# NACOmatic 

Effective: 08-April-2010
Expires: 06-May-2010

# Your Ad Here ~100,000 Page views/month 

Contact:<br>Doug Ranz<br>248-318-0011<br>NACOmatic@hotmail.com

## Warranty

I make absolutely no warranty nor guarantee whatsoever about the accuracy, availability, applicability and/or correctness of any of the information in this document.

The official, original NACO documents are available for your downloading pleasure from: http://naco.faa.gov/index.asp?xml=naco/onlineproducts

## Copyright

This compilation is protected by US copyright laws and international copyright treaties.

## Limitations

The sale, hosting and/or distribution of this document in any and all forms, is prohibited.

## Release from Liability

All users of this compilation must agree to be legally bound hereby, that Douglas R . Ranz ("Released Party") SHALL NOT BE LIABLE FOR MY DEATH OR INJURY TO MY PERSON, OR FOR ANY LOSS FOR DAMAGE TO MY PROPERTY OR REPUTATION caused in any manner whatsoever, whether attributable to the negligence of the Released Party, or for any other reason, occurring during the time that I am operating an aircraft.

I do hereby waive any right of action against the Released Party from any and all causes or claims that I may have against them from the beginning of time. I further agree not to sue on any such cause or claim. This agreement shall not release liability for gross negligence or willful misconduct of the Released Party. I agree to indemnify and hold the Released Party harmless for any losses, judgments, damages or fees he may incur, including but not limited to attorneys fees, arising out any lawsuit related to the planning, flight and/or enforcement of or legal challenge to this agreement. It is my intention that this agreement be interpreted and enforced to the maximum extent allowed by Michigan law.

PR Min Alt\#3 - 5
PR Min TO\#3 - 10
BQN - 31
MAZ - 36
PSE - 38
SIG - 41
SJU - 43
VQS - 34

Kindle-DX Index; by-City, by-AptID
Use "Menu", then "Goto Page"
PR Mins - Alternates \#3 ..... 5
PR Mins - Take-Off \#3 ..... 10
AGUADILLA ......... BQN ..... 31
ISLA DE VIEQUES ..... 34
MAYAGUEZ ..... 36
PONCE ..... 38
SAN JUAN ..... 41
SAN JUAN ..... 43

## A ifr alternate airport minimums

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

## NAME

ALTERNATE MINIMUMS
APALACHICOLA, FL APALACHICOLA RGNL

RNAV (GPS)-A
RNAV (GPS)-B
RNAV (GPS) Rwy 6
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 24
RNAV (GPS) Rwy 31
NA when local weather not available.

## BARTOW, FL

BARTOW MUNI RNAV (GPS) Rwy 5 RNAV (GPS) Rwy 9L RNAV (GPS) Rwy 23 RNAV (GPS) Rwy 27R NA when local weather not available.

## BROOKSVILLE, FL

HERNANDO COUNTY
RNAV (GPS) Rwy 3
RNAV (GPS) Rwy 9
RNAV (GPS) Rwy 21
RNAV (GPS) Rwy 27
NA when local weather not available.
CHARLOTTE AMALIE, ST. THOMAS, VI
CYRIL E. KING
ILS Rwy 10¹, 700-2
VOR-A, 1200-3
${ }^{1}$ NA when control tower closed.
CHRISTIANSTED, ST. CROIX, VI
HENRY E ROHLSEN ILS or LOC Rwy $10^{1}$ NDB Rwy $10^{12}$
RNAV (GPS) Rwy $10^{\mathbf{3}}$ VOR Rwy $\mathbf{2 8}^{14}$ ${ }^{1}$ NA when control tower closed.
${ }^{2}$ Category A,B, 1200-2; Category C,D, 1200-3.
${ }^{3}$ Category A,B, 1000-2; Category C,D, 1000-3.
${ }^{4}$ Category A,B, 900-2; Category C,D, 900-3.

NAME
CRESTVIEW, FL
BOB SIKES ................................... ILS Rwy $17^{12}$
RNAV (GPS) Rwy 17¹
RNAV (GPS) Rwy $35^{1}$ VOR-A ${ }^{3}$
${ }^{1} \mathrm{NA}$ when local weather not available.
${ }^{2}$ Category D, 700-2.
${ }^{3}$ Category D, 800-21/4.

## DAYTONA BEACH, FL

DAYTONA BEACH INTL.. ILS or LOC Rwy 7L¹ LOC BC Rwy 25R ${ }^{1}$

VOR Rwy $\mathbf{1 6}^{\mathbf{2}}$
${ }^{1} \mathrm{NA}$ when local weather not available.
${ }^{2}$ Category D, 800-21/4.

## DELAND, FL

DELAND MUNI- SIDNEY H.
TAYLOR FIELD ................. RNAV (GPS) Rwy 5 RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 23
RNAV (GPS) Rwy 30
NA when local weather not available.

FORT LAUDERDALE, FL
FORT LAUDERDALE
EXECUTIVE...................... ILS or LOC Rwy 8
ILS, Category D, $700-2$.
FORT LAUDERDALE-HOLLYWOOD
INTL ................................ILS or LOC Rwy 9L ${ }^{1}$
ILS or LOC Rwy 27R ${ }^{1}$
LOC Rwy 9R²
LOC/DME Rwy $13^{2}$
RNAV (GPS) Rwy $\mathbf{1 3}^{2}$
RNAV (GPS) Y Rwy 9R²
RNAV (GPS) Z Rwy 9L²
RNAV (GPS) Rwy 27L²
RNAV (GPS) Y Rwy 27R²
RNAV (GPS) Rwy 31²
RNAV (RNP) Z Rwy 27R, 800-21/4
VOR Rwy 27R²
${ }^{1}$ ILS, Categories $A, B, C, 700-2$, Category D,

FORT MYERS, FL
PAGE FIELD $\qquad$ ILS Rwy $5^{1}$ RNAV (GPS) Rwy $13^{2}$ ${ }^{1} \mathrm{NA}$ when FMY tower closed. ${ }^{2} N A$ when local weather not available.

SOUTHWEST
FLORIDA INTL
ILS or LOC Rwy $\mathbf{6}^{12}$ ${ }^{1} \mathrm{NA}$ when control tower closed.
${ }^{2}$ ILS, Category E, 700-2½; LOC, Category E, 800-2½.

## FORT PIERCE, FL

ST LUCIE
COUNTY INTL
ILS or LOC Rwy 10R ${ }^{1}$ NDB Rwy 28L ${ }^{1}$ RNAV (GPS) Rwy 10R RNAV (GPS) Rwy 14 RNAV (GPS) Rwy 28L RNAV (GPS) Rwy 32 VOR/DME Rwy 14
NA when local weather not available.
${ }^{1}$ NA when control tower closed.

## GAINESVILLE, FL

GAINESVILLE RGNL RNAV (GPS) Rwy $7^{1}$ RNAV (GPS) Rwy $25^{1}$ RNAV (GPS) Rwy $29^{1}$

VOR Rwy $\mathbf{2 5}^{2}$
${ }^{1} N A$ when local weather not available.
${ }^{2}$ Categories A,B, 900-2; Category C 900-2½.

## JACKSONVILLE, FL

CECIL FIELD
ILS or LOC RWY 36R
NA when control tower closed.
NA when local weather not available.

CRAIG MUNI $\qquad$ ILS or LOC Rwy 32 RNAV (GPS) Rwy $14^{1}$
RNAV (GPS) Rwy 32
VOR Rwy $14^{1}$
VOR/DME Rwy 32
NA when local weather not available.
${ }^{1}$ Category C, 800-2¼; Category D, 800-2½.
JACKSONVILLE INTL $\qquad$ ILS Rwy $7^{1}$
ILS Rwy $13^{2}$
ILS or LOC Rwy $25^{2}$
RADAR-1 ${ }^{3}$
RNAV (GPS) Rwy 31 ${ }^{4}$
VOR/DME Rwy 31³
${ }^{1}$ ILS, Category D, 700-2, Category E,800-23/4. LOC, Category E, 800-23/4.
${ }^{2}$ ILS, Category D, 700-2.
${ }^{3}$ Category E, 800-23/4.
${ }^{4}$ NA when local weather not available.

KEY WEST INTL ................. RNAV (GPS) Rwy 9 RNAV (GPS) Rwy 27 NA when local weather not available.

## LAKELAND, FL

LAKELAND LINDER RGNL . ILS or LOC Rwy 5
NDB Rwy 5
RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 9
RNAV (GPS) Rwy 23
RNAV (GPS) Rwy 27
VOR Rwy 9
VOR Rwy $\mathbf{2 7}^{1}$
NA when control tower closed.
${ }^{1}$ Category C $800-2^{1 ⁄ 2}$; Category D, 800-2½.
LEESBURG, FL
LEESBURG INTL ................ RNAV (GPS) Rwy 3 RNAV (GPS) Rwy 13 RNAV (GPS) Rwy 31
NA when local weather not available.
MARATHON, FL
THE FLORIDA KEYS MARATHON
NDB-A
RNAV (GPS) Rwy 7
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 31
NA when local weather not available.
MAYAGUEZ, PR
EUGENIO MARIA
DE HOSTOS $\qquad$ VOR or GPS Rwy 9 Categories A,B, 1000-2; Category C, 1000-3. NA except for operators with approved weather reporting service.

MERRITT ISLAND, FL
MERRITT ISLAND $\qquad$ RNAV (GPS) Rwy 11 NA when local weather not available.
NAME
MIAMI, FL

KENDALL-TAMIAMI
EXECUTIVE $\qquad$ ILS or LOC Rwy 9R ${ }^{1}$ RNAV (GPS) Rwy 9L RNAV (GPS) Rwy 9R RNAV (GPS) Rwy 27L
RNAV (GPS) Rwy 27R
NA when local weather not available.
${ }^{1}$ Category D, 700-2.
MIAMI INTL
ILS or LOC Rwy $\mathbf{2 7}^{1}$
ILS or LOC Rwy $\mathbf{3 0}^{\mathbf{2}}$
${ }^{1} \mathrm{NA}$ when local weather not available.
${ }^{2}$ Categories A,B, 900-2; Category C 900-2½; Category D, 900-23/4.

OPALOCKA
ILS Rwy 9L
ILS Rwy 12
ILSIDME Rwy 27R
NA when control tower closed.

## NAPLES, FL

NAPLES MUNI... ................ RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 23
NA when local weather not available.
OCALA, FL
OCALA INTL-JIM
TAYLOR FIELD.. ...... ILS or LOCIDME Rwy 36
RNAV (GPS) Rwy 18
RNAV (GPS) Rwy 36
VOR Rwy 36
NA when local weather not available.
OKEECHOBEE, FL
OKEECHOBEE COUNTY.. . RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 23
RNAV (GPS) Rwy 32
NA when local weather not available.
ORLANDO, FL
EXECUTIVE
ILS or LOC Rwy 7 LOC BC Rwy 25 VORIDME Rwy 7 VORIDME Rwy 25
${ }^{1}$ Category D, 800-2½.
ORLANDO INTL
ILS or LOC Rwy 17L ILS or LOC Rwy 17R ILS or LOC Rwy 18R ILS or LOC Rwy 35L ILS or LOC Rwy 35R ILS or LOC Rwy 36R

```
NAME
    ALTERNATEMINIMUMS
ORLANDO, FL (CON'T)
    ORLANDO SANFORD
    INTL ............................. ILS or LOC Rwy 9L
                                    ILS or LOC Rwy 9R }\mp@subsup{}{}{12
                                    ILS or LOC Rwy 27R}\mp@subsup{}{}{12
                                    NDB-B2
                                    NDB-C}\mp@subsup{}{}{2
                                    RNAV (GPS) Rwy 9L
                                    RNAV (GPS) Rwy 9R }\mp@subsup{}{}{1
                                    RNAV (GPS) Rwy 27R1
    1}NA\mathrm{ when local weather not available.
    2NA when control tower closed.
PANAMA CITY, FL
    NORTHWESTFLORIDA-PANAMA
    CITY INTL ................ ILS or LOCIDME Rwy 16
        NA when control tower closed.
    PANAMA CITY-BAY
    COUNTY INTL ........................... ILS Rwy 142
                                    NDB Rwy 14
                                    VORorTACAN-A 3
                VOR or TACAN Rwy 141
                VOR or TACAN Rwy 32
                            RNAV (GPS) Rwy 144
                            RNAV (GPS) Rwy 324
        1}\mp@subsup{}{}{1}\mathrm{ NA when control tower closed.
        2ILS, Category D, 700-2.
        3}\mp@subsup{}{}{3}\mathrm{ Category D, 800-21/4.
        4
    PENSACOLA, FL
    PENSACOLA RGNL
                ILS or LOC Rwy 17
                                    VOR Rwy 8
        1NA when Pensacola tower closed.
        2}\mathrm{ 2Category D, 800-21/4.
            POMPANO BEACH. FL
        POMPANO BEACH AIRPARK ...... LOC Rwy 15
                                    RNAV (GPS) Rwy }
                                    RNAV (GPS) Rwy 15
                                    RNAV (GPS) Rwy 24
                                    RNAV (GPS) Rwy 33
        NA when local weather not available.
        1
PUNTA GORDA, FL
CHARLOTTE COUNTY ..... RNAV (GPS) Rwy 4
                                    RNAV (GPS) Rwy }1
            RNAV (GPS) Rwy 22
            RNAV (GPS) Rwy 33
                                    VOR Rwy 4
                                    VOR Rwy }2
    NA when local weather not available.
```

NAME
ST. AUGUSTINE, FL

ALTERNATE MINIMUMS

| $3^{1}$ |  |
| :---: | :---: |
|  | RNAV (GPS) Rwy 31¹ |
|  | VOR Rwy $13^{2}$ |
|  | VOR Rwy 31² |
| ${ }^{1} \mathrm{NA}$ when local weather not available. |  |
| ${ }^{2} \mathrm{NA}$ when control tower closed. |  |
| ST. PETERSBURG, FL |  |
| ALBERT WHITTED ............ RNAV (GPS) Rwy 7 |  |
|  | RNAV (GPS) Rwy 18 |
|  | RNAV (GPS) Rwy 36 |
|  | VOR Rwy 18 |

NA when local weather not available.

## ST. PETERSBURG-CLEARWATER,FL

ST. PETERSBURG-CLEARWATER
INTL
ILS or LOC Rwy 17L ${ }^{12}$ ILS or LOC/DME Rwy 35R ${ }^{12}$ RNAV (GPS)-A ${ }^{2}$
RNAV (GPS) Rwy 17L ${ }^{2}$
RNAV (GPS) Rwy 35R ${ }^{2}$
VOR Rwy $4^{3}$
${ }^{1}$ Category E, 1000-3.
${ }^{2} \mathrm{NA}$ when local weather not available.
${ }^{3}$ Categories A,B, 1000-2;Category C, 1000-23/4; Category D, 1000-3.

## SAN JUAN, PR

LUIS MUNOZ MARIN INTL
ILS Rwy $10^{1}$
VOR or TACAN Rwy $\mathbf{8}^{2}$ VOR or TACAN Rwy $1 \mathbf{1 0}^{2}$ VOR or TACAN Rwy $\mathbf{2 6}^{\mathbf{2}}$
${ }^{1}$ ILS, Category E, 700-2¼. LOC, Category E, 800-21/4.
${ }^{2}$ Category E, 900-3.

## SARASOTA(BRADENTON), FL

SARASOTA
BRADENTON INTL ........... ILS or LOC Rwy $14{ }^{1}$ ILS or LOC Rwy $32^{1}$

VOR Rwy $\mathbf{3 2}^{2}$
${ }^{1} \mathrm{NA}$ when control tower closed.
${ }^{2}$ Categories A,B, 900-2; Category C, 900-2½; Category D, 900-23/4.

STUART, FL
WITHAM FIELD
RNAV (GPS) Rwy 12 RNAV (GPS) Rwy 30 NA when local weather not available.

## NAME

ALTERNATE MINIMUMS
TALLAHASSEE, FL
TALLAHASSEE RGNL ... ILS or LOC Rwy $\mathbf{2 7}^{\mathbf{1 2 3}}$ ILS or LOC/DME Rwy $\mathbf{3 6}^{\mathbf{1}}$

NDB Rwy $36^{1}$
RNAV (GPS) Rwy $18^{5}$
RNAV (GPS) Rwy $27^{5}$
VORIDME or TACAN Rwy $36^{4}$
VOR Rwy $18{ }^{15}$
${ }^{1} \mathrm{NA}$ when control tower closed.
${ }^{2} \mathrm{NA}$ when local weather not available.
${ }^{3}$ ILS, Categories A,B, 800-2; ILS,LOC, Category C, 800-2 $1 / 4$; Category D, 800-2½; Category E, 1000-3.
${ }^{4}$ Category E, 1000-3.
${ }^{5}$ Category D, 800-2¼.

## TAMPA, FL

TAMPAINTL .................... ILS or LOC Rwy 18R ILS or LOC Rwy 36L RNAV (GPS) Rwy 18R RNAV (GPS) Rwy 36L RNAV (GPS) Rwy 36R
Category E, 1000-3.
PETER O KNIGHT ................................... NDB-A ${ }^{1}$
RNAV (GPS) Rwy 21
RNAV (GPS) Rwy 35
NA when local weather not available.
${ }^{1}$ Categories A,B, 900-2; Category C, 900-23/4.
TAMPAEXECUTIVE .......... ILS or LOC Rwy $23^{1}$ RNAV (GPS) Rwy 23
NA when local weather not available.
${ }^{1}$ ILS, Categories B, C, 800-2.

## TITUSVILLE, FL

SPACE COAST RGNL ...... ILS or LOC Rwy $\mathbf{3 6}^{\mathbf{1}}$ RNAV (GPS) Y Rwy $9^{2}$ RNAV (GPS) Y Rwy $18^{\mathbf{2}}$ RNAV (GPS) Z Rwy $18^{3}$ RNAV (GPS) Rwy $\mathbf{3 6}^{\mathbf{2}}$
${ }^{1}$ ILS, $700-2$, LOC,NA when control tower closed.
${ }^{2}$ NA when local weather not available.
${ }^{3} \mathrm{NA}$ when control tower closed.

## VERO BEACH, FL

VERO BEACH MUNI
RNAV (GPS) Rwy 4 RNAV (GPS) Rwy 11R
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 29L
NA when local weather not available.

ALTERNATEMINIMUMS
WEST PALM BEACH, FL
PALM BEACH INTL. . ILS or LOC Rwy 10L ${ }^{1}$ ILS or LOC Rwy 28R ${ }^{1}$ RNAV (GPS) Y Rwy $14^{2}$ VOR Rwy $14^{3}$
${ }^{1}$ ILS, Categories C,D, 700-2.
${ }^{2}$ Category D, 800-21/4.
${ }^{3}$ Category A,B, 900-2;Category C, 900-2½;
Category D, 900-23/4.
WINTER HAVEN, FL
WINTER HAVEN'S
GILBERT
RNAV (GPS) Rwy $\mathbf{1 1}^{11}$ VOR/DME-A
Category D, 800-21/4.
${ }^{1}$ NA when local weather not available.

## $\nabla_{\mathrm{T}}$ <br> TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

# चIFR TAKE-OFF 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 take-off minimums other than standard, are listed below. Take-off 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 described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

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 take-off rules and establishes take-off 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) take-off minima are published below. For military takeoff minima, refer to appropriate service directives.

