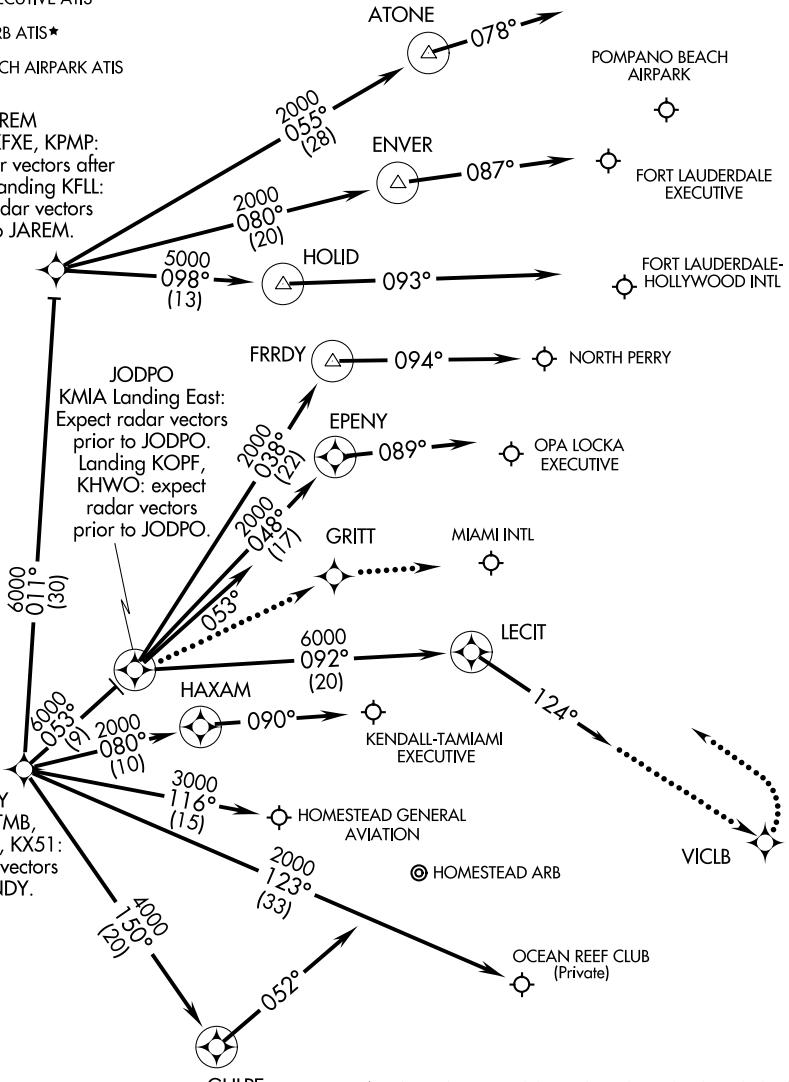
CURSO TWO ARRIVAL (RNAV) (Arrival Routes)

MIAMI, FLORIDA

MIAMI APP CON
124.85 322.3
MIAMI INTL ATIS
119.15
FORT LAUDERDALE-HOLLYWOOD INTL ATIS
135.0
FORT LAUDERDALE EXECUTIVE ATIS
119.85
KENDALL TAMiami-EXECUTIVE ATIS
124.0
NORTH PERRY ATIS
135.475
OPA LOCKA EXECUTIVE ATIS
125.9
HOMESTEAD ARB ATIS★
132.275 269.9
POMPANO BEACH AIRPARK ATIS
120.55

JAREM

Landing KFXE, KPMP:
Expect radar vectors after
JAREM. Landing KFLL:
Expect radar vectors
prior to JAREM.



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

CURSO TWO ARRIVAL (RNAV) (Arrival Routes)
(CURSO.CURSO2) 14261

MIAMI, FLORIDA

ARRIVAL ROUTE DESCRIPTION

KMIA Landing East Rwy 08R/08L/09/12: From over MNNDY via 053° track to JODPO, then fly heading 053°. Expect radar vectors to final approach course.

KMIA Landing West Rwy 26R/26L/27/30: From over MNNDY via 053° track to JODPO, then via 092° track to LECIT, then fly heading 124°. Expect radar vectors to final approach course.

Landing KPMP: From over MNNDY via 011° track to JAREM, then via 055° track to ATONE, then fly heading 078°. Expect radar vectors to final approach course.

Landing KFXE: From over MNNDY via 011° track to JAREM, then via 080° track to ENVER, then fly heading 087°. Expect radar vectors to final approach course.

Landing KFLL: From over MNNDY via 011° track to JAREM, then via 098° track to HOLID, then fly heading 093°. Expect radar vectors to final approach course.

Landing KHWO: From over MNNDY via 053° track to JODPO, then via 038° track to FRRDY, then fly heading 094°. Expect radar vectors to final approach course.

Landing KOPF: From over MNNDY via 053° track to JODPO, then via 048° track to EPENY, then fly heading 089°. Expect radar vectors to final approach course.

Landing KTMB: From over MNNDY via 080° track to HAXAM, then fly heading 090°. Expect radar vectors to final approach course.

Landing KX51: From over MNNDY via 116° track to KX51.

Landing K07FA: From over MNNDY via 123° track to K07FA.

Landing KHST: From over MNNDY via 150° track to GULPE, then fly heading 052°. Expect radar vectors to final approach course.

LOST COMMUNICATIONS:

KMIA Landing East: Track to JODPO, then proceed direct GRITT, intercept Rwy 09 final approach course, conduct approach.

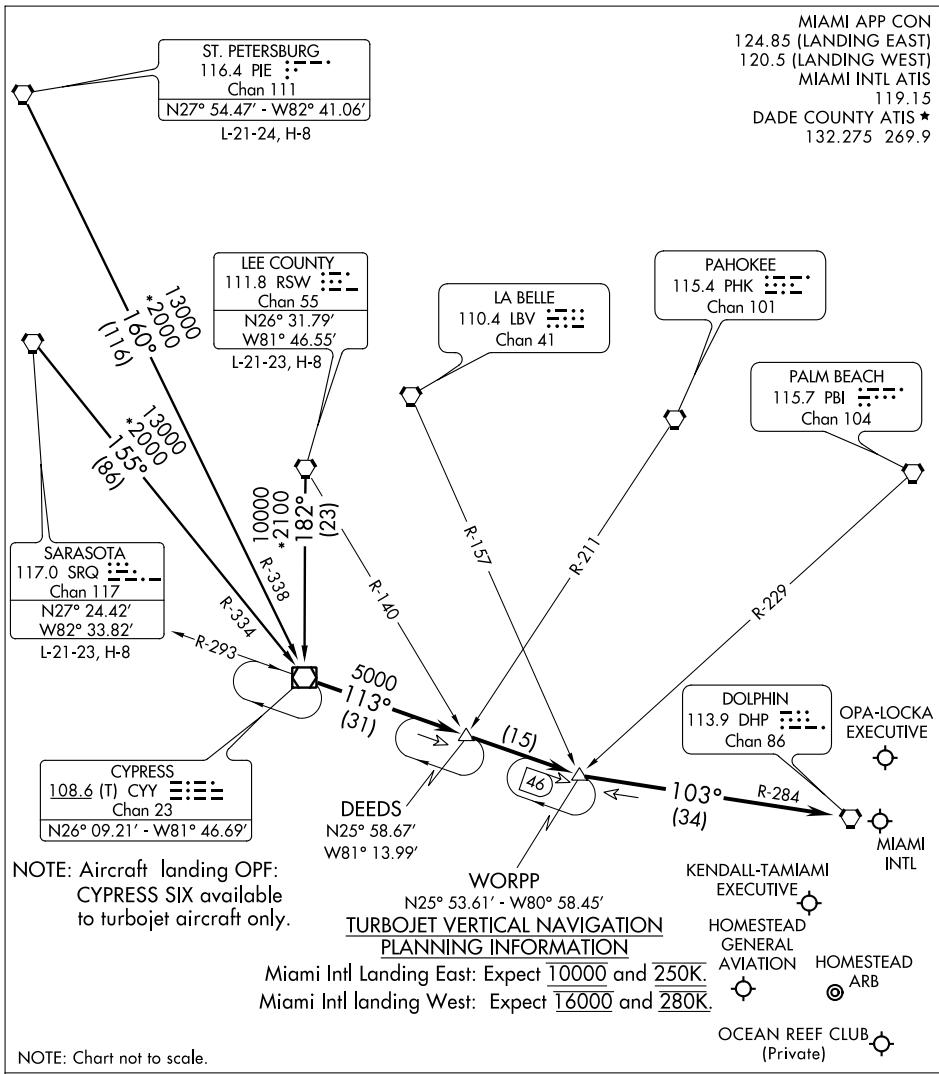
KMIA Landing West: Track to LECIT, then proceed direct VICLB, turn left to intercept Rwy 30 final approach course, conduct approach.

(CYY.CYY6) 14149

CYPRESS SIX ARRIVAL

ST-257 (FAA)

MIAMI, FLORIDA



CYPRESS SIX ARRIVAL
(CYY.CYY6) 14149

MIAMI, FLORIDA

0815Z

DVALL ONE ARRIVAL (DVALL.DVALL1)

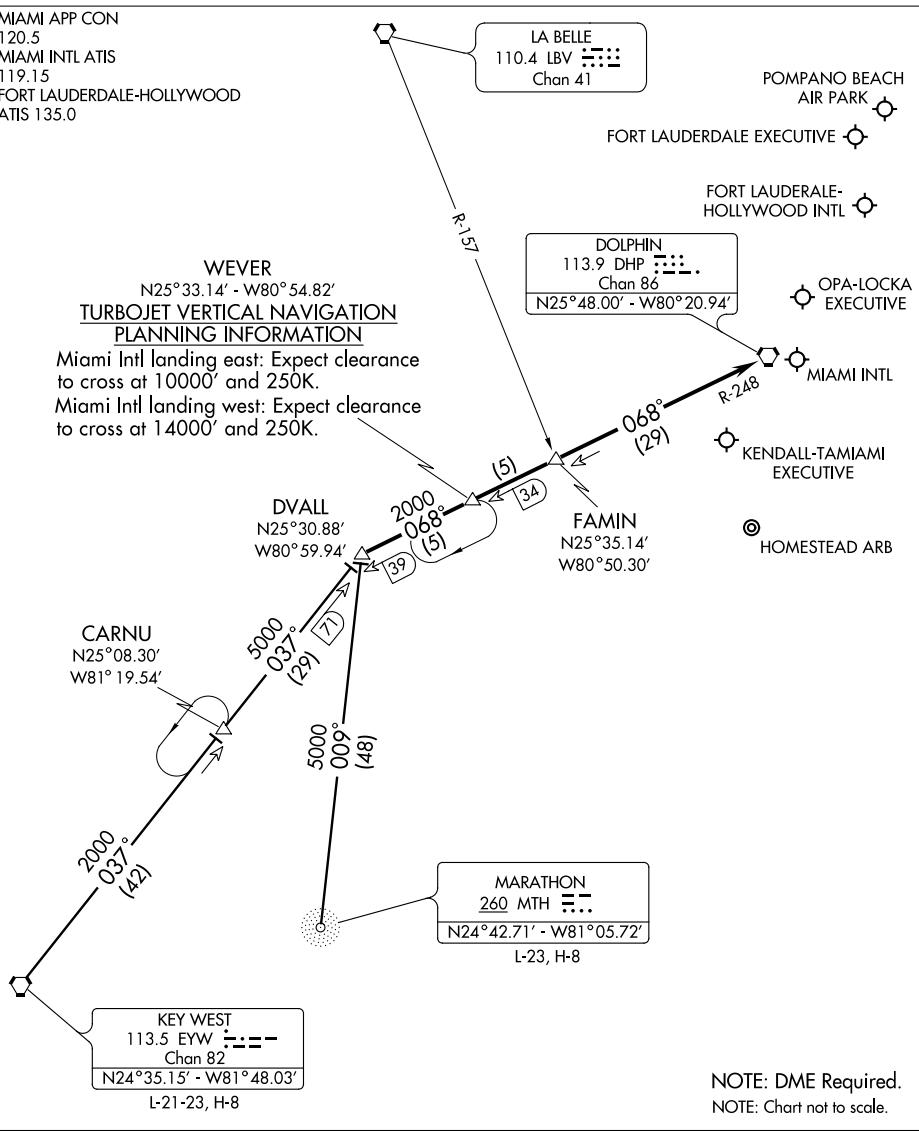
ST-257 (FAA)

MIAMI, FLORIDA

MIAMI APP CON
120.5
MIAMI INTL ATIS
119.15
FORT LAUDERDALE-HOLLYWOOD
ATIS 135.0

WEVER
N25°33.14' - W80°54.82'
TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION

Miami Intl landing east: Expect clearance to cross at 10000' and 250K.
Miami Intl landing west: Expect clearance to cross at 14000' and 250K.



KEY WEST TRANSITION (EYW.DVALL1): From over EYW VORTAC via EYW R-037 to DVALL INT. Thence. . . .

MARATHON TRANSITION (MTH.DVALL1): From over MTH NDB via bearing 009° to DVALL INT. Thence. . . .

. . . . From over DVALL INT via DHP R-248 to DHP VORTAC. Expect radar vectors to final approach course after FAMIN INT.

DVALL ONE ARRIVAL (DVALL.DVALL1)

MIAMI, FLORIDA

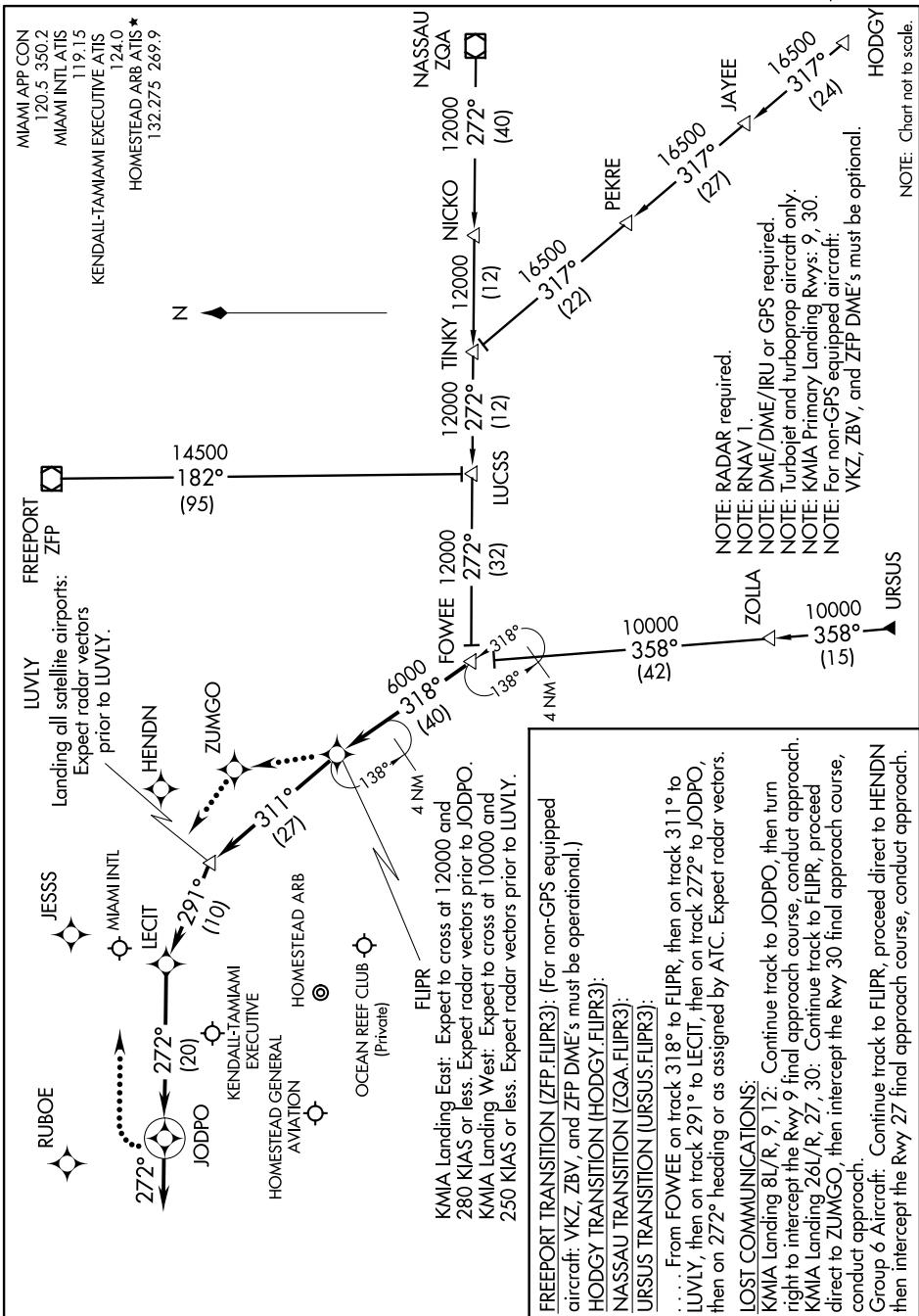
0815Z

(FLIPR.FLIPR3) 14261

ST-257 (FAA)

FLIPR THREE ARRIVAL (RNAV)

MIAMI, FLORIDA



NOTE: Chart not to scale.

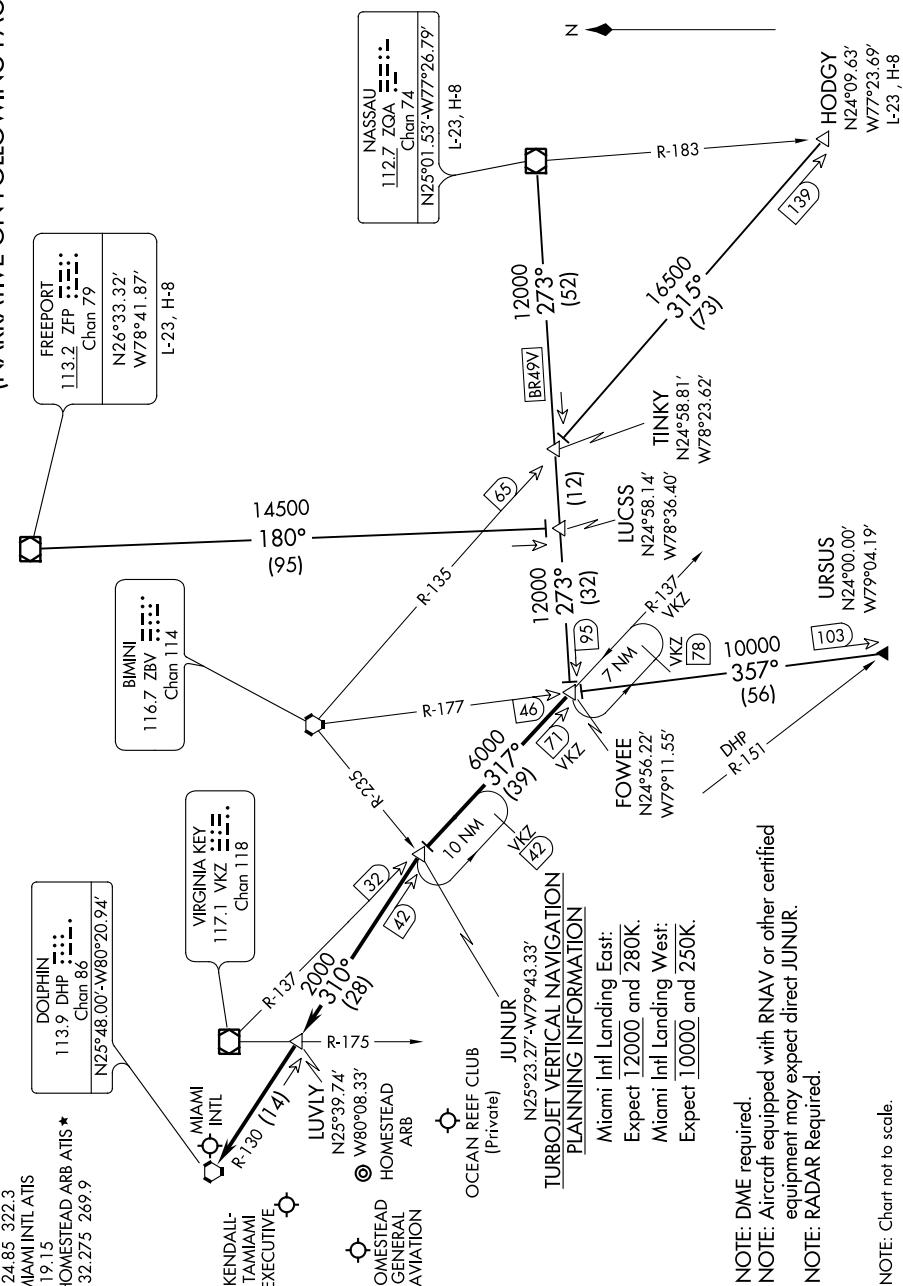
(FOWEE.FOWEE7) 15064

FOWEE SEVEN ARRIVAL

ST-257 (FAA)

MIAMI, FLORIDA

(NARRATIVE ON FOLLOWING PAGE)



(FOWEE.FOWEE7) 15064

ST-257 (FAA)

FOWEE SEVEN ARRIVAL

MIAMI, FLORIDA

ARRIVAL ROUTE DESCRIPTION

FREEPORT TRANSITION (ZFP.FOWEE7): From over ZFP VOR/DME via ZFP R-180 to LUCSS, then via ZQA R-273 to FOWEE. Thence

HODGY TRANSITION (HODGY.FOWEE7): From over HODGY via ZBV R-135 to TINKY, then via ZQA R-273 to FOWEE. Thence

NASSAU TRANSITION (ZQA.FOWEE7): From over ZQA VOR/DME via ZQA R-273 (BR49V) to FOWEE. Thence

URSUS TRANSITION (URSUS.FOWEE7): From over URSUS via ZBV R-177 to FOWEE. Thence

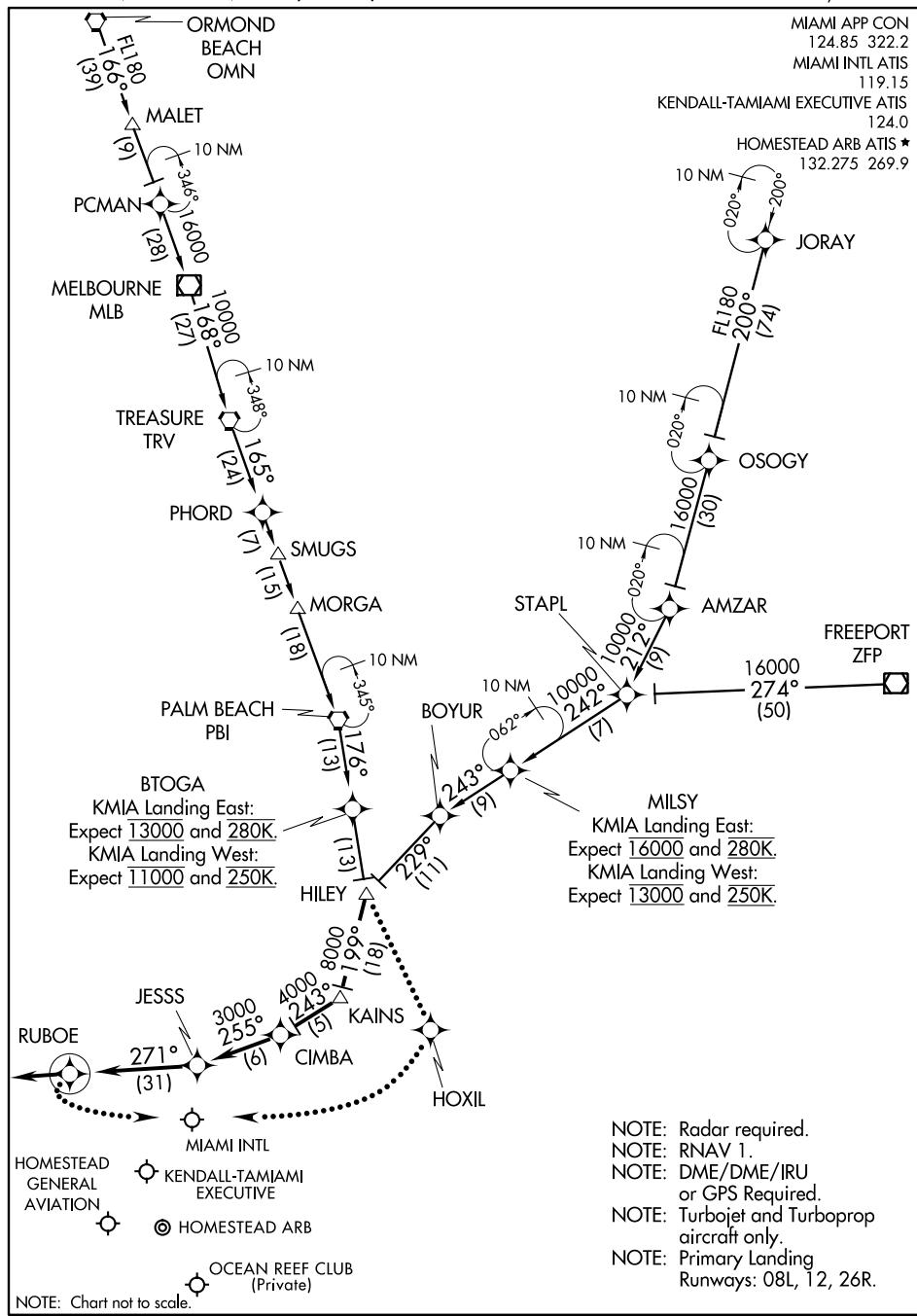
. . . . From over FOWEE via VKZ R-137 to JUNUR, then via DHP R-130 to DHP VORTAC. Expect radar vectors to final approach course after LUVLY.

(HILEY.HILEY5) 14317

ST-257 (FAA)

HILEY FIVE ARRIVAL (RNAV)

M|AMI, FLOR|DA



NOTE: Chart not to scale.

**HILEY FIVE ARRIVAL (RNAV)
(HILEY.HILEY5) 14317**

MIAMI FLORIDA

(HILEY.HILEY5) 14317

ST-257 (FAA)

HILEY FIVE ARRIVAL (RNAV)

MIAMI, FLORIDA

ARRIVAL ROUTE DESCRIPTIONFREEPORT TRANSITION (ZFP.HILEY5):JORAY TRANSITION (JORAY.HILEY5):ORMOND BEACH TRANSITION (OMN.HILEY5):

From HILEY on track 199° to KAINS, then on track 243° to CIMBA, then on track 255° to JESSS, then on track 271° to RUBOE, then on 271° heading or as assigned by ATC. Expect radar vectors.

LOST COMMUNICATIONS:

KMIA Landing East: Continue track to RUBOE, then turn left to intercept Rwy 8L final approach course, conduct approach.

Group 6 aircraft, continue track to RUBOE, then turn left to intercept Rwy 8R final approach course, conduct approach.

KMIA Landing West: Continue track to HILEY, proceed direct to HOXIL, then turn right to intercept Rwy 26R final approach course, conduct approach.