NAME TAKE-OFFMINIMUMS
AGUADILLA, PR
RAFAEL HERNANDEZ (BQN)
ORIG 09071 (FAA)
DEPARTURE PROCEDURE: Rwy 8, climb on a heading between $262^{\circ} \mathrm{CW}$ to $158^{\circ}$ from DER. Rwy 26, climb on a heading between $230^{\circ} \mathrm{CW}$ to $082^{\circ}$ from DER. NOTE: Rwy 8, vehicles on roadway beginning 1489 ' from DER, left and right of centerline, up to 15' AGL/242' MSL. Rwy $\mathbf{2 6}$, vehicles on roadway beginning 751 'from DER, left and right of centerline, up to 17' AGL/275' MSL. Trees beginning 939 ' from DER, 447 ' right of centerline, up to $100^{\prime}$ ' $\mathrm{AGL} / 343^{\prime}$ ' MSL.

## APALACHICOLA, FL

APALACHICOLA RGNL
NOTE: Rwy 6, multiple trees beginning 22 ' from departure end of runway, 15 ' right of centerline, up to $99^{\prime}$ AGL/108' MSL. Multiple trees beginning 1153 ' from departure end of runway, 97 ' left of centerline, up to 92 ' AGL/101'MSL. Rwy 13, multiple trees beginning 207' from departure end of runway, 147 ' left of centerline, up to $95^{\prime}$ ' AGL/97' MSL. Bush $427^{\prime}$ ' from departure end of runway, 276 ' left of centerline, 15 ' AGL/32' MSL. Multiple trees beginning 2951' 'from departure end of runway, 68 ' right of centerline, up to $90^{\prime}$ AGL/99' MSL. Rwy 18, multiple trees beginning 1032 ' from departure end of runway, 43 'left of centerline, up to $22^{\prime}$ AGL/56' MSL. Multiple trees beginning 1438 ' from departure end of runway, 219 ' right of centerline, up to $22^{\prime}$ AGL/72' MSL.

NAME
TAKE-OFF MINIMUMS
APALACHICOLA MUNI (CON'T)
Rwy 24, multiple trees beginning 24 ' from departure end of runway, $17^{\prime}$ 'right of centerline up to $75^{\prime}$ AGL/84' MSL. Multiple trees beginning 71 ' from departure end of runway, 77 ' left of centerline, up to 79 ' AGL/88'MSL. Multiple light poles beginning 583 ' from departure end of runway, $268^{\prime}$ left of centerline, up to 32 ' AGL/47' MSL. Bush 1018' from departure end fo runway, 394' left of centerline, 41'AGL/47'MSL. Rwy 31, multiple trees beginning 52 ' from departure end of runway, $88^{\prime}$ left of centerline, up to 73' AGL/82' MSL. Multiple trees beginning 137 ' from departure end of runway, 75 ' right of centerline, 78 ' AGL/87' MSL. Rwy 36, multiple trees beginning 686 ' from departure end of runway, 260 ' left of centerline, up to 81' AGL/90' MSL. Multiple trees beginning 991 'from departure end of runway, 179 ' right of centerline, up to 81 ' $\mathrm{AGL} / 90^{\prime}$ ' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AVON PARK, FL
AVON PARK EXECUTIVE (AVO)
AMDT 109351 (FAA)
TAKE-OFF MINIMUMS: Rwy 5,300-1 or std. w/min. climb of 430' per NM to 500.
NOTE: Rwy 5, trees beginning 219' from DER, 84 ' left of centerline, up to 100 ' AGL/284' MSL. Trees beginning 1007' from DER, 298' right of centerline, up to 100' AGL/ 289 ' MSL. Building 327 ' from DER, 431 ' right of centerline, 21' AGL/182' MSL. Rwy 10, buildings beginning 293 ' from DER, 251' left of centerline, up to 30' AGL/285' MSL. Line of 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 $26^{\prime}$ AGL/186' MSL. Trees beginning $23^{\prime}$ from DER, $93^{\prime}$ left of centerline, up to $38^{\prime}$ AGL/198' MSL. Power lines beginning 2691' from DER, 1019' left to 2034' right of centerline, up to 79' AGL/235' MSL. Rwy 28, numerous trees beginning 371' from DER, 218 ' right of centerline, up to 100 ' AGL/259' 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 $79^{\prime}$ AGL/233' MSL.

## BARTOW, FL <br> BARTOW MUNI (BOW) <br> ORIG 08157 (FAA)

NOTE: Rwy 5, trees beginning 816 ' from departure end of runway, 7 ' left of centerline, up to 79 ' AGL/198' MSL. Trees beginning 164 ' from departure end of runway, 9 ' right of centerline, up to 65 ' AGL/184'MSL. Rwy 9L, vehicles on roadway and trees beginning 16 ' from departure end of runway, 19 'left of centerline, up to 55 ' AGL/174' MSL. Trees beginning 49' from departure end of runway, 54 ' right of centerline, up to 54 'AGL/173' MSL. Rwy 9R, trees beginning 637' from departure end of runway, 113 ' left of centerline, up to 64' AGL/173' MSL. Trees beginning 1311 'from departure end of runway, 253 ' right of centerline, up to $69^{\prime}$ AGL/178' MSL. Rwy 23, trees beginning 143 ' from departure end of runway, 87 ' left of centerline, up to 72 ' AGL/191'MSL. Trees beginning 419 ' from departure end of runway, 33 ' right of centerline, up to 100' AGL/239' MSL. Rwy 27L, trees beginning 939 ' from departure end of runway, 644' left of centerline, up to 100 ' AGL/249' MSL. Trees beginning 2007 ' from departure end of runway, 517 ' right of centerline, up to $36^{\prime}$ AGL/175' MSL. Tower 2880 ' from departure end of runway, 1015 ' left of centerline, 50 ' AGL/188' MSL. Rwy 27R, trees beginning 2433 ' from departure end of runway, 1069 ' left of centerline, up to $100^{\prime}$ AGL/249' MSL. Vehicles on roadway, poles and multiple trees beginning 1179' from departure end of runway, 260' right of centerline, up to 100' AGL/249' MSL.

## BOCA RATON, FL <br> BOCA RATON

TAKE-OFF 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 departure end of runway.
NOTE: Rwy 5, numerous trees and poles beginning $185^{\prime}$ from departure end of runway, 20 ' left of centerline, upto 35 ' AGL/49' MSL. Numerous trees and poles beginning 6 ' from departure end of runway, 267 ' right of centerline, up to 28 ' AGL/45' MSL. Rwy 23, numerous trees, poles, and buildings beginning 278 ' from departure end of runway, 41 ' left of centerline, up to 137' AGL/154' MSL. Numerous trees, poles and buildings beginning 626' from departure end of runway, 171'right of centerline, up to 154 'AGL/171'MSL.

## BONIFAY, FL

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

## BROOKSVILLE, FL

HERNANDO COUNTY (BKV) ORIG 09183 (FAA)

TAKE-OFF MINIMUMS: Rwy 9, 300-11/4 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 83' 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 $46^{\prime}$ from DER, 27 ' right of centerline, up to $70^{\prime}$ AGL/ $138^{\prime}$ MSL. Building and trees beginning $108^{\prime}$ from DER, $39^{\prime}$ left of centerline, up to $85^{\prime}$ AGL/155' MSL. Rwy 27, trees 2143 ' from DER, $891^{\prime}$ 'left of centerline, up to 89 ' AGL/ 189' MSL. Trees 4755 ' from DER, 1684 ' right of centerline, up to 99 ' AGL/199' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

## CAPE CANAVERAL AFS SKID STRIP (KXMR)

COCOA BEACH, FL . . . . . . . . . . 07046
DEPARTUREPROCEDURES: Rwy 13, diverse departure authorized. Cross DER at or above $20^{\prime}$ AGL/29'MSLfor Take Off Minima Standard with Climb Gradient200ft/NM. Rwy 31, diverse departure authorized $322^{\circ} \mathrm{CCW}$ to $143^{\circ}$ only. TAKE-OFFOBSTACLES: Rwy 13, numerous trees 500 ' left and right of centerline beginning from DER and numerous trees left and right of centerline beginning $1100^{\prime}$ from DER, up to $80^{\prime} \mathrm{AGL} / 100^{\prime} \mathrm{MSL}$. Rwy 31, light pole 1795 ' from DER, 498 ' left of centerline, $35^{\prime}$ 'AGL/67' MSL. Trees $2042^{\prime}$ ' from DER, 162 ' right of centerline, $45^{\prime}$ AGL/72' MSL. Brush 500 ' from DER, 300 ' right of centerline, 18 ' AGL/48' MSL. Brush 144 ' from DER, 500 ' left of centerline, 8 ' AGL/38' MSL. Pylon 4347 ' from DER, 700 ' right of centerline, 61' AGL/135' MSL. Pylon 4534' from DER, $1069^{\prime}$ right of centerline, 78 ' AGL/150' MSL. Terrain $101^{\prime}$ to $500^{\prime}$ ' left of DER, $17^{\prime}$ MSL. Terrain $185^{\prime}$ ' rom DER, 138 ' to 585 ' right of centerline, 18 ' MSL. Trees 1031' from DER, 114' left of centerline, 45 ' AGL/70' MSL. Trees 3864 ' from DER, 393 ' left of centerline, $80^{\prime}$ AGL/120' MSL. Trees $3760^{\prime}$ from DER, $490^{\prime}$ right of centerline, $80^{\prime}$ AGL/120' MSL.

CHARLOTTE AMALIE, ST. THOMAS, VI CYRIL E. KING (STT) AMDT 108157 (FAA)

TAKE-OFFMINIMUMS: Rwy 10, 400-1 with minimum climb of 462 ' per NM to 1400 or $2100-21 / 2$ 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 $120^{\circ}$ 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 $280^{\circ}$ to 2000 before turning north.
NOTE: Rwy 10, antenna on building 258 ' from departure end of runway, $485^{\prime}$ ' eft of centerline, $25^{\prime}$ ' AGL/41' MSL. Multiple trees beginning 729' from departure end of runway, 244 'right of centerline up to $100^{\prime}$ AGL/259' MSL. Pole 300 ' from departure end of runway, 430 ' right of centerline, $23^{\prime}$ AGL/39' MSL. Rwy 28, antenna $33^{\prime}$ from departure end of runway, $412^{\prime}$ 'left of centerline, 16 ' AGL/29'MSL. Bush 175' from departure end of runway, 178 ' right of centerline, 2' AGL/29' MSL. Bush 206 ' from departure end of runway, $121^{\prime}$ 'left of centerline, $2^{\prime}$ 'AGL/ 29' MSL. Trees beginning 2.39 NM from departure end of runway, $4351^{\prime}$ ' right of centerline, 100 ' AGL/710' MSL.

CHRISTIANSTED, ST. CROIX, VI
HENRY E. ROHLSEN
TAKE-OFF MINIMUMS: Rwy 10,300-1 $1 / 2$ or std. w/a min. climb of 300' per NM to 300.
DEPARTURE PROCEDURE: Rwy 10, climb via heading $103^{\circ}$ to 1300 before proceeding on course. Rwy 28, climb via heading $280^{\circ}$ to 1100 before proceeding on course.
NOTE: Rwy 10, pole and bushes beginning 103 ' from departure end of runway, 283 ' right of centerline, up to $30^{\prime}$ AGL/44' MSL. Bushes, trees, pole, elevator, strobe on elevator, obstruction light on stack, building, and refinery beginning 127 ' from departure end of runway, 324' left of centerline, up to 203' AGL/231' MSL. Rwy 28, tree 517 ' from departure end of runway, 553 ' right of centerline, $54^{\prime}$ AGL/114' MSL. Tower 1499' from departure end of runway, 802 ' right of centerline, 50 ' AGL/140' MSL.

## CLEWISTON, FL

AIRGLADES (2IS)
ORIG 09071 (FAA)
NOTE: Rwy 31, vehicle on road, $362^{\prime}$ from DER, 578' right of centerline, $15^{\prime}$ AGL/38' MSL.

## CRESTVIEW, FL

BOB SIKES (CEW)
ORIG 08213 (FAA)
NOTE: Rwy 17, trees beginning 92 ' from departure end of runway, $248^{\prime}$ right of centerline up to 100 ' AGL/203' MSL. Trees beginning 171 ' from departure end of runway, $9^{\prime}$ left of centerline, up to $100^{\prime}$ AGL/205' MSL. Rwy 35, trees beginning 329' from departure end of runway, $222^{\prime}$ right of centerline up to 100 'AGL/272' MSL. Trees beginning 152 ' from departure end of runway, $184^{\prime}$ left of centerline, up to $100^{\prime}$ AGL/278' MSL.

## CROSS CITY, FL

CROSS CITY (CTY)
ORIG 08157 (FAA)
NOTE: Rwy 4, trees beginning 527' from departure end of runway, left and right of centerline, up to 100' AGL/149' MSL.Rwy 13, trees beginning 158 ' from departure end of runway, left and right of centerline, up to 100 ' AGL/149' MSL. Tank 3302 ' from departure end of runway, 927 ' right of centerline, 101'AGL/141'MSL. Rwy 22, trees beginning 1510 ' from departure end of runway, left and right of centerline, up to 100 ' AGL/149' MSL. Powerlines 2807' from departure end of runway, 58' left of centerline, 73' AGL/114' MSL.Rwy 31, trees beginning 195 ' from departure end of runway, left and right of centerline, up to $100^{\prime}$ AGL/149' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE)DEPARTUREPROCEDURES $\nabla$

CRYSTAL RIVER, FL

CRYSTAL RIVER (CGC)
ORIG 10098 (FAA)
TAKE-OFF MINIMUMS: Rwy 9, std. w/ min. climb of 260 ' per NM to 600 , or $500-2^{3} / 4$ with min. climb of $210^{\prime}$ per NM to 900 , or $900-2 \frac{1}{2}$ for climb in visual conditions. Rwys 18,36, NA-Environmental.
DEPARTURE PROCEDURE: Rwy 9, climb heading $096^{\circ}$ to 700 before turning right, or for climb in visual conditions cross Crystal River airport 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 $15^{\prime}$ AGL/24' MSL. Multiple trees beginning $364^{\prime}$ from DER, from $680^{\circ}$ 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 $100^{\prime}$ ' AGL/109' MSL. Vehicles on road beginning 368 ' from DER, from left to right of centerline, up to $15^{\prime}$ ' $\mathrm{AGL} / 24^{\prime}$ MSL. Power line beginning 474 ' from DER, from left to right of centerline, up to $26^{\prime}$ AGL/45' MSL. Building 916' from DER, on centerline, $26^{\prime}$ 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)
AMDT 409239 (FAA)
NOTE: Rwy 7L, multiple trees beginning 1834' from DER, $646^{\prime}$ right of centerline, up to $64^{\prime}$ AGL/95' MSL . Rwy 7R, tower, trees beginning 1042 ' from DER, 413 ' right of centerline, up to 100 ' $\mathrm{AGL} / 135^{\prime} \mathrm{MSL}$. 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, $75^{\prime}$ 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 $88^{\prime}$ AGL/115' MSL. Multiple trees beginning 1254 ' from DER, 41 ' left of centerline, up to $84^{\prime}$ 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 $78^{\prime}$ AGL/107' MSL.

## DEFUNIAK SPRINGS, FL

DEFUNIAK SPRINGS (54J) ORIG 09127 (FAA)

TAKE-OFF MINIMUMS: Rwy 9, 400-21/4or 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 $25^{\prime}$ '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 $74^{\prime}$ 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, FL

DELAND MUNI/SIDNEY H. TAYLOR FIELD DEPARTURE PROCEDURE: Rwy 5, climb via heading $054^{\circ}$ to 1800 before proceeding on course. Rwy 12, climb via heading $122^{\circ}$ to 1800 before proceeding on course. Rwy 23, climb via heading $234^{\circ}$ to 1800 before proceeding on course. Rwy 30, climb via heading $302^{\circ}$ to 1800 before proceeding on course.
NOTE: Rwy 5, numerous trees beginning 64 ' from departure end of runway, 245' left of centerline, up to 100' AGL/143' MSL. Numerous trees beginning 869 ' from departure end of runway, 410 ' right of centerline, up to 100' AGL/154' MSL. Rwy 12, numerous trees beginning 154 ' from departure end of runway, 129 ' left of centerline, up to $1^{\prime 0}$ ' AGL/153' MSL. Numerous trees beginning 456 ' from departure end of runway, 289' right of centerline, up to 100 ' AGL/162' MSL. Rwy 30, numerous trees beginning 624 ' from departure end of runway, $9^{\prime}$ left of centerline, up to $100^{\prime}$ AGL/ $156^{\prime}$ MSL. Numerous trees beginning 159 ' from departure end of runway, 341' right of centerline, up to 100 ' AGL/162' MSL. Rwy 23, light pole and numerous trees beginning 381 'from departure end of runway, 44 ' right of centerline, up to 100 'AGL/132' MSL. Pole, building, vent on building, hangar, and trees beginning 164 ' from departure end of runway, $26^{\prime}$ left of centerline, up to 100 ' AGL/129' MSL.

## DESTIN, FL

DESTIN-FORT WALTON BEACH
DEPARTURE PROCEDURE: Rwy 14, climb runway heading to 400 before making turn.

DUNNELLON, FL
DUNNELLON/MARION CO \& PARK OF COMMERCE (X35)
ORIG 10042 (FAA)
NOTE: Rwy 5, trees beginning 17 ' from DER, 279 ' left of centerline, up to $100^{\prime}$ AGL/169' MSL. Trees beginning 481 ' from DER, 304 ' right of centerline, up to 100' AGL/ 179 ' MSL. Rwy 9, trees beginning 315' from DER, 281' right of centerline, up to 100 ' AGL/164' MSL. Trees beginning 693 ' from DER, 332 ' left of centerline, up to 100'AGL/164' MSL. Rwy 23, tree 705 ' from DER, 455' left of centerline, 100 AGL/164' MSL. Tree2132' from DER, 212 ' right of centerline, 100 ' AGL/164' MSL. Rwy 27, trees beginning 354' from DER, 417' right of centerline, up to 100 ' AGL/174' MSL. Trees beginning 921' from DER, 273 ' left of centerline, up to 100' AGL/ 164'MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTUREPROCEDURES $\mathbb{V}$

FERNANDINA BEACH, FL
FERNANDINA BEACH MUNI (FHB)
ORIG 09323 (FAA)
NOTE: Rwy 4, vehicles on roadway, beginning 443' from DER, left and right of centerline, up to $15^{\prime}$ AGL/29' MSL. Trees beginning 573 ' from DER, $442^{\prime}$ right of centerline, up to 100 ' AGL/114' MSL. Trees beginning $705^{\prime}$ from DER, $484^{\prime}$ ' left of centerline, up to 100' AGL/ 114'MSL. Rwy 8, trees beginning abeam DER, 402' right of centerline, up to $100^{\prime}$ AGL/114' MSL. Trees beginning $221^{\prime}$ from DER, 247 ' left of centerline, up to 100' AGL/114' MSL. Vehicles on roadway, 452' from DER, left and right of centerline, up to $15^{\prime}$ AGL/34' MSL. Rwy 13, trees beginning 31 ' from DER, 323 ' right of centerline, up to $25^{\prime}$ AGL/36' MSL. Vehicles on roadway, 403 ' from DER, left and right of centerline, up to $15^{\prime}$ AGL/29' MSL. Trees beginning 432 ' from DER, $574^{\prime}$ left of centerline, up to $100^{\prime}$ AGL/119' MSL. Rwy 22, trees beginning 163 ' from DER, 503 ' right of centerline, up to 100' AGL/114' MSL. Rwy 26, trees beginning 279 ' from DER, $460^{\prime}$ left of centerline, up to $74^{\prime}$ AGL/79' MSL. Trees beginning 869 ' from DER, 331 ' right of centerline, up to 88' AGL/93' MSL. Rwy 31, tree 29' from DER, $458^{\prime}$ left of centerline, $8^{\prime}$ AGL/18' MSL. Trees beginning $518^{\prime}$ from DER, $530^{\prime}$ left of centerline, up to 91'AGL/96' MSL. Trees beginning 757 ' from DER, 563' right of centerline, up to $70^{\prime}$ AGL/75' MSL. Trees beginning $1965^{\prime}$ from DER, $17 \mathbf{0}^{\prime}$ left of centerline, up to 89' AGL/94' MSL.

## FORT LAUDERDALE, FL

FORT LAUDERDALE-EXECUTIVE DEPARTURE PROCEDURE: Rwy 26, climb heading $267^{\circ}$ to 600 before turning left.
NOTE: Rwy 8, tree 1905 ' from departure end of runway, 482 'right of centerline, 80' AGL/89' MSL. Building 4721 ' from departure end of runway, 47 ' right of centerline, 150' $^{\prime}$ AGL/159' MSL. Rwy 13, hangar252' from departure end of runway, 302 ' right of centerline, $29^{\prime}$ AGL/39' MSL. Light pole 634 ' from departure end of runway, $354^{\prime}$ left of centerline, $44^{\prime}$ AGL/54' MSL. Tree 808 ' from departure end of runway, 166 ' right of centerline, 29' AGL/39' MSL. Tree 2237' from departure end of runway, 258 ' right of centerline, 91'AGL/101' MSL. Antenna on tower 5130 ' from departure end of runway, $1825^{\prime}$ right of centerline, 137' AGL/147' MSL. Rwy 26, multiple trees beginning 2041 ' from departure end of runway, $256^{\prime}$ left of centerline, up to 106' AGL/116' MSL. Six towers 2.3 NM from departure end of runway, 5031'left of centerline, 399' AGL/409' MSL. Rwy 31, multiple trees beginning 704 ' from departure end of runway, 263 ' right of centerline, up to $71^{\prime} \mathrm{AGL} / 81^{\prime} \mathrm{MSL}$.

## FORT LAUDERDALE, FL (CON'T)

FORT LAUDERDALE-HOLLYWOOD INTL DEPARTUREPROCEDURE: Rwy 9L, climb heading $093^{\circ}$ to 500 before turning left. Rwy 13, climb heading $138^{\circ}$ to 800 before turning right. Rwy 27L, climb heading $273^{\circ}$ to 600 before turning left. Rwy 27R, climb heading $273^{\circ}$ to 500 before turning left.
NOTE: Rwy 9L, railroad, light pole, and antenna on building beginning 469 ' from departure end of runway, 379 ' left of centerline, up to 43 ' AGL/47' MSL. Light pole 1332 ' from departure end of runway, 634' right of centerline, $42^{\prime}$ AGL/46' MSL. Tree 1977 ' from departure end of runway, 272' right of centerline, 55' AGL/59' MSL. Rwy 9R, light pole 545 ' from departure end of runway, $335^{\prime}$ left of centerline, $27^{\prime}$ AGL/41'MSL. Tree $783^{\prime}$ ' from departure end of runway, $396^{\prime}$ left of centerline, $30^{\prime}$ AGL/ 44' MSL. Antenna on building, fence, light pole, and multiple trees beginning 254 ' from departure end of runway, 133 ' right of centerline, up to 56 ' AGL/70' MSL.
Rwy 13, multiple trees beginning 844' from departure end of runway, 206' left of centerline, up to 76' AGL/80' MSL. Antenna on building 534' from departure end of runway, 431'left of centerline, 11'AGL/20' MSL. Pole 910' from departure end of runway, on centerline, 30' AGL/39' MSL. Railroad crossing arm 1104 ' from departure end of runway, 14 ' right of centerline, 42' AGL/ 56 ' MSL. Multiple trees and light poles beginning 563' from departure end of runway, 53 ' right of centerline, up to 81 'AGL/95' MSL. Rwy 27L, fence 154 ' from departure end of runway, $120^{\prime}$ left of centerline, $5^{\prime}$ AGL/ 13 ' MSL. Road 212 ' from departure end of runway, 80 ' left of centerline, $11^{\prime}$ AGL/20' MSL. Sign, multiple buildings, poles and trees beginning 622 ' from departure end of runway, 227' left of centerline, up to $97^{\prime}$ AGL/106' MSL. Bush, multiple light poles, trees and towers beginning 221 'from departureend of runway, 41 ' right of centerline, up to $105^{\prime}$ AGL/114' MSL. Rwy 27R, antenna on building, road, railroad and sign beginning 262 ' from departure end of runway, 6 ' left of centerline, up to 37 ' AGL/46' MSL. Multiple trees beginning 1206' from departure end of runway, 279 ' left of centerline, up to $93^{\prime}$ AGL/97' MSL. Road 584 ' from departure end of runway, 557' right of centerline, $24^{\prime} \mathrm{AGL} / 33^{\prime}$ MSL. Multiple trees beginning 2288' from departure end of runway, 848 ' right of centerline, up to 103 ' AGL/112' MSL. Rwy 31, rod on tower 299 ' from departure end of runway, 382 ' left of centerline, 14 ' AGL/23' MSL. Tree 1332 ' from departure end of runway, 458 ' left of centerline, $34^{\prime}$ AGL/43' MSL. Road $3384^{\prime}$ from departure end of runway, $711^{\prime}$ 'left of centerline, $84^{\prime}$ AGL/ 94 ' MSL. Multiple trees and poles beginning 1180 ' from departure end of runway, 405 ' right of centerline, up to 111'AGL/116' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE)DEPARTURE PROCEDURES $V$

FORT MYERS, FL
PAGE FIELD (FMY)
AMDT 509239 (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, $34^{\prime}$ 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 $36^{\prime}$ AGL/49' MSL. Vehicles, concrete pole, obstruction light on pole, and trees beginning $288^{\prime}$ 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, $235^{\prime}$ left of centerline, up to $74^{\prime}$ AGL/88' MSL.

SOUTHWEST FLORIDA INTL
NOTE: Rwy 6, trees beginning $1398^{\prime}$ from departure end of runway, 582 ' left of centerline, upto 84 'AGL/104' MSL. Trees beginning $1763^{\prime}$ from departure end of runway, $860^{\prime}$ right of centerline, up to $95^{\prime}$ AGL/115' MSL. Rwy 24, tree 1692' from departure end of runway, 916 ' right of centerline, 78 ' AGL/98' MSL.

## FORT PIERCE, FL

ST. LUCIE COUNTY INTL (FPR)
AMDT 310014 (FAA)
TAKE-OFF MINIMUMS: Rwys 10L, 28R,NAEnvironmental.
NOTE: Rwy 10R, bush 91 ' from DER, 496' left of centerline, 11'AGL/31'MSL. Tree 1044' from DER, $458^{\prime}$ right of centerline, $36^{\prime}$ AGL/51' MSL. Trees beginning 1124 ' from DER, 332 ' left of centerline, up to $100^{\prime}$ AGL/144' MSL. Rwy 14, poles beginning $274{ }^{\prime}$ from DER, 385 ' right of centerline, up to $38^{\prime}$ AGL/58' MSL. Trees beginning 963 ' from DER, 470 ' right of centerline, up to $61^{\prime}$ AGL/81'MSL. Trees beginning 1082 ' from DER, 425 ' left of centerline, up to 49' AGL/ 69 ' MSL. Rwy 32, trees beginning 187 ' from DER, 153' right of centerline, up to $73^{\prime}$ AGL/93' AGL/93' MSL. Trees beginning 1832 ' from DER, $133^{\prime}$ left of centerline, upto $66^{\prime}$ AGL/86' MSL.

## GAINESVILLE, FL

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

## HOLLYWOOD, FL

NORTH PERRY (HWO)
AMDT 309267 (FAA)
TAKE-OFF MINIMUMS: Rwys 9L/R, 18L/R,36L/R, NA - ATC request.

DEPARTURE PROCEDURE: Rwys 27L/R, climb heading $274^{\circ}$ to 1100 before turning.
NOTE: Rwy 27L, trees, building and poles beginning $37^{\prime}$ from DER, 13 ' right of centerline, up to $102^{\prime}$ AGL/112' MSL. Trees, building and poles beginning $1115^{\prime}$ from DER, 28 ' left of centerline, up to 87'AGL/95' MSL. Rwy 27R, trees and poles beginning 17 ' from DER, 65 ' right of centerline, up to $82^{\prime}$ AGL/90' MSL. Trees, poles, and building beginning 15 ' from DER, 28 ' left of centerline, up to 102 'AGL/112' MSL.

## HOMESTEAD ARB (KHST)

HOMESTEAD, FL (03331)
Departure headings $260^{\circ}-350^{\circ}$ not authorized. CAUTION: Unmarked and lighted balloon and cable to 14,000 ' in R-2916, 77 NM SW of arpt.
TAKE-OFF OBSTACLES: Rwy 5, $22^{\prime}$ MSL (15' AGL) vehicle on road 1350' from departure end of rwy, from $150^{\prime}$ left of centerline to $300^{\prime}$ right of centerline. $38^{\prime}$ MSL (31'AGL) aircraft at hold line 281'left of centerline. Rwy 23, $39^{\prime}$ MSL ( $32^{\prime}$ AGL) aircraft at hold short line at departure end of rwy, 300 ' right of centerline. 22 ' MSL ( 15 ' AGL) vehicle on road 1390 ' from departure end of rwy, from 520 'left of centerline to 810 ' right of centerline.

HURLBURTFLD (KHRT)<br>MARY ESTHER, FL<br>TAKE-OFF OBSTACLES: Rwy 36:85' AGL tree, 3140'<br>from departure end of rwy, 707 ' right of centerline.

## $\nabla$ TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES $\bar{\square}$

10098

IMMOKALEE, FL
IMMOKALEE RGNL (IMM)
AMDT 109239 (FAA)
TAKE-OFF MINIMUMS: Rwy 18,300-21/4 or std. with a min. climb of 221 'per NM to 500 , or alternatively, with standard take-off minimums and a normal 200 ' per NM climb gradient, take-off mustoccur no later than $1900^{\prime}$ prior to DER.
NOTE: Rwy 9, tree 45 ' from DER, 438 ' right of centerline, $4^{\prime}$ AGL/38' MSL. Trees beginning $1144^{\prime}$ 'rom DER, $312^{\prime}$ left of centerline, up to $100^{\prime}$ 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, $6^{\prime}$ AGL/41'MSL. Trees beginning $187^{\prime}$ ' from DER, 150 ' right of centerline, up to $40^{\prime}$ 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 $1320^{\prime}$ 'from DER, $258^{\prime}$ left of centerline, $35^{\prime}$ 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.

## ISLA DE VIEQUES, PR

ANTONIO RIVERA RODRIGUEZ (VQS) AMDT 210042 (FAA)

TAKE-OFF MINIMUMS: Rwy $9,500-21 / 4 \mathrm{w} / \mathrm{min}$. climb of $260^{\prime}$ per NM to 900 or $1600-2^{1 / 2}$ for climb in visual conditions. Rwy 27,500-2 $1 / 2 \mathrm{w} / \mathrm{min}$. climb of 280 ' per NM to 2700 or std. w/ min. climb of 570 ' per NM to 1300 or $1600-2 \frac{1}{2}$ for climb in visual conditions. DEPARTURE PROCEDURE: Rwy 9, climb heading $090^{\circ}$ to 900 before proceeding on course or for climb in visual conditions, cross Antonio Rivera Rodriquez airport at or above 1500 before proceeding on course.
Rwy 27, climb heading to $270^{\circ}$ to 2700 before proceeding on course or for climb in visual conditions, cross Antonio Rivera Rodriquz airportat 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, $225^{\prime}$ 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 $100^{\prime}$ 'AGL/165' MSL. Trees beginning 1206 ' from DER, 794 ' left of centerline, up to $100^{\prime}$ ' ${ }^{\prime}$ LL/493' MSL .

## JACKSONVILLE, FL

CECIL FIELD
NOTE: Rwy 18L, tree 1499' from departure end of runway, $699^{\prime}$ right of centerline, 34 ' AGL/113' MSL.

CRAIG MUNI (CRG)
AMDT 308325 (FAA)
TAKE-OFF MINIMUMS: Rwy 23, std. w/min. climb of 360' per NM to 1500 ' or 1300 ' and $21 / 2$ for climb in visual conditions.
DEPARTURE PROCEDURE: Rwy 5, climb heading $049^{\circ}$ to 500 before proceeding on course.
Rwy 14, climb heading $139^{\circ}$ to 700 before turning right.
Rwy 23, for climb in visual conditions: Cross Craig Muni airport at or above 1200 before proceeding on course.
NOTE: Rwy 5, trees beginning 1617 ' from departure end of runway, 182 ' right of centerline, up to $99^{\prime}$ AGL/143' MSL. Trees beginning 571 'from departure end of runway, 113 ' left of centerline, up to $99^{\prime}$ 'AGL/143' MSL.
Rwy 14, trees beginning 1848 ' from departure end of runway, 807 ' left of centerline, up to 89 ' AGL/128' MSL. Rwy 23, trees beginning 519 ' from departure end of runway, 510' left of centerline, up to 84' AGL/133' MSL. Trees beginning 1601 ' from departure end of runway, 427 ' right of centerline, up to 69' AGL/119' MSL. Pole 1570' from departure end of runway, 580' left of centerline, $45^{\prime}$ AGL/85' MSL. Rwy 32, trees beginning 194' from departure end of runway, 222 ' left of centerline, up to 54' AGL/101' MSL. Trees beginning 494' from departure end of runway, 104 ' right of centerline, up to $50^{\prime}$ AGL/99' MSL.

## HERLONG

DEPARTURE PROCEDURE: Rwy 7, climb heading $060^{\circ}$ to 800 before proceeding on course. Rwy 11, climb runway heading to 800 before proceeding on course.

## JACKSONVILLE INTL

NOTE: Rwy 7, bush 83' from departure end of runway, 262 ' right of centerline, 6' AGL/30' MSL. Multiple trees beginning 2737 ' from departure end of runway, 429 ' right of centerline, up to 89 ' AGL/118' MSL. Rwy 13, electrical equipment 79 ' from departure end of runway, 292 ' left of centerline, $3^{\prime}$ AGL/27' MSL. Multiple trees beginning 1761' from departure end of runway, 563 ' left of centerline, up to $100^{\prime}$ AGL/121' MSL. Multiple trees beginning 899 ' from departure end of runway, 151' right of centerline, up to 102' AGL/121'MSL. Pole 755' from departure end of runway, $700^{\prime}$ left of centerline, 33 ' AGL/ 52 ' MSL. Rwy 25, multiple trees beginning 2341 'from departure end of runway, $793^{\prime}$ right of centerline, up to $80^{\prime}$ AGL/102' MSL. Rwy 31, tree $2816^{\prime}$ ' from departure end of runway, 691' left of centerline, 83 ' AGL/102' MSL. Multiple trees beginning 2227' from departure end of runway, 576 ' right of centerline, up to 89 ' AGL/108' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTUREPROCEDURES

## JACKSONVILLE NAS (TOWERS FIELD)(KNIP)

JACKSONVILLE, FL. . . . . . . . . . . . 09155

DEPARTURE PROCEDURES: Rwy 10, Diverse departures only between $095^{\circ}$ through $275^{\circ} \mathrm{CW}$. Rwy 14, Diverse departures only between $095^{\circ}$ through $320^{\circ} \mathrm{CW}$. Rwy 32, Diverse departures only between $351^{\circ}$ through $141^{\circ} \mathrm{CCW}$.
TAKE-OFF OBSTACLES: Rwy 28: Pole 1064 ' from DER, 782' left of centerline, 65' MSL. Rwy 32: Trees 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, $72^{\prime}$ MSL. Trees 1081' from DER, $185^{\prime}$ right of centerline, $48^{\prime}$ MSL. Trees $1317^{\prime}$ 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, $108^{\prime}$ MSL. Trees 1907' from DER, $462^{\prime}$ left of centerline, $128^{\prime}$ MSL. Trees 2037' from DER, $321^{\prime}$ left of centerline, 130 ' MSL. Trees 2497' from DER, $561^{\prime}$ left of centerline, 133 ' MSL. Tower2744' from DER, $616^{\prime}$ left of centerline, $87^{\prime}$ MSL.

## KEY WEST, FL

KEY WEST INTL
DEPARTURE PROCEDURE: Rwys 9,27, climb on a heading between $087^{\circ}$ clockwise to $033^{\circ}$ from departure end of runway to avoidR-2916 and unmarkedtethered baloon up to 14000 MSL.
NOTE: Rwy 9, rod on antenna, dome on building, poles, and numerous trees beginning 38 ' from departure end of runway, 199 ' right of centerline, up to 75 ' AGL/82' MSL. Obstruction light on building, pole, and numerous trees beginning 4 ' from departure end of runway, 220' left of centerline, up to $38^{\prime}$ AGL/45' MSL. Rwy 27, pole and numerous trees beginning 27 ' from departure end of runway, 116 ' right of centerline, up to 83 ' $\mathrm{AGL} / 90$ ' MSL. Numerous bushes and trees beginning 202' from departure end of runway, $78^{\prime}$ left of centerline, upto $37^{\prime}$ AGL/44' MSL.

## KEY WEST NAS(BOCA CHICA FLD) (KNQX)

KEY WEST, FL. . . . . . . . . . . . . . . . . 10042
DEPARTURE PROCEDURE: Rwy 3, Cross DER at or above $25^{\prime}$ AGL/31'MSL. Diverse departures authorized between $028^{\circ} \mathrm{CCW} 216^{\circ}$. Left turn to departure heading only. Rwy 7, Diverse departures authorized $087^{\circ} \mathrm{CW}$ $257^{\circ}$. Crossing DER climb on heading $065^{\circ}$ 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 310KIAS until crossing VORTAC or TACAN. Rwy 13, Diverse departures authorized $084^{\circ} \mathrm{CW} 315^{\circ}$. Rwy 21, Diverse departures authorized $084^{\circ} \mathrm{CW} 315^{\circ}$. Rwy 25, Diverse departures authorized $084^{\circ} \mathrm{CW} 315^{\circ}$. Rwy 31, Diverse departures authorized $035^{\circ} \mathrm{CCW} 084^{\circ}$.
TAKE-OFF 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)
ORIG 09015 (FAA)
NOTE: Rwy 5, trees beginning 363' from departure end of runway, 503 'left of centerline, up to 100' AGL/309' MSL. Trees beginning 1165 ' from departure end of runway, 331 ' right of centerline, up to 100' AGL/309' MSL. Rwy 11, trees beginning 995 ' from departure end of runway, on centerline, up to 100' AGL/309' MSL. Rwy 23, trees beginning 375 ' from departure end of runway, on centerline, up to 87' AGL/257' MSL. Powerlines beginning 2436 ' from departure end of runway, 24 ' right of centerline, up to 100 ' $\mathrm{AGL} / 279$ ' MSL.
Rwy 29, trees beginning 0 ' from departure end of runway, 263' right of centerline, up to 100' AGL/289' MSL. Trees beginning 563 ' from departure end of runway, on centerline, upto 100' AGL/289' MSL. Powerlines beginning 3048 ' from departure end of runway, 122 ' left of centerline, up to 100 ' AGL/279' MSL.