Group 6 aircraft, continue track to HILEY, proceed direct to HOXIL, then turn right to intercept Rwy 26L final approach course, conduct approach.

HILEY FIVE ARRIVAL (RNAV)

(HILEY.HILEY5) 14317

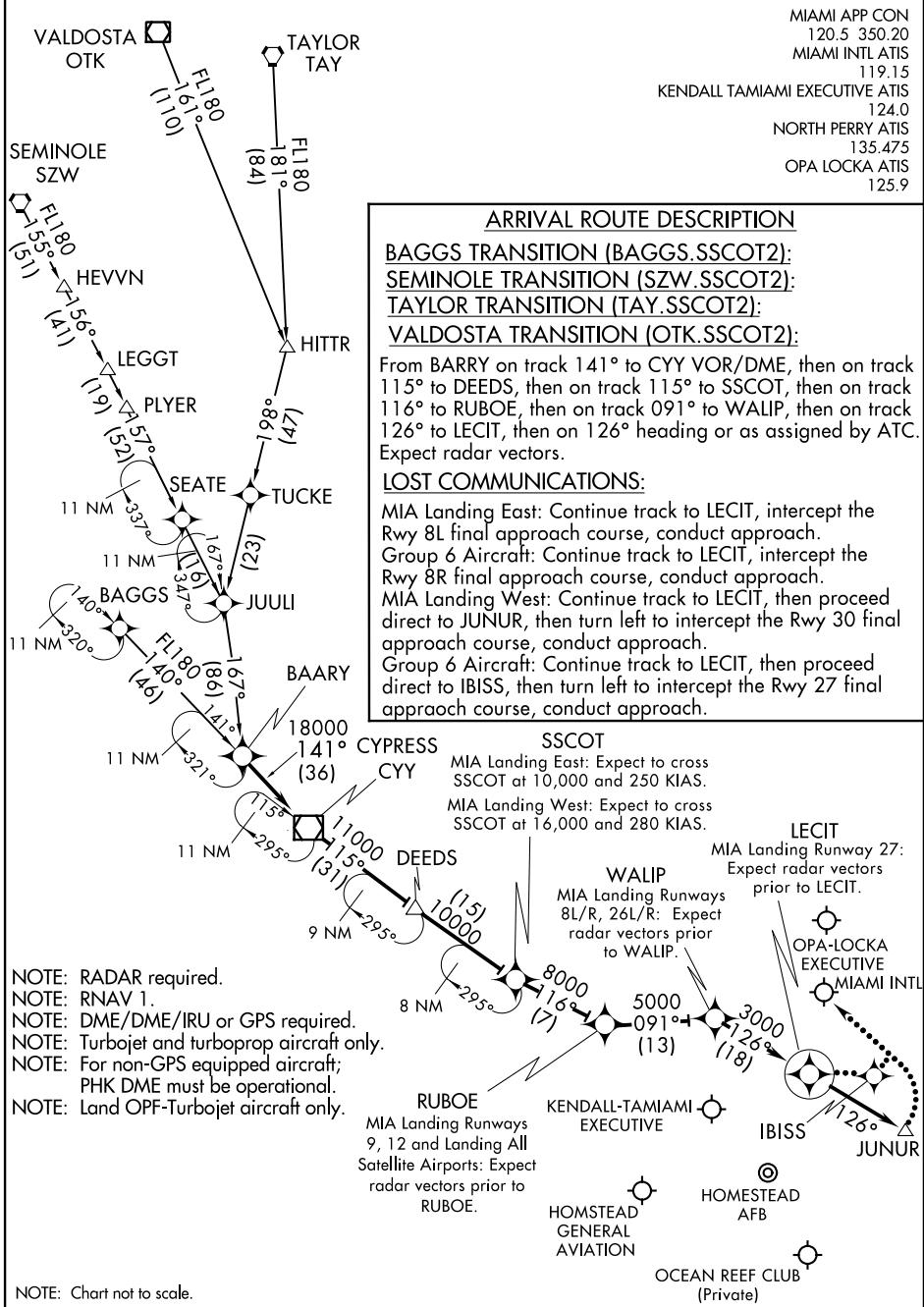
MIAMI, FLORIDA

(SSCOT.SSCOT2) 14261

SSCOT TWO ARRIVAL (RNAV)

ST-257 (FAA)

MIAMI, FLORIDA



SSCOT TWO ARRIVAL (RNAV)
 (SSCOT.SSCOT2) 14261

MIAMI, FLORIDA

MIAMI, FLORIDA

AL-257 (FAA)

15008

LOC/DME I-MFA 110.3 Chan 40	APP CRS 092°	Rwy Idg 10506 TDZE Apt Elev 8 9
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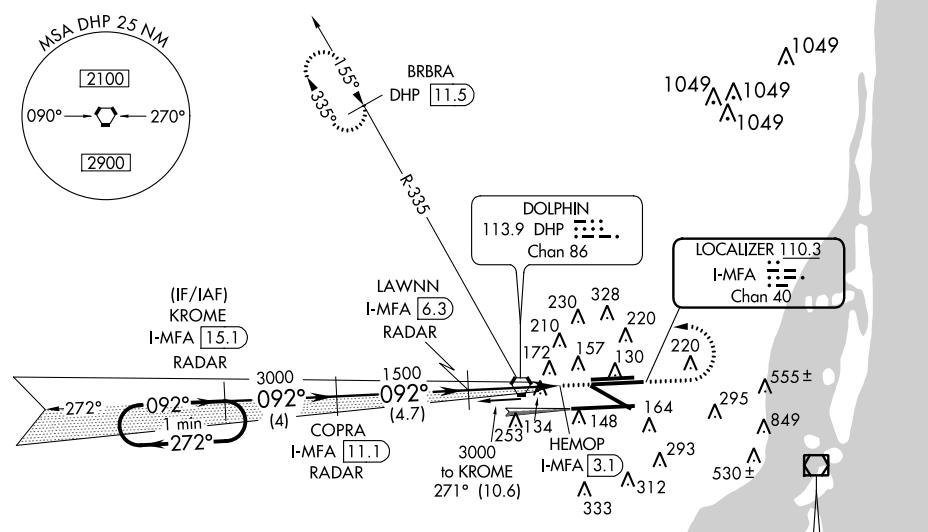
ILS or LOC RWY 8R
MIAMI INTL (MIA)

▼ For inop MALSR, increase S-ILS 8 all Cts visibility to 1½ mile.
Simultaneous approach authorized with Rwy 9. Autopilot coupled approach NA below 500 feet. DME required.



MISSED APPROACH: Climb to 800 then climbing left turn to 3000 on heading 270° and on DHP VORTAC R-335 to BRBRA/DHP 11.5 DME and hold.

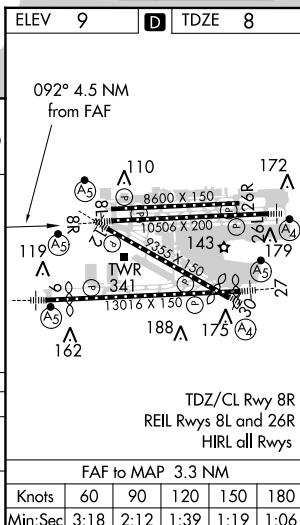
ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6
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VIRGINIA KEY	ALTERNATE MISSED APCH FIX
VKZ 117.1 Chan 118	VIRGINIA KEY 117.1 VKZ 117.1 Chan 118

DME or RADAR REQUIRED

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 77).		800	3000	DHP R-335	BRBRA DHP [11.5]
One Minute Holding Pattern	KROME I-MFA [15.1] RADAR	COPRA I-MFA [11.1] RADAR	LAWNN I-MFA [6.3] RADAR	HEMOP I-MFA [3.1]	Localizer unusable 1.2 NM from threshold.
3000 ← 272°	3000 → 092°	3000 → 092°	1500 → 1500		
GS 3.00°	TCH 51				
		4 NM	4.7 NM	3.3 NM	1.2 NM
CATEGORY	A	B	C	D	
S-ILS 8R		450/50	442 (500-1)		
S-LOC 8R	560/50	552 (600-1)		560/60	
				552 (600-1 1/4)	



MIAMI, FLORIDA
Amdt 30D 11DEC14

25°48'N-80°17'W

MIAMI INTL (MIA)
ILS or LOC RWY 8R

MIAMI, FLORIDA

AL-257 (FAA)

15008

LOC I-BUL	APP CRS 092°	Rwy Idg 11397 TDZE 7 Apt Elev 9
110.9		

ILS or LOC RWY 9
MIAMI INTL (MIA)

▼ Simultaneous approach authorized with ILS or LOC Rwy 8R and RNAV (GPS) Rwy 8L. For inop MALS, increase S-ILS 9 Cat E visibility to RVR 4000, and S-LOC 9 Cat E visibility to 1½.
* Vis Cat A/B/C/D RVR 1800 authorized with the use of FD or AP or HUD to DA.



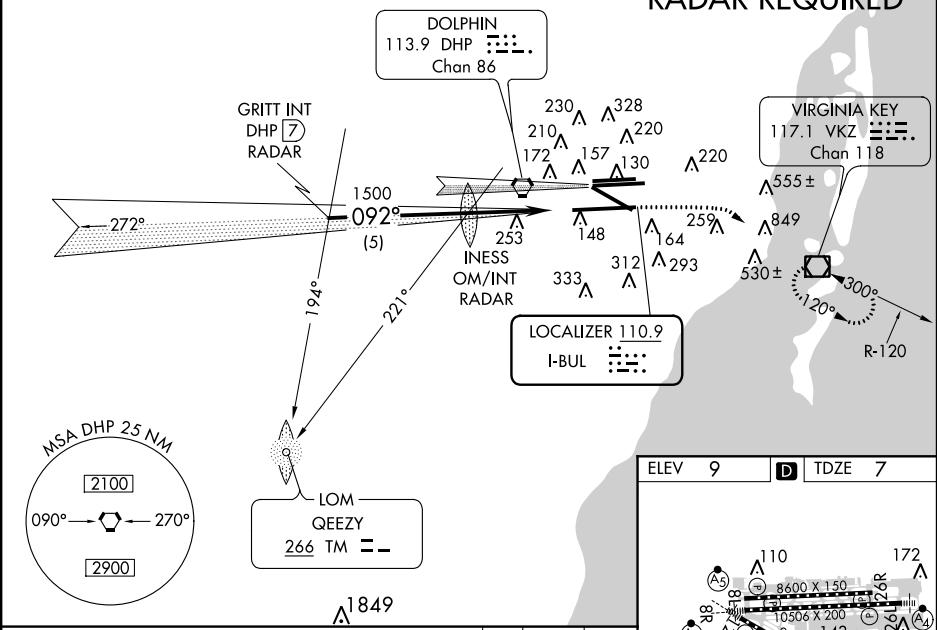
MISSIED APPROACH: Climb to 800 then climbing right turn to 3000 direct VKZ VOR/DME and hold.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6
				135.35

CAUTION: Lights on highway ¼ mile south of final approach course may be mistaken for runway.

1049
AA
A1049

RADAR REQUIRED



ELEV 9	TDZE 7
110	172
119(A5)	143(★)
162	179
188(A)	175(A)
8600 X 150	248
13016 X 150	27
10505 X 200	
092° 4 NM from FAF	
TDZ/CL Rwy 8R	
REIL Rwy 8L and 26R	
HIRL all Rwy	
FAF to MAP 4 NM	
Knots 60 90 120 150 180	
Min:Sec 4:00 2:40 2:00 1:36 1:20	

MIAMI, FLORIDA

Amdt 9D 11DEC14

25°48'N-80°17'W

MIAMI INTL (MIA)

ILS or LOC RWY 9

MIAMI, FLORIDA

AL-257 (FAA)

15008

LOC/DME I-GEM	APP CRS	Rwy Idg	8579
108.9	124°	TDZE	8
Chan 26		Apt Elev	9

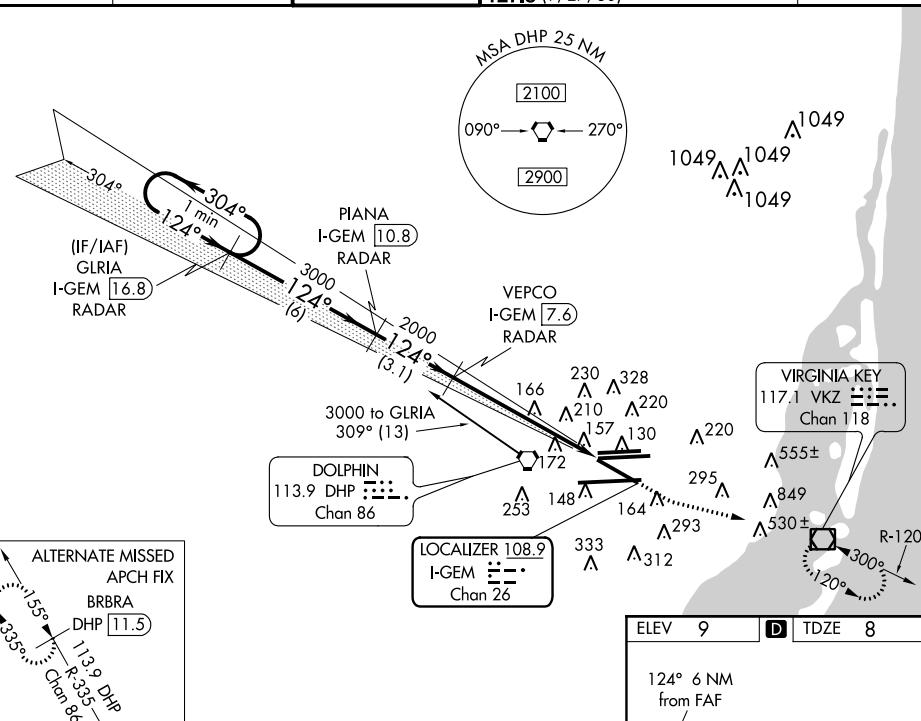
ILS or LOC RWY 12
MIAMI INTL (MIA)

▼ For inoperative MALSR, increase S-ILS 12 all Cats visibility to $1\frac{1}{4}$, increase S-LOC 12 Cats A and B visibility to RVR 5000.
DME or RADAR Required.
Visibility reduction by helicopters NA.



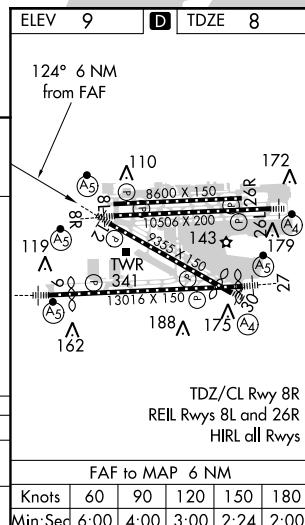
MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct VKZ VOR/DME and hold.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	348.6	CLNC DEL 135.35
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VGSI and ILS glidepath not coincident
(VGSI Angle 3.00/TCH 72).

One Minute Holding Pattern	GLRIA I-GEM RADAR	PIANA I-GEM RADAR	VEPCO I-GEM RADAR	I-GEM 3.1	I-GEM 1.6
3000 ← 304°	3000	3000	2000	2000	2000
124° →		124°			
GS 3.00° TCH 56					
CATEGORY	A	B	C	D	
S-ILS 12		376/40	368 (400-¾)		
S-LOC 12	560/40 552 (600-¾)	560/50 552 (600-1)	560/60 552 (600-1¼)		
				FAF to MAP 6 NM	
	Knots	60	90	120	150
	Min:Sec	6:00	4:00	3:00	2:24
					2:00



MIAMI, FLORIDA
Amdt 5A 18DEC08

25°48'N-80°17'W

MIAMI INTL (MIA)
ILS or LOC RWY 12

MIAMI, FLORIDA

AL-257 (FAA)

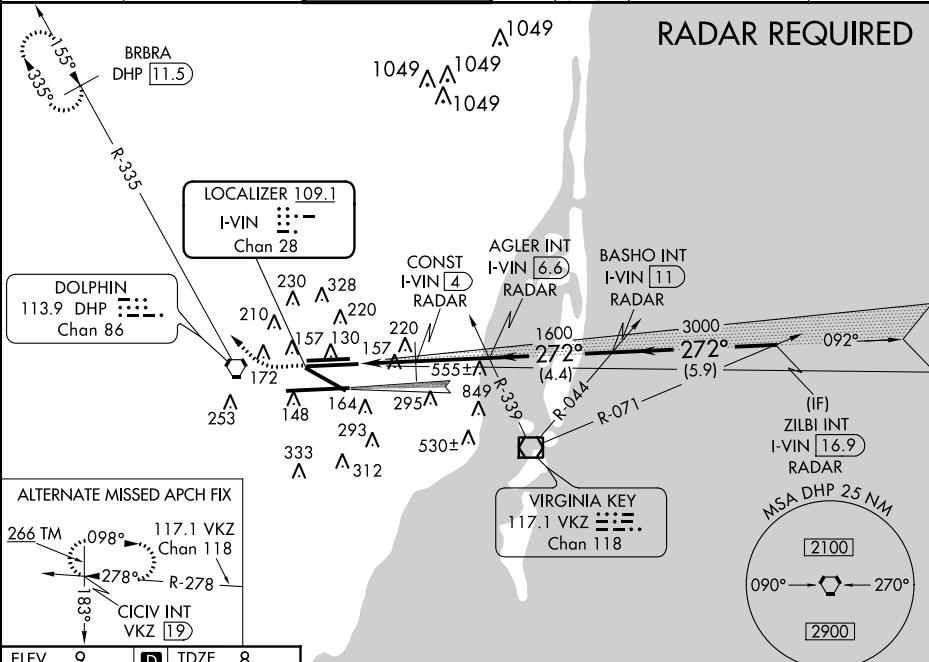
15008

LOC/DME I-VIN	APP CRS	Rwy Idg 10506
109.1	272°	TDZE
Chan 28		Apt Elev 8
		9

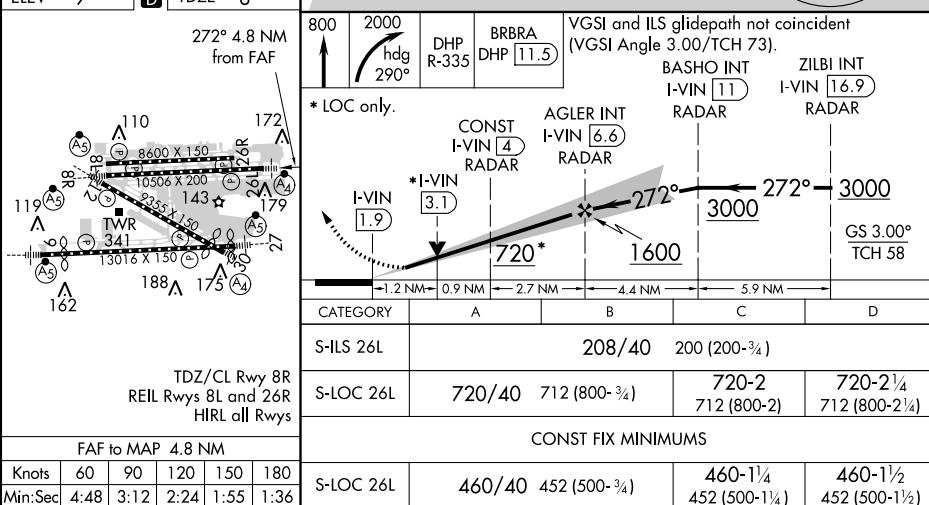
▼ Autopilot coupled approach NA below 480.
 ▲ Simultaneous approach authorized with ILS or LOC Rwy 27.
 DME required.

MALSF
(A4)**ILS or LOC RWY 26L**
MIAMI INTL (MIA)

ATIS ARR 119.15	MIAMI APP CON 124.85	MIAMI TOWER 118.3	GND CON 121.8 (8L/8R/12/26L/26R)	CNC DEL 135.35
DEP 133.675	322.3	256.9	127.5 (9/27/30)	348.6



ELEV 9 D TDZE 8



MIAMI, FLORIDA

Amdt 15C 23AUG12

25°48'N-80°17'W

MIAMI INTL (MIA)
ILS or LOC RWY 26L

MIAMI, FLORIDA

AL-257 (FAA)

15008

APP CRS 092°	Rwy Idg 10506 8
Apt Elev	9

RNAV (RNP) Y RWY 8R
MIAMI INTL (MIA)

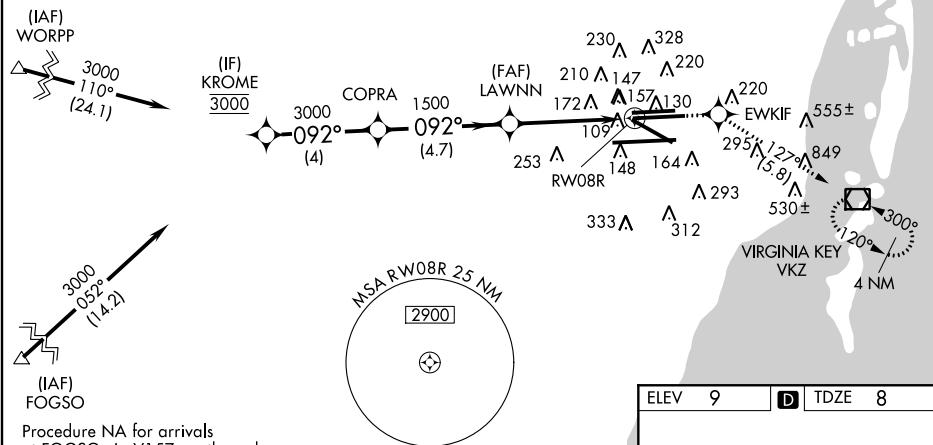
▼ For inoperative MALS, increase RNP 0.11 all Cts visibility to RVR 6000, RNP 0.30 all Cts visibility to 1½.
 ▲ NA For uncompensated Baro-VNAV systems, procedure NA below 6°C (42°F) or above 49°C (120°F). GPS Required.
 * RNP 0.11 missed approach requires minimum climb of 330 feet per NM to 600.

MALSR

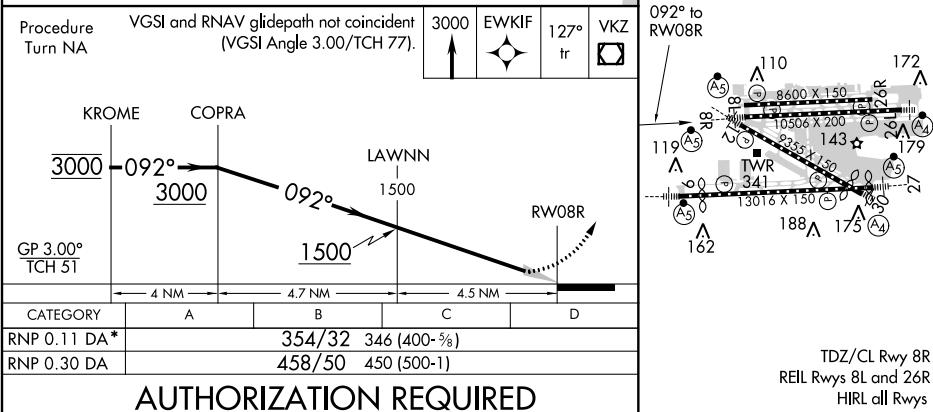
MISSSED APPROACH: Climb to 3000 direct EWKIF and via 127° track to VKZ VOR/DME and hold, continue climb-in-hold to 3000.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6	135.35
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Procedure NA for arrivals at WORPP
via V529 northwest bound, V35 westbound.



Procedure NA for arrivals
at FOGSO via V157 westbound.



MIAMI, FLORIDA
Orig-A 30JUN11

25°48'N-80°17'W

MIAMI INTL (MIA)

RNAV (RNP) Y RWY 8R

TDZ/CL Rwy 8R
REIL Rwy 8L and 26R
HIRL all Rwy

MIAMI, FLORIDA

AL-257 (FAA)

15008

APP CRS	Rwy Idg	8579
124°	TDZE	8
Apt Elev		9

RNAV (RNP) Y RWY 12
MIAMI INTL (MIA)

▼ GPS Required. For inoperative MALS, increase 0.30 all Cat visibility to 1½. For uncompensated Baro-VNAV systems, procedure NA below 6°C (42°F) or above 49°C (120°F).



MISSIED APPROACH: Climb to 3000 direct VAYQO and via 109° track to VKZ VOR/DME and hold, continue climb-in-hold to 3000.

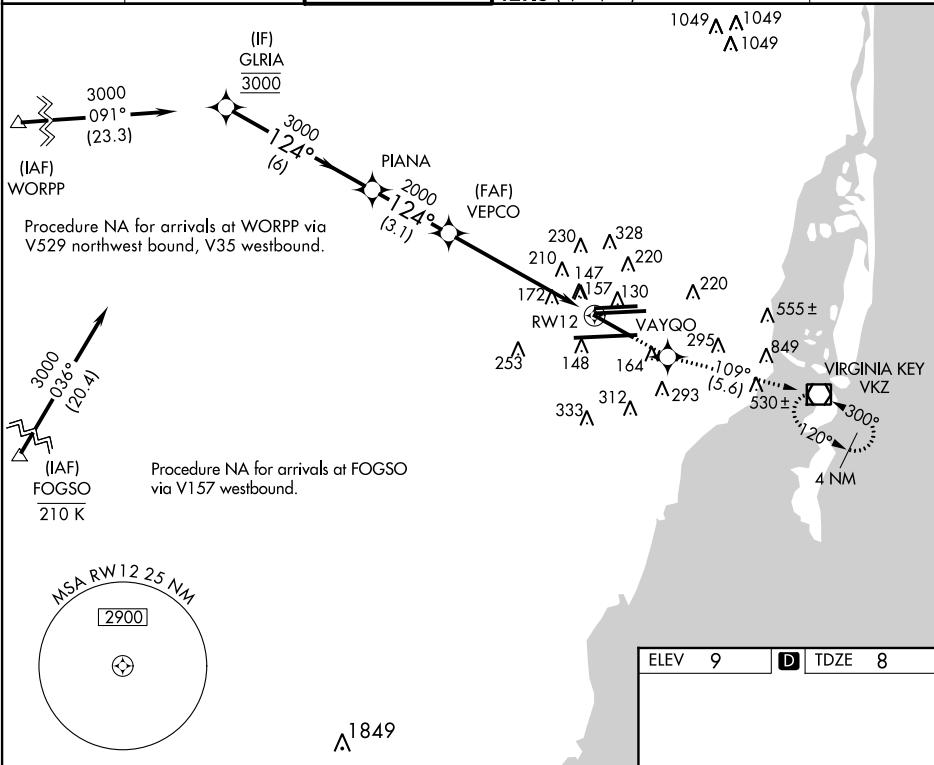
ATIS
ARR **119.15**
DEP **133.675**

MIAMI APP CON
124.85 322.3

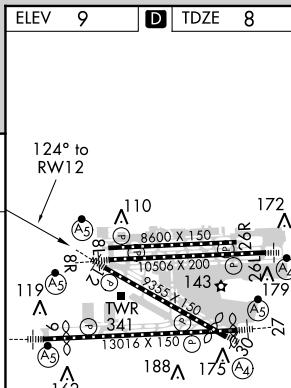
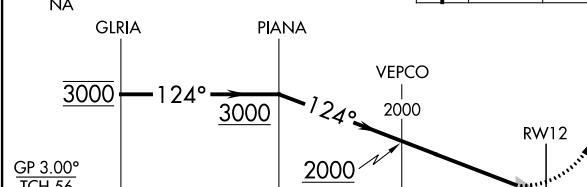
MIAMI TOWER
118.3 256.9

GND CON
121.8 (8L/8R/12/26L/26R)
127.5 (9/27/30) 348.6

CLNC DEL
135.35



Procedure Turn NA
VGS and RNAV glidepath not coincident (VGS Angle 3.00/TCH 72).



AUTHORIZATION REQUIRED

MIAMI, FLORIDA
Orig-B 30JUN11

25°48'N-80°17'W

MIAMI INTL (MIA)
RNAV (RNP) Y RWY 12

MIAMI, FLORIDA

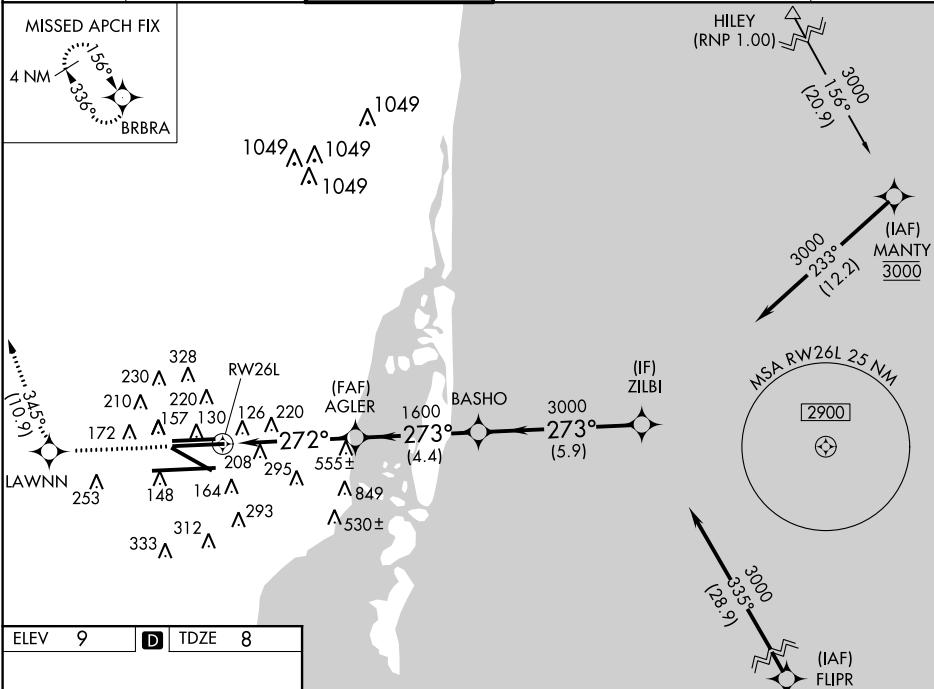
AL-257 (FAA)

15008

APP CRS 272°	Rwy Idg 10506
TDZE	8
Apt Elev	9

RNAV (RNP) Y RWY 26L
MIAMI INTL (MIA)

V	GPS Required. For inoperative MALSF, increase RNP 0.20 all Cnts visibility to RVR 6000, RNP 0.30 all Cnts visibility to 2. For uncompensated Baro-VNAV systems, procedure NA below 6°C (42°F) or above 48°C (119°F).	MALSF 	MISSIED APPROACH: Climb to 2000 direct LAWNN and via 345° track to BRBRA and hold.
ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30) 348.6 CLNC DEL 135.35



ELEV 9	TDZE 8
272° to RW26L	
110 A 172 A 119 A 143 A 179 A 188 A 175 A 162 A	1600 273° 3000 3000 GP 3.00° TCH 58
8600 X 150 10506 X 200 9255 X 150 13016 X 150	4.8 NM 4.4 NM 5.9 NM
CATEGORY	A B C D
RNP 0.20 DA	407/50 399 (400-1)
RNP 0.30 DA	564-1 556 (600-1 1/4)

TDZ/CL Rwy 8R
REFL Rwy 8L and 26R
HIRL all Rwy

AUTHORIZATION REQUIRED

MIAMI, FLORIDA
Orig-B 30JUN11

MIAMI INTL (MIA)

25°48'N-80°17'W

RNAV (RNP) Y RWY 26L

MIAMI, FLORIDA

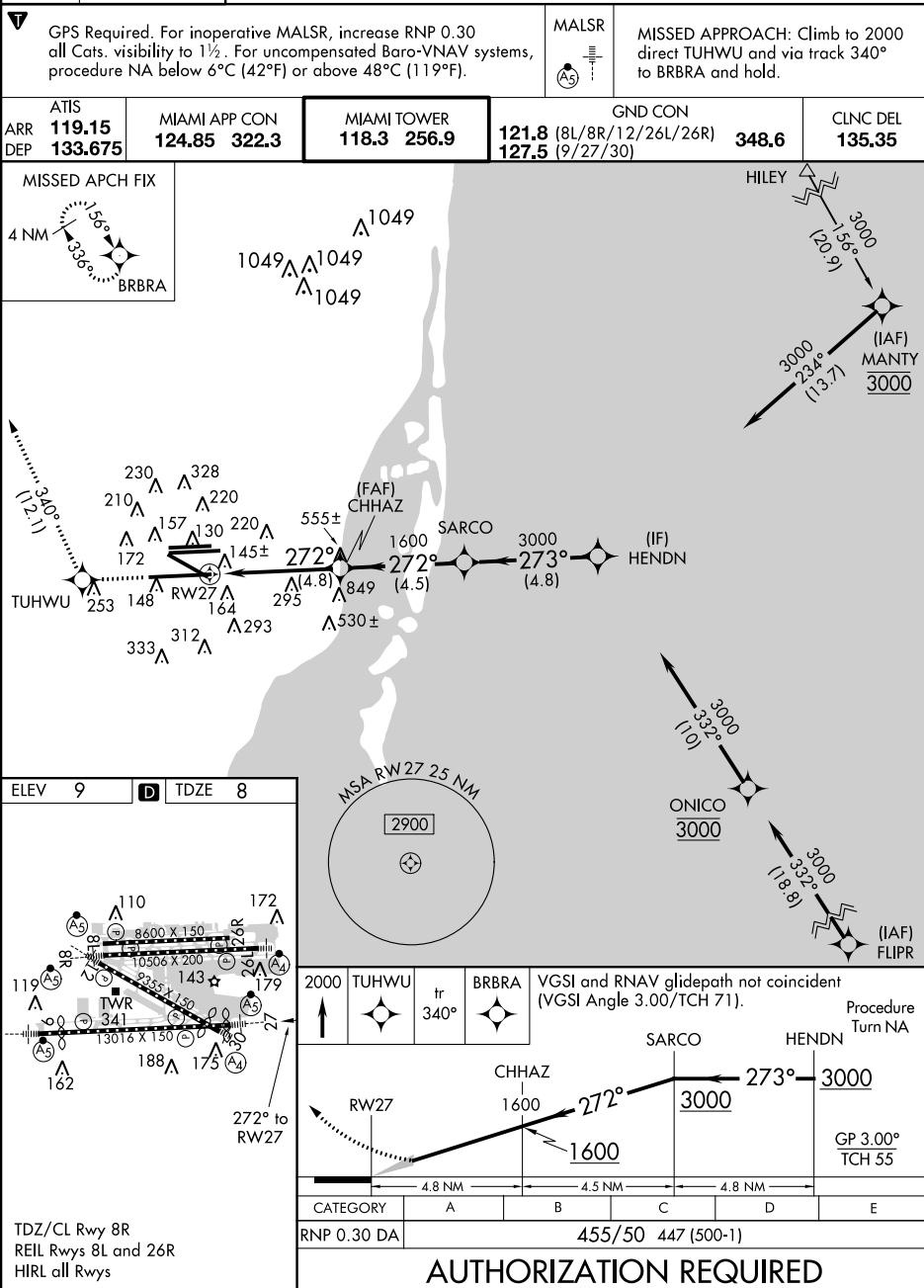
AL-257 (FAA)

15008

APP CRS 272°	Rwy Idg 12755
TDZE 8	Apt Elev 9

RNAV (RNP) Y RWY 27

MIAMI INTL (MIA)



MIAMI, FLORIDA
Amdt 1A 30JUN11

25°48'N-80°17'W

MIAMI INTL (MIA)

RNAV (RNP) Y RWY 27

MIAMI, FLORIDA

AL-257 (FAA)

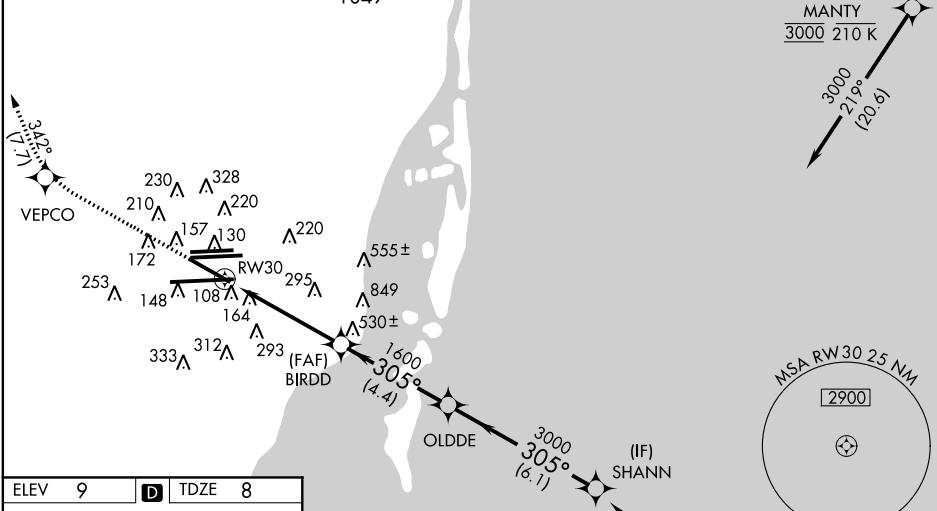
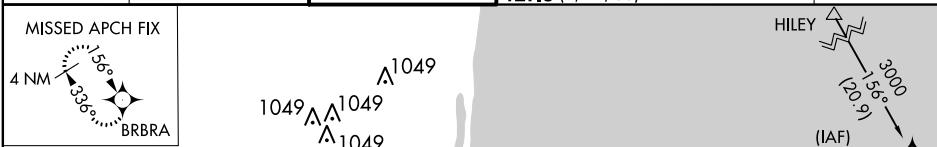
15008

APP CRS 305°	Rwy Idg 7913
TDZE 8	
Apt Elev 9	

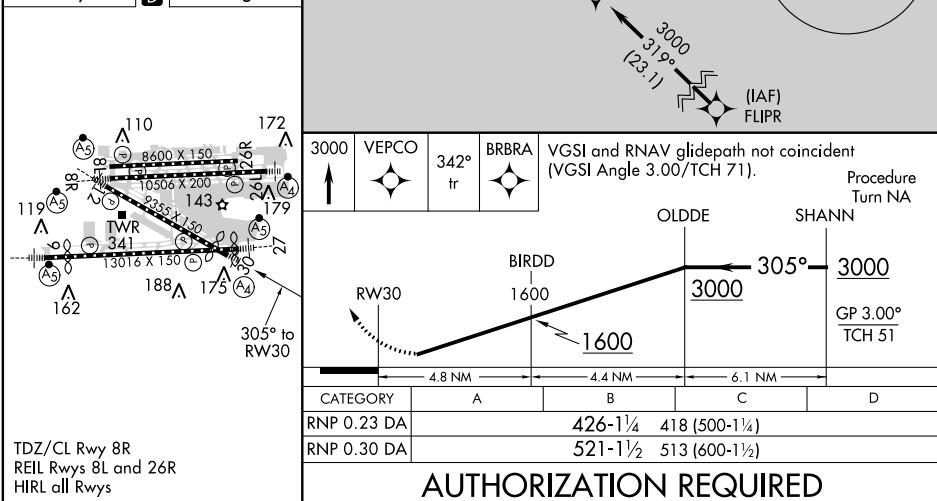
RNAV (RNP) Y RWY 30
MIAMI INTL (MIA)

▼	For inoperative MALS, increase RNP 0.23 all Cats visibility to 1½, RNP 0.30 all Cats to 1¾. GPS Required.	MALS	MISSED APPROACH: Climb to 3000 direct VEPCO and via 342° track to BRBRA and hold.
▲ NA	For uncompensated Baro-VNAV systems, procedure NA below 6°C (42°F) or above 48°C (119°F).	(A)	

ATIS ARR 119.15	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12L/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6	CLNC DEL 135.35
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ELEV 9 D TDZE 8

TDZ/CL Rwy 8R
REIL Rwy 8L and 26R
HIRL all RwyMIAMI, FLORIDA
Orig-A 30JUN11

25°48'N-80°17'W

MIAMI INTL (MIA)
RNAV (RNP) Y RWY 30

MIAMI, FLORIDA

AL-257 (FAA)

15008

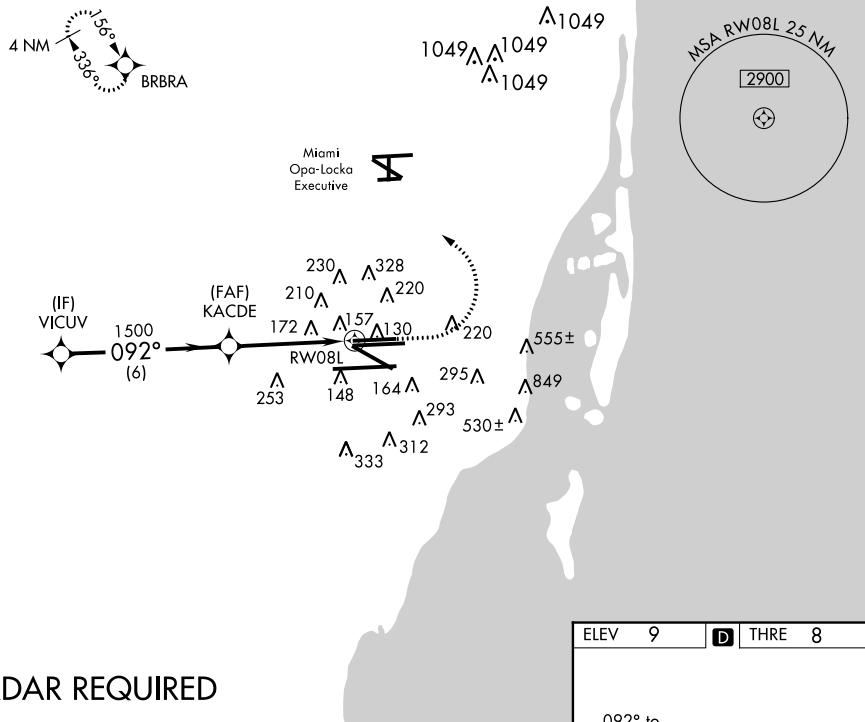
RNAV (GPS) RWY 8L
MIAMI INTL (MIA)

WAAS CH 42703 W08A	APP CRS 092°	Rwy Idg 8600 THRE 8 Apt Elev 9
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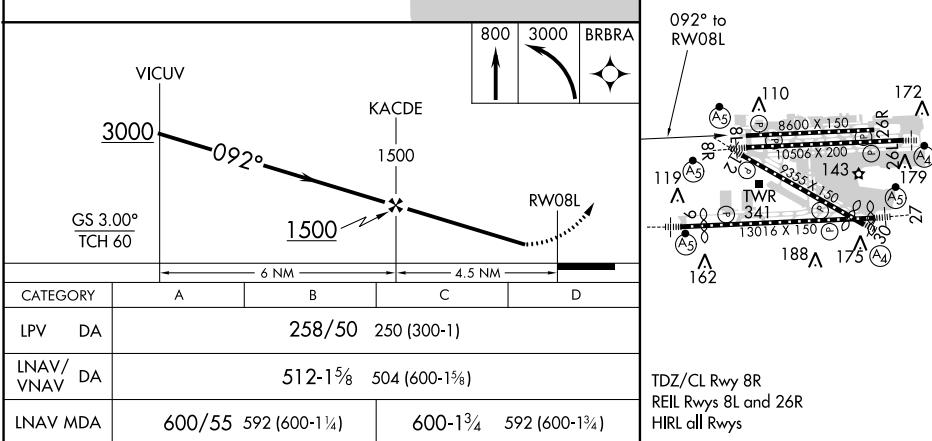
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 9. DME/DMP RNP-0.3 NA. Helicopter visibility reduction below RVR 5000 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 direct BRBRA and hold.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6 135.35
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RADAR REQUIRED

MIAMI, FLORIDA
Amdt 2 12DEC13

25°48'N-80°17'W

MIAMI INTL (MIA)
RNAV (GPS) RWY 8L

MIAMI, FLORIDA

AL-257 (FAA)

15008

WAAS CH 81931 W09A	APP CRS 092°	Rwy Idg 11397 TDZE 7 Apt Elev 9
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**RNAV (GPS) RWY 9
MIAMI INTL (MIA)**

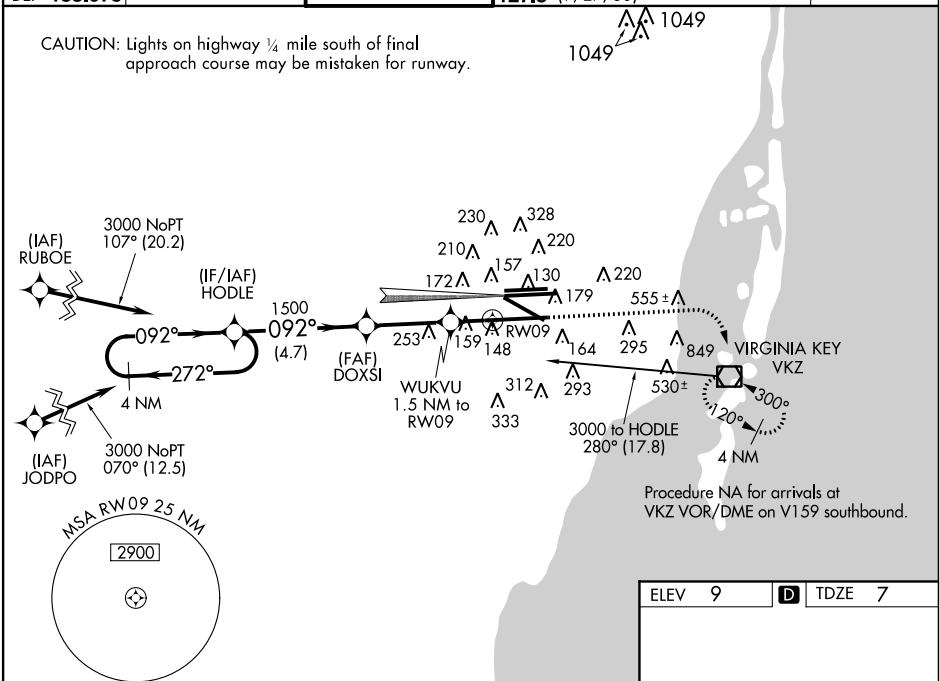
T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C(130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized with ILS or LOC Rwy 8R and RNAV (GPS) Rwy 8L. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Helicopter visibility reduction below RVR 4000 NA. For inop MALSR, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1 ½ mile, LNAV Cats A and B visibility to RVR 5500 and Cat C, D, and E visibility to 1 ½ mile.



MISSED APPROACH:
Climb to 800 then climbing
right turn to 3000 direct
VKZ VOR/DME and hold,
continue climb-in-hold
to 3000

ATIS	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6 135.35
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CAUTION: Lights on highway $\frac{1}{4}$ mile south of final approach course may be mistaken for runway.



Procedure NA for arrivals at
VKZ VOR/DME on V159 southbound.

The figure consists of several parts:

- Top Left:** A holding pattern diagram labeled "4 NM Holding Pattern". It shows a "HODLE" turn with a "DOXSI" fix. The track numbers 3000 and 272° are shown, along with GS 3.00° and TCH 56.
- Top Center:** A "VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 72)." Diagram includes a vertical arrow pointing up, a curve labeled "3000", and a box labeled "VKZ".
- Top Right:** A note "* LNAV only".
- Middle:** A diagram showing distances between waypoints: 1.5 NM from WUKVU to RW09, 3 NM from DOXSI to RW09, and 4.7 NM from GS 3.00° to DOXSI.
- Bottom Left:** A table for landing categories A through E:

CATEGORY	A	B	C	D	E
LPV DA		207/24	200 (200-½)		
LNAV/ VNAV DA		428/46	421 (500-1)		
LNAV MDA	460/40	453 (500-¾)	460/45	453 (500-⅔)	
- Bottom Right:** A complex air traffic control map showing various runways (RW09, RW27, RW26L, RW26R), taxiways (TWR, 341, 13016 X 150, 10506 X 200, 8600 X 150), and other aircraft positions marked with A5, A4, and A3 symbols.

MIAMI, FLORIDA
Amdt 1A 11DEC14

25°48'N-80°17'W

MIAMI INTL(MIA)
RNAV(GPS) RWY 9

MIAMI, FLORIDA

AL-257 (FAA)

15008

WAAS CH 86903 W26A	APP CRS 272°	Rwy Idg TDZE Apt Elev	8600 8 9
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RNAV (GPS) RWY 26R
MIAMI INTL (MIA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below 5°C (41°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 27, DME/DME RNP-0.3 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

MISSIED APPROACH: Climb to 800 then climbing right turn to 3000 direct BRBRA and hold.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6
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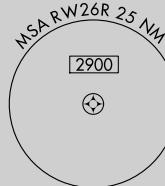
1049
A 1049
A 1049

RADAR REQUIRED

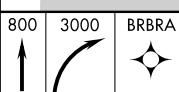
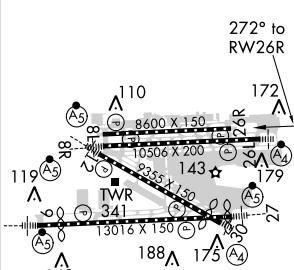
Miami
Opa-Locka
Executive

230 A 328
210 A 220
172 A 157 130
148 A 164 A 295
333 A 312 A 293
A 530± 849

(FAF) ZARER
RW26R 1500 272° (6)
172° 403 555±



ELEV 9 TDZE 8



*LNAV only.

*1.3 NM to RW26R

RW26R

NAYIB
ZARER
1500 272° 3000GS 3.00°
TCH 60

1.3

3.2 NM

6 NM

CATEGORY

A

B

C

D

LPV DA

273-7/8 265 (300-7/8)

LNAV/
VNAV DA

434-1 426 (500-1%)

LNAV MDA

480-1 472 (500-1%)

480-1 472 (500-1%)

TDZ/CL Rwy 8R
REIL Rwy 8L and 26R
HIRL all Rwy's

MIAMI, FLORIDA
Amdt 2A 11DEC14

25°48'N-80°17'W

MIAMI INTL (MIA)

RNAV (GPS) RWY 26R

SE-3, 05 MAR 2015 to 02 APR 2015

MIAMI, FLORIDA

AL-257 (FAA)

15008

RNAV (GPS) Z RWY 8R
MIAMI INTL (MIA)

WAAS CH 97404 W08B	APP CRS 092°	Rwy Idg 10506 TDZE 8 Apt Elev 9
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▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). For inop MALS, increase LPV all Cts visibility to RVR 5000 and LNAV/VNAV all Cts visibility to 134. DME/DME RNP-0.3 NA.

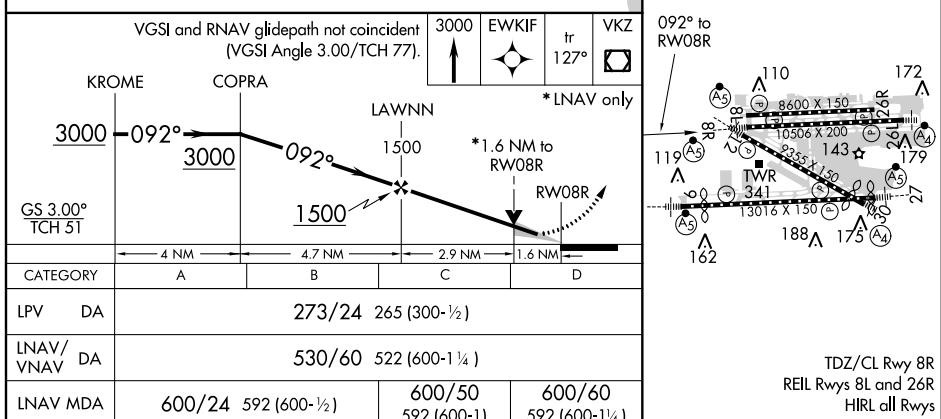
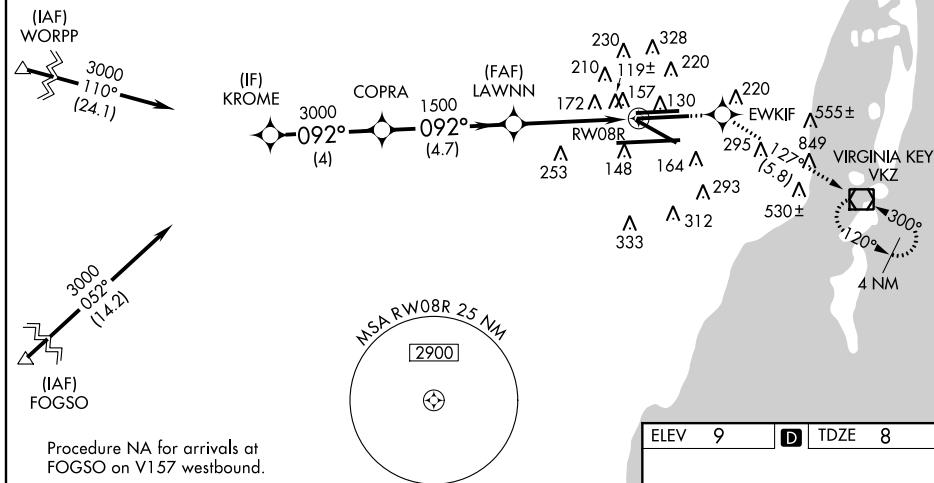
MALSR
MISSSED APPROACH: Climb to 3000 direct EWKIF and on track 127° to VKZ VOR/DME and hold.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6 135.35
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A1049

1049 A A 1049
A 1049

Procedure NA for arrivals
at WORPP on V35 westbound
and V529 northwest bound.