TAKE-OFF MINIMUMS AND(OBSTACLE)DEPARTURE PROCEDURES

LA BELLE, FL<br>LA BELLE MUNI (X14)<br>ORIG 08045 (FAA)<br>NOTE: Rwy 14, vehicles on roadway, beginning 98 ' from departure end of runway, $483^{\prime}$ left of centerline, up to $15^{\prime}$ AGL/39' MSL. Trees beginning 70 ' from departure end of runway, 357 ' right of centerline, up to 100 ' AGL/124' MSL. Poles and trees beginning 305 ' from departure end of runway, $157^{\prime}$ left of centerline, up to $40^{\prime}$ AGL/94' MSL. Building 562 ' from departure end of runway, 238 ' left of centerline, $14^{\prime}$ AGL/38' MSL. Poles and trees beginning 745 ' from departure end of runway, 93 ' right of centerline, up to $40^{\prime}$ AGL/60' MSL. Rwy 32, airplanes on taxiway beginning 18 ' from departure end of runway, $130^{\prime}$ ' left of centerline, up to $12^{\prime}$ 'AGL/31' MSL. Trees beginning 35 ' from departure end of runway, 135 ' right of centerline, up to $100^{\prime}$ AGL/119' MSL. Trees beginning 61 ' from departure end of runway, $6^{\prime}$ 'eft of centerline, up to $100^{\prime}$ AGL/119'MSL. Vehicle on roadway beginning 136 ' from departure end of runway, 450 ' right of centerline, upto $15^{\prime} \mathrm{AGL} / 34$ ' MSL. Building $446^{\prime}$ ' rom departure end of runway, 214 ' 'right of centerline, 18 ' $\mathrm{AGL} / 37^{\prime}$ ' MSL. Pole 1578 ' from departure end of runway, $789^{\prime}$ 'eft of centerline, $43^{\prime}$ AGL/62' MSL.

## LAKE CITY, FL <br> LAKE CITY MUNI

TAKE-OFF MINIMUMS: Rwy 28,300-1 orstd. with a min. climb of 330 ' per NM to 500 .

## LAKE WALES, FL

LAKE WALES MUNI (X07)
ORIG 08325 (FAA)
NOTE: Rwy 6, trees beginning 1403' from departure end of runway, 165 ' left of centerline, up to 100 ' AGL/229' MSL. Trees beginning 2739 ' from departure end of runway, 899 ' right of centerline, up to $100^{\prime}$ AGL/234' MSL. Rwy 17, trees beginning 534 ' from departure end of runway, 642 ' right of centerline, up to 100 ' $\mathrm{AGL} / 224$ ' MSL. Rwy 24, trees beginning 2462' from departure end of runway, 836 ' left of centerline, up to 100 ' AGL/224' MSL. Rwy 35, trees beginning 2567 ' from departure end of runway, 468 ' left of centerline, up to 100 ' AGL/234' MSL. Buildings beginning 691 ' from departure end of runway, 1' right of centerline up to 74 ' AGL/205' MSL.

## LAKELAND, FL <br> LAKELAND LINDER RGNL

NOTE: Rwy 5, trees 720 ' from departure end of runway, 49' right of centerline, up to 47' AGL/191'MSL. Trees 869' from departure end of runway, 219 'left of centerline, up to 39 'AGL/183' MSL. Rwy 9 , trees 423 ' from departure end of urnway, 53 ' right of centerline, up to 68 ' AGL/212'MSL. Trees 590' from departure end of runway, $185^{\prime}$ left of centerline, up to $66^{\prime}$ AGL/210' MSL. Rwy 27, trees 70 ' from departure end of runway, $75^{\prime}$ left of centerline, up to 78' AGL/207' MSL. Pole 383' from departure end of runway, 476 ' left of centerline, 16 ' AGL/ 155'MSL. Trees 1795 ' from departure end of runway, 116 ' right of centerline, up to 76 ' AGL/205' MSL.

LEESBURG,FL
LEESBURG INTL (LEE)
AMDT 309127 (FAA)
TAKE-OFFMINIMUMS: Rwy 3, 400-2 $1 / 40$ or std. w/min. climb of 272 ' per NM to 600 .
NOTE: Rwy 3, tower 1.78 NM from DER, 2631 ' left of centerline, $310^{\prime}$ 'AGL/382' MSL. Sign and trees beginning 187 ' from DER, 259 ' left of centerline, up to $72^{\prime}$ AGL/150' MSL. Poles and trees beginning 62 ' from DER, 209 ' right of centerline, up to 63' AGL/96' MSL. Blastfence 78 ' from DER, on centerline, 11 ' 'AGL/85' MSL. Vehicle on road 176 ' from DER, $2^{\prime}$ left to right of centerline, 17 ' AGL/96' MSL. Rwy 13, trees beginning 265 ' from DER, 365 ' left of centerline, up to 86 ' AGL/ 150' MSL.Trees beginning 181 ' from DER, 370 ' right of centerline, up to 76 ' AGL/140' MSL. Vehicle on road 237 ' from DER 548 ' right to left of centerline 15 ' AGL 80' MSL. Rwy 21, tree 3614 ' from DER, 126 ' right of centerline, $109^{\prime}$ AGL/82' MSL. Trees beginning 776' from DER, 202' left of centerline, up to $115^{\prime}$ AGL/179' MSL. Vehicle on road 75 ' from DER, 390 ' left of centerline, 15' AGL/82'MSL. Rwy 31, poles and trees beginning 62 ' from DER, $265^{\prime}$ left of centerline, up to $70^{\prime}$ AGL/159' MSL. Poles and trees beginning 532 ' from DER, 104 ' right of centerline, up to 100 ' AGL/204' MSL. Vehicle on road 822 ' from DER, 682 ' right to left of centerline, 17'AGL/101'MSL. Building 1791'from DER, 85 ' right of centerline, 36 ' $\mathrm{AGL} / 125$ ' MSL.

## MACDILL AFB (KMCF)

TAMPA, FL . . . . . . . . . . . . . . . . . 07102
TAKE-OFF OBSTACLES: Rwy 4; Palmtree 60'AGL/ 73' MSL2134' from DER, 961 'left of centerline. Pylon 71 'AGL/101'MSL $3961^{\prime}$ 'from DER, $166^{\prime}$ 'left of centerline.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES $\nabla$

## MARATHON, FL

THE FLORIDA KEYS MARATHON (MTH) AMDT 107354 (FAA)

DEPARTURE PROCEDURE: Rwy 7, climbing right turn direct MTH NDB then via $307^{\circ}$ bearing from MTH NDB to TIGAR Int before proceeding on course. Rwy 25 , climb direct MTH NDB then via $307^{\circ}$ bearing from MTH NDB to TIGAR Intbefore proceeding on course. NOTE: Rwy 7, trees beginning 337 ' from departure end of runway, $324^{\prime}$ 'right of centerline, up to 74 ' AGL/81'MSL, bush 166 ' from departure end of runway, 323 ' right of centerline, $9^{\prime}$ AGL/16' MSL , pole $726^{\prime}$ ' from departure end of runway, 589 ' right of centerline, $39^{\prime}$ AGL/46' MSL, rod on obstruction light 1404 ' from departure end of runway, 655 ' right of centerline, 55 ' AGL/62' MSL, transmission pole 2360 ' from departure end of runway, 1029 ' right of centerline, $89^{\prime}$ AGL/96' MSL, rod on obstruction light antenna 3366 ' from departure end of runway, 1010 ' right of centerline, $136^{\prime}$ AGL/143' MSL, antenna $3270^{\prime}$ ' from departure end of runway, 1253 ' right of centerline, 121' AGL/128'MSL, tower 3427 ' from departure end of runway, 1033 ' right of centerline, $115^{\prime}$ AGL/21' MSL , trees beginning 242 ' from departure end of runway, $99^{\prime}$ ' left of centerline, up to 75 ' AGL/82' MSL, antennas 1660 ' from departure end of runway, $371^{\prime}$ 'left of centerline, up to $86^{\prime}$ AGL/93' MSL, pole 876 ' from departure end of runway, $468^{\prime}$ left of centerline, $39^{\prime}$ AGL/46' MSL, concrete pole 1391' from departure end of runway, $534^{\prime}$ left of centerline, $51^{\prime}$ AGL/58'MSL. Pole 1441 'from departure end of runway, 586 ' right of centerline, 55 ' AGL/62' MSL. Rwy 25, trees beginning 122 ' from departure end of runway, 224 ' right of centerline, up to $65^{\prime}$ AGL/72' MSL, poles beginning 702' from departure end of runway, 470 ' right of centerline, upto $37^{\prime}$ AGL/44' MSL, antenna $1752^{\prime}$ ' from departure end of runway, $135^{\prime}$ ' right of centerline, 49 ' AGL/56' MSL, trees beginning 223 ' from departure end of runway, 324 ' left of centerline, up to $66^{\prime}$ AGL/73' MSL, rod on obstruction light antennabeginning $2353^{\prime}$ 'from departure end of runway, $22^{\prime}$ right of centerline, up to $138^{\prime}$ AGL/145' MSL, antenna 2953' from departure end of runway, $745^{\prime}$ 'eft of centerline, $75^{\prime}$ AGL/82' MSL, transmission pole 1545 ' from departure end of runway, $693^{\prime}$ left of centerline, $60^{\prime}$ AGL/ $67^{\prime} \mathrm{MSL}$.

## MARCO ISLAND, FL <br> MARCO ISLAND (MKY) <br> AMDT 209351 (FAA)

DEPARTURE PROCEDURE: Rwy 35, climb heading $005^{\circ}$ to 700 before turning west. CAUTION: Strobelight and unmarked balloon on cable to $14000^{\prime}$ 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 $48^{\prime}$ AGL/52' MSL. Wind sock $76^{\prime}$ from DER, 310 ' right of centerline, 21 ' AGL/25' MSL. Rwy 35 , antenna 11 ' from DER, 384 ' left of centerline, 53 ' AGL/ $57^{\prime}$ MSL. Sign $16^{\prime}$ ' from DER, $255^{\prime}$ l left of centerline, 5 ' AGL/9' MSL. Trees beginning 64 ' from DER, left and right of centerline up to 51 ' $\mathrm{AGL} / 55^{\prime}$ 'MSL.

MARIANNA, FL

MARIANNA MUNI (MAI)
ORIG 09071 (FAA)
TAKE-OFF 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 $1^{\prime 0}{ }^{\prime}$ AGL/279' MSL. Trees beginning 1241' from DER, $366^{\prime}$ left of centerline, up to $100^{\prime}$ AGL/209' MSL. Rwy 26, trees beginning 3180' from DER, 1278' right of centerline, upto 100' AGL/209' MSL. Rwy 36, trees beginning $2230^{\prime}$ from DER, 1003 ' left of centerline, up to 100 ' AGL/209' MSL. Trees beginning $2352^{\prime}$ from DER, 1007 ' right of centerline, up to 100 ' AGL/209' MSL.

## MAYAGUEZ, PR

EUGENIO MARIA DE HOSTOS
TAKE-OFF 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 northeastbound on G633 continue climb on course. All others turn left direct MAZ VOR/ DME before proceeding on course. Rwy 27, climb via MAZR-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 DONALDFLD)(KNRB)

MAYPORT, FL . . . . . . . . . . . . . . . . 08073 TAKE-OFFOBSTACLES: 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.

## MELBOURNE, FL <br> MELBOURNE INTL

NOTE: Rwy 5, multiple trees 1584 ' from departure end of runway, 222 ' left of centerline, up to 43 ' AGL/64' MSL.
Rwy 9L, tree 108 ' from departure end of runway, 479' left of centerline, $25^{\prime}$ AGL/62' MSL. Rwy 9R, multiple trees 1855 ' from departure end of runway, 434 ' left of centerline, up to 43 ' AGL/73' MSL. Tree 1332 ' from departure end of runway, $434^{\prime}$ right of centerline, $36^{\prime}$ AGL/56' MSL. Rwy 23, bush 20 ' from departure end of runway, 217' right of centerline, $8^{\prime}$ AGL/33' MSL, tower 6034 ' from departure end of runway, 750 ' right of centerline, $152^{\prime}$ AGL/177' MSL. Multiple trees beginning 284 ' from departure end of runway, 121 ' left of centerline, up to 47' AGL/72' MSL. Rwy 27R, multiple trees beginning 543 ' from departure end of runway, 169' left of centerline, up to 51 'AGL/81'MSL. Multiple trees beginning 1202 ' from departure end of runway, 114 ' right of centerline, up to $58^{\prime}$ AGL/88' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

## MERRITT ISLAND, FL

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

## MIAMI, FL

KENDALL-TAMIAMIEXECUTIVE(TMB)
AMDT 809295 (FAA)
DEPARTURE PROCEDURE: Rwy 9L, climb heading $093^{\circ}$ to 800 before turning right. Rwy 9R, climb heading $093^{\circ}$ to 900 before turning right. Rwy 13, climb heading $133^{\circ}$ to 1400 before turning right. Rwy 27L, climb heading $273^{\circ}$ to 1400 before turning left. Rwy 27R, climb heading $273^{\circ}$ to 1300 before turning left. Rwy 31, climb heading $313^{\circ}$ to 900 before turning left.
NOTE: Rwy 9L, trees beginning 1731 ' from DER, 717 ' left of centerline, up to $\mathbf{1 0 0}^{\prime}$ 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, $100^{\prime}$ AGL/119' MSL. Rwy 13, tree 1100 ' from DER, 764 ' right of centerline, $100^{\prime}$ 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 $72^{\prime}$ AGL/82' MSL. Tree $2106^{\prime}$ 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, $49^{\prime}$ 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.

## MIAMI, FL (CON'T)

MIAMI INTL
TAKE-OFF MINIMUMS: Rwy 8L, 300-1 $1 / 4$ or std. w/min. climb of 382' perNM to 300. Rwy 9, std. w/ min. climb of 233' per NM to 1200.
DEPARTURE PROCEDURE: Rwys 8L/R, climb heading $092^{\circ}$ to 1000 before turning right. Rwy 12, climbing right turn to intercept DHP VORTAC R-125 to 1100 before turning left.
NOTE: Rwy 8L, building 3391' from departure end of runway, 1024' left of centerline, 160' AGL/172' MSL. Glideslope antenna 804 ' from departure end of runway, 501 'right of centerline, 32 ' AGL/46' MSL. Multiple towers and buildings beginning 1350 ' from departure end of runway, 691' left of centerline, up to 150' AGL/164' MSL. Rwy 8R, tree 4064' from departure end of runway, 959' right of centerline, 98' AGL/112' MSL. Antenna and multiple trees beginning 2719' from departure end of runway, 194 ' left of centerline, up to $85^{\prime}$ AGL/98' MSL. Rwy 9, light 1232 ' from departure end of runway, 785 ' left of centerline, 39' AGL/48' MSL. Windsock 22 ' from departure end of runway, 438 ' right of centerline, $21^{\prime}$ AGL/30' MSL. Rwy 12, railroad beginning 4' from departure end of runway, $356^{\prime}$ right of centerline, $23^{\prime}$ AGL/28' MSL. Building and tree beginning 1064' from departure end of runway, 118 ' right of centerline, up to 94' AGL/108' MSL. Windsock681'from departure end of runway, $345^{\prime}$ ' left of centerline, 21'AGL/30' MSL. Rwy 26L, tower and multiple trees beginning 1306 ' from departure end of runway, 638 ' right of centerline, up to $63^{\prime}$ AGL/77' MSL. Tree and light pole beginning 1773' from departure end of runway, $568^{\prime}$ left of centerline, up to 61'AGL/75' MSL. Rwy 26R, tower, building, multiple light poles and trees beginning 741 ' from departure end of runway, 1 ' right of centerline, up to $66^{\prime}$ AGL/80' MSL. Pole, building, and tower beginning 255 ' from departure end of runway, 5 ' left of centerline, up to 34 ' AGL/48' MSL. Rwy 27, railroad, tree and multiple light poles beginning $750^{\prime}$ from departure end of runway, $94^{\prime}$ left of centerline, up to 62 ' AGL/76' MSL. Rwy 30, pole, multiple towers and trees beginning 1414 ' from departure end of runway, 189 ' right of centerline, up to 120' AGL/125' MSL. Tree 2058 ' from departure end of runway, $785^{\prime}$ 'left of centerline, $52^{\prime}$ AGL/66' MSL.

MIAMI, FL (CON'T)<br>OPA-LOCKA EXECUTIVE (OPF)<br>AMDT 809211 (FAA)<br>TAKE-OFF MINIMUMS: Rwy 9R, 300-1 or std. w/ min. climb of 365 ' per NM to 300 .<br>DEPARTUREPROCEDURE: Rwy 9L, climb heading $089^{\circ}$ to 1200 before turning north. Rwy 9 R, climb heading $089^{\circ}$ to 1000 before turning north. Rwy 12 , climb heading $124^{\circ}$ to 600 before turning north.

Rwy 27R, climb heading $269^{\circ}$ to 500 before turning north.
NOTE: Rwy 9L, fence 48 ' from DER, 497 ' left of centerline, $7^{\prime}$ AGL/17' MSL. Trees $3246^{\prime}$ 'from DER, $885^{\prime}$ right of centerline, 78 ' AGL/92' MSL. Rwy 9R, pole 1438' from DER, $737^{\prime}$ ' right of centerline, 31 'AGL/45' MSL . Trees beginning 1947 ' from DER, $366^{\prime}$ left of centerline, upto 89' AGL/103' MSL. Tower 3832 ' from DER, $729^{\prime}$ left of centerline, $165^{\prime}$ AGL/181'MSL. Rwy 12, trees 1558 ' from DER, 610' right of centerline, 49' AGL/63' MSL. Trees 3564 ' from DER, 922 ' left of centerline, 100 ' AGL/ 109' MSL. Rwy 27L, poles beginning 1318 ' from DER, 258 ' left of centerline, up to 37 ' AGL/51' MSL. Trees 1781 ' from DER, 756 ' left of centerline, 100 'AGL/109' MSL. Rwy 27R, trees 1127 ' from DER, 745 'right of centerline, 72 ' AGL/86' MSL. Trees 1449' from DER, $312^{\prime}$ 'eft of centerline, $32^{\prime}$ ' AGL/46' MSL. Trees 4225' from DER, 229 ' right of centerline, $100^{\prime}$ AGL/114' MSL. Rwy 30, tree 1370 ' from DER, 437 ' left of centerline, $32^{\prime}$ AGL/46'MSL. Trees beginning $1711^{\prime}$ 'from DER, 614 ' right of centerline, up to 100 ' AGL/109' MSL. Towers beginning 2542 ' from DER 565 ' right of centerline, up to 100' AGL/105' MSL.

## MILTON, FL

PETER PRINCE FIELD
NOTE: Rwy 18, power line 204' from departure end of runway on centerline, 40' AGL/119' MSL.

## NAPLES, FL

NAPLES MUNI (APF)
AMDT 209351 (FAA)
DEPARTURE PROCEDURE: Rwy 14, climb heading $137^{\circ}$ 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 $66^{\prime}$ AGL/70' MSL. Rwy 32, trees beginning 339 ' from DER, left and right of centerline, up to $119^{\prime}$ 'AGL/123' MSL.

## NASA SHUTTLE LANDING FACILITY (KTTS) <br> TITUSVILLE, FL

Rwy 15, Climb rwy heading to 800 before turning East.

## NEW SMYRNA BEACH, FL

NEW SMYRNA BEACH MUNI
NOTE: Rwy 2, tree 1271'from departure end of runway, 628' left of centerline, $85^{\prime}$ AGL/93' MSL, tree 1816' from departure end of runway, 585 ' right of centerline, $48^{\prime}$ AGL/56' MSL. Rwy 7, transmission tower348' from departure end of runway, $348^{\prime}$ right of centerline, $43^{\prime}$ AGL/51' MSL, transmission tower 1832 ' from departure end of runway, 150 ' left of centerline, 53 ' AGL/61'MSL. Rwy 11, tree 509' from departure end of runway, 499 ' left of centerline, 53 'AGL/61'MSL, tree 1420' from departure end of runway, $485^{\prime}$ right of centerline, $54^{\prime}$ AGL/62' MSL. Rwy 20, tree 542' from departure end of runway, 397' right of centerline, 71'AGL/80' MSL, tree 1345 ' from departure end of runway, 322 ' left of centerline, 72 ' AGL/81' MSL. Rwy 25, tree 1674 ' from departure end of runway, $104^{\prime}$ left of centerline, $90^{\prime}$ AGL/ 100 ' MSL, tree 1835 ' from departure end of runway, 158 ' right of centerline, $86^{\prime}$ AGL/96' MSL. Rwy 29, tree 1853' from departure end of runway, 197 ' left of centerline, $9 \mathbf{9 0}^{\prime}$ AGL/100' MSL, tree 1535 ' from departure end of runway, 394 ' right of centerline, 76 ' AGL/86' MSL.