MIAMI, FLORIDA
Amdt 1A 30MAY13

25°48'N-80°17'W

MIAMI INTL (MIA)

RNAV (GPS) Z RWY 8R

MIAMI, FLORIDA

AL-257 (FAA)

15008

WAAS CH 61204 W12A	APP CRS 124°	Rwy Idg 8579 TDZE 8 Apt Elev 9
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RNAV (GPS) Z RWY 12
MIAMI INTL (MIA)

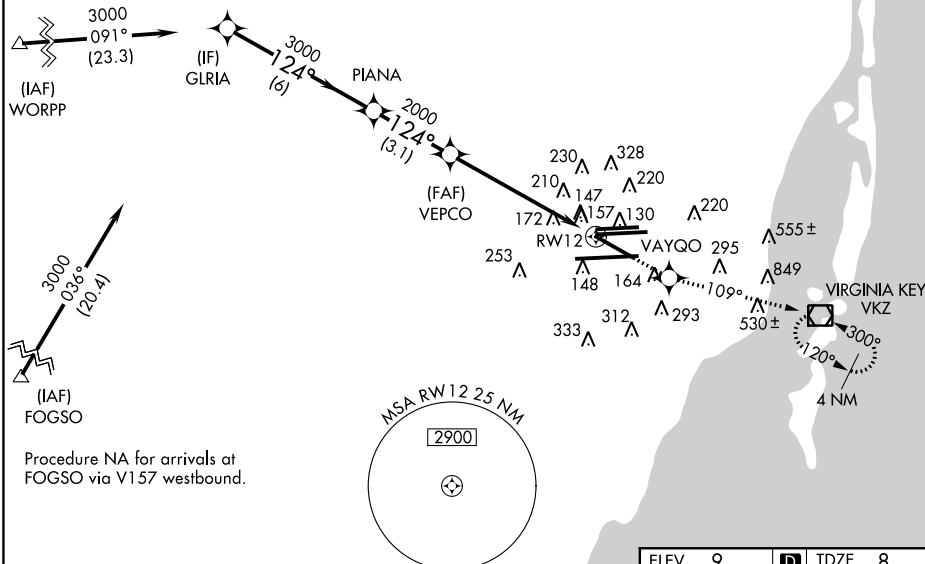
- ▼ For inoperative MALSR, increase LPV DA all Cats visibility to $1\frac{1}{4}$, increase LNAV MDA Cats A and B visibility to RVR 5000.
 ▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.



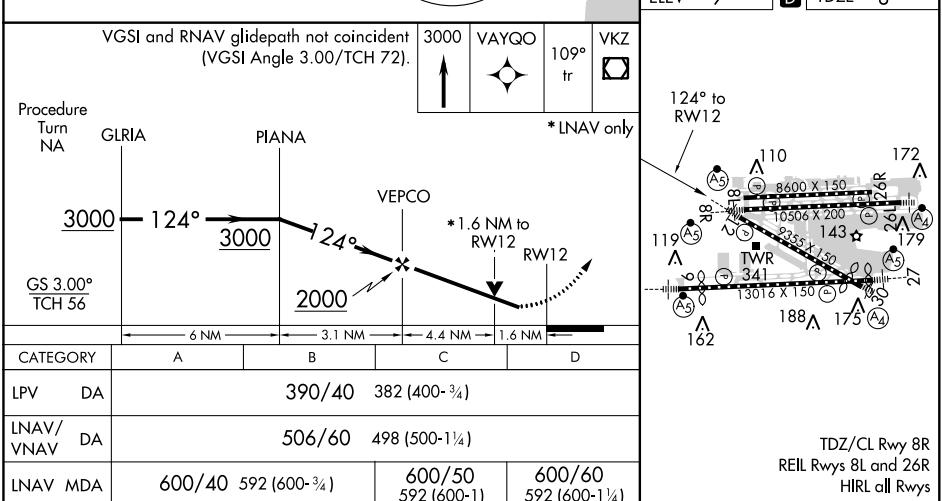
MISSSED APPROACH: Climb to 3000 direct VAYQO and via 109° track to VKZ VOR/DME and hold, continue climb-in-hold to 3000.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MIAMI TOWER 118.3 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	CLNC DEL 348.6	135.35
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Procedure NA for arrivals at WORPP via V35 westbound and via V529 northwest bound.



Procedure NA for arrivals at FOGSO via V157 westbound.

MIAMI, FLORIDA
Amdt 1A 18DEC08

25°48'N-80°17'W

MIAMI INTL (MIA)

RNAV (GPS) Z RWY 12

MIAMI, FLORIDA

AL-257 (FAA)

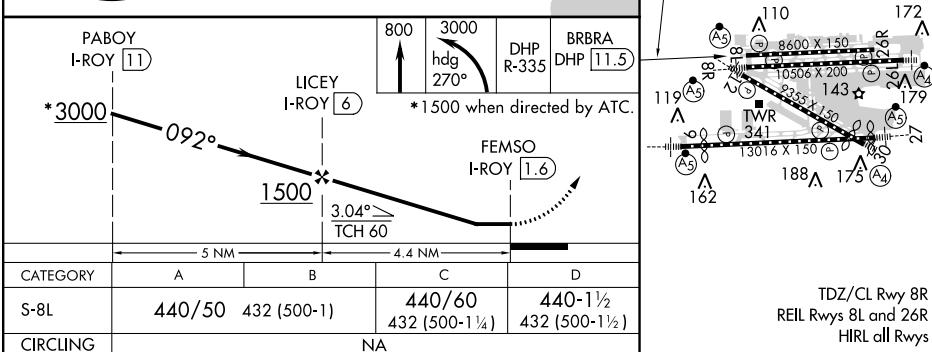
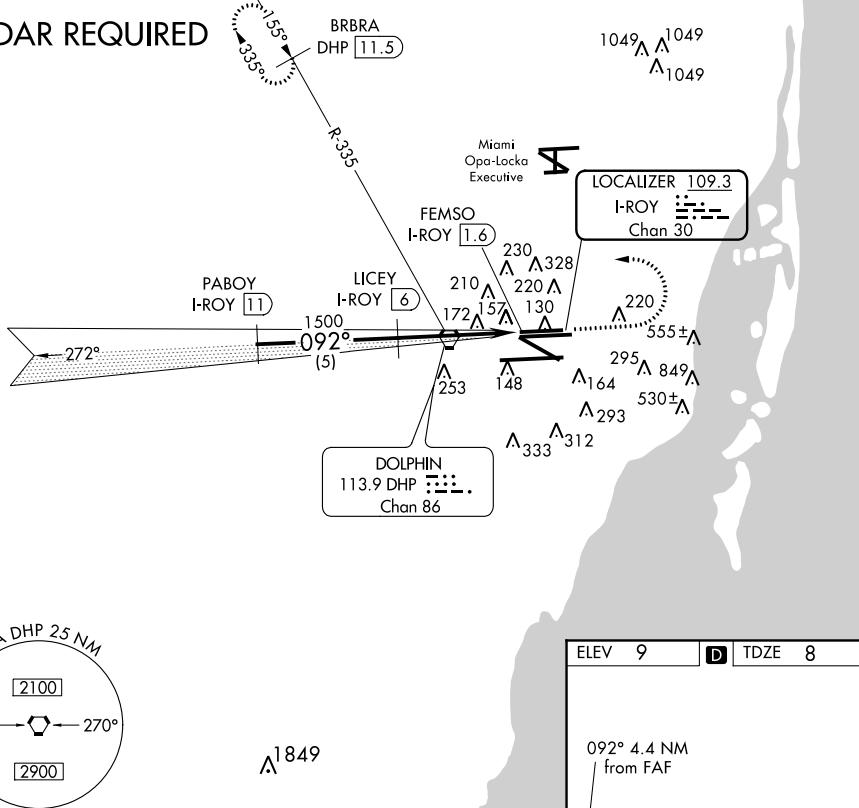
15008

LOC/DME I-ROY	APP CRS	Rwy Idg	8600
109.3	092°	TDZE	8
Chan 30		Apt Elev	9

LOC/DME RWY 8L
 MIAMI INTL (MIA)

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 via heading 270° and DHP R-335 to BRBRA/11.5 DME and hold.

ATIS	MIAMI APP CON	MIAMI TOWER	GND CON	CLNC DEL
ARR 119.15	124.85 322.3	118.3 256.9	121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	348.6
DEP 133.675				135.35

RADAR REQUIREDMIAMI, FLORIDA
Orig-B 07MAY09

25°48'N-80°17'W

 MIAMI INTL (MIA)
LOC/DME RWY 8L

MIAMI, FLORIDA

AL-257 (FAA)

15008

LOC/DME I-CNV APP CRS **Rwy 1dg** **8600**
109.3 **272°** **TDZE** **8**
Chan 30 **Apt Elev** **9**

15008

LOC/DME RWY 26R
MIAMI INTL (MIA)

MIAMI INTL (MIA)

MISSED APPROACH: Climb to 800 then climbing right turn to 2000 via heading 290° and DHP R-335 to BRBRA/11.5 DME and hold.

ATIS ARR 119.15 DEP 133.675	MIAMI APP CON 124.85 322.3	MI 118
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POWER 256.9	GND CON 121.8 (8L/8R/12/26L/26R) 127.5 (9/27/30)	348.6	CLNC DEL 135.35
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This aeronautical chart displays radar stations and flight levels across the southern United States, specifically focusing on the Florida peninsula and surrounding areas.

Radar Stations:

- BRBRA**: Located near Miami, with DHP [11.5] and a 155° bearing.
- DOLPHIN**: Located near Miami, with DHP [113.9] and a 333° bearing.
- LOCALIZER 109.3**: Located near Miami, serving I-CNV Chan 30.
- ARIYA**: Located near Fort Lauderdale, serving I-CNV [1.6].
- JODAX**: Located near Orlando, serving I-CNV [6].
- HINKU**: Located near Tampa, serving I-CNV [11].

Flight Levels:

The chart shows numerous flight levels indicated by 'A' symbols with numbers. Key levels include:

- 1049 (repeated multiple times)
- 230, 210, 172, 253, 148, 328, 157, 130, 220, 220, 330, 1500, 272°, 555± (5), 295, 164, 312, 293, 849, 530±

Other Labels:

- Miami Opa-Locka Executive
- R-335
- MSA DHP 25 NM
- RADAR REQUIRED

Wind Rose:

- 090° → 270°
- 2100
- 2900
- 270°

Flight Plan:

- I-ARIA:** DHP R-335, DHP DHP [11.5]
- Intermediate Waypoints:** JODAX [6], TCH 60
- Final Destination:** HINKU I-CNV [11]
- Routes:**
 - I-ARIA → I-CNV [2.9] → JODAX [6] → 3000*
 - I-ARIA → I-CNV [1.6] → TCH 60 → 1500 → 272° → 3000*
- Distances:** 1.3 NM, 3.1 NM, 5 NM
- Category:** A, B, C, D
- Altitudes:** 480-1 472 (500-1), 480-1½ 472 (500-1½), 480-1½ 472 (500-1½)
- Circling:** NA

MIAMI, FLORIDA
Orig-B 07MAY09

2.52 (20) - 2.604 (20)

MIAMI INTL (MTA)

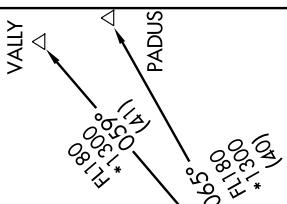
MIAMI INTL (MIA)
LOC/DME RWY 26R

(BSTER1.BSTER) 12264

SL-257 (FAA)

BSTER ONE DEPARTURE (RNAV)

ATIS 133.675
CLNC DEL 135.35
GND CON 121.8 348.6
(Rwy 8L/26R 127.5 348.6
MIAMITOWER 118.3 256.9
MIAMI DEP CON 119.45 290.325

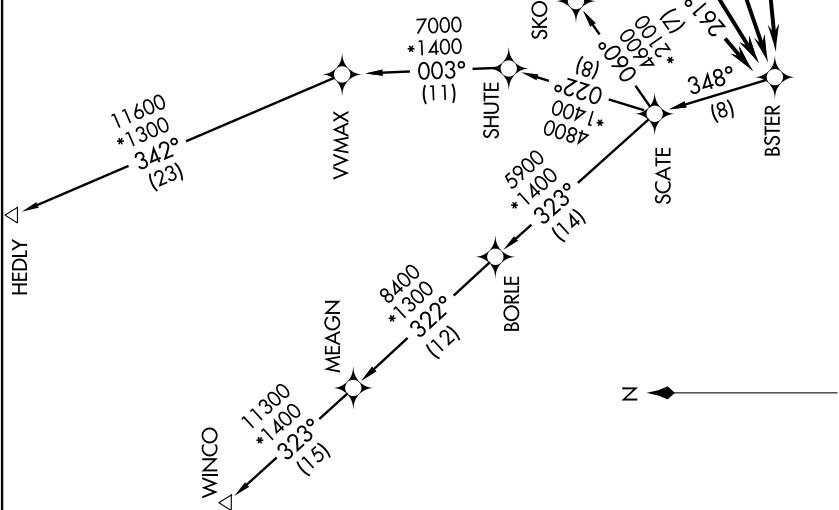


TAKEOFF MINIMUMS:

Rwy 8R, 8L, 9, 12: NA per ATC.

Rwy 26L, 26R, 27, 30: Standard with minimum climb of 500' per NM to 520.

(NOTES CONTINUED ON FOLLOWING PAGE)



BSTER ONE DEPARTURE (RNAV)

(BSTER1.BSTER) 12264

MIAMI, FLORIDA

MIAMI INTL (MIA)

(NARRATIVE ON FOLLOWING PAGE)

(BSTER1.BSTER) 12096

SL-257 (FAA)

BSTER ONE DEPARTURE (RNAV)**DEPARTURE ROUTE DESCRIPTION**

TAKEOF^NRUNWAY 26L, 26R, 27: Climb heading 272° to 520, then direct BSTER, then on depicted route to SCATE. Thence....

TAKEOF^NRUNWAY 30: Climb heading 304° to intercept course 261° to BSTER, then on depicted route to SCATE. Thence....

....Via transition or assigned route, maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

HEDLY TRANSITION (BSTER1.HEDLY):

PADUS TRANSITION (BSTER1.PADUS):

VALLY TRANSITION (BSTER1.VALLY):

WINCO TRANSITION (BSTER1.WINCO):

TAKEOF^NOBSTACLE NOTES:

Rwy 26L: Pole 1080' from DER, 680' left of centerline, 33' AGL/47' MSL. Light pole 1773' from DER, 825' left of centerline, 34' AGL/53' MSL. Tree 1405' from DER, 848' left of centerline, 30' AGL/44' MSL. Rod on tower 1305' from DER, 638' right of centerline, 34' AGL/48' MSL. Tree 2459' from DER, 1070' right of centerline, 63' AGL/71' MSL.

Rwy 26R: Numerous poles beginning 1090' from DER, 36' right of centerline, up to 44' AGL/59' MSL. Building 740' from DER, 511' right of centerline, 14' MSL/28' MSL. Trees beginning 1047' from DER, 272' right of centerline, up to 66' AGL/80' MSL. Tree 888' from DER, on centerline, 21' AGL/35' MSL. Rod on tower 1304' from DER, 160' left of centerline, 34' AGL/48' MSL.

Rwy 27: Numerous poles and light poles beginning 2056' from DER, 93' left of centerline up to 62' AGL/76' MSL. Train on tracks 750' from DER, 576' left of centerline, 23' AGL/53' MSL. Sign 2005' from DER, 386' left of centerline, 44' AGL/58' MSL. Tree 1067' from DER, 680' left of centerline, 23' AGL/37' MSL. Pole 2056' from DER, 95' right of centerline, 46' AGL/60' MSL. Pole 2067' from DER, 273' right of centerline, 46' AGL/60' MSL.

Rwy 30: Pole 560' from DER, 563' left of centerline, 33' AGL/47' MSL. Rod on tower 2451' from DER, 434' right of centerline, 34' AGL/48' MSL. Antenna on tower 1733' from DER, 911' right of centerline, 41' AGL/55' MSL. Antenna on tower 4427' from DER, 1451' right of centerline, 109' AGL/123' MSL. Trees beginning 2658' from DER, 188' right of centerline, up to 63' AGL/77' MSL.

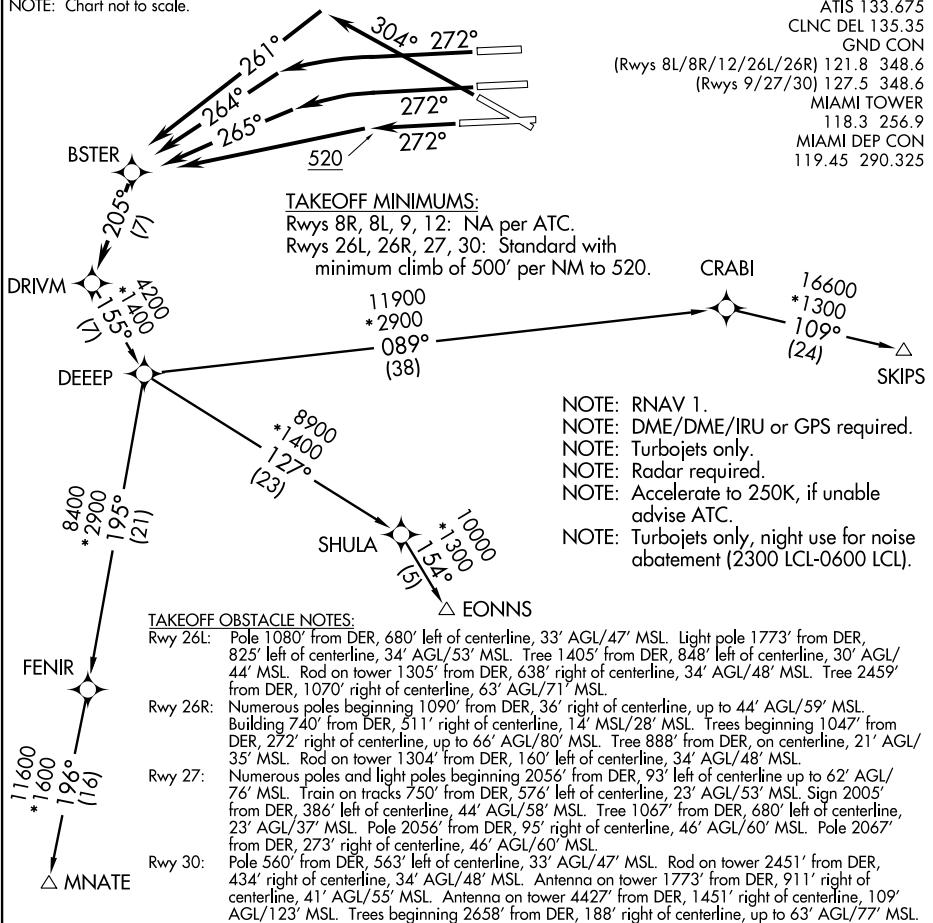
(DEEEP1.DEEEP) 12264

SL-257 (FAA)

DEEEP ONE DEPARTURE (RNAV)

MIAMI INTL (MIA)
MIAMI, FLORIDA

NOTE: Chart not to scale.



- NOTE: RNAV 1.
 NOTE: DME/DME/IRU or GPS required.
 NOTE: Turbojets only.
 NOTE: Radar required.
 NOTE: Accelerate to 250K, if unable advise ATC.
 NOTE: Turbojets only, night use for noise abatement (2300 LCL-0600 LCL).

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 26L: Climb heading 272° to intercept course 265° to BSTER, then on depicted route to DRIVM, thence....

TAKEOFF RUNWAY 26R: Climb heading 272° to intercept course 264° to BSTER, then on depicted route to DRIVM, thence....

TAKEOFF RUNWAY 27: Climb heading 272° to 520, then direct BSTER, then on depicted route to DRIVM, thence....

TAKEOFF RUNWAY 30: Climb heading 304° to intercept course 261° to BSTER, then on depicted route to DRIVM, thence....

....Via transition or assigned route, maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

EONNS TRANSITION (DEEEP1.EONNS):

MNATE TRANSITION (DEEEP1.MNATE):

SKIPS TRANSITION (DEEEP1.SKIPS):

DEEEP ONE DEPARTURE (RNAV)

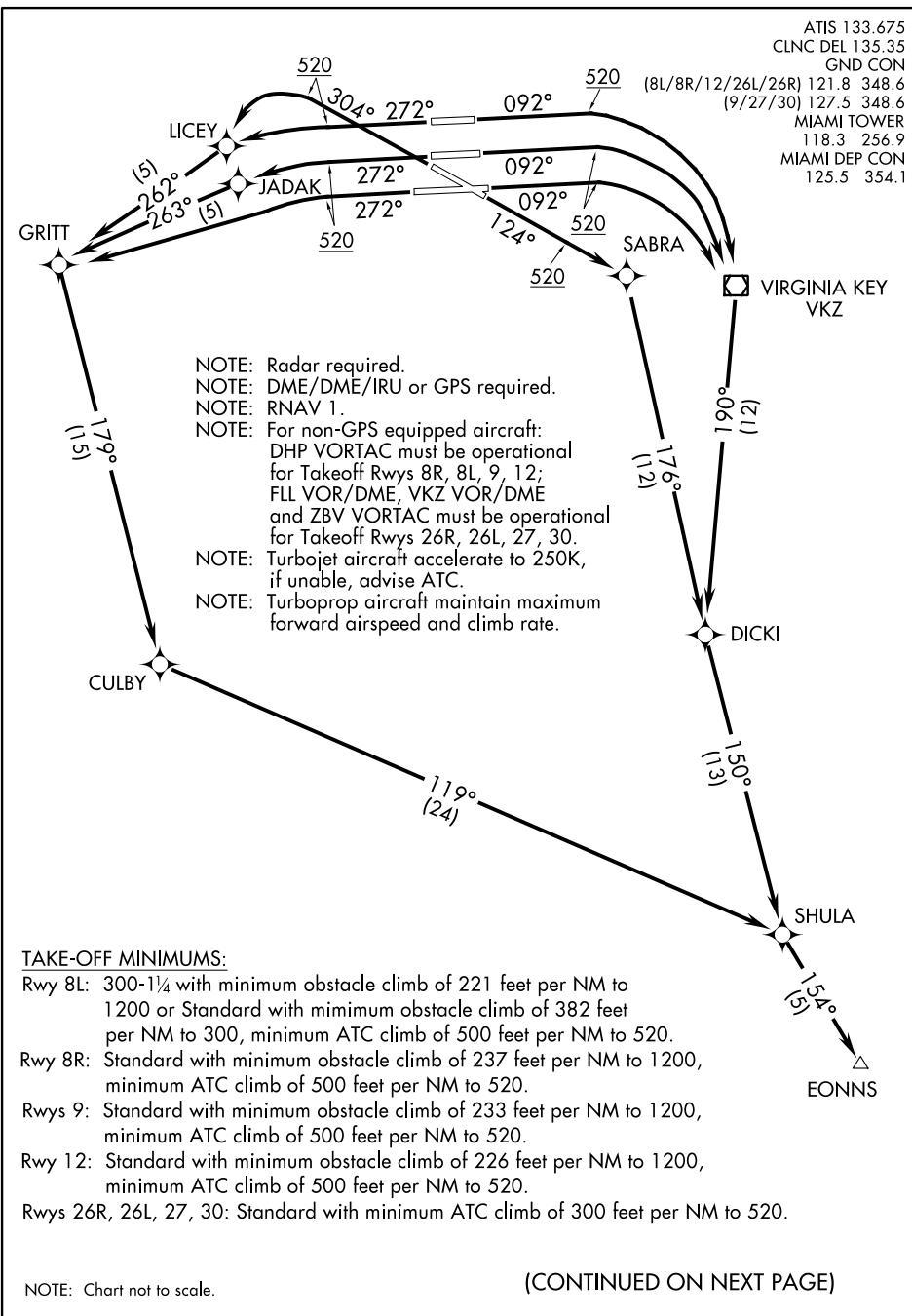
(DEEEP1.DEEEP) 12264

MIAMI, FLORIDA

MIAMI INTL (MIA)

(EONNS1.EONNS) 12152

SL-257 (FAA)

EONNS ONE DEPARTURE (RNAV)MIAMI INTL (MIA)
MIAMI, FLORIDA

(EONNS1.EONNS) 06271

SL-257 (FAA)

EONNS ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION



TAKE-OFF RUNWAYS 8L, 8R, 9: Climb heading 092° to 520, then right turn direct VKZ VOR/DME, then via depicted route to EONNS, thence. . . .

TAKE-OFF RUNWAY 12: Climb heading 124° to 520, then right turn direct SABRA, then via depicted route to EONNS, thence. . . .

TAKE-OFF RUNWAY 26R: Climb heading 272° to 520, then left turn direct LICEY, then via depicted route to EONNS, thence. . . .

TAKE-OFF RUNWAY 26L: Climb heading 272° to 520, then left turn direct JADAK, then via depicted route to EONNS, thence. . . .

TAKE-OFF RUNWAY 27: Climb heading 272° to 520, then left turn direct GRITT, then left turn via track 179° to CULBY, then via depicted route to EONNS, thence. . . .

TAKE-OFF RUNWAY 30: Climb heading 304° to 520, then left turn direct LICEY, then via depicted route to EONNS, thence. . . .

. . . . Maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

TAKE-OFF OBSTACLES:

NOTE: Rwy 8L, Bldg 3391' from DER, 1024' left of centerline, 160' AGL/172' MSL.
Glideslope Antenna 804' from DER, 501' right of centerline, 32' AGL/46' MSL. Multiple Towers and Bldgs beginning 1350' from DER, 691' left of centerline, up to 150' AGL/164' MSL.

NOTE: Rwy 8R, Tree 4064' from DER, 959' right of centerline, 98' AGL/112' MSL.
Antenna and Multiple Trees beginning 2719' from DER, 194' left of centerline, up to 85' AGL/98' MSL.

NOTE: Rwy 9, Light 1232' from DER, 785' left of centerline, 39' AGL/48' MSL.
Windsock 22' from DER, 438' right of centerline, 21' AGL/30' MSL.

NOTE: Rwy 12, Railroad beginning 4' from DER, 356' right of centerline, 23' AGL/28' MSL. Building and Tree beginning 1064' from DER, 118' right of centerline, up to 94' AGL/108' MSL.
Windsock 681' from DER, 345' left of centerline, 21' AGL/30' MSL.

NOTE: Rwy 26R, Tower, Building, Multiple Light Poles and Trees beginning 741' from DER, 1' right of centerline, up to 66' AGL/80' MSL. Pole, Bldg, and Tower beginning 255' from DER, 5' left of centerline, up to 34' AGL/48' MSL.