## MASSEY RANCH AIRPARK (X50) ORIG 09323 (FAA)

NOTE: Rwy 18, trees beginning 132 ' from DER, left and right of centerline, up to $70^{\prime}$ AGL/84' MSL. Vehicles on road beginning $23^{\prime}$ 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 $70^{\prime}$ 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, $33^{\prime}$ AGL/45' MSL. Tower 5101' from DER, 401' right of centerline, 152' AGL/162' MSL.

## OCALA, FL

OCALA INTL-JIM TAYLOR FLD (OCF)
ORIG 09015 (FAA)
DEPARTURE PROCEDURE: Rwy 8, climb heading $069^{\circ}$ to 500 before proceeding on course. NOTE: Rwy 18, trees beginning 316' from departure end of runway, 527 ' right of centerline, up to 30 ' AGL/106' MSL. Rwy 26, trees beginning 83' from departure end of runway, $255^{\prime}$ ' left of centerline, up to 100 'AGL/204' MSL. Trees beginning 272 ' from departure end of runway, 10 ' right of centerline, up to 100 ' AGL/194' MSL. Rwy 36, taxiing aircraft, 43 ' from departure end of runway, 305 ' right of centerline, up to 10 ' AGL/94' MSL. Trees beginning 196 ' from departure end of runway, 500 ' left of centerline, up to 70 ' AGL/164' MSL. Trees beginning $2668^{\prime}$ from departure end of runway, 305 ' right of centerline, up to $70^{\prime} \mathrm{AGL} / 162^{\prime} \mathrm{MSL}$.

## ORLANDO,FL

EXECUTIVE (ORL)
AMDT 3A 08297 (FAA)
TAKE-OFF MINIMUMS: Rwy 25,500-2½ or std. with a min. climb of 260 ' per NM to 700.
DEPATURE PROCEDURE: Rwy 31, climb heading $314^{\circ}$ to 600 before turning left.
NOTE: Rwy 7, numerous trees beginning 194 ' from departure end of runway, 542 ' right of centerline, up to 114'AGL/132' MSL. Rwy 13, numerous trees and poles beginning 824 ' from departure end of runway, 126 ' right of centerline, up to $119^{\prime}$ AGL/173' MSL. Pole 1275' from departure end of runway, 502 ' left of centerline, 119'AGL/ 160' MSL. Rwy 25, building 2 NM from departure end of runway, 4195 ' right of centerline, 439' AGL/547' MSL. Numerous trees beginning 1318' from departure end of runway, 277 ' right of centerline, up to 119' AGL/191' MSL. Tree 1823 ' from departure end of runway, 582 ' left of centerline, 109' $^{\prime}$ AGL/156' MSL. Rwy 31, numerous poles and trees beginning 828 ' from departure end of runway, 392 ' right of centerline, up to 109' AGL/139' MSL. Numerous poles, trees, and antenna beginning 948 ' from departure end of runway, 229 ' left of centerline, up to $104^{\prime}$ AGL/161'MSL.

KISSIMMEEGATEWAY
TAKE-OFF MINIMUMS: Rwy 6, 300-1.
ORLANDO INTL (MCO)
AMDT 108269 (FAA)
NOTE: Rwy 17L, multiple trees beginning 1073' from departureend of runway, $23^{\prime}$ left of centerline, up to $84^{\prime}$ AGL/151'MSL. Rwy 17R, tree 1784' from departure end of runway, $965^{\prime}$ right of centerline, $74^{\prime}$ AGL/138' MSL.
Rwy 35L, light and bush beginning 134 ' from departure end of runway, $456^{\prime}$ left of centerline, up to $84^{\prime}$ AGL/129' MSL. Rwy 35R, multiple trees beginning 2164 ' from departure end of runway, 5 ' right of centerline, up to 89' AGL/187' MSL. Multiple trees beginning 2596 ' from departure end of runway, 4 ' left of centerline, up to 89 ' AGL/172' MSL. Rwy 36L, light on sign 1063' from departure end of runway, $775^{\prime}$ right of centerline, 94 ' AGL/123' MSL. Rwy 36R, multiple trees beginning $1365^{\prime}$ from departure end of runway, 193 ' right of centerline, up to 94 ' AGL/153' MSL. Light on sign 1063' from departure end of runway, $726^{\prime}$ left of centerline, $94^{\prime}$ AGL/123' MSL.

ORLANDO, FL(CON'T)
ORLANDO SANFORD INTL (SFB)
AMDT 908269 (FAA)
DEPARTURE PROCEDURE: Rwy 27L, climb heading $275^{\circ}$ to 800 before proceeding northbound. Rwy 27C, climb heading $275^{\circ}$ to 900 before proceeding northbound. Rwy 27R, climb heading $275^{\circ}$ to 900 before proceeding northbound. Rwy 36, climb heading $005^{\circ}$ to 2000 before proceeding on course.
NOTE: Rwy 9L, trees beginning 197 ' from departure end of runway, 25' left of centerline up to 55' AGL/79' MSL. Pole 2277' from departure end of runway, 12 ' left of centerline 32 ' AGL/61' MSL. Trees beginning 956' from departure end of runway, 280' right of centerline65' AGL/90' MSL. Rwy 9C, bush 162 ' from departure end of runway, 276 ' left of centerline $8^{\prime}$ AGL/57' MSL. Tree 2305 ' from departure end of runway, 90 ' right of centerline up to 81'AGL/111'MSL. Rwy 9R, utilities beginning 430 ' from departure end of runway, 206 ' left of centerline up to $36^{\prime}$ AGL/55' MSL. Trees beginning $986^{\prime}$ from departure end of runway, 13 ' left of centerline up to 52 ' AGL/71'MSL. Post 1'from departure end of runway, 277 ' left of centerline 6' AGL/25' MSL. Utilities beginning 430 ' from departure end of runway, 109 ' right of centerline up to $36^{\prime}$ ' AGL/55' MSL. Tree 1078' from departure end of runway, 463 ' right of centerline 34 ' AGL/53' MSL. Rwy 27L, trees beginning 2733' from departure end of runway, 260' left of centerline up to 72 ' AGL/131' MSL. Fence 229 ' from departure end of runway, 16 ' right of centerline 12' AGL/51' MSL. Rwy 27C, tower2341'from departure end of runway, 544' left of centerline 128' AGL/185' MSL. Rod on obstruction light tower2,364' from departure end of runway, 551 ' left of centerline 125'AGL/184' MSL. Rwy 27R, tower3434' from departure end of runway, $1332^{\prime}$ left of centerline 115 ' AGL/171' MSL. Pole 1378 ' from departure end of runway, $790^{\prime}$ left of centerline 37 ' AGL/96' MSL. Trees beginning 1355 'from departure end of runway, 147 ' left of centerline up to 71'AGL/120' MSL. Antenna on building 130 ' from departure end of runway, 440 ' right of centerline 18' AGL/67' MSL. Trees beginning 1453' from departure end of runway, 179 ' right of centerline up to 63 ' AGL/112' MSL.

ORMOND BEACH, FL
ORMOND BEACH MUNI (OMN)
ORIG 09211 (FAA)
NOTE: Rwy 8, trees beginning 8 ' from DER, left and right of centerline, up to $100^{\prime}$ AGL/124' MSL. Rwy 26, trees beginning $20^{\prime}$ from DER, left and right of centerline, up to 100 ' AGL/129' MSL. Rwy 17, trees beginning $23^{\prime}$ from DER, left and right of centerline, up to $1^{\prime 0}$ ' AGL/129' MSL. Power poles beginning 540 ' from DER, 589 ' right of centerline, up to $36^{\prime}$ 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.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

PALATKA, FL<br>PALATKA MUNI-LT KAY LARKIN FIELD (28J) ORIG 09295 (FAA)<br>TAKE-OFF MINIMUMS: Rwy 9, 200-1 $1 / 4$ or std. w/ min. climb of 207 ' per NM to 300 , or alternatively, with standard take-off minimums and a normal $200^{\prime} / \mathrm{NM}$ climb gradient, take-off mustoccur no later than $1300^{\prime}$ prior to DER.<br>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 $100^{\prime}$ AGL/137' MSL. Tower 1.1 NM from DER, 1398 ' right of centerline, 164' AGL/199' MSL. Rwy 12, trees beginning at DER, 285 ' 'ight of centerline, up to $100^{\prime}$ AGL/131'MSL. Trees beginning 1337 ' from DER, $211^{\prime}$ left of centerline, up to 64' AGL/93' 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 center line, up to $100^{\prime}$ 'AGL/169' MSL.<br>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 $72^{\prime}$ AGL/ 101'MSL. Rwy 30, trees beginning 401 'from DER, 554 ' right of centerline, up to 100 ' AGL/129' MSL. Buildings beginning 1315 ' from DER, 408 ' right of centerline, up to $75^{\prime}$ 'AGL, $104^{\prime}$ MSL. Trees beginning 1387 ' from DER, 41 ' left of centerline, up to 100 ' AGL/ 129' 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 $1387^{\prime}$ ' from DER, 81 'right of centerline, up to 100 ' $\mathrm{AGL} / 119^{\prime}$ ' MSL . Buildings beginning 1454 ' from DER, 850 ' left of centerline, up to $75^{\prime}$ AGL/104' MSL.

PALM COAST, FL FLAGLER COUNTY (XFL) ORIG-A 10098 (FAA)

DEPARTURE PROCEDURE: Rwy 24, climb heading $241^{\circ}$ to 700 before turning Northbound. Rwy 29, climb heading $270^{\circ}$ to 1700 before proceeding on course.

PAHOKEE,FL
PALM BEACH COUNTY GLADES
NOTE: Rwy 17, tower 1600' from departure end of runway, 690 ' left of centerline, $127^{\prime}$ 'AGL/143' MSL.

PANAMA CITY, FL
NORTHWEST FLORIDA-PANAMA CITY INTL (ECP)
ORIG 10098 (FAA)
TAKE-OFFMINIMUMS: Rwys 3, 21, NAEnvironmental.
NOTE: Rwy 16, trees beginning $2644^{\prime}$ from DER, $382^{\prime}$ right of centerline, up to 82' AGL/131' MSL.

PANAMA CITY, FL (CON'T)
PANAMA CITY-BAY COUNTY INTL
TAKE-OFF MINIMUMS: Rwy 5, 400-2¼ or std. with a min. climb of 233 ' per NM to 500.
NOTE: Rwy 5, towers 1.8NM from departure end of runway, 3216 ' right of centerline, 319' AGL/338' MSL, trees beginning 296 ' from departure end of runway, 205' right of centerline, up to 61'AGL/74' MSL, trees beginning 225 ' from departure end of runway, 217 ' left of centerline, up to 69' AGL/79' MSL. Rwy 5, multiple trees beginning 1585 ' from departure end of runway, 232 ' left of centerline, up to $43^{\prime}$ AGL/64' MSL, trees beginning 731 ' from departure end of runway, 200' right of centerline, up to 65'AGL/75' MSL.Rwy 14, trees and buildings beginning 445 ' from departure end of runway, 29 ' right of centerline, up to 80 ' AGL/110' MSL. Trees beginning 13 ' from departure end of runway, 374 ' left of centerline, up to 87' AGL/107' MSL. Rwy 23, numerous trees beginning 55 ' from departure end of runway, 236 ' left of centerline, up to 65' AGL/72' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES $\nabla$

## PATRICK AFB (KCOF)

COCOA BEACH, FL .......................... 08017
Rwy 2, Diverse departure authorized. Cross DER at or above 10'AGL/18' MSL for Take-Off Minima Standard with climb gradient of $200 \mathrm{ft} / \mathrm{NM}$. Rwy 11, Diverse departure authorized. Take-Off Minima Standard with climb gradient of $200 \mathrm{ft} / \mathrm{NM}$. Rwy 20, Diverse departure authorized. Cross DER at or above $20^{\prime}$ AGL/25' MSL for Take-Off Minima Standard with climb gradient of $200 \mathrm{ft} /$ NM. Rwy 29, Diverse departure authorized. Take-Off Minima Standard with climb gradient of $200 \mathrm{ft} / \mathrm{NM}$. TAKE-OFF OBSTACLES: Rwy 2, Trees 150' AGL/ 170' MSL, 1 NM from DER, $1985^{\prime}$ left of centerline; Sign 26 ' AGL/33' MSL, 940 ' from DER, 648 ' left of centerline; Road + Truck 37 ' AGL/45' MSL, max $726^{\prime}$ from DER, 620' right of centerline; Flag Pole 85' AGL/96' MSL, 3325' from DER, 1273' left of centerline; Trees 50' AGL/76' MSL, max 1892' from DER, 994' left of centerline; Trees $75^{\prime}$ AGL/100' MSL, max 2872' from DER, 1254' left of centerline; Trees 70' AGL/77' MSL, max $2740^{\prime}$ 'from DER, 731'left of centerline; Antenna 79' AGL/104' MSL, 3066' from DER, 1290' left of centerline; Road + Truck 12' AGL/ 29' MSL, max 747 ' from DER, 574 ' right of centerline. Rwy 11, terrain 158 ' from DER, 381' right of centerline, up to $1^{\prime}$ ' MSL; terrain 0 ' inward of DER, 500 ' left of centerline, 16 ' MSL; wind sock 77 ' from DER, 227 ' right of centerline, 28' AGL/34' MSL; terrain starting 376' inward of DER, 841 ' right of centerline, up to 28 ' MSL; road + truck starting $719^{\prime}$ from DER, 438 ' left of centerline, up to $35^{\prime}$ AGL/49' MSL; road + truck starting 1131 ' from DER, 240 ' right of centerline, up to 35 ' AGL/ 49 ' MSL; sailboard mast 914 ' from DER, 880 ' left of centerline, up to 0'AGL/21' MSL. Rwy 20, Trees 150' AGL/170' MSL, 1 NM from DER, 1801 ' and 1549 ' left of centerline; Trees $40^{\prime}$ AGL/65' MSL, max $2526^{\prime}$ from DER, 452' left of centerline; Trees 40' AGL/65' MSL, 2465' from DER, 620' left of centerline; Trees 40' AGL/100' MSL, 3503 ' from DER, 425 ' left of centerline. Rwy 29, terrain $86^{\prime}$ from DER, $326^{\prime}$ ' left of centerline, $13^{\prime}$ MSL; terrain starting 0 ' from DER, out to 353 ' right of centerline, up to $16^{\prime}$ MSL; road + truck starting $435^{\prime}$ from DER, out to 310' right of centerline, up to $15^{\prime}$ AGL/18'MSL; shrubs starting 380 ' from DER, $350^{\prime}$ ' left of centerline, 60 ' AGL/65' MSL; bird cannon \#22 88' from DER, 455' right of centerline, 5 ' AGL/9' MSL; fiber optic box\#1 168 ' from DER, 133' left of centerline, 0' AGL 10 ' MSL; fiber optic box \#1 139' from DER, 460' right of centerline, 20' AGL/29' MSL; sailboat mast 1583 ' from DER, 1221 ' right of centerline, 0 ' AGL/ $43^{\prime}$ MSL; patrol boat starting 2 ' from DER, $775^{\prime}$ left of centerline, up to 0 ' AGL/10' MSL; sailboat mast starting 786 ' from DER, 888 ' left of centerline, $0^{\prime}$ AGL/43' MSL.

## PENSACOLA, FL

PENSACOLA RGNL
DEPARTURE PROCEDURE: Rwy 26, climb runway heading to 800 before turning south.

## PERRY,FL

PERRY-FOLEY
DEPARTURE PROCEDURE: Rwys 6,12,30,36, climb on runway heading to 800 before turning.

PLANT CITY, FL
PLANT CITY (PCM)
ORIG 09127 (FAA)
NOTE: Rwy 10, trees beginning $264^{\prime}$ from DER, 561' left of centerline, up to $1^{\prime 0}{ }^{\prime}$ AGL/229' MSL. Trees beginning 490 ' from DER, 13 ' right of centerline, up to $100^{\prime}$ AGL/239' MSL. Rwy 28, trees beginning 50 ' from DER, 278 ' right of centerline, up to $100^{\prime}$ AGL/254' MSL. Trees beginning 515 ' from DER, 15 ' left of centerline, up to $100^{\prime}$ 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 $15^{\prime}$ AGL/169' MSL.

## POMPANO BEACH, FL

POMPANO BEACH AIRPARK
TAKE-OFF MINIMUMS: Rwy 10, 300-1 $1 / 4$ or std. $\mathbf{w} / \mathrm{min}$. climb of 261' per NM to 300. Rwy 15, 400-2 or std. w/ min. climb of 424' per NM to 500. Rwy 28,300-1. DEPARTURE PROCEDURE: Rwy 10, climb heading $101^{\circ}$ to 500 before proceeding on course. Rwy 15, climb heading $146^{\circ}$ to 500 before proceeding on course.
NOTE: Rwy 6, multiple trees beginning 102' from departure end of runway, 233 ' right of centerline, up to $70^{\prime}$ AGL/84' MSL. Multiple trees beginning 298 ' from departure end of runway, $26^{\prime}$ left of centerline, up to 79 ' AGL/88' MSL. Rwy 10, obstruction light pole 154' from departure end of runway, 132 ' left of centerline, $7^{\prime}$ AGL/ 18 ' MSL. Multiple trees beginning 427 ' from departure end of runway, $12^{\prime}$ left of centerline, up to $48^{\prime}$ AGL/62' MSL. Pole 670' from departure end of runway, 23 ' left of centerline, $22^{\prime}$ AGL/33' MSL. Multiple trees beginning 711 'from departureend of runway, 67 ' right of centerline, up to $49^{\prime}$ AGL/63' MSL. Building $760^{\prime}$ ' from departure end of runway, $343^{\prime}$ right of centerline, $29^{\prime}$ AGL/40' MSL. Rod on light pole, 891 ' from departure end of runway, $733^{\prime}$ right of centerline, $41^{\prime}$ AGL/52' MSL. Multiple light poles beginning 1264 ' from departure end of runway, 417 ' right of centerline, up to $50^{\prime}$ AGL/59' MSL. Multiple light poles beginning 1340' from departure end of runway, 194 ' left of centerline, up to 50 ' AGL/59' MSL. Multiple flag poles beginning 1447 ' from departure end of runway, 167 ' left of centerline, up to $50^{\prime}$ AGL/59' MSL. Building $1648^{\prime}$ from departure end of runway, 418 ' right of centerline, $43^{\prime}$ AGL/52' MSL. Antenna on building 2404' from departure end of runway, 287 ' right of centerline, 63 ' AGL/72' MSL. Antenna on building 5670' from departure end of runway, 604 ' right of centerline, 181' AGL/190' MSL. Multiple buildings 1 NM from departure end of runway, $888^{\prime}$ left of centerline, 201' AGL/210' MSL. Rwy 15, building 503' from departure end of runway, 569 ' left of centerline, $41^{\prime}$ AGL/52' MSL. Multiple trees beginning 523 ' from departure end of runway, 152 ' left of centerline, up to 53' AGL/62' MSL. Multiple trees beginning 749 ' from departure end of runway, 190 ' right of centerline, up to 48 ' AGL/57' MSL. Rod on light pole 871' from departure end of runway, 387 ' left of centerline, $41^{\prime}$ AGL/52' MSL. Light pole 1006' from departure end of runway, 453' left of centerline, $42^{\prime}$ AGL/51' MSL. Buildings 1.1 NM from departure end of runway, 1259 ' left of centerline, 300' AGL/310' MSL. Antenna on building 1.1 NM from departure end of runway, 1131' left of centerline, 277' AGL/282' MSL. Building 1.7 NM from departure end of runway, $1385^{\prime}$ right of centerline, $255^{\prime}$ AGL/265' MSL.

## TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTUREPROCEDURES $\nabla$

POMPANO BEACH AIRPARK (CON'T)
Rwy 24, multiple trees beginning 191'from departure end of runway, 24 ' right of centerline, up to 54' AGL/73' MSL. Multiple trees 423 ' from departure end of runway, 3 ' left of centerline, up to 91 ' AGL/110' MSL. Tank 630 ' from departure end of runway, 600 ' right of centerline, 61'AGL/ 80 ' MSL. Rod on building 724 ' from departure end of runway, 418 ' right of centerline, $41^{\prime}$ AGL/60' MSL. Obstruction light on light pole 916 ' from departure end of runway, 66 ' right of centerline, 30' AGL/49' MSL. Rod on obstruction light tank 968 ' from departure end of runway, 712 ' right of centerline, 54 ' AGL/73' MSL.
Rwy 28, multiple trees beginning 358 ' from departure end of runway, $140^{\prime}$ left of centerline, up to $35^{\prime}$ AGL/54' MSL. Light pole $722^{\prime}$ ' from departure end of runway, 389 ' left of centerline, 28 ' AGL/47' MSL. Rod on building 777 ' from departure end of runway, $429^{\prime}$ left of centerline, $41^{\prime}$ AGL/ 60 ' MSL. Rod on building 869 ' from departure end of runway, 454 ' left of centerline, 42 ' AGL/61' MSL. Multiple trees 1001' from departure end of runway, 238 ' right of centerline, up to 43 ' AGL/62' MSL. Tank 1177 ' from departure end of runway, $422^{\prime}$ ' left of centerline, $45^{\prime}$ AGL/ 64' MSL. Pole 1781 'from departure end of runway, 33 ' left of centerline, $45^{\prime}$ ' AGL/64' MSL. Tower2650' from departure end of runway, $1134^{\prime}$ right of centerline, 190' AGL/207' MSL. Rwy 33, multiple trees beginning 136' from departure end of runway, 157 ' left of centerline, upto 59 ' AGL/78' MSL. Antenna on building 529' from departure end of runway, $399^{\prime}$ left of centerline, 18' AGL/ 34 ' MSL. Multiple trees 702 ' from departure end of runway, 458 ' right of centerline, up to 37 ' $\mathrm{AGL} / 56$ ' MSL.

## PONCE, PR

MERCEDITA
TAKE-OFF MINIMUMS: Rwy 30,500-1 or std. with a min. climb of 510' per NM to 600.
DEPARTURE PROCEDURE: Rwy 12, climb to 2100 direct PSE VOR/DME and PSE VOR/DME R-121, then climbing rightturn direct PSE VOR/DME. Continue climb in holding pattern, hold SE, leftturns, $301^{\circ}$ inbound, until reaching enroute altitude. Rwy 30, immediate climbing left turn to 2100 direct PSE VOR/DME and PSE VOR/DME R-121, then climbing right turn direct PSE VOR/DME. Continue climb in holding pattern, hold SE, left turns, $301^{\circ}$ inbound, until reaching enroute altitude.

## PUNTA GORDA, FL

CHARLOTTE COUNTY (PGD)
AMDT 108157 (FAA)
TAKE-OFF MINIMUMS: Rwys 9, 27, NA-airport authority request.
NOTE: Rwy 4, multiple trees beginning 34 ' from departure end of runway, 292 ' right of centerline, up to 63 ' AGL/84' MSL. Rwy 15, multiple trees beginning 133 ' from departure end of runway, $449^{\prime}$ right of centerline, up to $84^{\prime}$ AGL/104' MSL. Multiple trees beginning 43 ' from departure end of runway, 129 ' left of centerline, up to 48' AGL/68' MSL. Rwy 22, multiple trees beginning 373' from departure end of runway, 390 ' right of centerline, up to 54 ' AGL/73' MSL. Rwy 33, tree 638 ' from departure end of runway, $618^{\prime}$ left of centerline, $38^{\prime}$ AGL/53' MSL.

## QUINCY, FL

QUINCY MUNI (2J9)
ORIG 09071 (FAA)
TAKE-OFF MINIMUMS: Rwy 32, 300-2 or std. w/min. climb of 217' per NM to 600, or alternatively, with standard takeoffminimums and a normal 200'/NMclimb gradient, takeoff must occur no later than 1700 ' prior to DER.
NOTE: Rwy 14, trees beginning abeam DER, 421' left of centerline, up to $100^{\prime}$ AGL/299' MSL. Vehicles on road abeam DER, $340^{\prime}$ left of centerline, $1^{\prime}$ '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, $15^{\prime}$ AGL/244' MSL. Trees beginning $910^{\prime}$ from DER, $722^{\prime}$ right of centerline, up to 100' AGL/329' MSL. Powerline beginning 1225 ' from DER, left and right of centerline, up to 79 ' $\mathrm{AGL} / 327^{\prime}$ MSL.

## ST. AUGUSTINE, FL

ST. AUGUSTINE
NOTE: Rwy 2, trees 1355 ' from departure end of runway, 314 ' right of centerline, 100' AGL/104' MSL. Rwy 20, aircraft on ramp abeam departure end of runway, 158' right of centerline, up to 32 ' AGL/41' MSL. Aircraft on taxiway 182 'from departure end of runway, on centerline, up to $32^{\prime}$ AGL/42' MSL. Buildings beginning 220 ' from departure end of runway, 402 ' right of centerline, up to $34^{\prime}$ AGL/44' MSL. Hangars beginning $174^{\prime}$ from departure end of runway, $180^{\prime}$ left of centerline, up to $16^{\prime}$ AGL/26' MSL. Vehicles on road and train on railroad beginning 419 ' from departure end of runway, 599 ' right of centerline, up to $23^{\prime}$ AGL/37' MSL. Numerous trees beginning 589 ' from departure end of runway, 652 ' right of centerline, up to 100 ' AGL/ 114 ' MSL. Numerous trees beginning 754 ' from departure end of runway, 586 ' left of centerline, up to 100' AGL/109' MSL. Rwy 24, hangars beginning abeam departure end of runway, 400 ' left of centerline, up to $1^{\prime}$ ' AGL/26' MSL. Aircraft on ramp 55 ' from departure end of runway, 119 'right of centerline up to 32 ' AGL/41' MSL. Buildings beginning 150 ' from departure end of runway, 191' right of centerline, up to 34 ' AGL/44' MSL. Vehicles on road and train on railroad beginning 571 'from departure end of runway, on centerline, up to $23^{\prime}$ AGL/37' MSL. Numerous trees beginning 742 ' from departure end of runway, left and right of centerline, up to $100^{\prime} \mathrm{AGL} / 114^{\prime} \mathrm{MSL}$. Rwy 31, numerous trees beginning 87 ' from departure end of runway, $418^{\prime}$ left of centerline, up to 89 ' AGL/98' MSL. Vehicles on road and train on railroad beginning at departure end of runway, 237' left of centerline, up to 23 ' AGL/37' MSL. Numerous trees beginning 242 ' from departure end of runway, $2^{\prime}$ right of centerline, up to $85^{\prime}$ AGL/99' MSL.

## ST.PETERSBURG, FL <br> ALBERTWHITTED

TAKE-OFF MINIMUMS: Rwy 36,300-1 or std. with a min. climb of 320 ' per NM until 500.
DEPARTURE PROCEDURE: Rwy 18,25, climb runway heading to 500 before turning right. Rwy 7,36, climb runway heading to 500 before turning left.
NOTE: Rwy 25, 70' MSL/63' AGL building 350 ' from departure end of runway, $375^{\prime}$ left of runway centerline.

TAKE-OFF MINIMUMS AND(OBSTACLE)DEPARTURE PROCEDURES

ST. PETERSBURG, FL (CON'T)<br>ST. PETERSBURG-CLEARWATER INTL (PIE) AMDT 108157 (FAA)<br>TAKE-OFF MINIMUMS: Rwys 17R, 35L, NA - VFR runway. Rwy 22, 200-11/4 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 departure end ofrunway.

DEPARTURE PROCEDURE: Rwy 9, climb heading $090^{\circ}$ to 500 before proceeding southbound.
NOTE: Rwy 4, trees beginning 175 ' from departure end of runway, 280 ' right of centerline, up to $72^{\prime}$ AGL/76' MSL. Bush 496' from departure end of runway, 259' right of centerline, $27^{\prime}$ AGL/31' MSL. Bush 511 'from departure end of runway, $327^{\prime}$ ' left of centerline, 17' AGL/21' MSL. Trees beginning 523 ' from departure end of runway, 226' left of centerline, up to $17^{\prime}$ AGL/21'MSL. Boats beginning 775 ' from departure end of runway, on centerline, up to 25 ' AGL/25' MSL. Rwy 9, trees beginning 352 ' from departure end of runway, $469^{\prime}$ right of centerline, up to $47{ }^{\prime}$ AGL/51'MSL. Trees beginning 1161 'from departure end of runway, 386 ' left of centerline, up to 40 ' AGL/ 44 ' MSL.
Rwy 17L, building 689' from departure end of runway, 418 ' right of centerline, $35^{\prime} \mathrm{AGL} / 44^{\prime} \mathrm{MSL}$. Building 833 ' from departure end of runway, $439^{\prime}$ right of centerline, 35 ' AGL/ 44 ' MSL. Signs beginning 909 ' from departure end of runway, 98 ' right of centerline, up to $49^{\prime}$ AGL/58' MSL. Poles beginning 970 ' from departure end of runway, 114 ' right of centerline, up to 49' AGL/58' MSL. Poles beginning 1015 ' from departure end of runway, 103 ' left of centerline, up to 38 ' AGL/47' MSL. Sign 1336 ' from departure end of runway, 198 ' left of centerline, $44^{\prime}$ AGL/ 53' MSL. Tree 2100' from departure end of runway, 996' right of centerline, $96^{\prime}$ AGL/ $105^{\prime}$ MSL. Antenna on hopper 2,583 ' from departure end of runway, 801 ' right of centerline, 80' AGL/89' MSL. Rwy 22, trees 1007' from departure end of runway, 109 ' left of centerline, up to 65 ' AGL/74' MSL. Tree 1629' from departure end of runway, $88^{\prime}$ right of centerline, 61'AGL/70' MSL. Tower 5591' from departure end of runway, 266 ' right of centerline, 153 ' AGL/168' MSL. Rwy 27, poles beginning 188 ' from departure end of runway, 138 ' right of centerline, up to 66' AGL/75' MSL. Hangar lights 552 ' from departure end of runway, 450 ' right of centerline, $25^{\prime}$ ' $\mathrm{AGL} / 34$ ' MSL. Poles beginning 605 ' from departure end of runway, 179 ' left of centerline, up to $40^{\prime}$ AGL/49' MSL. Trees beginning 1540' from departure end of runway, 224 ' left of centerline, upto 57' AGL/66' MSL. Antenna on tank $2188^{\prime}$ from departure end of runway, $712^{\prime}$ ' left of centerline, 71 'AGL/80' MSL.

## SAN JUAN, PR

FERNANDO LUIS RIBAS DOMINICCI
TAKE-OFF 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 $177^{\prime}$ AGL left and right of centerline within 5500 ' of departure end. Rwy 27, ship maneuvering area within 5200' of departure end of runway.

## SAN JUAN, PR (CON'T)

LUIS MUNOZ MARIN INTL (SJU)
AMDT 709239 (FAA)
DEPARTURE PROCEDURE: Rwy 8, climb on a heading between $109^{\circ} \mathrm{CCW}$ to $258^{\circ}$ from DER, or minimum climb of 381 ' per NM to 5000 for all other courses. Rwy 10, climb on a heading between $91^{\circ}$ CCW to $281^{\circ}$ from DER, or minimum climb of 390' per NM to 4900 for all other courses. Rwy 26, climb on a heading between $255^{\circ} \mathrm{CW}$ to $078^{\circ}$ from DER, or minimum climb of 311 ' per NM to 4800 for all other courses. Rwy 28, climb on a heading between $260^{\circ} \mathrm{CW}$ to $101^{\circ}$ 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 $1^{\prime} 8^{\prime}$ AGL/154' MSL. Sign and bushes beginning 381' from DER, $374^{\prime}$ ' left of centerline, up to $28^{\prime}$ AGL/35' MSL. Rwy 28, bush and trees beginning 159 ' from DER, $476^{\prime}$ left of centerline, up to $61^{\prime}$ AGL/71' MSL. Pole 438 ' from DER, 587 ' left of centerline, 31'AGL/38' MSL.

## $\nabla$ TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTUREPROCEDURES $\bar{\nabla}$

10098

SARASOTA(BRADENTON), FL<br>SARASOTA/BRADENTON INTL (SRQ)<br>AMDT 108269 (FAA)

NOTE: Rwy 4, multiple trees beginning 831' from departure end of runway, 91 'right of centerline, up to 57 ' AGL/87' MSL. Floodlight 521 'feetfrom departure end of runway, 274 ' right of centerline, 23 ' AGL/48' MSL. Floodlight 786 ' from departure end of runway, 152 ' right of centerline, $22^{\prime}$ ' AGL/47' MSL. Pole 989' from departure end of runway, 492 ' right of centerline, $35^{\prime}$ AGL/65' MSL . Vehicle on road 370 ' from departure end of runway, 261' right of centerline, 17' AGL/42' MSL. Multiple trees beginning 926 ' from departure end of runway, 54 ' left of centerline, up to 71 ' AGL/96' MSL. Building 200' from departure end of runway, 506 ' left of centerline, $33^{\prime}$ AGL/ 58 'MSL. Camera on pole 1012 ' from departure end of runway, 250 'left of centerline, 27 ' AGL/52' MSL. Rwy 14, multiple trees beginning 345 ' from departure end of runway, 277 'right of centerline, up to 69' AGL/94'MSL. Multiple trees beginning 119 ' from departure end of runway, 365 'left of centerline, up to 30 ' AGL/55' MSL. Railroad 431 ' from departure end of runway, 533 ' left of centerline, 24'AGL/44'MSL.
Rwy 22, tree 1383' from departure end of runway, 438 ' left of centerline, 53 ' AGL/73' MSL. Tree 1534 ' from departure end of runway, $338^{\prime}$ ' left of centerline,54'AGL/ 74'MSL. Lightpole 1157 ' from departure end of runway, 530 ' left of centerline, 42 ' AGL/62' MSL. Vent on building 1688 ' from departure end of runway, 61 'left of centerline, 55' AGL/75' MSL. Pole 1189' from departure end of runway, 349 'left of centerline, 41 'AGL/61'MSL. Sign 865 ' from departure end of runway, 162 ' left of centerline, 31'AGL/51'MSL. Light pole 881' from departure end of runway, $37^{\prime}$ 'left of centerline, $30^{\prime}$ ' $\mathrm{ALL} / 50^{\prime}$ MSL. Tree 1732 ' from departure end of runway, 51 ' right of centerline, $58^{\prime}$ AGL/78' MSL. Sign 592 ' from departure end of runway, 382 'right of centerline, $28^{\prime}$ AGL/48' MSL . Flood light 643 ' from departure end of runway, 319 ' right of centerline, $27^{\prime}$ 'AGL/47' MSL. Vehicle on road 527' from departure end of runway, 282 ' right of centerline, 17' AGL/37'MSL. Rwy 32, multiple trees beginning $606^{\prime}$ from departure end of runway, 2 ' right of centerline, up to 51' AGL/71' MSL. Multiple trees beginning 775' from departure end of runway, $113^{\prime}$ left of centerline, up to $68^{\prime}$ AGL/88' MSL. Wall 119' from departure end of runway, 465 ' left of centerline, 29' AGL/49' MSL. Pole 945' from departure end of runway, 531 'left of centerline, 41 'AGL/ 61'MSL. Antenna 732 ' from departure end of runway, $168^{\prime}$ left of centerline, $34^{\prime}$ AGL/54' MSL. Vehicle on road 675 ' from departure end of runway, 277 ' left of centerline, 17' AGL/51'MSL. Lightpole 837' from departure end of runway, $326^{\prime}$ ' left of centerline, $34^{\prime}$ 'AGL/54' MSL. Tower 5674 ' from departure end of runway, 1845 'left of centerline, 162' AGL/177' MSL.

## SEBRING, FL

SEBRING RGNL
NOTE: Rwy 14, trees 1716 ' from departure end of runway, 527 ' right of centerline, up to $100^{\prime}$ AGL/150' MSL. Rwy 18, trees beginning 11 'from departure end of runway, $216^{\prime}$ right of centerline, up to 76 ' AGL/132' MSL. Rwy 32 , trees 988 ' from departure end of runway, 23 ' right of centerline, up to $100^{\prime}$ AGL/146' MSL. Railroad $500^{\prime}$ ' from departure end of runway, on centerline, up to $23^{\prime}$ AGL/77' MSL. Rwy 36 , trees beginning 107 ' from departure end of runway, 157 ' right of centerline, up to 57 ' AGL/107' MSL. Trees beginning 107 ' from departure end of runway, 141 'left of centerline, up to 51 'AGL/101'MSL.

## STUART, FL

WITHAM FIELD (SUA)
AMDT 209239 (FAA)
DEPARTURE PROCEDURE: Rwy 25, climb heading $290^{\circ}$ to 1700 before proceeding on course. Rwy 30, climb heading $295^{\circ}$ 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 $268^{\prime}$ from DER, 287 ' right of centerline, up to $100^{\prime}$ 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 $92^{\prime}$ AGL/106' MSL. Rwy 25, storage racks and trees beginning 176 ' from DER, 17 ' left of centerline, up to 36 ' AGL/55' 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 $72^{\prime}$ 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 $1^{\prime 0}$ ' AGL/109' MSL. Trees beginning 281 ' from DER, 385 ' right of centerline, up to $100^{\prime}$ AGL/ 109' MSL.

## TALLAHASSEE, FL

TALLAHASSEE RGNL
NOTE: Rwy 9, trees beginning 1068' from departure end of runway, $670^{\prime}$ left of centerline, up to $29^{\prime}$ AGL/95' MSL. Trees beginning 1299 ' from departure end of runway, 84 ' right of centerline, up to 66' AGL/126' MSL. Lighted hopper 2416 ' from departure end of runway, 965 ' right of centerline, 63' AGL/113' MSL. Rwy 27, trees beginning 2708 ' from departure end of runway, 34 ' left of centerline, upto 70 ' AGL/169' MSL. Trees beginning 2782 ' from departure end of runway, 190 ' right of centerline, up to 58 ' AGL/149' MSL. Rwy 36, tee beginning 1211 ' from departure end of runway, $426^{\prime}$ left of centerline, up to $56^{\prime}$ AGL/140' MSL. Trees beginning 1286 ' from departure end of runway, 559 ' right of centerline, up to 61 'AGL/ 140' MSL.