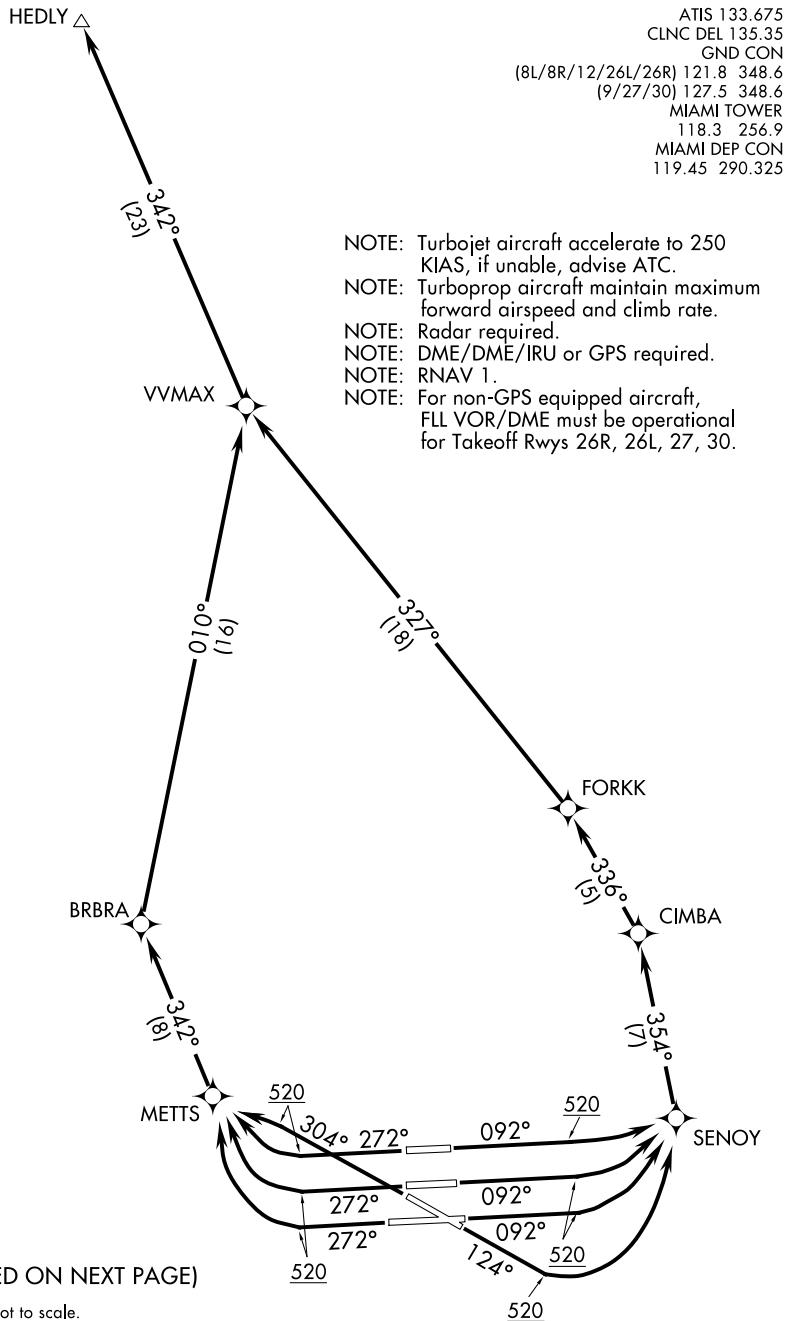
NOTE: Rwy 26L, Tower and Multiple Trees beginning 1306' from DER, 638' right of centerline, up to 63' AGL/77' MSL. Tree and Light Pole beginning 1773' from DER, 568' left of centerline, up to 61' AGL/75' MSL.

NOTE: Rwy 27, Railroad, Tree, and Multiple Light Poles beginning 750' from DER, 94' left of centerline, up to 62' AGL/76' MSL.

NOTE: Rwy 30, Pole, Multiple Towers and Trees beginning 1414' from DER, 189' right of centerline, up to 120' AGL/125' MSL. Tree 2058' from DER, 785' left of centerline, 52' AGL/66' MSL.

(HEDLY1.HEDLY) 12152

SL-257 (FAA)

HEDLY ONE DEPARTURE (RNAV)MIAMI INTL (MIA)
MIAMI, FLORIDA**HEDLY ONE DEPARTURE (RNAV)**
(HEDLY1.HEDLY) 12152MIAMI, FLORIDA
MIAMI INTL (MIA)

(HEDLY1.HEDLY) 06271

SL-257 (FAA)

HEDLY ONE DEPARTURE (RNAV)MIAMI INTL (MIA)
MIAMI, FLORIDA**DEPARTURE ROUTE DESCRIPTION**

TAKE-OFF RUNWAYS 8L, 8R, 9: Climb heading 092° to 520, then left turn direct SENOY, then via depicted route to HEDLY, thence. . . .

TAKE-OFF RUNWAY 12: Climb heading 124° to 520, then left turn direct SENOY, then via depicted route to HEDLY, thence. . . .

TAKE-OFF RUNWAYS 26R, 26L, 27: Climb heading 272° to 520, then right turn direct METTS, then via depicted route to HEDLY, thence. . . .

TAKE-OFF RUNWAY 30: Climb heading 304° to 520, then left turn direct METTS, then via depicted route to HEDLY, thence. . . .

. . . . Maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

TAKE-OFF MINIMUMS:

Rwy 8L: 300-1¼ or Standard with minimum obstacle climb of 382 feet per NM to 300, minimum ATC climb of 500 feet per NM to 520.

Rwys 8R, 9: Standard with minimum ATC climb of 500 feet per NM to 520.

Rwy 12: Standard with minimum obstacle climb of 229 feet per NM to 1200, minimum ATC climb of 500 feet per NM to 520.

Rwys 26R, 26L, 27, 30: Standard with minimum ATC climb of 300 feet per NM to 520.

TAKE-OFF OBSTACLES:

NOTE: Rwy 8L, Bldg 3391' from DER, 1024' left of centerline, 160' AGL/172' MSL. Glideslope Antenna 804' from DER, 501' right of centerline, 32' AGL/46' MSL. Multiple Towers and Bldgs beginning 1350' from DER, 691' left of centerline, up to 150' AGL/164' MSL.

NOTE: Rwy 8R, Tree 4064' from DER, 959' right of centerline, 98' AGL/112' MSL. Antenna and Multiple Trees beginning 2719' from DER, 194' left of centerline, up to 85' AGL/98' MSL.

NOTE: Rwy 9, Light 1232' from DER, 785' left of centerline, 39' AGL/48' MSL. Windsock 22' from DER, 438' right of centerline, 21' AGL/30' MSL.

NOTE: Rwy 12, Railroad beginning 4' from DER, 356' right of centerline, 23' AGL/28' MSL. Building and Tree beginning 1064' from DER, 118' right of centerline, up to 94' AGL/108' MSL.

Windsock 681' from DER, 345' left of centerline, 21' AGL/30' MSL.

NOTE: Rwy 26R, Tower, Building, Multiple Light Poles and Trees beginning 741' from DER, 1' right of centerline, up to 66' AGL/80' MSL. Pole, Bldg, and Tower beginning 255' from DER, 5' left of centerline, up to 34' AGL/48' MSL.

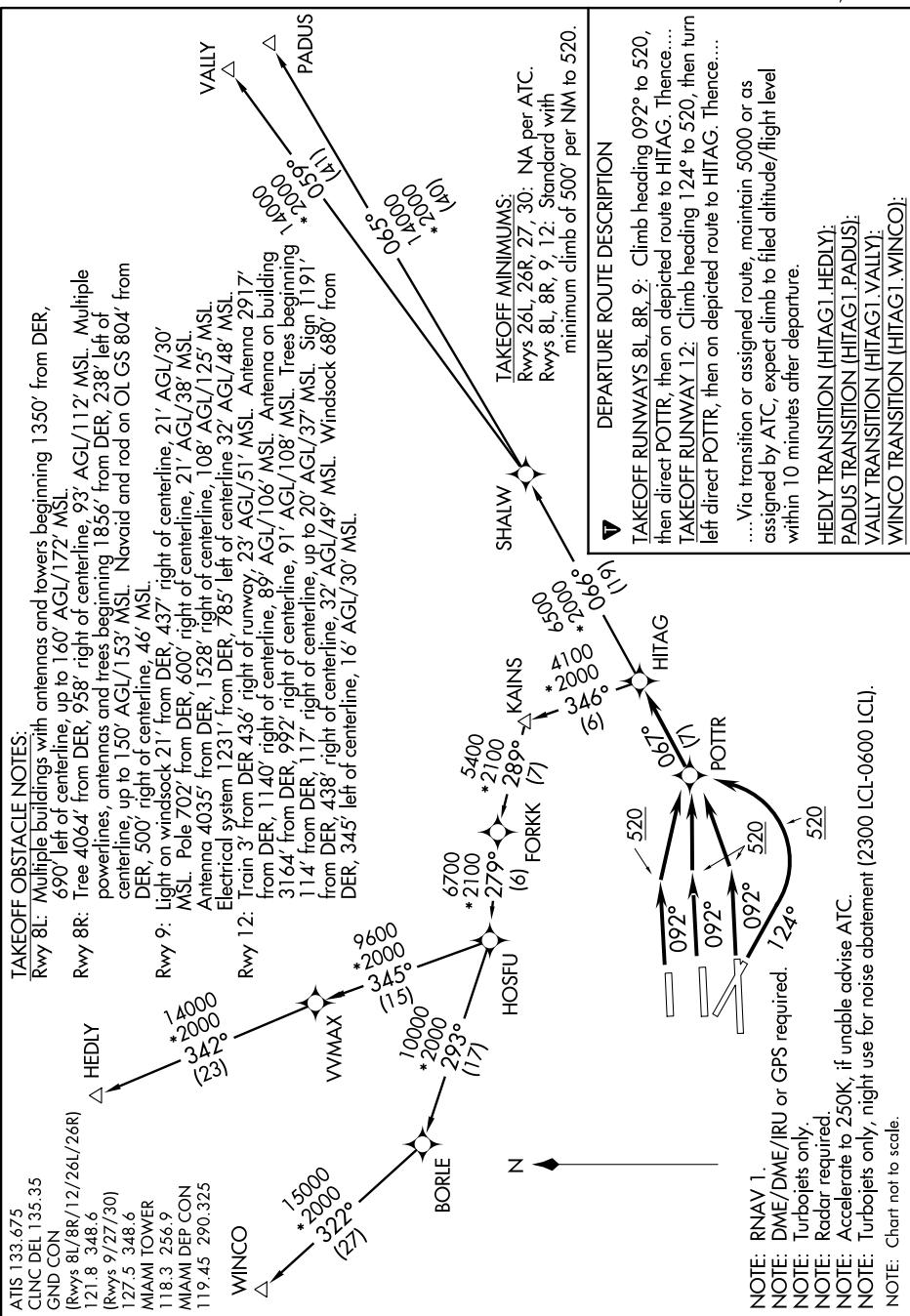
NOTE: Rwy 26L, Tower and Multiple Trees beginning 1306' from DER, 638' right of centerline, up to 63' AGL/77' MSL. Tree and Light Pole beginning 1773' from DER, 568' left of centerline, up to 61' AGL/75' MSL.

NOTE: Rwy 27, Railroad, Tree, and Multiple Light Poles beginning 750' from DER, 94' left of centerline, up to 62' AGL/76' MSL.

NOTE: Rwy 30, Pole, Multiple Towers and Trees beginning 1414' from DER, 189' right of centerline, up to 120' AGL/125' MSL. Tree 2058' from DER, 785' left of centerline, 52' AGL/66' MSL.

(HITAG1.HITAG) 12264

SL-257 (FAA)

HITAG ONE DEPARTURE (RNAV)MIAMI INTL (MIA)
MIAMI, FLORIDA
HITAG ONE DEPARTURE (RNAV)
(HITAG1.HITAG) 12264
MIAMI, FLORIDA
MIAMI INTL (MIA)

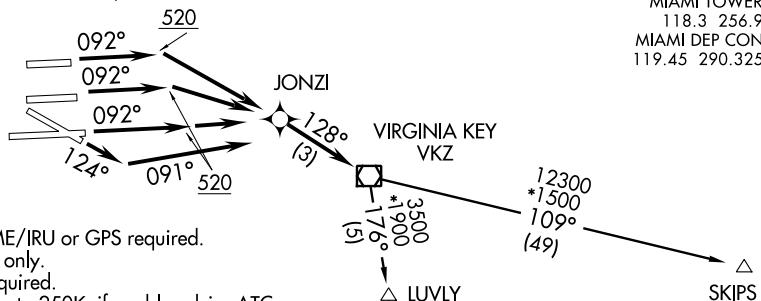
(JONZI1.JONZI) 12264

SL-257 (FAA)

JONZI ONE DEPARTURE (RNAV)MIAMI INTL (MIA)
MIAMI, FLORIDA**TAKEOFF MINIMUMS:**

Rwys 8L, 8R, 9, 12: Standard with minimum climb of 500' per NM to 520.
 Rwys 26L, 26R, 27, 30: NA per ATC.

ATIS 133.675
 CLNC DEL 135.35
 GND CON
 (Rwys 8L/8R/12/26L/26R) 121.8 348.6
 (9/27/30) 127.5 348.6
 MIAMI TOWER 118.3 256.9
 MIAMI DEP CON 119.45 290.325



NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Turbojets only.

NOTE: Radar required.

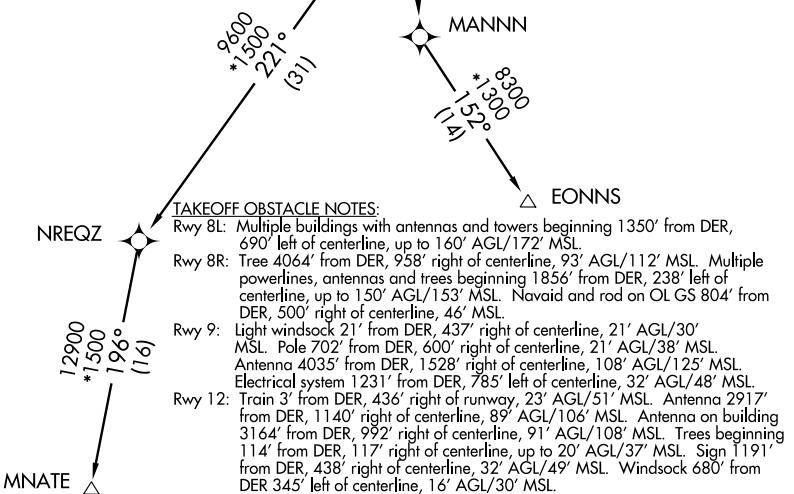
NOTE: Accelerate to 250K, if unable advise ATC.

NOTE: Turbojets only, night use for noise abatement (2300 LCL-0600 LCL).

NOTE: Chart not to scale.

SE-3 05 MAR 2015 to 02 APR 2015

SE-3, 05 MAR 2015 to 02 APR 2015

**DEPARTURE ROUTE DESCRIPTION**

TAKEOFF RUNWAYS 8L, 8R, 9: Climb heading 092° to 520, then direct JONZI, then on depicted route to VKZ VOR/DME. Thence....

TAKEOFF RUNWAY 12: Climb heading 124° to intercept course 091° to JONZI, then on depicted route to VKZ VOR/DME. Thence....

...Via transition or assigned route, maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

EONNS TRANSITION (JONZI1.EONNS):

MNATE TRANSITION (JONZI1.MNATE):

SKIPS TRANSITION (JONZI1.SKIPS):

JONZI ONE DEPARTURE (RNAV)

(JONZI1.JONZI) 12264

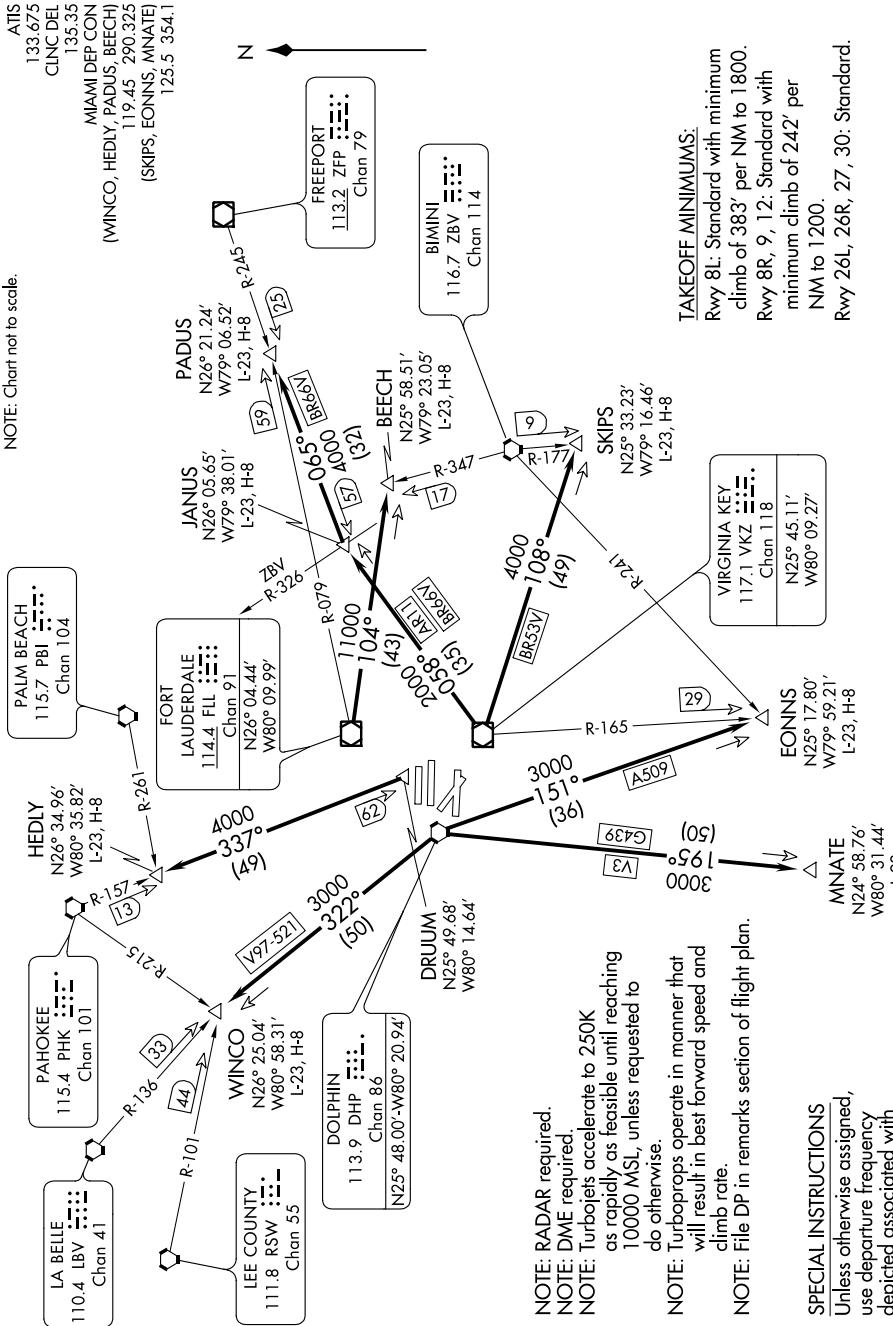
MIAMI, FLORIDA

MIAMI INTL (MIA)

(MIA3.MIA) 14317

SL-257 (FAA)

MIAMI THREE DEPARTURE

MIAMI THREE DEPARTURE
(MIA3.MIA) 14317MIAMI, FLORIDA
MIAMI INTL (MIA)

(NARRATIVE ON FOLLOWING PAGES)

(MIA3.MIA) 14317

SL-257 (FAA)

MIAMI THREE DEPARTURE**DEPARTURE ROUTE DESCRIPTION**

TAKEOF ALL RWYS: Climb on assigned heading for radar vectors to assigned transition. Maintain 5000' or assigned lower altitude. Expect filed altitude ten (10) minutes after departure.

BEECH TRANSITION (MIA3.BEECH): From over FLL VOR/DME via FLL R-104 to BEECH INT. Thence as filed.

EONNS TRANSITION (MIA3.EONNS): From over DHP VORTAC via DHP R-151 to EONNS INT. Thence as filed.

HEDLY TRANSITION (MIA3.HEDLY): From over DRUUM DME FIX via PHK R-157 to HEDLY INT. Thence as filed.

MNATE TRANSITION (MIA3.MNATE): From over DHP VORTAC via R-195 to MNATE DME FIX. Thence as filed.

PADUS TRANSITION (MIA3.PADUS): From over VKZ VOR/DME via VKZ R-058 to JANUS INT and ZFP R-245 to PADUS INT. Thence as filed.

SKIPS TRANSITION (MIA3.SKIPS): From over VKZ VOR/DME via VKZ R-108 to SKIPS INT. Thence as filed.

WINCO TRANSITION (MIA3.WINCO): From over DHP VORTAC via DHP R-322 to WINCO INT. Thence as filed.

(CONTINUED ON FOLLOWING PAGE)

MIAMI THREE DEPARTURE
(MIA3.MIA) 14317MIAMI, FLORIDA
MIAMI INTL (MIA)

(MIA3.MIA) 14317

SL-257 (FAA)

MIAMI INTL (MIA)
MIAMI, FLORIDA

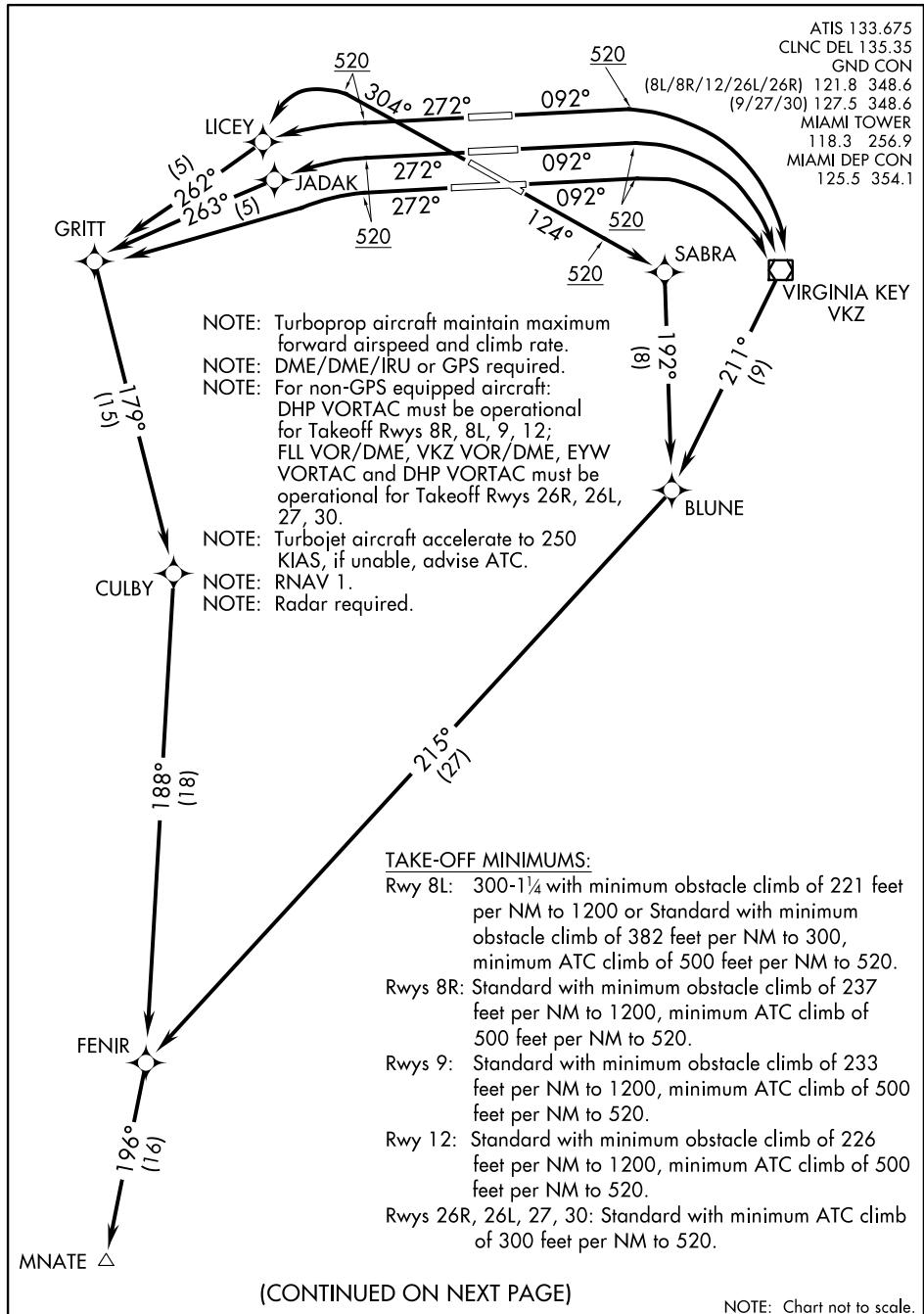
MIAMI THREE DEPARTURE**TAKEOFF OBSTACLE NOTES:**

- Rwy 8L: Multiple buildings with antennas and towers beginning 1350' from DER, 690' left of centerline, up to 160' AGL/172' MSL.
- Rwy 8R: Tree 4064' from DER, 958' right of centerline, 93' AGL/112' MSL.
Multiple power lines, antennas and trees beginning 1856' from DER, 238' left of centerline, up to 150' AGL/153' MSL.
Navaid and rod on OL GS 804' from DER, 500' right of centerline, 44' AGL/46' MSL.
- Rwy 9: Light on windsock 21' from DER, 437' right of centerline, 21' AGL/30' MSL.
Pole 702' from DER, 600' right of centerline, 21' AGL/38' MSL.
Antenna 4035' from DER, 1528' right of centerline, 108' AGL/125' MSL.
Electrical system 1231' from DER, 785' left of centerline, 32' AGL/48' MSL.
- Rwy 12: Train 3' from DER, 436' right of runway, 23' AGL/51' MSL.
Antenna 2917' from DER, 1140' right of centerline, 89' AGL/106' MSL.
Antenna on building 3164' from DER, 992' right of centerline, 91' AGL/108' MSL.
Trees beginning 114' from DER, 117' right of centerline, up to 20' AGL/37' MSL.
Sign 1191' from DER, 438' right of centerline, 32' AGL/49' MSL.
Windsock 680' from DER, 345' left of centerline, 16' AGL/30' MSL.
- Rwy 26L: Pole 1080' from DER, 680' left of centerline, 33' AGL/47' MSL.
Light pole 1773' from DER, 825' left of centerline, 34' AGL/53' MSL.
Tree 1405' from DER, 848' left of centerline, 30' AGL/44' MSL.
Rod on tower 1305' from DER, 638' right of centerline, 34' AGL/48' MSL.
Tree 2459' from DER, 1070' right of centerline, 63' AGL/71' MSL.
- Rwy 26R: Numerous poles beginning 1090' from DER, 36' right of centerline, up to 44' AGL/59' MSL.
Building 740' from DER, 511' right of centerline, 14' AGL/28' MSL.
Trees beginning 1047' from DER, 272' right of centerline, up to 66' AGL/80' MSL.
Tree 888' from DER, on centerline, 21' AGL/35' MSL.
Rod on tower 1304' from DER, 160' left of centerline, 34' AGL/48' MSL.
- Rwy 27: Train on tracks 750' from DER, 576' left of centerline, 23' AGL/53' MSL.
Tree 1067' from DER, 680' left of centerline, 23' AGL/37' MSL.
Roadway beginning 1874' from DER, 502' left of centerline, up to 71' AGL/85' MSL.
Numerous poles and signs beginning 1876' from DER, 93' left of centerline, up to 63' AGL/77' MSL.
Poles beginning 2056' from DER, 95' right of centerline, up to 46' AGL/60' MSL.
- Rwy 30: Pole 560' from DER, 563' left of centerline, 33' AGL/47' MSL.
Rod on tower 2451' from DER, 434' right of centerline, 34' AGL/48' MSL.
Antenna on tower 1733' from DER, 911' right of centerline, 41' AGL/55' MSL.
Antenna on tower 4427' from DER, 1451' right of centerline, 109' AGL/123' MSL.
Trees beginning 2658' from DER, 188' right of centerline, up to 63' AGL/77' MSL.