TALLAHASSEE/HAVANA, FL
TALLAHASSEE COMMERCIAL (68J) ORIG 08185 (FAA)

TAKE-OFF MINIMUMS: Rwy 16, 300-1 $1 / 2$ or std. w/a min. climb gradient of 344 ' per NM to 500.
NOTE: Rwy 16, road beginning 0 ' from departure end of runway, 136 ' right of centerline, up to 15 ' AGL/164' MSL. Trees beginning 0 ' from departure end of runway, 149 ' right of centerline, up to $100^{\prime}$ AGL/269' MSL. Trees beginning 0 ' from departure end of runway, 154 ' left of centerline, up to $100^{\prime}$ AGL/259' MSL. Rwy 34, trees beginning 0 ' from departure end of runway, 41 ' left of centerline, up to 100 ' AGL/269' MSL. Trees beginning 0 ' from departure end of runway, 45 ' right of centerline, up to 100 ' $\mathrm{AGL} / 259^{\prime}$ MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE)DEPARTURE PROCEDURES

TAMPA, FL
PETER O KNIGHT (TPF)
AMDT 509211 (FAA)
TAKE-OFF MINIMUMS: Rwy 3,300-11/4 or std. w/min. climb of 497' per NM to 850 or $900-21 / 2$ for climb in visual conditions. Rwys 17, 21, 300-11/2. Rwy 35, 700-21/2.
DEPARTURE PROCEDURE: Rwy 3, for climb in visual conditions: cross Peter O Knight Field at or above 900 MSLbefore proceeding on course.
NOTE: Rwy 3, ship 296' from DER, 3 ' right of centerline, 177' AGL/185' MSL. Ship 1.0 NM from DER, 900 ' right of centerline, 177 ' AGL/185' MSL. Towers $1366^{\prime}$ from DER, 279 ' left of centerline, up to 110' AGL/117' MSL. Tanks 1716' from DER, 19 ' right of centerline, up to 70' AGL/77' MSL. Crane 2684 ' from DER, 1047 ' left of centerline, 247' AGL/253' MSL. Rwy 17, ship 389' from DER, 460 ' left of centerline, 177' AGL/185' MSL. Ship 1.2 NM from DER, on centerline, $177^{\prime}$ AGL/185' MSL. Rwy 21, ship 1967 ' from DER, 72 ' left of centerline, 177' AGL/185' MSL. Ship 1.2 NM from DER, on centerline, 177' AGL/185' MSL. Rwy 35, multiple buildings beginning 1.2 NM from DER, $127^{\prime}$ left of centerline, up to 610' AGL/625' MSL. Ship 714' from DER, 48' right of centerline, 177' AGL/185' MSL. Tower3032' from DER, 1117 ' right of centerline, $128^{\prime}$ AGL/139' MSL. Building 1.4 NM from DER, 994 ' right of centerline, 330' AGL/ 337'MSL.

TAMPAEXECUTIVE
TAKE-OFF MINIMUMS: Rwy 18,500-3 or std. with a min. climb of 220' per NM to 600.

TAMPAINTL(TPA)
AMDT 810098 (FAA)
DEPARTURE PROCEDURE: Rwy 9, climb heading 094 ${ }^{\circ}$ to 800 before turning right.
NOTE: Rwy 9, multiple trees 1281' from DER, 1 ' right of centerline, up to 106 ' AGL/118' MSL. Tower 4214' from DER 265 ' right of centerline, $105^{\prime}$ AGL/145' MSL. Multiple trees beginning 134 ' from DER, $73^{\prime}$ ' left of centerline, up to 103 ' AGL/114' MSL. Rwy 18L, antenna on obstruction light building, 3279 ' from DER, $1160^{\prime}$ ' left of centerline, 145 ' AGL/155' MSL. Building 4755 ' from DER, 1522 ' left of centerline, 146 ' AGL/155' MSL.
Rwy 18R, trees beginning 482 ' from DER, 578 ' right of centerline, up to $33^{\prime}$ AGL/37' MSL. Rwy 27, building and antenna beginning 4354 ' from DER, $1162^{\prime}$ left of centerline, up to 146 ' AGL/158' MSL. Multiple trees beginning 479 ' from DER, 419 ' right of centerline, up to 53 ' AGL/67' MSL. Multiple trees beginning 128 ' from DER, $3^{\prime}$ left of centerline, up to $54^{\prime}$ AGL/68' MSL. Pole $474^{\prime}$ from DER, $436^{\prime}$ left of centerline, up to $30^{\prime}$ 'AGL/35' MSL. Rwy 36L, tree 752' from DER, 596' right of centerline, 42 ' AGL/66' MSL.

## TITUSVILLE, FL

ARTHUR DUNN AIR PARK (X21)
AMDT 1A 08269 (FAA)
TAKE-OFF MINIMUMS: Rwy 15, 700-2 or std. with a min. climb of 350 ' per mile to 700 .
NOTE: Multiple towers beginning 1.52 NM from departure end of runway, 1140 ' left of centerline, up to 399' AGL/419' MSL.

## SPACE COAST RGNL

TAKE-OFF MINIMUMS: NOTE: Rwy 36,60' AGL trees 254 ' from departure end of runway, 526 ' right of centerline.

## TYNDALL AFB (KPAM)

PANAMA CITY, FL. . . . . . . . . . . . . . . 06327
TAKE-OFF OBSTACLES: Rwy 13L, 29' MSL/13'AGL vehicle on road 127 ' from DER, 533 ' right of centerline. $39^{\prime} \mathrm{MSL} / 20^{\prime} \mathrm{AGL}$ aircraft $6^{\prime}$ ' inward of DER, 301' right of centerline. Rwy 31L, 27' MSL/11' AGL building 188 ' from DER, $519^{\prime}$ ' left of centerline. 81' MSL/66' AGL aircraft 4' inward of DER, 302' left of centerline. Rwy 31R, 29' MSL/13' AGL vehicle 2' inward of DER, $458^{\prime}$ right of centerline. 29' $\mathrm{MSL} / 13^{\prime}$ AGL vehicle 3 ' inward of DER, 383 ' left of centerline.

## VENICE, FL

VENICE MUNI (VNC)
AMDT 108269 (FAA)
DEPARTURE PROCEDURE: Rwy 4, climb heading $047^{\circ}$ to 700 before turning right. Rwy 31, climb heading $303^{\circ}$ to 1500 before proceeding on course.
NOTE: Rwy 4, trees beginning 511' from departure end of runway, 586 ' right of centerline, up to $40^{\prime}$ AGL/54' MSL. Poles/buildings beginning 526 ' from departure end of runway, 578' left of centerline, up to 50' AGL/64' MSL. Rwy 13, trees beginning 861 'from departure end of runway, 419 ' left of centerline, up to 40 ' AGL/54' MSL. Trees beginning 965 ' from departure end of runway, $610^{\prime}$ right of centerline, up to $40^{\prime}$ AGL/49' MSL. Rwy 22, building 805 ' from departure end of runway, 327 ' left of centerline, 30' AGL/39' MSL. Rwy 31, trees beginning 691' from departure end of runway, 617' left of centerline, upto $40^{\prime}$ AGL/54' MSL. Poles/buildings beginning $853^{\prime}$ from departure end of runway, 693 ' right of centerline, up to 50' AGL/69' MSL.

TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES $\bar{V}$

VERO BEACH, FL
VERO BEACH MUNI
NOTE: Rwy 4, multiple trees beginning 813' from departure end of runway, 178 ' left of centerline, up to $100^{\prime}$ AGL/120' MSL. Multiple trees beginning 3003' from departure end of runway, 93 ' right of centerline, up to 83' AGL/100' MSL. Rwy 11L, multiple trees beginning 171 ' from departure end of runway, 455 ' right of centerline, up to 57' AGL/74' MSL. Multiple trees and lights beginning 547 ' from departure end of runway, 259' left of centerline, up to 39 ' AGL/56' MSL. Storage tank 1813 ' from departure end of runway, 763 ' right of centerline, 45' AGL/74' MSL. Rwy 11R, pole 709' from departure end of runway, $522^{\prime}$ left of centerline, $28^{\prime}$ AGL/ 45 ' MSL. Spire 1622 ' from departure end of runway, 574 ' right of centerline, 44' AGL/61' MSL. Rwy 22, vehicles on road abeam departure end of runway, 421' left of centerline, up to $15^{\prime}$ AGL/39' MSL. Vehicles on road 408 ' from departure end of runway, left and right of centerline, up to $15^{\prime}$ AGL/39' MSL. Multiple trees beginning 1404 ' from departure end of runway, 272 ' left of centerline, up to $64^{\prime}$ AGL/84' MSL. Multiple trees beginning 1989 ' from departureend of runway, 126 ' right of centerline, up to $68^{\prime}$ AGL/88' MSL. Rwy 29L, multiple trees beginning 1206 ' from departure end of runway, 46 ' right of centerline, up to $100^{\prime}$ AGL/120' MSL. Multiple trees beginning 1575 ' from departure end of runway, $135^{\prime}$ left of centerline, up to 61 'AGL/81' MSL. Rwy 29R, multiple antennas and trees beginning $1656^{\prime}$ from departure end of runway, 111 'right of centerline, up to $70^{\prime}$ AGL/90' MSL. Multiple trees beginning $1782^{\prime}$ from departure end of runway, 247 ' left of centerline, up to 65 ' AGL/85' MSL.

## WAUCHULA, FL

WAUCHULA MUNI
NOTE: Rwy 18, trees 450 ' from departure endof runway, 130 ' left of centerline, $22^{\prime}$ AGL/126' MSL. Rwy 36, trees 183 ' from departure end of runway, 350 ' left of centerline, 49' AGL/145' MSL. Powerline 582' from departure end of runway, on centerline, 51 'AGL/140' MSL. Tree, 323' from departure end of runway, 490 ' left of centerline, 100' AGL/200' MSL. Tree 39' from departure end of runway, 486 ' right of centerline, 100 ' AGL/185' MSL.

WEST PALM BEACH, FL
NORTH PALM BEACH COUNTY GENERAL AVIATION (F45)
ORIG 09015 (FAA)
TAKE-OFF MINIMUMS: Rwys 8L, 26R, NA-turf runway.
NOTE: Rwy 8R, trees beginning 582 ' from departure end of runway, 47 ' right of centerline, up to 100' AGL/ $124^{\prime}$ MSL. Trees beginning 950 ' from departure end of runway, $56^{\prime}$ left of centerline, up to 100 ' AGL/124' MSL. Rwy 13, trees beginning at departure end of runway, 14 ' right of centerline, up to 100' AGL/124' MSL. Trees beginning $144^{\prime}$ from departure end of runway, 29 ' left of centerline, up to 100 ' AGL/124' MSL. Rwy 26L, trees 43 ' from departure end of runway, 418 ' left of centerline, up to 8' AGL/23' MSL. Rwy 31, trees beginning 87' from departure end of runway, 26 ' right of centerline, up to 68' AGL/83' MSL. Craft 114 ' from departure end of runway, 425 ' left of centerline, up to $20^{\prime}$ AGL/44 'MSL. Trees beginning 458 ' from departure end of runway, 91 'left of centerline, up to $100^{\prime}$ AGL/124' MSL.

## PALM BEACH COUNTY PARK

TAKE-OFF 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 $180^{\circ}$ before proceeding on course.
NOTE: Rwy 3, crane 1.25 NM from departure end of runway, $1660^{\prime}$ ' right of centerline, $260^{\prime}$ AGL/285' MSL. Rwy 33, crane 4700' from departure end of runway, on centerline, 220' AGL/234' MSL.

PALM BEACH INTL (PBI)
AMDT 309351 (FAA)
DEPARTURE PROCEDURE: Rwy 28L, climb heading $279^{\circ}$ to 1200 before turning left. Rwy 28R, climb heading $279^{\circ}$ 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, $45^{\prime}$ AGL/64' MSL. Rwy 14, transmission line tower, traffic signal, poles, and trees beginning $649^{\prime}$ from DER, 24 ' left of centerline, up to $71^{\prime}$ AGL/90' MSL. Vehicles on road, light poles, and trees beginning $168^{\prime}$ from DER, $76^{\prime}$ right of centerline, up to 87' AGL/106' MSL. Rwy 28R, light pole and trees beginning $1205^{\prime}$ from DER, $323^{\prime}$ left of centerline, up to 63 ' AGL/82' MSL. Sign, light pole, and trees beginning $1233^{\prime}$ from DER, $155^{\prime}$ right of centerline, up to $44^{\prime} \mathrm{AGL} / 63^{\prime}$ MSL. Rwy 32, trees beginning 1993 ' from DER, 444 ' left of centerline, up to $69^{\prime}$ AGL/88' MSL. Trees beginning $1108^{\prime}$ from DER, 548 ' right of centerline, up to 70 ' AGL/89' MSL.

WHITING FLD NAS-SOUTH (KNDZ)
MILTON, FL ........................................ 07354
TAKE-OFF OBSTACLES: Rwy 5, trees 809 ' from DER, 646 ' left of centerline, $40^{\prime}$ AGL/200' MSL. Rwy 32 , trees 435 ' from DER, 542 ' right of centerline, $62^{\prime}$ AGL/258' MSL.

WILLISTON, FL<br>WILLISTON MUNI<br>TAKE-OFF MINIMUMS: Rwy 5, 400-2½ or std. w/min. climb of 257' per NM to 600.<br>DEPARTURE PROCEDURE: Rwy 5, climb heading $049^{\circ}$ to 500 before proceeding on course. Rwy 14, climb heading $142^{\circ}$ to 600 before proceeding on course. Rwy 23, climb on a heading between $253^{\circ}$ clockwise $048^{\circ}$ from departure end of runway, or minimum climb of $248^{\prime}$ per NM to 1900 for all other courses.<br>NOTE: Rwy 5, brush and multiple trees beginning 38 from departure end of runway, 54 ' leftof centerline, up to 100 ' AGL/179' MSL. Tower 2 NM from departure end of runway, $2343^{\prime}$ left of centerline, 324' AGL/399' MSL. Brush and multiple trees beginning 49 ' from departure end of runway, 234 ' right of centerline, up to 100 ' AGL/ 179 ' MSL. Rwy 14, multiple trees 799 ' from departure end of runway, on centerline, up to 30' AGL/99' MSL. Multiple trees beginning 1143 ' from departure end of runway, 381 'left of centerline, up to 100 ' AGL/174' MSL. Road and multiple trees beginning 13 ' from departure end of runway, 208' right of centerline, up to 100' AGL/ 179' MSL. Rwy 23, multiple trees beginning 445 ' from departure end of runway, 8 ' left of centerline, up to 100' AGL/184' MSL. Multiple trees beginning 430 ' from departure end of runway, 403' right of centerline, up to 100' AGI/189' MSL. Rwy 32, multiple trees 799 ' from departure end of runway, on centerline, upto 50' AGL/ 124 ' MSL. Multiple trees beginning 719 ' from departure end of runway, 288' left of centerline, up to 100' AGL/194' MSL. Multiple trees beginning 497' from departure end of runway, 442 ' right of centerline, up to 100 ' AGL/194' MSL.

## WINTER HAVEN, FL

WINTER HAVEN'S GILBERT
DEPARTURE PROCEDURE: Rwy 23, climb runway heading to 1000 before turning south.

ZEPHYRHILLS, FL

ZEPHYRHILLS MUNI
TAKE-OFF MINIMUMS: Rwy 4, 400-2 or std. with a min. climb of 280 ' per NM to 400. DEPARTURE PROCEDURE: Rwy 22, climb runway heading to 500 before right turn.
NOTE: Rwy 4, tower 1.6 NM from departure end of runway, 2675 ' right of centerline, $260^{\prime}$ AGL/346' MSL.

AGUADILLA, PUERTO RICO

| APP CRS | Rwy Idg | 11302 |
| :---: | :--- | ---: |
| TDZE | 237 |  |
| $\mathbf{0 8 2}^{\circ}$ | Apt Elev | $\mathbf{2 3 7}$ |

## RNAV (GPS) RWY 8

 AGUADILLA / RAFAEL HERNANDEZ (BQN) (TJBQ)Obtain local altimeter setting on CTAF; when not received procedure T not authorized.

Circling not authorized south of Rwy 8-26. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 1000, then climbing left turn to 2500 direct ODEZZ WP and hold.


| VORTAC BQN | APP CRS | Rwy Idg | 11302 |
| :---: | ---: | :--- | ---: |
| 113.5 | $085^{\circ}$ | TDZE | 237 |
| Chan 82 |  | Apt Elev | 237 |

Obtain local altimeter setting on CTAF; when

- not received procedure not authorized.

Circling not authorized south of Rwy 8-26.

VOR/DME RWY 8
AGUADILLA / RAFAEL HERNANDEZ (BQN) (TJBQ)


| VORTAC BUN | APP CR | Rwy Id | 11302 |
| :---: | :---: | :--- | ---: |
| 113.5 | $085^{\circ}$ | aDZE | 237 |
| Chan 82 |  | Apt Elev | $\mathbf{2 3 7}$ |

Obtain local altimeter setting on CTAF; when

- not received procedure not authorized.

Circling not authorized south of Rwy 8-26.

| ATIS | SAN JUAN CENTER | AGUADILLA TOWER | GAD CON | CLNC DEL | UNICOM |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 118.325 | 124.35 | 269.35 | 124.95 (CTAF) 0 | 120.875 | 124.35269 .35 |



| APP CRS | Rwy Idg | 3405 |
| :---: | :--- | ---: |
| $090^{\circ}$ | TDZE | 47 |
|  | Apt Elev | $\mathbf{4 9}$ |

RNAV (GPS) RWY 9 ISLA DE VIEQUES/ANTONIO RIVERA RODRIGUEZ (VQS)(TJVQ)
$\Delta$

Use Luis Munoz Marin Intl altimeter setting. DME/DME RNP-0.3 NA.
Circling NA south of Rwy 9-27.

MISSED APPROACH: Climbing left turn to 3000 direct MIXEE and hold.

SAN JUAN CERAP APP CON
128.65279 .6
$\Lambda^{3637}$

$$
.2215
$$

${ }^{2819 \pm} \AA \quad{ }_{3524}$

UNICOM
123.0 (CTAF)


NOTE: GPS Required. NOTE: RNAV 1.


## TAKE-OFF MINIMUMS:

RWY 9: 500-2 $1 / 4$ with minimum climb of 260 per NM to 900.
RWY 27: 500-2 $1 / 2$ with minimum climb of $410^{\prime}$ per NM to 1600 or standard with minimum climb of $570^{\prime}$ per NM to 1300 .

## TAKE-OFF OBSTACLE NOTES:

Rwy 9: Vehicles on roadway beginning $26^{\prime}$ from DER, left and right of centerline, up to $15^{\prime} \mathrm{AGL} / 80^{\prime} \mathrm{MSL}$. Trees beginning $70^{\prime}$ from DER, $504^{\prime}$ right of centerline, up to $100^{\prime}$ AGL/ $165^{\prime}$ MSL. Trees beginning 579' from DER, on centerline, up to $100^{\prime} \mathrm{AGL} / 165^{\prime} \mathrm{MSL}$. Trees beginning $1750^{\prime}$ from DER, $956^{\prime}$ right of centerline up to $100^{\prime}$ AGL/493' MSL.
Rwy 27: Trees beginning $15^{\prime}$ from DER, $225^{\prime}$ left of centerline, up to $100^{\prime}$ AGL/ $165^{\prime}$ MSL. Trees beginning $16^{\prime}$ from DER, $274^{\prime}$ right of centerline, up to $100^{\prime} \mathrm{AGL} /$ 165' MSL. Trees beginning 186' from DER, left and right of centerline, up to $100^{\prime}$ AGL/165' MSL. Trees beginning 1206' from DER, 794' left of centerline, up to $100^{\prime}$ AGL/493' MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 9: Climb heading $090^{\circ}$ to 2200, then right turn direct HAKVO and right turn via track $295^{\circ}$ to VEDAS, Thence. . . .

TAKE-OFF RWY 27: Climb heading $270^{\circ}$ to 549 , then direct HOMAG and via track $194^{\circ}$ to VEDAS, Thence. . . .

CLNC DEL
121.7 (SAN JUAN)

CTAF/UNICOM
122.8


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

RWY 9-27
S85, D108, DT170


| VOR/DME MAZ | APP CRS | Rwy Idg | 4998 |
| :---: | :---: | :--- | ---: |
| 110.6 | TDZE | $\mathbf{2 8}$ |  |
| Chan 43 |  | $\mathbf{0 8 1}$ | Apt Elev |

T When Class E airspace not in effect, except for operators with approved weather reporting

MISSED APPROACH: Climb to 2000 via MAZ R-081 then climbing left turn to 2500 direct MAZ VOR/DME and hold.