(MNATE1.MNATE) 12152

SL-257 (FAA)

MNATE ONE DEPARTURE (RNAV)

MIAMI INTL (MIA)
MIAMI, FLORIDAMNATE ONE DEPARTURE (RNAV)
(MNATE1.MNATE) 12152MIAMI, FLORIDA
MIAMI INTL (MIA)

(MNATE1.MNATE) 06271

SL-257 (FAA)

MNATE ONE DEPARTURE (RNAV)MIAMI INTL (MIA)
MIAMI, FLORIDA**DEPARTURE ROUTE DESCRIPTION**

T TAKE-OFF RUNWAY 8L, 8R, 9: Climb heading 092° to 520', then right turn direct VKZ VOR/DME, then via depicted route to MNATE, thence. . . .

T TAKE-OFF RUNWAY 12: Climb heading 124° to 520', then direct SABRA, then via depicted route to MNATE, thence. . . .

T TAKE-OFF RUNWAY 26R: Climb heading 272° to 520', then direct LICEY, then via depicted route to MNATE, thence. . . .

T TAKE-OFF RUNWAY 26L: Climb heading 272° to 520', then left turn direct JADAK, then via depicted route to MNATE, thence. . . .

T TAKE-OFF RUNWAY 27: Climb heading 272° to 520', then left turn direct GRITT, then via depicted route to MNATE, thence. . . .

T TAKE-OFF RUNWAY 30: Climb heading 304° to 520', then left turn direct LICEY, then via depicted route to MNATE, thence. . . .

. . . . Maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

T TAKE-OFF OBSTACLES:

NOTE: Rwy 8L, Bldg 3391' from DER, 1024' left of centerline, 160' AGL/172' MSL. Glideslope antenna 804' from DER, 501' right of centerline, 32' AGL/46' MSL. Multiple towers and bldgs beginning 1350' from DER, 691' left of centerline, up to 150' AGL/164' MSL.

NOTE: Rwy 8R, Tree 4064' from DER, 959' right of centerline, 98' AGL/112' MSL. Antenna and multiple trees beginning 2719' from DER, 194' left of centerline, up to 85' AGL/98' MSL.

NOTE: Rwy 9, Light 1232' from DER, 785' left of centerline, 39' AGL/48' MSL. Windsock 22' from DER, 438' right of centerline, 21' AGL/30' MSL.

NOTE: Rwy 12, Railroad beginning 4' from DER, 356' right of centerline, 23' AGL/28' MSL. Building and tree beginning 1064' from DER, 118' right of centerline, up to 94' AGL/108' MSL. Windsock 681' from DER, 345' left of centerline, 21' AGL/30' MSL.

NOTE: Rwy 26R, Tower, building, multiple light poles and trees beginning 741' from DER, 1' right of centerline, up to 66' AGL/80' MSL. Pole, bldg, and tower beginning 255' from DER, 5' left of centerline, up to 34' AGL/48' MSL.

NOTE: Rwy 26L, Tower and multiple trees beginning 1306' from DER, 638' right of centerline, up to 63' AGL/77' MSL. Tree and light pole beginning 1773' from DER, 568' left of centerline, up to 61' AGL/75' MSL.

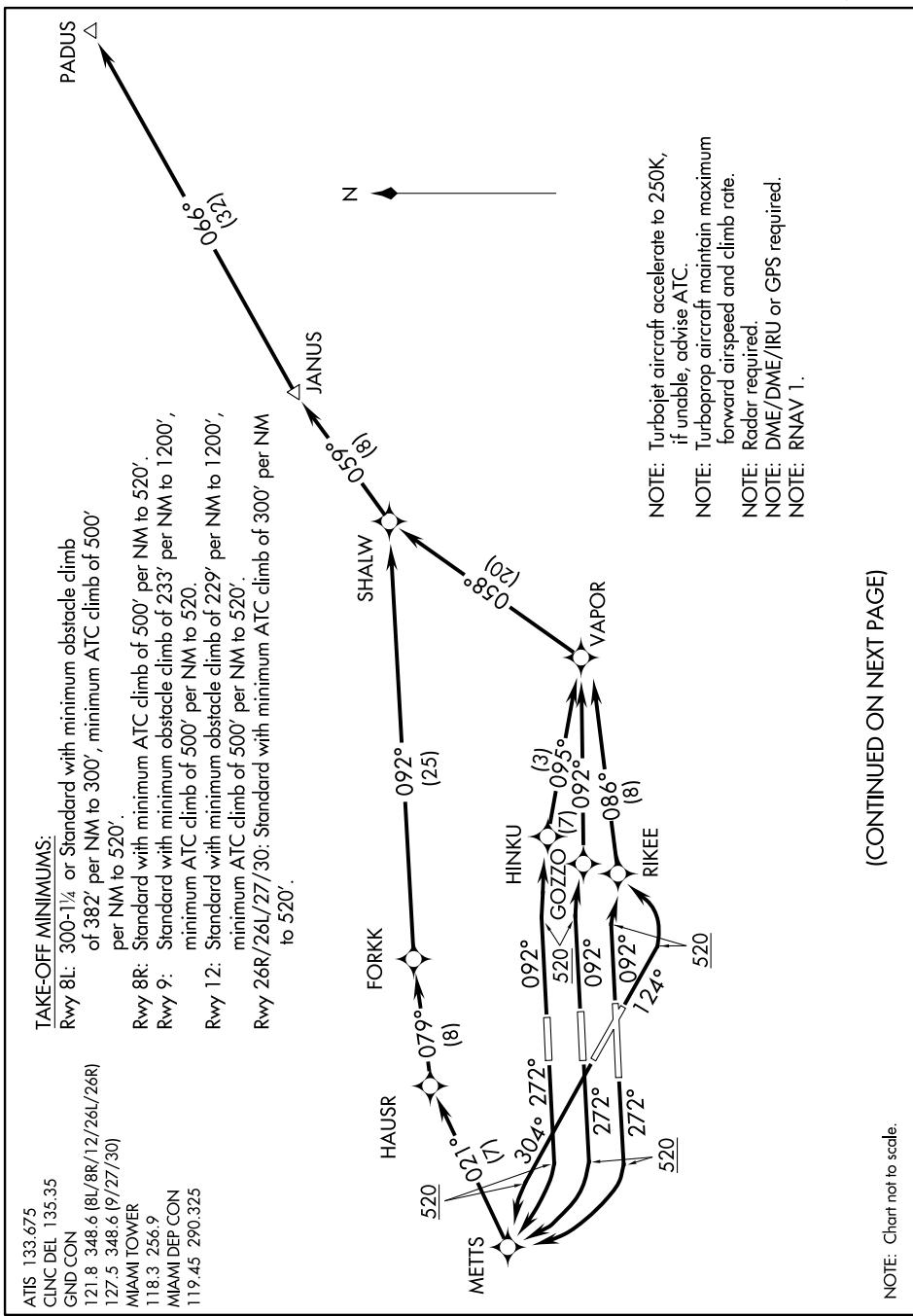
NOTE: Rwy 27, Railroad, tree, and multiple light poles beginning 750' from DER, 94' left of centerline, up to 62' AGL/76' MSL.

NOTE: Rwy 30, Pole, multiple towers and trees beginning 1414' from DER, 189' right of centerline, up to 120' AGL/125' MSL. Tree 2058' from DER, 785' left of centerline, 52' AGL/66' MSL.

(PADUS1.PADUS) 12152

SL-257 (FAA)

PADUS ONE DEPARTURE (RNAV)

MIAMI INTL (MIA)
MIAMI, FLORIDA

PADUS ONE DEPARTURE (RNAV)
(PADUS1.PADUS) 12152

MIAMI, FLORIDA
MIAMI INTL (MIA)

NOTE: Chart not to scale.

(CONTINUED ON NEXT PAGE)

(PADUS1.PADUS) 06271

SL-257 (FAA)

PADUS ONE DEPARTURE (RNAV)**DEPARTURE ROUTE DESCRIPTION**

TAKE-OFF RUNWAY 8L: Climb heading 092° to 520', then right turn direct HINKU, then via depicted route to PADUS, thence. . . .

TAKE-OFF RUNWAY 8R: Climb heading 092° to 520', then right turn direct GOZZO, then via depicted route to PADUS, thence. . . .

TAKE-OFF RUNWAY 9: Climb heading 092° to 520', then right turn direct RIKEE, then via depicted route to PADUS, thence. . . .

TAKE-OFF RUNWAY 12: Climb heading 124° to 520', then left turn direct RIKEE, then via depicted route to PADUS, thence. . . .

TAKE-OFF RUNWAY 26L, 26R, 27: Climb heading 272° to 520', then right turn direct METTS, then via depicted route to PADUS, thence. . . .

TAKE-OFF RUNWAY 30: Climb heading 304° to 520', then left turn direct METTS, then via depicted route to PADUS, thence. . . .

. . . . Maintain 5000' or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

TAKE-OFF OBSTACLES:

NOTE: Rwy 8L, Bldg 3391' from DER, 1024' left of centerline, 160' AGL/172' MSL. Glideslope antenna 804' from DER, 501' right of centerline, 32' AGL/46' MSL. Multiple towers and bldgs beginning 1350' from DER, 691' left of centerline, up to 150' AGL/164' MSL.

NOTE: Rwy 8R, Tree 4064' from DER, 959' right of centerline, 98' AGL/112' MSL. Antenna and multiple trees beginning 2719' from DER, 194' left of centerline, up to 85' AGL/98' MSL.

NOTE: Rwy 9, Light 1232' from DER, 785' left of centerline, 39' AGL/48' MSL. Windsock 22' from DER, 438' right of centerline, 21' AGL/30' MSL.

NOTE: Rwy 12, Railroad beginning 4' from DER, 356' right of centerline, 23' AGL/28' MSL. Building and tree beginning 1064' from DER, 118' right of centerline, up to 94' AGL/108' MSL. Windsock 681' from DER, 345' left of centerline, 21' AGL/30' MSL.

NOTE: Rwy 26R, Tower, building, multiple light poles and trees beginning 741' from DER, 1' right of centerline, up to 66' AGL/80' MSL. Pole, bldg, and tower beginning 255' from DER, 5' left of centerline, up to 34' AGL/48' MSL.

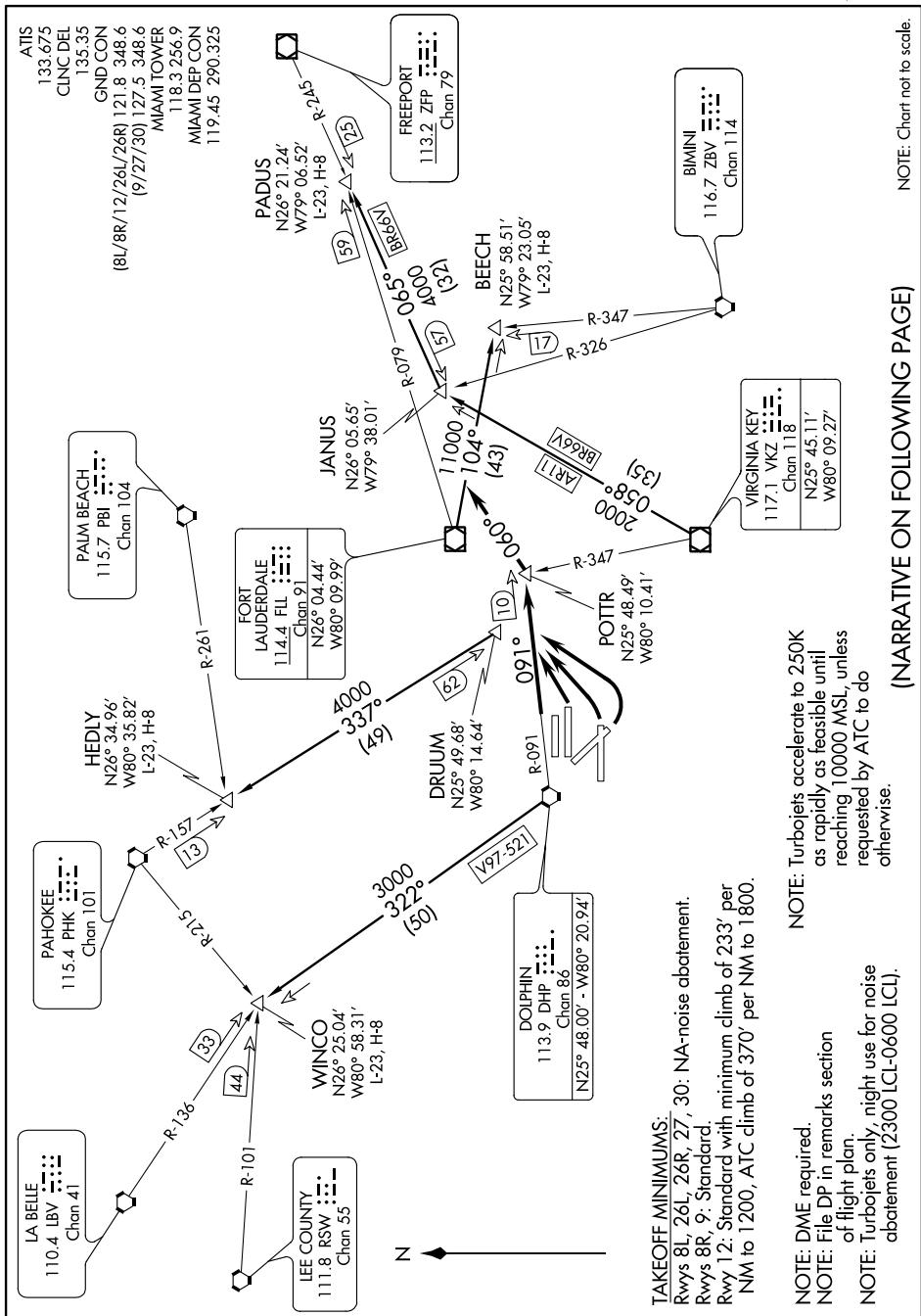
NOTE: Rwy 26L, Tower and multiple trees beginning 1306' from DER, 638' right of centerline, up to 63' AGL/77' MSL. Tree and light pole beginning 1773' from DER, 568' left of centerline, up to 61' AGL/75' MSL.

NOTE: Rwy 27, Railroad, tree, and multiple light poles beginning 750' from DER, 94' left of centerline, up to 62' AGL/76' MSL.

NOTE: Rwy 30, Pole, multiple towers and trees beginning 1414' from DER, 189' right of centerline, up to 120' AGL/125' MSL. Tree 2058' from DER, 785' left of centerline, 52' AGL/66' MSL.

(POTTR5.POTTR) 13178
POTTR FIVE DEPARTURE

SL-257 (FAA)

MIAMI INTL (MIA)
MIAMI, FLORIDA**NARRATIVE ON FOLLOWING PAGE**

NOTE: Chart not to scale.

(POTTR5.POTTR) 13122

SL-257 (FAA)

POTTR FIVE DEPARTUREMIAMI INTL (MIA)
MIAMI, FLORIDA**DEPARTURE ROUTE DESCRIPTION****TAKEOFF RWY 8R:** Climb to intercept DHP VORTAC R-091 to POTTR INT. Thence**TAKEOFF RWYS 9, 12:** Climbing left turn to intercept DHP VORTAC R-091 to POTTR INT. Thence

. . . . turn left heading 060°. Expect radar vectors to appropriate transition.
 All aircraft maintain 5000 or assigned lower altitude. Expect clearance to filed altitude ten (10) minutes after departure.

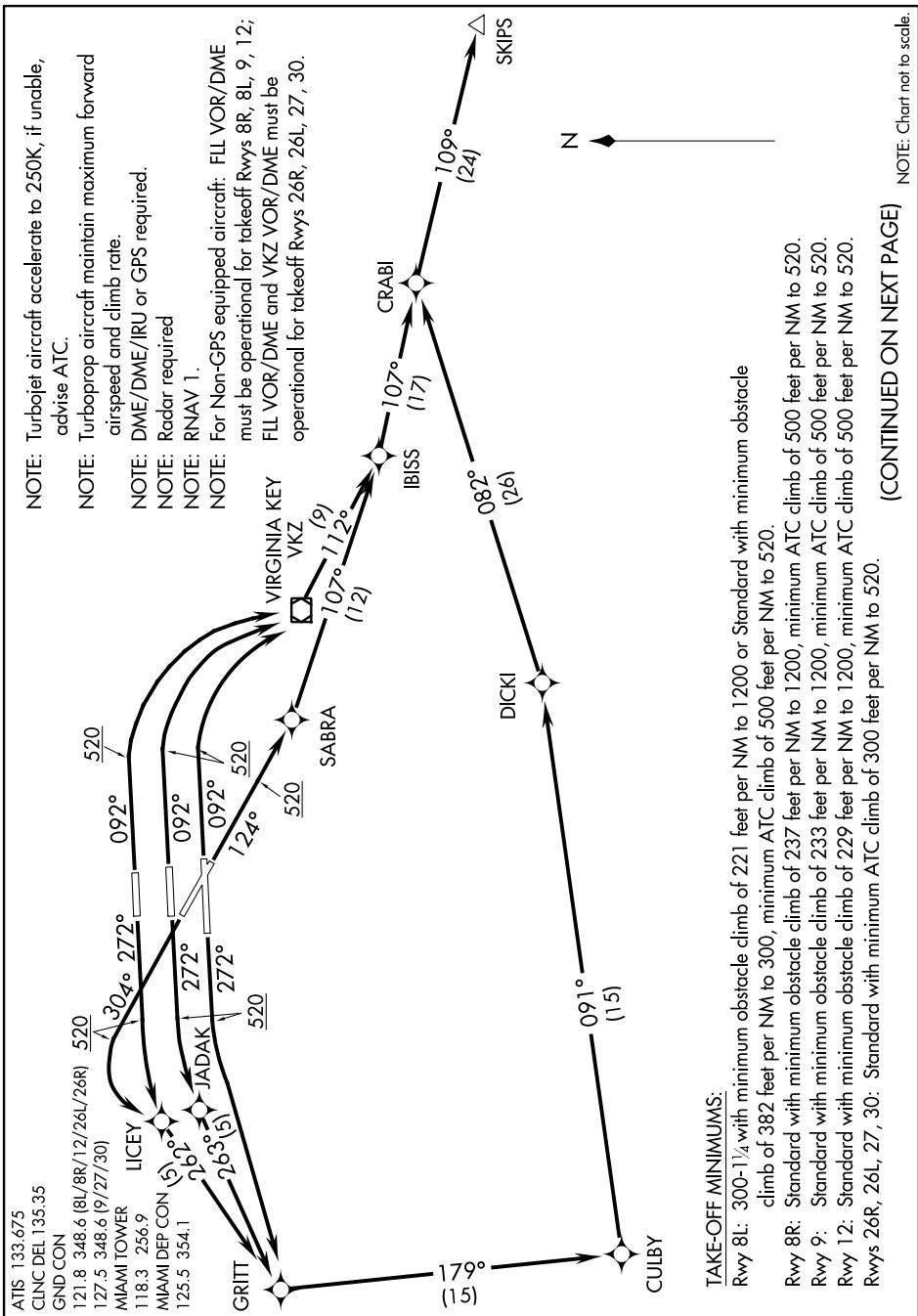
BEECH TRANSITION (POTTR5.BEECH): From over FLL VOR/DME on FLL R-104 to BEECH INT. Thence as filed.**HEDLY TRANSITION (POTTR5.HEDLY):** From over DRUUM DME FIX on PHK VORTAC R-157 to HEDLY INT. Thence as filed.**PADUS TRANSITION (POTTR5.PADUS):** From over VKZ VOR/DME on VKZ R-058 to JANUS INT and ZFP VOR/DME R-245 to PADUS INT. Thence as filed.**WINCO TRANSITION (POTTR5.WINCO):** From over DHP VORTAC on DHP R-322 to WINCO INT. Thence as filed.**TAKEOFF OBSTACLE NOTES:**

- Rwy 8R: Tree 4064' from DER, 958' right of centerline, 93' AGL/112' MSL.
 Multiple powerlines, antennas and trees beginning 1856' from DER, 238' left of centerline, up to 150' AGL/153' MSL.
 Navaid and rod on OL GS 804' from DER, 500' right of centerline, 44' AGL/46' MSL.
- Rwy 9: Light on windsock 21' from DER, 437' right of centerline, 21' AGL/30' MSL.
 Pole 702' from DER, 600' right of centerline, 21' AGL/38' MSL.
 Antenna 4035' from DER, 1528' right of centerline, 108' AGL/125' MSL.
 Electrical system 1231' from DER, 785' left of centerline, 32' AGL/48' MSL.
- Rwy 12: Train 3' from DER, 436' right of centerline, 23' AGL/51' MSL.
 Antenna 2917' from DER, 1140' right of centerline, 89' AGL/106' MSL.
 Antenna on building 3164' from DER, 992' right of centerline, 91' AGL/108' MSL.
 Trees beginning 114' from DER, 117' right of centerline, up to 20' AGL/37' MSL.
 Sign 1191' from DER, 438' right of centerline, 32' AGL/49' MSL.
 Windsock 680' from DER, 345' left of centerline, 16' AGL/30' MSL.

(SKIPS1.SKIPS) 12152

SL-257 (FAA)

SKIPS ONE DEPARTURE (RNAV)

MIAMI INTL (MIA)
MIAMI, FLORIDASKIPS ONE DEPARTURE (RNAV)
(SKIPS1.SKIPS) 12152MIAMI, FLORIDA
MIAMI INTL (MIA)

(CONTINUED ON NEXT PAGE)

(SKIPS1.SKIPS) 06327

SKIPS ONE DEPARTURE (RNAV)

SL-257 (FAA)

**DEPARTURE ROUTE DESCRIPTION**

TAKE-OFF RUNWAY 8L, 8R, 9: Climb heading 092° to 520, then right turn direct VKZ VOR/DME, then via depicted route to SKIPS, thence

TAKE-OFF RUNWAY 12: Climb heading 124° to 520, then direct SABRA, then via depicted route to SKIPS, thence

TAKE-OFF RUNWAY 26R: Climb heading 272° to 520, then left turn direct LICEY, then via depicted route to SKIPS, thence

TAKE-OFF RUNWAY 26L: Climb heading 272° to 520, then left turn direct JADAK, then via depicted route to SKIPS, thence

TAKE-OFF RUNWAY 27: Climb heading 272° to 520, then left turn direct GRITT, then left turn via track 179° to CULBY, then via depicted route to SKIPS, thence

TAKE-OFF RUNWAY 30: Climb heading 304° to 520, then left turn direct LICEY, then via depicted route to SKIPS, thence

. . . . Maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

TAKE-OFF OBSTACLES:

NOTE: Rwy 8L, Bldg 3391' from DER, 1024' left of centerline, 160' AGL/172' MSL. Glideslope Antenna 804' from DER, 501' right of centerline, 32' AGL/46' MSL. Multiple Towers and Bldgs beginning 1350' from DER, 691' left of centerline, up to 150' AGL/164' MSL.

NOTE: Rwy 8R, Tree 4064' from DER, 959' right of centerline, 98' AGL/112' MSL. Antenna and Multiple Trees beginning 2719' from DER, 194' left of centerline, up to 85' AGL/98' MSL.

NOTE: Rwy 9, Light 1232' from DER, 785' left of centerline, 39' AGL/48' MSL. Windsock 22' from DER, 438' right of centerline, 21' AGL/30' MSL.

NOTE: Rwy 12, Railroad beginning 4' from DER, 356' right of centerline, 23' AGL/28' MSL. Building and Tree beginning 1064' from DER, 118' right of centerline, up to 94' AGL/108' MSL. Windsock 681' from DER, 345' left of centerline, 21' AGL/30' MSL.

NOTE: Rwy 26R, Tower, Building, Multiple Light Poles and Trees beginning 741' from DER, 1' right of centerline, up to 66' AGL/80' MSL. Pole, Bldg, and Tower beginning 255' from DER, 5' left of centerline, up to 34' AGL/48' MSL.

NOTE: Rwy 26L, Tower and Multiple Trees beginning 1306' from DER, 638' right of centerline, up to 63' AGL/77' MSL. Tree and Light Pole beginning 1773' from DER, 568' left of centerline, up to 61' AGL/75' MSL.

NOTE: Rwy 27, Railroad, Tree, and Multiple Light Poles beginning 750' from DER, 94' left of centerline, up to 62' AGL/76' MSL.

NOTE: Rwy 30, Pole, Multiple Towers and Trees beginning 1414' from DER, 189' right of centerline, up to 120' AGL/125' MSL. Tree 2058' from DER, 785' left of centerline, 52' AGL/66' MSL.

(SOUBY4.SOUBY) 12152
SOUBY FOUR DEPARTURE

SL-257 (FAA)

ATIS 133.675
CLNC DEL 135.35
GND CON
(BL/8R/12/24L/26R) 121.8 348.6
(9/27/30) 127.5 348.6
MIAMI TOWER
118.3 256.9
MIAMI DEP CON
119.45 290.525

(BL/8R/12/24L/26R)

(9/27/30)

127.5

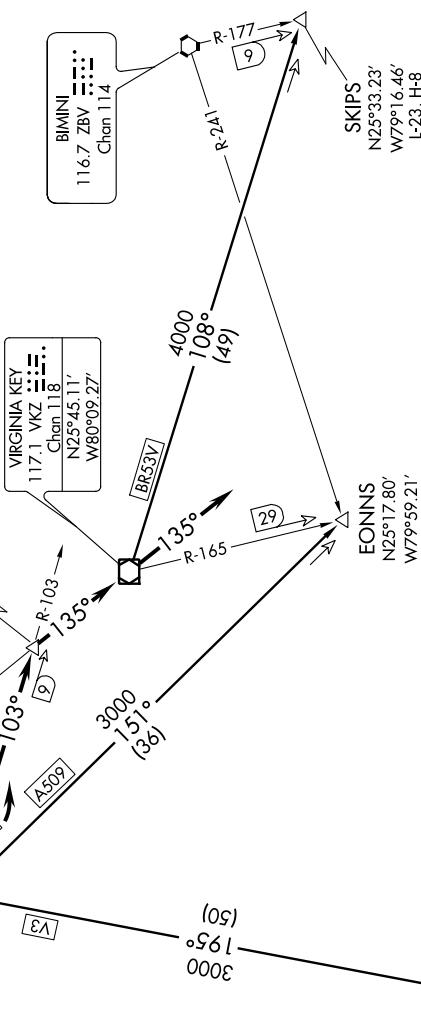
348.6

MIAMI TOWER

118.3 256.9

MIAMI DEP CON

119.45 290.525



NOTE: Unless otherwise instructed, continue heading 135° after VKZ VOR/DME until ATC issues vectors to appropriate transition.

NOTE: Turboprops Only, night use for noise abatement (2300 LCL - 0600 LCL).

NOTE: File DP in remarks section of flight plan.

NOTE: DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

SOUBY FOUR DEPARTURE
(SOUBY4.SOUBY) 12152MIAMI, FLORIDA
MIAMI INTL (MIA)

(SOUBY4.SOUBY) 07186

SL-257 (FAA)

SOUBY FOUR DEPARTURE

▼

DEPARTURE ROUTE DESCRIPTION**TAKE-OFF RUNWAYS 8R and 9:** Turn right. Thence....**TAKE-OFF RUNWAY 12:** Turn left. Thence....

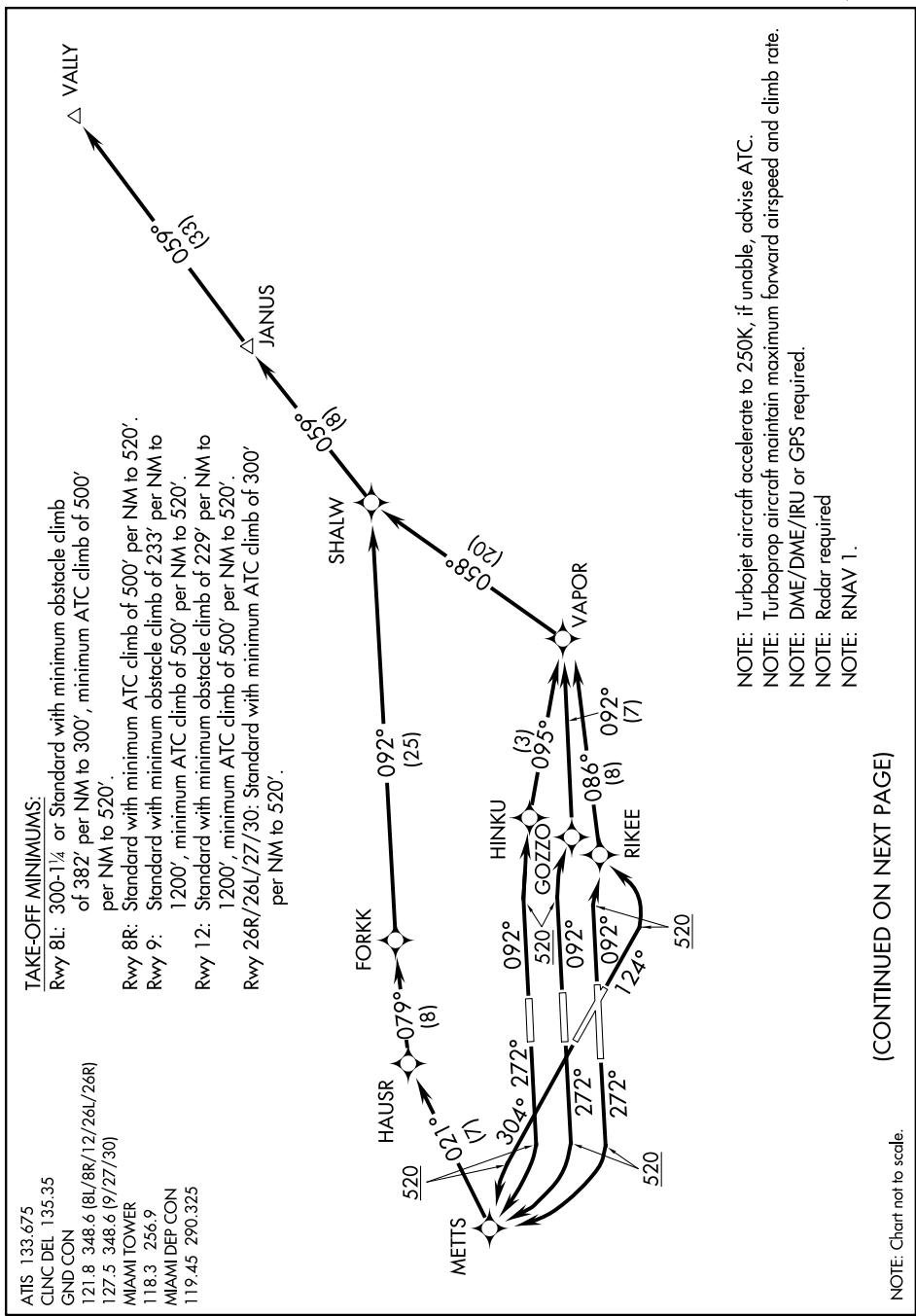
....intercept DHP R-103 to SOUBY INT/DHP 9 DME, then turn right via VKZ R-315 to VKZ VOR/DME. Thence via heading 135°. Expect radar vectors to appropriate transition. All aircraft maintain 5000' or assigned lower altitude. Expect further clearance to filed altitude ten minutes after departure. Unless otherwise assigned, departure frequency for SKIPS, EONNS, and MNATE transitions use 125.5.

EONNS TRANSITION (SOUBY4.EONNS): Intercept the DHP VORTAC R-151 to EONNS INT. Thence as filed.**MNATE TRANSITION (SOUBY4.MNATE):** Intercept the DHP VORTAC R-195 to MNATE DME FIX. Thence as filed.**SKIPS TRANSITION (SOUBY4.SKIPS):** Intercept the VKZ VOR/DME R-108 to SKIPS INT. Thence as filed.

(VALLY1.VALLY) 12152

SL-257 (FAA)

VALLY ONE DEPARTURE (RNAV)

MIAMI INTL (MIA)
MIAMI, FLORIDA

VALLY ONE DEPARTURE (RNAV)

(VALLY1.VALLY) 12152

MIAMI, FLORIDA
MIAMI INTL (MIA)

(VALLY1.VALLY) 06271

VALLY ONE DEPARTURE (RNAV)

SL-257 (FAA)

MIAMI INTL (MIA)
MIAMI, FLORIDA**DEPARTURE ROUTE DESCRIPTION**

TAKE-OFF RUNWAY 8L: Climb heading 092° to 520, then right turn direct HINKU, then via depicted route to VALLY, thence

TAKE-OFF RUNWAY 8R: Climb heading 092° to 520, then right turn direct GOZZO, then via depicted route to VALLY, thence

TAKE-OFF RUNWAY 9: Climb heading 092° to 520, then right turn direct RIKEE, then via depicted route to VALLY, thence

TAKE-OFF RUNWAY 12: Climb heading 124° to 520, then left turn direct RIKEE, then via depicted route to VALLY, thence

TAKE-OFF RUNWAY 26R, 26L, 27: Climb heading 272° to 520, then right turn direct METTS, then via depicted route to VALLY, thence

TAKE-OFF RUNWAY 30: Climb heading 304° to 520, then left turn direct METTS, then via depicted route to VALLY, thence

. . . . Maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

TAKE-OFF OBSTACLES:

NOTE: Rwy 8L, Bldg 3391' from DER, 1024' left of centerline, 160' AGL/172' MSL. Glideslope Antenna 804' from DER, 501' right of centerline, 32' AGL/46' MSL. Multiple Towers and Bldgs beginning 1350' from DER, 691' left of centerline, up to 150' AGL/164' MSL.

NOTE: Rwy 8R, Tree 4064' from DER, 959' right of centerline, 98' AGL/112' MSL. Antenna and Multiple Trees beginning 2719' from DER, 194' left of centerline, up to 85' AGL/98' MSL.

NOTE: Rwy 9, Light 1232' from DER, 785' left of centerline, 39' AGL/48' MSL. Windsock 22' from DER, 438' right of centerline, 21' AGL/30' MSL.

NOTE: Rwy 12, Railroad beginning 4' from DER, 356' right of centerline, 23' AGL/28' MSL. Building and Tree beginning 1064' from DER, 118' right of centerline, up to 94' AGL/108' MSL. Windsock 681' from DER, 345' left of centerline, 21' AGL/30' MSL.

NOTE: Rwy 26R, Tower, Building, Multiple Light Poles and Trees beginning 741' from DER, 1' right of centerline, up to 66' AGL/80' MSL. Pole, Bldg, and Tower beginning 255' from DER, 5' left of centerline, up to 34' AGL/48' MSL.

NOTE: Rwy 26L, Tower and Multiple Trees beginning 1306' from DER, 638' right of centerline, up to 63' AGL/77' MSL. Tree and Light Pole beginning 1773' from DER, 568' left of centerline, up to 61' AGL/75' MSL.

NOTE: Rwy 27, Railroad, Tree, and Multiple Light Poles beginning 750' from DER, 94' left of centerline, up to 62' AGL/76' MSL.

NOTE: Rwy 30, Pole, Multiple Towers and Trees beginning 1414' from DER, 189' right of centerline, up to 120' AGL/125' MSL. Tree 2058' from DER, 785' left of centerline, 52' AGL/66' MSL.

(WINCO1.WINCO) 12152

SL-257 (FAA)

WINCO ONE DEPARTURE (RNAV)MIAMI INTL (MIA)
MIAMI, FLORIDA

ATIS 133.675

CLNC DEL 135.35

GND CON

121.8 348.6(8L/8R/12/26L/26R)

127.5 348.6(9/27/30)

MIAMI TOWER

118.3 256.9

MIAMI DEP CON

119.45 290.325

TAKEOFF MINIMUMS:

Rwy 8L: 300-1¼ or Standard with minimum obstacle climb of 382' per NM to 300, minimum ATC climb of 500' per NM to 520.

Rwy 8R, 9: Standard with minimum ATC climb of 500' per NM to 520.

Rwy 12: Standard with minimum obstacle climb of 229' per NM to 1200, minimum ATC climb of 500' per NM to 520.

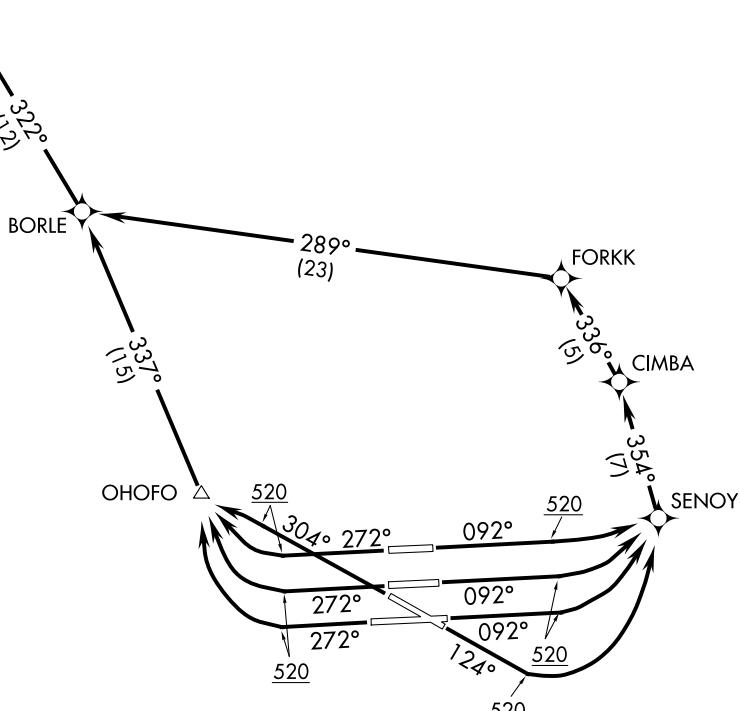
Rwys 26R, 26L, 27, 30: Standard with minimum ATC climb of 300' per NM to 520.

△ WINCO

- NOTE: Turbojet aircraft accelerate to 250K, if unable, advise ATC.
 NOTE: Turboprop aircraft maintain maximum forward airspeed and climb rate.
 NOTE: RNAV 1.
 NOTE: DME/DME/IRU or GPS required.
 NOTE: Radar required.
 NOTE: For non-GPS equipped aircraft, FLL VOR/DME must be operational for takeoff Rwy 26R, 26L, 27, 30.

SE-3 05 MAR 2015 to 02 APR 2015

SE-3, 05 MAR 2015 to 02 APR 2015



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

WINCO ONE DEPARTURE (RNAV)

(WINCO1.WINCO) 12152

MIAMI, FLORIDA

MIAMI INTL (MIA)

(WINCO1.WINCO) 12152

SL-257 (FAA)

WINCO ONE DEPARTURE (RNAV)

MIAMI INTL (MIA)
MIAMI, FLORIDA

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 8L, 8R, 9: Climb heading 092° to 520, then left turn direct SENOY, then via depicted route to WINCO, thence. . . .

TAKEOFF RWY 12: Climb heading 124° to 520, then left turn direct SENOY, then via depicted route to WINCO, thence. . . .

TAKEOFF RWYS 26R, 26L, 27: Climb heading 272° to 520, then right turn direct OHOFO, then via depicted route to WINCO, thence. . . .

TAKEOFF RWY 30: Climb heading 304° to 520, then left turn direct OHOFO, then via depicted route to WINCO, thence. . . .

. . . . Maintain 5000 or ATC assigned altitude. Expect further clearance to filed altitude within 10 minutes after departure.

TAKEOFF OBSTACLE NOTES:

- Rwy 8L: Building 3391' from DER, 1024' left of centerline, 160' AGL/172' MSL.
Glideslope Antenna 804' from DER, 501' right of centerline, 32' AGL/46' MSL.
Multiple towers and buildings beginning 1350' from DER, 691' left of centerline, up to 150' AGL/164' MSL.
- Rwy 8R: Tree 4064' from DER, 959' right of centerline, 98' AGL/112' MSL.
Antenna and multiple trees beginning 2719' from DER, 194' left of centerline, up to 85' AGL/98' MSL.
- Rwy 9: Light 1232' from DER, 785' left of centerline, 39' AGL/48' MSL.
Windsock 22' from DER, 438' right of centerline, 21' AGL/30' MSL.
- Rwy 12: Railroad beginning 4' from DER, 356' right of centerline, 23' AGL/28' MSL.
Building and tree beginning 1064' from DER, 118' right of centerline, up to 94' AGL/108' MSL. Windsock 681' from DER, 345' left of centerline, 21' AGL/30' MSL.
- Rwy 26R: Tower, building, multiple light poles and trees beginning 741' from DER, 1' right of centerline, up to 66' AGL/80' MSL. Pole, building, and tower beginning 255' from DER, 5' left of centerline, up to 34' AGL/48' MSL.
- Rwy 26L: Tower and multiple trees beginning 1306' from DER, 638' right of centerline, up to 63' AGL/77' MSL. Tree and light pole beginning 1773' from DER, 568' left of centerline, up to 61' AGL/75' MSL.
- Rwy 27: Railroad, tree, and multiple light poles beginning 750' from DER, 94' left of centerline, up to 62' AGL/76' MSL.
- Rwy 30: Pole, multiple towers and trees beginning 1414' from DER, 189' right of centerline, up to 120' AGL/125' MSL. Tree 2058' from DER, 785' left of centerline, 52' AGL/66' MSL.

ATIS
135.0
FORT LAUDERDALE TOWER
119.3 257.8
GND CON
121.4
CLNC DEL
128.4

D

JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W

ASDE-X Surveillance System in use.
Operate transponders with Mode C
on all twys and rwys.

Runway Status Lights in operation.

SE-3, 23 JUL 2015 to 20 AUG 2015

ATIS
135.0
FORT LAUDERDALE TOWER
119.3 257.8
GND CON
121.4
CLNC DEL
128.4

D

JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W

ASDE-X Surveillance System in use.
Operate transponders with Mode C
on all twys and rwy.

Runway Status Lights in operation.

EMAS ELEV 6

EMAS ELEV 10

EMAS ELEV 5

EMAS ELEV 65

NON MOVEMENT AREA

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

**CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED**

AIRPORT DIAGRAM

FORT LAUDERDALE, FLORIDA
FORT LAUDERDALE-HOLLYWOOD INT'L (FLL)

ATIS 135.0
CLNC DEL
128.4
GND CON
121.4

FORT LAUDERDALE TOWER
119.3 257.8
MIAMI DEP CON
126.05 251.1

**TOP ALTITUDE:
3000**

TAKEOFF MINIMUMS:

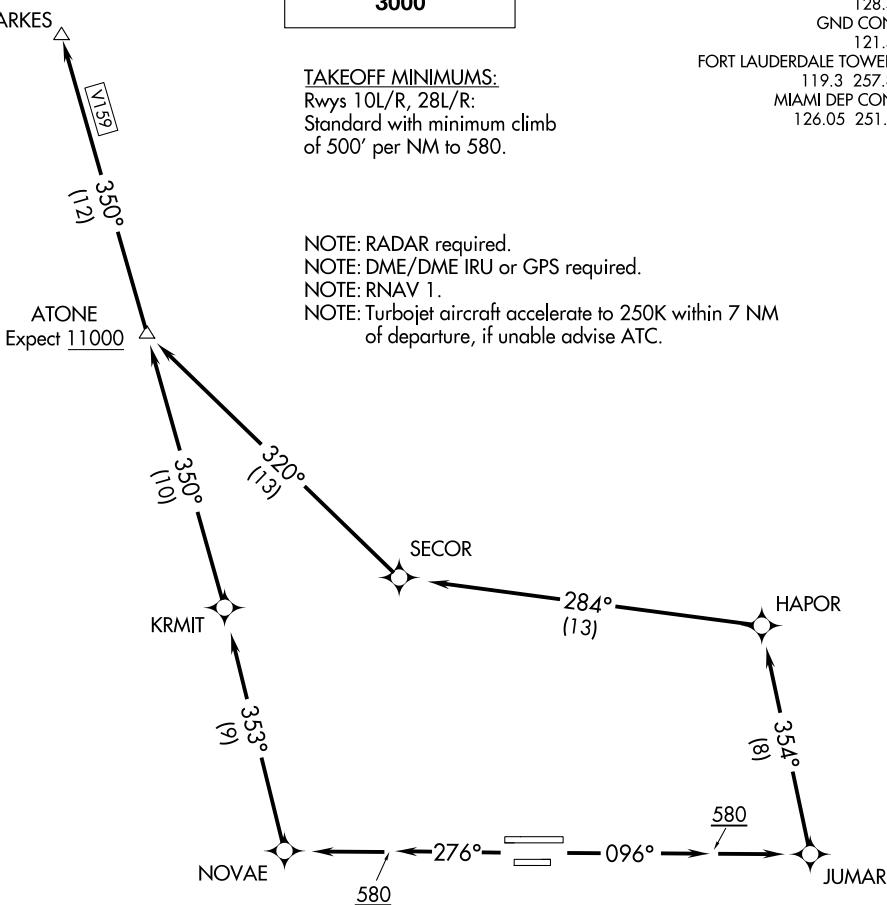
Rwys 10L/R, 28L/R:
Standard with minimum climb
of 500' per NM to 580.

NOTE: RADAR required.

NOTE: DME/DME IRU or GPS required.

NOTE: RNAV 1.

NOTE: Turbojet aircraft accelerate to 250K within 7 NM
of departure, if unable advise ATC.



(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWYS 10L/R: Climb heading 096° to 580, then direct JUMAR, then turn left on track 354° to HAPOR, then on depicted route to ARKES, thence. . . .

TAKEOFF RWYS 28L/R: Climb heading 276° to 580, then direct NOVAE, then on depicted route to ARKES, thence. . . .

. . . . Maintain 3000 or as assigned by ATC. Expect clearance to filed altitude 10 minutes after departure.

TAKEOFF OBSTACLE NOTES:

Rwy 10L: Approach light 296' from DER, on centerline, 11' AGL/15' MSL. Building 469' from DER, 378' left of centerline, 13' AGL/18' MSL. Lights beginning 496' from DER, from 28' left to 27' right of centerline, up to 16' AGL/20' MSL. Train on railroad beginning 510' from DER, from 632' left to on centerline, 23' AGL/30' MSL. Light poles beginning 666' from DER, on centerline, up to 32' AGL/36' MSL. Poles and trees beginning 1290' from DER, 548' left and 633' right of centerline, up to 49' AGL/53' MSL. Trees and pole beginning 1975' from DER, 827' left and 271' right of centerline, up to 79' AGL/83' MSL. Bridge 2429' from DER, 1123' left of centerline, 65' AGL/70' MSL.

Rwy 10R: Trees beginning 199' from DER, 259' left of centerline, up to 21' AGL/86' MSL.
 Trees beginning 273' from DER, 181' right of centerline, up to 31' AGL/96' MSL.
 Trees beginning 495' from DER, 144' left of centerline, up to 44' AGL/109' MSL.

Rwy 28L: Tree 491' from DER, 444' left of centerline, 24' AGL/34' MSL. Trees beginning 773' from DER, 399' left of centerline, up to 80' AGL/90' MSL. Poles and trees beginning 865' from DER, 534' right of centerline, up to 81' AGL/91' MSL. Buildings, trees, and signs beginning 1317' from DER, 455' left of centerline, up to 100' AGL/109' MSL.
 Trees and pole beginning 1636' from DER, 290' right of centerline, up to 90' AGL/100' MSL. Towers beginning 3190' from DER, 666' right of centerline, up to 108' AGL/114' MSL.

Rwy 28R: Building and light pole beginning 260' from DER, 253' left of centerline and on centerline, up to 14' AGL/18' MSL. Vehicles on road beginning 323' from DER, from 28' left to 281' right of centerline, 15' AGL/21' MSL. Approach lights beginning 441' from DER, from 28' left to 27' right of centerline, up to 16' AGL/25' MSL. Vehicles on road beginning 455' from DER, from 647' left to 685' right of centerline, up to 17' AGL/33' MSL. Approach lights beginning 652' from DER, on centerline, up to 24' AGL/33' MSL. Train on railroad beginning 849' from DER, from 683' left to 379' right of centerline, up to 23' AGL/34' MSL. Trees and sign beginning 1017' from DER, 122' left of centerline, up to 63' AGL/72' MSL.
 Trees beginning 2231' from DER, 354' left of centerline, up to 88' AGL/97' MSL.
 Trees beginning 2286' from DER, 530' right of centerline, up to 108' AGL/112' MSL.

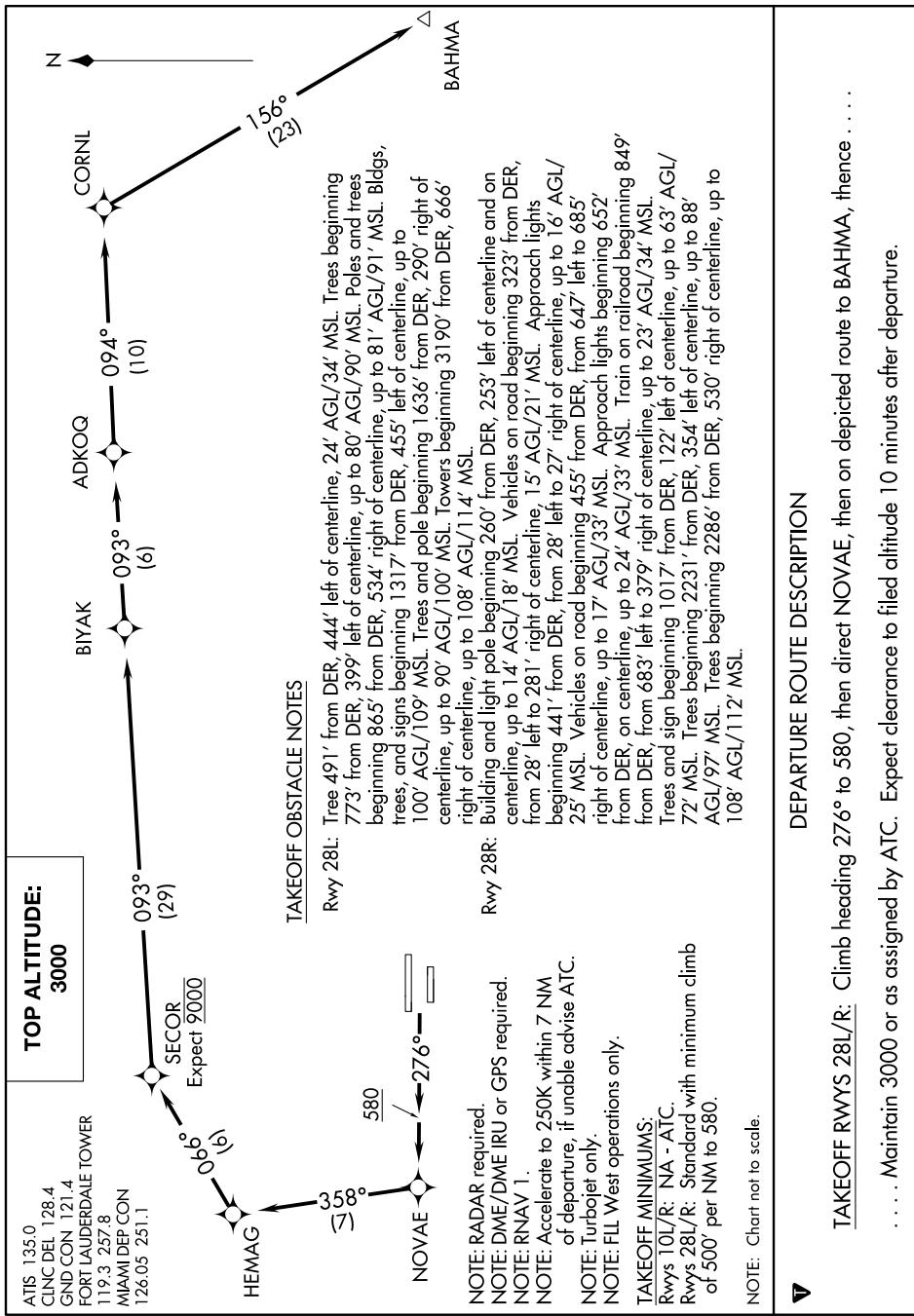
(BAHMA5.BAHMA) 15176

SL-744 (FAA)

BAHMA FIVE DEPARTURE

(RNAV)

FORT LAUDERDALE/HOLLYWOOD INTL (FLL)
FORT LAUDERDALE, FLORIDA



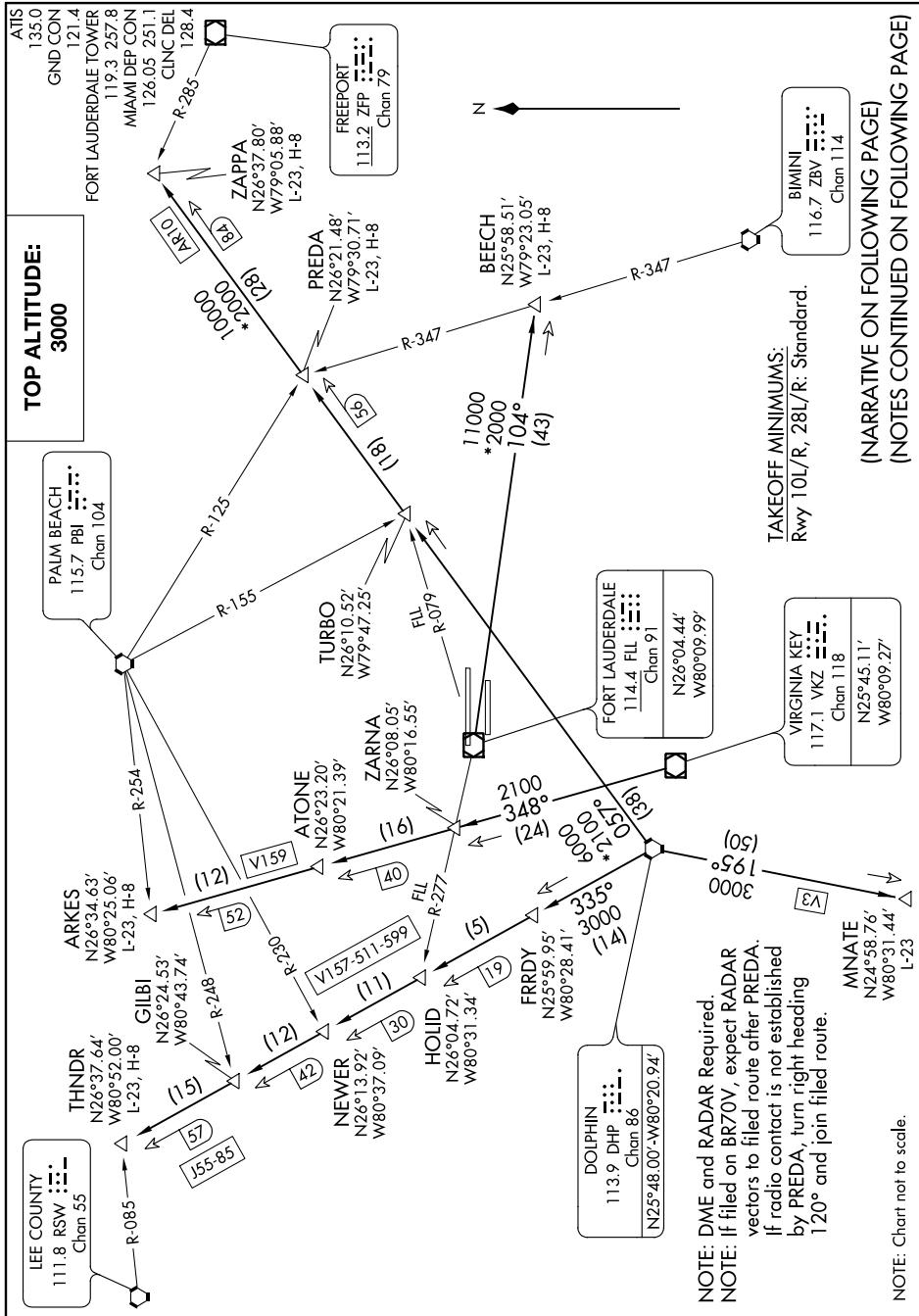
BAHMA FIVE DEPARTURE (RNAV)
(BAHMA5.BAHMA) 15176

FORT LAUDERDALE, FLORIDA
FORT LAUDERDALE/HOLLYWOOD INTL (FLL)

TOP ALTITUDE: 3000			
580	JUMAR	KERRH	BEECH
096°	108° (18)	108° (11)	104° (14)
ATIS 135.0 CINIC DEL 128.4 GND CON 121.4 FORT LAUDERDALE TOWER 119.3 257.8 MIAMI DEP CON 120.0 251.1	ATIS 135.0 CINIC DEL 128.4 GND CON 121.4 FORT LAUDERDALE TOWER 119.3 257.8 MIAMI DEP CON 120.0 251.1	N	BAHMA
TAKEOFF OBSTACLE NOTES: Rwy 10L: Approach light 296' from DER, on centerline, 11' AGL/15' MSL. Building 469' from DER, 378' left of centerline, 13' AGL/18' MSL. Lights beginning 496' from DER, from 28' left to 27' right of centerline, up to 16' AGL/20' MSL. Train on railroad beginning 510' from DER, from 632' left to on centerline, 23' AGL/30' MSL. Light poles beginning 666' from DER, on centerline, up to 32' AGL/36' MSL. Poles and trees beginning 1120' from DER, 548' left and 633' right of centerline, up to 49' AGL/53' MSL. Trees and pole beginning 1975' from DER, 827' left and 271' right of centerline, up to 79' AGL/83' MSL. Bridge 2429' from DER, 1123' left of centerline, 65' AGL/70' MSL. Trees beginning 199' from DER, 259' left of centerline, up to 21' AGL/86' MSL. Trees beginning 273' from DER, 181' right of centerline, up to 31' AGL/96' MSL. Trees beginning 495' from DER, 144' left of centerline, up to 44' AGL/109' MSL.			TAKEOFF MINIMUMS: <u>Rwys 10L/R:</u> Standard with minimum climb of 500' per NM to 580'. <u>Rwys 28L/R:</u> NA - ATC. NOTE: RADAR required. NOTE: DME/DME IRU or GPS required. NOTE: RNAV 1. NOTE: Turbojet only. <u>NOTE: FLL east operations only.</u> <u>NOTE: Accelerate to 250K within 7 NM of departure, if unable advise ATC.</u> <u>NOTE: Chart not to scale.</u>
DEPARTURE ROUTE DESCRIPTION			<u>TAKEOFF RWYS 10L/R:</u> Climb heading 096° to 580, then direct JUMAR, then on depicted route to BAHMA, thence Maintain 3000 or as assigned by ATC. Expect clearance to filed altitude 10 minutes after departure.

FORT LAUDERDALE SIX DEPARTURE

FORT LAUDERDALE, FLORIDA



FORT LAUDERDALE SIX DEPARTURE

FORT LAUDERDALE, FLORIDA

FORT LAUDERDALE SIX DEPARTURE

FORT LAUDERDALE, FLORIDA

**DEPARTURE ROUTE DESCRIPTION**

TAKEOFF RWY 10L/R: Climb on assigned heading. Thence . . .

TAKEOFF RWY 28R: Climb on assigned heading. If assigned left turn, climb to 500 before turning left. Thence . . .

TAKEOFF RWY 28L: Climb on assigned heading. If assigned left turn, climb to 700 before turning left. Thence . . .

. . . Maintain 3000 or assigned lower altitude and expect radar vectors to appropriate transition. Expect further clearance to filed altitude ten (10) minutes after departure.

ARKES TRANSITION (FLL6.ARKES): From over VKZ VOR/DME on VKZ R-348 to ARKES INT.

BEECH TRANSITION (FLL6.BEECH): From over FLL VOR/DME on FLL R-104 to BEECH INT.

MNATE TRANSITION (FLL6.MNATE): From over DHP VORTAC on DHP R-195 to MNATE.

PREDA TRANSITION (FLL6.PREDA): From over DHP VORTAC on DHP R-057 to PREDA INT.

THNDR TRANSITION (FLL6.THNDR): From over DHP VORTAC on DHP R-335 to THNDR INT.

ZAPPA TRANSITION (FLL6.ZAPPA): From over DHP VORTAC on DHP R-057 to ZAPPA INT.

TAKEOFF OBSTACLE NOTES:

Rwy 10L: Approach light 296' from DER, on centerline, 11' AGL/15' MSL. Building 469' from DER, 378' left of centerline, 13' AGL/18' MSL. Lights beginning 496' from DER, from 28' left to 27' right of centerline, up to 16' AGL/20' MSL. Train on railroad beginning 510' from DER, from 632' left to on centerline, 23' AGL/30' MSL. Light poles beginning 666' from DER, on centerline, up to 32' AGL/36' MSL. Poles and trees beginning 1290' from DER, from 548' left to 633' right of centerline, up to 49' AGL/53' MSL. Trees and pole beginning 1975' from DER, from 827' left to 271' right of centerline, up to 79' AGL/83' MSL. Bridge 2429' from DER, 1123' left of centerline, 65' AGL/70' MSL.

Rwy 10R: Trees beginning 199' from DER, 259' left of centerline, up to 21' AGL/86' MSL.

Trees beginning 273' from DER, 181' right of centerline, up to 31' AGL/96' MSL.

Trees beginning 495' from DER, 144' left of centerline, up to 44' AGL/109' MSL.

Rwy 28L: Tree 491' from DER, 444' left of centerline, 24' AGL/34' MSL. Trees beginning 773' from DER, 399' left of centerline, up to 80' AGL/90' MSL. Poles and trees beginning 865' from DER, 534' right of centerline, up to 81' AGL/91' MSL. Buildings, trees, and signs beginning 1317' from DER, 455' left of centerline, up to 100' AGL/109' MSL. Trees and pole beginning 1636' from DER, 290' right of centerline, up to 90' AGL/100' MSL.

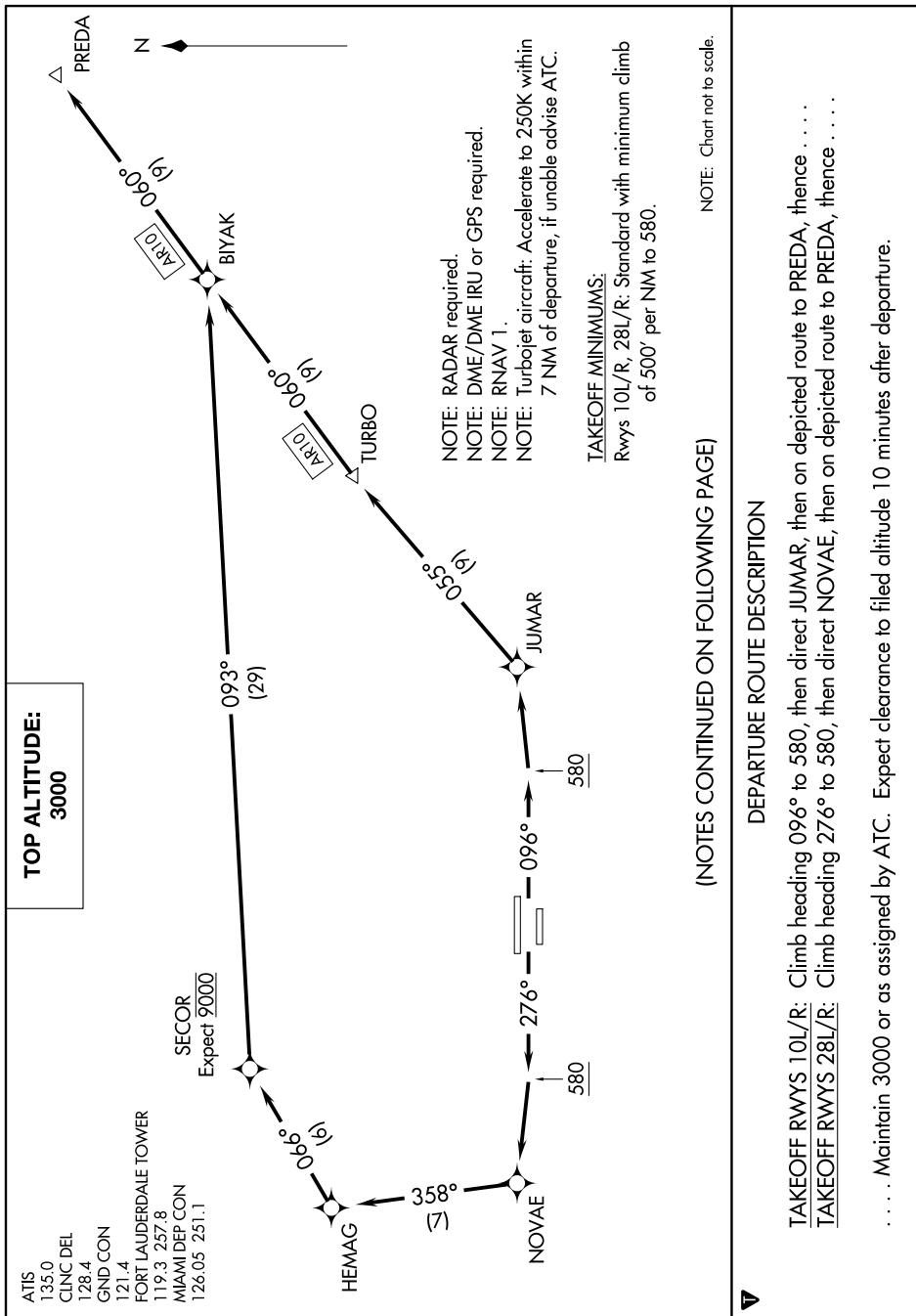
Towers beginning 3190' from DER, 666' right of centerline, up to 108' AGL/114' MSL.

Rwy 28R: Building and light pole beginning 260' from DER, 253' left of centerline and on centerline, up to 14' AGL/18' MSL. Vehicles on road beginning 323' from DER, from 28' left to 281' right of centerline, 15' AGL/21' MSL. Approach lights beginning 441' from DER, from 28' left to 27' right of centerline, up to 16' AGL/25' MSL. Vehicles on road beginning 455' from DER, from 683' left to 685' right of centerline, up to 17' AGL/34' MSL.

Approach lights beginning 652' from DER, on centerline, up to 24' AGL/33' MSL.

Train on railroad beginning 849' from DER, from 683' left to 379' right of centerline, up to 23' AGL/34' MSL. Trees and sign beginning 1017' from DER, 122' left of centerline, up to 63' AGL/72' MSL. Trees beginning 2231' from DER, 354' left of centerline, up to 88' AGL/97' MSL. Trees beginning 3347' from DER, 530' right of centerline, up to 108' AGL/112' MSL.

PREDA FOUR DEPARTURE (RNAV)

FORT LAUDERDALE/HOLLYWOOD INTL (FLL)
FORT LAUDERDALE, FLORIDA

TAKEOFF OBSTACLE NOTES:

Rwy 10L: Approach light 296' from DER, on centerline, 11' AGL/15' MSL. Building 469' from DER, 378' left of centerline, 13' AGL/18' MSL. Lights beginning 496' from DER, from 28' left to 27' right of centerline, up to 16' AGL/20' MSL. Train on railroad beginning 510' from DER, from 632' left to on centerline, 23' AGL/30' MSL. Light poles beginning 666' from DER, on centerline, up to 32' AGL/36' MSL. Poles and trees beginning 1290' from DER, 548' left and 633' right of centerline, up to 49' AGL/53' MSL. Trees and pole beginning 1975' from DER, 827' left and 271' right of centerline, up to 79' AGL/83' MSL. Bridge 2429' from DER, 1123' left of centerline, 65' AGL/70' MSL.

Rwy 10R: Trees beginning 199' from DER, 259' left of centerline, up to 21' AGL/86' MSL.

Trees beginning 273' from DER, 181' right of centerline, up to 31' AGL/96' MSL.

Trees beginning 495' from DER, 144' left of centerline, up to 44' AGL/109' MSL.

Rwy 28L: Tree 491' from DER, 444' left of centerline, 24' AGL/34' MSL. Trees beginning 773' from DER, 399' left of centerline, up to 80' AGL/90' MSL. Poles and trees beginning 865' from DER, 534' right of centerline, up to 81' AGL/91' MSL. Buildings, trees, and signs beginning 1317' from DER, 455' left of centerline, up to 100' AGL/109' MSL. Trees and pole beginning 1636' from DER, 290' right of centerline, up to 90' AGL/100' MSL. Towers beginning 3190' from DER, 666' right of centerline, up to 108' AGL/114' MSL.

Rwy 28R: Building and light pole beginning 260' from DER, 253' left of centerline and on centerline, up to 14' AGL/18' MSL. Vehicles on road beginning 323' from DER, from 28' left to 281' right of centerline, 15' AGL/21' MSL. Approach lights beginning 441' from DER, from 28' left to 27' right of centerline, up to 16' AGL/25' MSL. Vehicles on road beginning 455' from DER, from 647' left to 685' right of centerline, up to 17' AGL/33' MSL. Approach lights beginning 652' from DER, on centerline, up to 24' AGL/33' MSL. Train on railroad beginning 849' from DER, from 683' left to 379' right of centerline, up to 23' AGL/34' MSL. Trees and sign beginning 1017' from DER, 122' left of centerline, up to 63' AGL/72' MSL. Trees beginning 2231' from DER, 354' left of centerline, up to 88' AGL/97' MSL. Trees beginning 2286' from DER, 530' right of centerline, up to 108' AGL/112' MSL.

(THNDR4.THNDR) 15176

SI-744 (FAA)

THNDR FOUR DEPARTURE (RNAV)

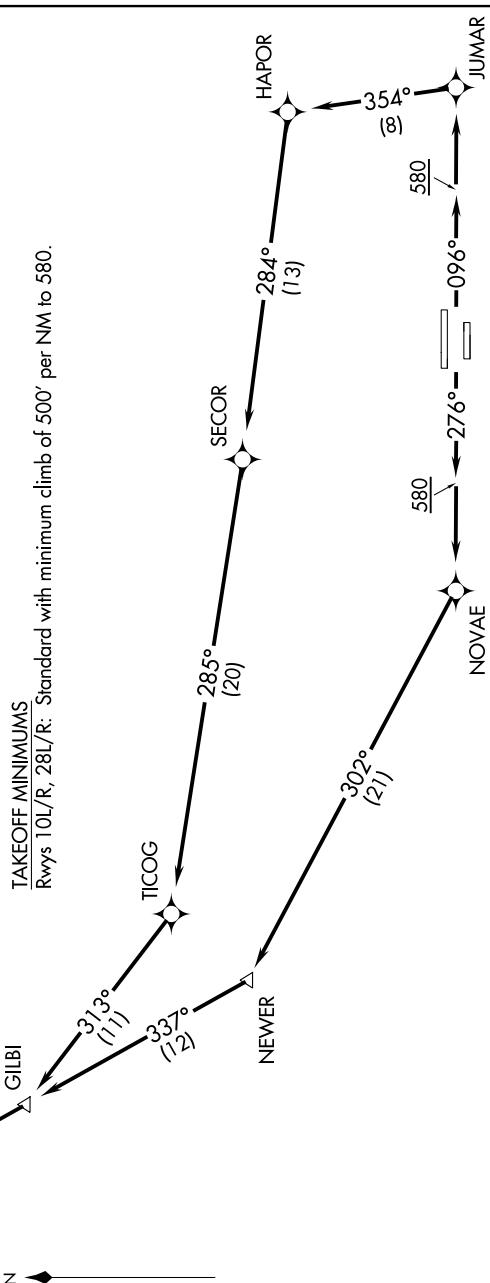
FORT LAUDERDALE/HOLLYWOOD INTL (FLL)
FORT LAUDERDALE, FLORIDA

ATIS 135.0
CLNC DEL
128.4
GND CON
121.4
FORT LAUDERDALE TOWER
119.3 257.8
MIAMI DEP CON
126.05 251.1

TOP ALTITUDE:
3000

NOTE: RADAR required.
NOTE: DME/DME IRU or GPS required.
NOTE: RNAV 1.
NOTE: Turbojet aircraft accelerate to 250K
within 7 NM of departure,
if unable advise ATC.

TAKEOFF MINIMUMS
RWYS 10L/R, 28L/R: Standard with minimum climb of 500' per NM to 580.



NOTE: Chart not to scale.

(NOTES CONTINUED ON FOLLOWING PAGE)

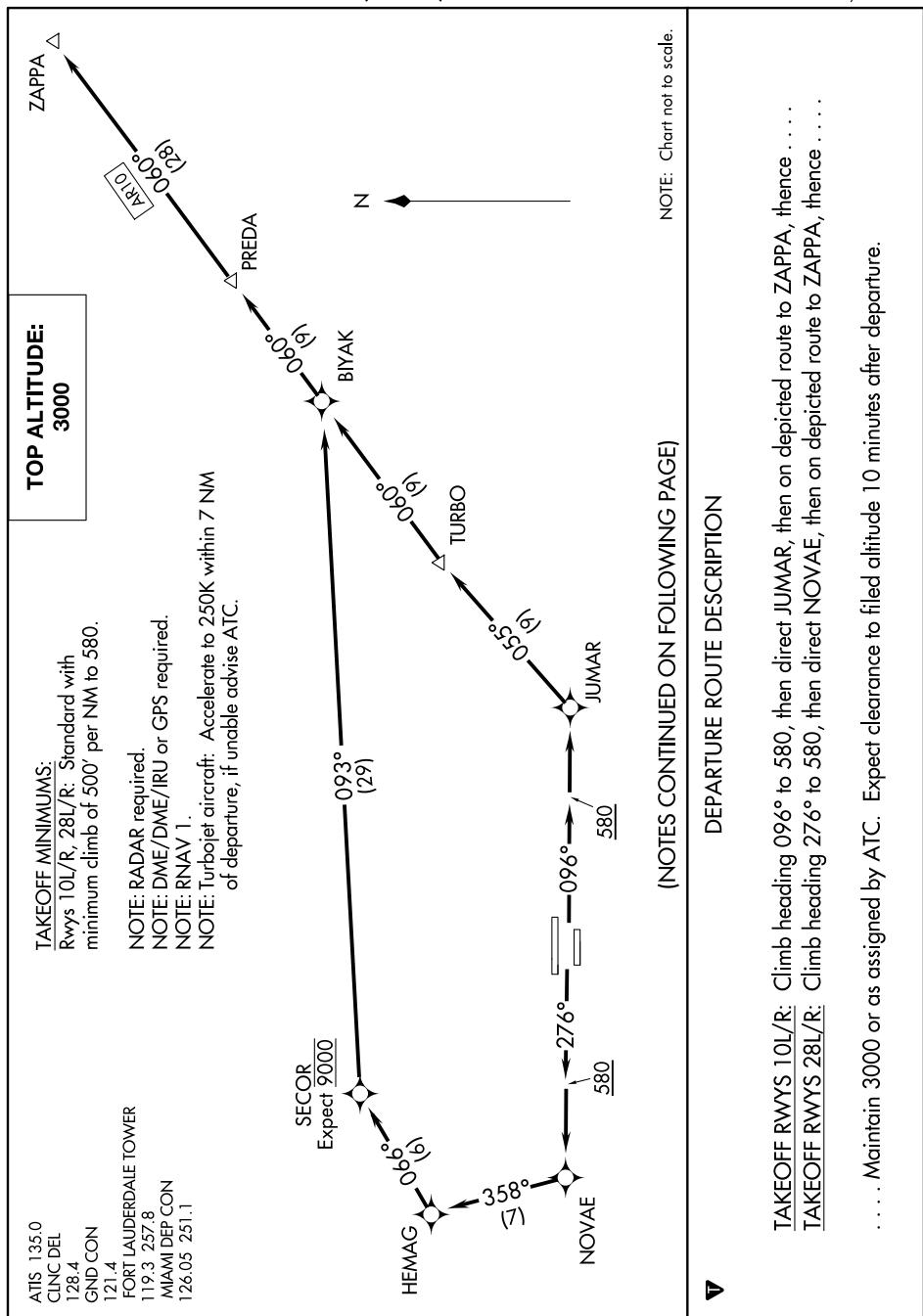
DEPARTURE ROUTE DESCRIPTION

TAKETOFL RWYS 10L/R: Climb heading 096° to 580, then direct JUMAR, then on depicted route to THNDR, thence . . .
TAKETOFL RWYS 28L/R: Climb heading 276° to 580, then direct NOVAE, then on depicted route to THNDR, thence . . .
. . . . maintain 3000 or as assigned by ATC. Expect clearance to filed altitude 10 minutes after departure.

THNDR FOUR DEPARTURE (RNAV)
(THNDR4.THNDR) 15176FORT LAUDERDALE, FLORIDA
FORT LAUDERDALE/HOLLYWOOD INTL (FLL)

(ZAPPA4.ZAPPA) 15176

SL-744 (FAA)

ZAPPA FOUR DEPARTURE (RNAV)FORT LAUDERDALE/HOLLYWOOD INTL (FLL)
FORT LAUDERDALE, FLORIDA**ZAPPA FOUR DEPARTURE (RNAV)**
(ZAPPA4.ZAPPA) 15176FORT LAUDERDALE, FLORIDA
FORT LAUDERDALE/HOLLYWOOD INTL (FLL)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

(NOTES CONTINUED ON FOLLOWING PAGE)



TAKOFF RWYS 10L/R: Climb heading 096° to 580, then direct JUMAR, thence
TAKOFF RWYS 28L/R: Climb heading 276° to 580, then direct NOVAE, then on depicted route to ZAPPA, thence

. . . . Maintain 3000 or as assigned by ATC. Expect clearance to filed altitude 10 minutes after departure.

TAKEOFF OBSTACLE NOTES:

Rwy 10L: Approach light 296' from DER, on centerline, 11' AGL/15' MSL. Building 469' from DER, 378' left of centerline, 13' AGL/18' MSL. Lights beginning 496' from DER, from 28' left to 27' right of centerline, up to 16' AGL/20' MSL. Train on railroad beginning 510' from DER, from 632' left to on centerline, 23' AGL/30' MSL. Light poles beginning 666' from DER, on centerline, up to 32' AGL/36' MSL. Poles and trees beginning 1290' from DER, 548' left and 633' right of centerline, up to 49' AGL/53' MSL. Trees and pole beginning 1975' from DER, 827' left and 271' right of centerline, up to 79' AGL/83' MSL. Bridge 2429' from DER, 1123' left of centerline, 65' AGL/70' MSL.

Rwy 10R: Trees beginning 199' from DER, 259' left of centerline, up to 21' AGL/86' MSL. Trees beginning 273' from DER, 181' right of centerline, up to 31' AGL/96' MSL. Trees beginning 495' from DER, 144' left of centerline, up to 44' AGL/109' MSL.

Rwy 28L: Tree 491' from DER, 444' left of centerline, 24' AGL/34' MSL. Trees beginning 773' from DER, 399' left of centerline, up to 80' AGL/90' MSL. Poles and trees beginning 865' from DER, 534' right of centerline, up to 81' AGL/91' MSL. Buildings, trees, and signs beginning 1317' from DER, 455' left of centerline, up to 100' AGL/109' MSL. Trees and pole beginning 1636' from DER, 290' right of centerline, up to 90' AGL/100' MSL. Towers beginning 3190' from DER, 666' right of centerline, up to 108' AGL/114' MSL.

Rwy 28R: Building and light pole beginning 260' from DER, 253' left of centerline and on centerline, up to 14' AGL/18' MSL. Vehicles on road beginning 323' from DER, from 28' left to 281' right of centerline, 15' AGL/21' MSL. Approach lights beginning 441' from DER, from 28' left to 27' right of centerline, up to 16' AGL/25' MSL. Vehicles on road beginning 455' from DER, from 647' left to 685' right of centerline, up to 17' AGL/33' MSL. Approach lights beginning 652' from DER, on centerline, up to 24' AGL/33' MSL. Train on railroad beginning 849' from DER, from 683' left to 379' right of centerline, up to 23' AGL/34' MSL. Trees and sign beginning 1017' from DER, 122' left of centerline, up to 63' AGL/72' MSL. Trees beginning 2231' from DER, 354' left of centerline, up to 88' AGL/97' MSL. Trees beginning 2286' from DER, 530' right of centerline, up to 108' AGL/112' MSL.