VOR or GPS RWY 9 MAYAGUEZ / EUGENIO MARIA DE HOSTOS (MAZ)(TJMZ)
service, procedure not authorized.
$\stackrel{\rightharpoonup}{\Delta}$ SAN JUAN CENTER 118.75269 .0

CLNC DEL
121.7

UNICOM
122.8 (CTAF) 1


| APP CRS | Rwy Idg | $\mathbf{5 4 8 8}$ |
| :---: | :--- | ---: |
|  | TDZE | $\mathbf{2 6}$ |
|  | Apt Elev | $\mathbf{2 6}$ |

$\nabla$ DME/DME RNP-0.3 NA. Obtain local altimeter setting on CTAF; A NA
when not received use Luis Munoz Marin Intl altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing right turn to 3000 direct SEPBO and hold.


| APP CRS | Rwy Idg | 6677 |
| :---: | :--- | ---: |
|  | TDZE | 27 |
|  | Apt Elev | 29 |

RNAV (GPS) RWY 30
V DME/DME RNP-0. 3 NA. Visibility reduction by helicopters NA. $\Delta \mathrm{NA}$ Obtain local altimeter setting on CTAF; when not received, use Luis Munoz Marin Intl altimeter setting.

MISSED APPROACH: Climbing left turn to 2900 direct CULEB and hold.



| VOR/DME PSE | APP CRS | Rwy Idg | 6677 |
| :---: | :---: | :--- | ---: |
| 109.0 |  | TDZE | 28 |
| Chan 27 |  | Apt Elev | 29 |

## VOR RWY 30 PONCE/MERCEDITA (PSE) (TJPS)

T Obtain local altimeter setting on CTAF; when not received: 1. Use Luis Munoz Marin Intl altimeter setting. 2. S-30 minimums not authorized; increase all Circling MDAs to 1340 and visibilities to 3 miles.

MISSED APPROACH: Climbing left turn to 2100 direct PSE VOR/DME and hold.


AIRPORT DIAGRAM
SAN JUAN／FERNANDO LUIS RIBAS DOMINICCI（SIG）（TJIG） AIROALAL－1019（FAA）SAN JUAN，PUERTO RICO


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

| APP CRS | Rwy Idg | $\mathbf{5 3 1 7}$ |
| :---: | :--- | ---: |
|  | TDZE | 10 |
|  | Apt Elev | $\mathbf{1 0}$ |

RNAV (GPS) RWY 9
SAN JUAN/FERNANDO LUIS RIBAS DOMINICCI (SIG)(TJIG)

| $\begin{aligned} & \boldsymbol{\nabla} \\ & \mathbf{A} N A \end{aligned}$ | Use Luis Munoz Marin Intl altimeter setting. GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA. | MISSED APPROACH: Climbing left turn to 3000 direct CORAF WP and hold. |  |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { ATIS } \\ 120.4 \end{gathered}$ | SAN JUAN APP CON <br> 119.4269 .2 (WEST \& SW) 120.9290 .2 (NORTH \& EAST) | ISLA GRANDE TOWERネ 135.875(CTAF) 298.85 | GND CON 121.7 |



TAKE-OFF MINIMUMS:
RWY 8, 10, 26, 28: STANDARD.
NOTE: GPS Required.
NOTE: For Turbojet aircraft only.
NOTE: RNAV 1.
NOTE: RADAR Required.
TAKE-OFF OBSTACLE NOTES:
ACONY
Rwy 8: Trees beginning 21' from DER, left and right of centerline, up to $84^{\prime} \mathrm{AGL} / 107^{\prime} \mathrm{MSL}$.
Rwy 10: Trees beginning $157^{\prime}$ from DER, left and right of centerline, up to $54^{\prime}$ AGL/61' MSL.
Rwy 26: Bldg and trees beginning $8^{\prime}$ from DER, 339' right of centerline, up to $138^{\prime}$ AGL/154' MSL. Sign and bushes beginning $381^{\prime}$ from DER, $374^{\prime}$ left of centerline, up to $28^{\prime} \mathrm{AGL} / 35^{\prime} \mathrm{MSL}$.
Rwy 28: Bush and trees beginning $159^{\prime}$ from DER, 476' left of centerline, up to 61' AGL/71' MSL. Pole 438' from DER, $587^{\prime}$ left of centerline, $31^{\prime} \mathrm{AGL} / 38^{\prime} \mathrm{MSL}$.

NOTE: Chart not to scale.


## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb heading $078^{\circ}$ to 520 , then climbing left turn heading $350^{\circ}$ or as assigned by ATC, expect vectors to ACONY, then via $327^{\circ}$ track to PALDE. Thence. . . .
TAKE-OFF RUNWAY 10: Climb heading $101^{\circ}$ to 520 , then climbing left turn heading $350^{\circ}$ or as assigned by ATC, expect vectors to ACONY, then via $327^{\circ}$ track to PALDE. Thence. . . .
TAKE-OFF RUNWAY 26: Climb heading $258^{\circ}$ to 520 , continue climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to ACONY, then via $327^{\circ}$ track to PALDE. Thence. . . .
TAKE-OFF RUNWAY 28: Climb heading $281^{\circ}$ to 520 , continue climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to ACONY, then via $327^{\circ}$ track to PALDE. Thence. . . .
.Via assigned transition. Maintain 5000 unless assigned lower altitude. Expect clearance to FL280, or requested altitude if lower, ten minutes after departure.

## AlRPORT DIAGRAM

SAN JUAN/ LUIS MUNOZ MARIN INTL (SJU)(TJSJ)


|  |
| :---: |


| ARRIVAL ROUTE DESCRIPTION |
| :--- |
| ELMUC TRANSITION (ELMUC.BEANOI): |
| HARDE TRANSITION (HARDE.BEANOI): |
| KATOK TRANSITION (KATOK.BEANOI): |
| Landing East Rwy 08: From over BEANO WP via $140^{\circ}$ track |
| to MYLET WP, then via $154^{\circ}$ track to WESEN WP, |
| thence via assigned runway transition. |
| Landing East Rwy 10: From over BEANO WP via $140^{\circ}$ track |
| to MYLET WP, then via $140^{\circ}$ track to TNNER WP, |
| thence via assigned runway transition. |
| Landing West Rwy $26 / 28:$ From over BEANO WP via $105^{\circ}$ track |
| to MAELO WP, then via $105^{\circ}$ heading. |
| Expect radar vectors. |

NOTE: This STAR applicable to Turbojet aircraft only. NOTE: Radar Required.
NOTE: GPS Required.
NOTE: RNAV 1.

## ATIS 125.8

SAN JUAN APP CON
119.4269 .2 (WEST \& SW)
120.9 290.2 (NORTH \& EAST)

SAN JUAN TOWER
132.05257 .8

GND CON
121.9348 .6

CLNC DEL
126.4284 .6

## RADAR REQUIRED



Weather Minima: 2500 foot ceiling and 5 mile visibility.
NOTE: Chart not to scale.

Vertical Guidance Navaid and Angle
VASI Rwy 10 ( $3.00^{\circ}$ )

## BRIDGE VISUAL APPROACH RUNWAY 10 PROCEDURE NOT AUTHORIZED AT NIGHT NOT AUTHORIZED FOR JETS OR FOUR ENGINE PROPS

When cleared for the Bridge Visual Runway 10 Approach aircraft will base East of the Moscoso Bridge.
125.8
$\overline{\overline{00 S \varepsilon}}$
$N \exists S \exists M$
$(61)$
062
NOTE: This STAR applicable to Prop and Turboprop aircraft only. NOTE: RADAR Required.
NOTE: GPS Required.
NOTE: RNAV 1.



## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8 AND 10: Turn left heading $350^{\circ}$ for vector to intercept SJU R-239 to CLAYO INT. Then via G432 to CRSTL INT. Thence.... TAKE-OFF RUNWAYS 26 AND 28: Fly heading $280^{\circ}$ for vector to intercept SJU R-239 to CLAYO INT. Then via G432 to CRSTL INT. Thence.... ....Maintain 5000' unless assigned lower altitude. Expect clearance to FL280 or requested altitude, if lower, ten minutes after departure. ARMUR TRANSITION (CRSTLI .ARMUR): From over CRSTL INT via G432 (DDP bearing $015^{\circ}$ ) to ARMUR INT.
SCAPA TRANSITION (CRSTLI.SCAPA): From over CRSTL INT direct to SCAPA INT.
ATIS 125.8
CLNC DEL
126.4284 .6
SAN JUAN TOWER
132.05
GND CON

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 8: Climb heading $078^{\circ}$ to 520 , then climbing left turn heading $350^{\circ}$ or as assigned by ATC, expect vectors to GANBO, then via depicted route to TOREY. Thence.
TAKE-OFF RUNWAY 10 : Climb heading $101^{\circ}$ to 520 , then climbing left turn heading $350^{\circ}$ or as assigned by ATC, expect vectors to GANBO, then via depicted route to TOREY. Thence.
TAKE-OFF RUNWAY 26: Climb heading $258^{\circ}$ to 520 , continue climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to GANBO, then via depicted route to TOREY. Thence. . . .
TAKE-OFF RUNWAY 28: Climb heading $281^{\circ}$ to 520 , continue climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to GANBO, then via depicted route to TOREY. Thence. . . .
. . . Via assigned transition. Maintain 5000 unless assigned lower altitude. Expect clearance to FL280, or requested altitude if lower, ten minutes after departure.

ATIS 125.8
CLNC DEL
126.4284 .6

SAN JUAN TOWER
132.05257 .8

GND CON
121.9348 .6

SAN JUAN DEP CON
119.4269 .2 (West \& SW)
120.9290 .2 (North \& East)

TAKE-OFF MINIMUMS:
Rwys 8, 10, 26, 28: STANDARD.
NOTE: GPS Required.
NOTE: For Turbojet aircraft only.
NOTE: RNAV 1.
NOTE: RADAR Required.

## TAKE-OFF OBSTACLES:

Rwy 8: Trees beginning $21^{\prime}$ from DER, left and right of centerline, up to $84^{\prime}$ AGL/107' MSL. Rwy 10: Trees beginning $157^{\prime}$ from DER, left and right of centerline, up to $54^{\prime} \mathrm{AGL} / 61^{\prime} \mathrm{MSL}$. Rwy 26: Bldg and trees beginning 8' from DER, $339^{\prime}$ right of centerline, up to $138^{\prime} \mathrm{AGL} / 154^{\prime}$ MSL. Sign and bushes beginning $381^{\prime}$ from DER, $374^{\prime}$ left of centerline, up to $28^{\prime}$ AGL/35' MSL.
Rwy 28: Bush and trees beginning $159^{\prime}$ from DER, 476' left of centerline, up to $61^{\prime}$ AGL/71' MSL. Pole 438' from DER, $587^{\prime}$ left of centerline, $31^{\prime} \mathrm{AGL} / 38^{\prime} \mathrm{MSL}$.

NOTE: Chart not to scale.


TAKE-OFF RUNWAY 8: Climb heading $078^{\circ}$ to 520 , then climbing left turn heading $020^{\circ}$ or as assigned by ATC, expect vectors to GLADA, then via $010^{\circ}$ track to MAWLY. Thence. . . .
TAKE-OFF RUNWAY 10: Climb heading $101^{\circ}$ to 520 , then climbing left turn heading $020^{\circ}$ or as assigned by ATC, expect vectors to GLADA, then via $010^{\circ}$ track to MAWLY. Thence
TAKE-OFF RUNWAY 26: Climb heading $258^{\circ}$ to 520 , continue climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to GLADA, then via $010^{\circ}$ track to MAWLY. Thence. . . .
TAKE-OFF RUNWAY 28: Climb heading $281^{\circ}$ to 520 , continue climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to GLADA, then via $010^{\circ}$ track to MAWLY. Thence. . . .
. . . Via assigned transition. Maintain 5000 unless assigned lower altitude. Expect clearance to FL280, or requested altitude if lower, ten minutes after departure.
KEEKA TRANSITION (GLADA2.KEEKA):
MACOR TRANSITION (GLADA2.MACOR):
NUBUS TRANSITION (GLADA2.NUBUS):
PRCHA TRANSITION (GLADA2.PRCHA):

## ATIS 125.8

CLNC DEL
126.4284 .6

SAN JUAN TOWER
132.05257 .8

GND CON
121.9348 .6

SAN JUAN DEP CON
119.4269 .2 (West \& SW)
120.9290 .2 (North \& East)


RWY 8, 10: STANDARD. ATC climb of 230' per NM to 5000. RWY 26, 28: NA-ATC.

NOTE: GPS Required.
NOTE: For Prop and Turboprop aircraft only.
NOTE: RNAV 1.
NOTE: RADAR Required.
TAKE-OFF OBSTACLE NOTES:
Rwy 8: Trees beginning $21^{\prime}$ from DER, left and right of centerline, up to $84^{\prime}$ AGL/107' MSL.
Rwy 10: Trees beginning $157^{\prime}$ from DER, left and right of centerline, up to $54^{\prime} \mathrm{AGL} / 61^{\prime} \mathrm{MSL}$.
NOTE: Chart not to scale.

## $\nabla$

DEPARTURE ROUTE DESCRIPTION
TAKE-OFF RUNWAY 8: Climb heading $078^{\circ}$ to 520 , continue climb expect vectors to HAMAR, then via $095^{\circ}$ track to NAILL. Thence. . . .

TAKE-OFF RUNWAY 10: Climb heading $101^{\circ}$ to 520 , continue climb expect vectors to HAMAR, then via $095^{\circ}$ track to NAILL. Thence. . . .
. . . . Via assigned transition. Maintain 5000 unless assigned lower altitude. Expect clearance to FL280, or requested altitude if lower, ten minutes after departure.
JUICE TRANSITION (HAMARI.JUICE):
SLUGO TRANSITION (HAMARI.SLUGO):
ST. CROIX TRANSITION (HAMAR1.COY):

| LOC I-SJU | APP CRS | Rwy Idg | 9783 |
| :---: | :---: | :--- | ---: |
| 110.3 | $078{ }^{\circ}$ | TDZE | 10 |

SAN JUAN/LUIS MUNOZ MARIN INTL (SJU)(TJSJ)
T ILS unusable 0.8 NM from threshold inbound.

MALSR to 3000 via SJU R-004 to DEEDY $\operatorname{lnt} /$ SJU 15 DME and hold.


| LOC I-CLA | APP CRS | Rwy Idg | 8016 |
| :---: | :---: | :--- | ---: |
| $\underline{109.7}$ | $101^{\circ}$ | TDZE | 9 |
|  |  | Apt Elev | 10 |

SAN JUAN/LUIS MUNOZ MARIN INTL (SJU)(TJSJ)
T Cat. E circling not authorized south of Rwy 10-28.
Inoperative table does not apply to S-LOC 10 Cat. C.

MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 via SJU R-004 to DEEDY Int/SJU 15 DME and hold.


UTAHS

NOTE: DME or RNAV required.
NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 8 and 10: Turn left heading $350^{\circ}$ for radar vector to intercept SJU R-326 to UTAHS INT. Thence....
TAKE-OFF RUNWAYS 26 and 28: Fly heading $280^{\circ}$ for radar vector to intercept SJU R-326 to UTAHS INT. Thence....
....Maintain 5000' unless assigned lower altitude. Expect clearance to flight level 280 or requested altitude if lower ten minutes after departure.
ATIS 125.8
CLNC DEL
126.4 284.6
GND CON
121.9 348.6
SAN JUAN TOWER
132.05 257.8
SAN JUAN DEP CON
119.4 269.2 Rwys
120.9290 .2 Rwys

NOTE: RNAV R

[^0]NOTE: RNAV Required.
NOTE: Chart not to scale.
T DEPARTURE ROUTE DESCRIPTION
TAKE-OFF RUNWAYS 8 AND 10: Turn left heading $060^{\circ}$ for vector to intercept SJU R-080 to
TAKSOF RUCe...̈ 26 AND 28: Fly 280 for TAKE-OFF RUNWA JETSS INT. Thence..
.... Maintain $5000^{\prime}$ unless assigned lower altitude. Expect clearance to FL 280 or requested altitude, JULE TRANSIION (JISSI.JUCE): From over JETSS INT direct to JUICE DME. Thence as filed. ST. CROIX TRANSITION (JETSS1.COY): From over JETSS INT direct to COY VOR/DME. Thence as

SAN JUAN APP CON

## (West \& Southwest)

119.4269 .2
(North \& East)
120.9290 .2

ATIS
125.8

JOSHE ONE ARRIVAL (RNAV)

NOTE: This STAR applicable to Turbojet aircraft only.
NOTE: Radar Required.
NOTE: GPS Required.
NOTE: RNAV 1.

## ARRIVAL ROUTE DESCRIPTION

ARMUR TRANSITION (ARMUR.JOSHE1): KIKER TRANSITION (KIKER.JOSHE1):
MELLA TRANSITION (MELLA.JOSHE 1):
SCAPA TRANSITION (SCAPA.JOSHE1):
Landing East Rwy 08: From over JOSHE WP via $078^{\circ}$ track to YEPUP WP, then via $078^{\circ}$ track to VARNA WP, thence via assigned runway transition.

Landing East Rwy 10: From over JOSHE WP via $067^{\circ}$ track to ZUGOD WP, then via $067^{\circ}$ track to TNNER WP, thence via assigned runway transition.

Landing West Rwys 26/28: From over JOSHE WP via $049^{\circ}$ track to MYLET WP, then via $049^{\circ}$ track to PAPPO WP, then via $105^{\circ}$ track to MAELO WP, then via $105^{\circ}$ heading.

Expect radar vectors to runway transition.


Weather Minima: 2000 foot ceiling and 5 mile visibility.
NOTE: Chart not to scale.

## LAGOON VISUAL APPROACH RUNWAY 8 <br> PROCEDURE NOT AUTHORIZED AT NIGHT

When cleared for the Lagoon Visual Runway 8 Approach aircraft will proceed visually to intercept and fly the Runway 10 final approach course until the west end of the San Jose Lagoon, then make left turn to land Runway 8.

| LOM SJ | APP CRS | Rwy Idg | $\mathbf{9 7 8 3}$ |
| :---: | :---: | :--- | ---: |
| $\mathbf{3 3 0}$ | $\mathbf{0 7 8}$ | TDZE | $\mathbf{9}$ |
|  |  | Apt Elev | $\mathbf{9}$ |

SAN JUAN／LUIS MUNOZ MARIN INTL（SJU）（TJSJ）

| $\nabla$ |  | MISSED APPROACH：Climb to 2000，then climbing left turn to 3000 via SJU VORTAC R－004 to DEEDY Int／SJU 15 DME and hold． |
| :---: | :---: | :---: |



[^1]| APP CRS | Rwy ldg | 9783 |
| :---: | :--- | ---: |
|  | TDZE | $\mathbf{9}$ |
|  | Apt Elev | $\mathbf{9}$ |

## RNAV (GPS) RWY 8

SAN JUAN/LUIS MUNOZ MARIN INTL (SJU)(TJSJ)

T Baro-VNAV not authorized below $-15^{\circ} \mathrm{C}\left(5^{\circ} \mathrm{F}\right)$.
$\triangle N A$

GPS or RNP-0. 3 Required. DME/DME RNP-0.3 not authorized. WAAS VNAV NA.

MISSED APPROACH: Climb to 3000 direct URZUM WP then turn left via $358^{\circ}$ track to DEEDY WP and hold.

(4NM

| APP CRS | Rwy Idg | 8016 |
| :---: | :--- | ---: |
|  | TDZE | 8 |
|  | Apt Elev | $\mathbf{9}$ |

## RNAV (GPS) RWY 10

SAN JUAN/ LUIS MUNOZ MARIN INTL (SJU)(TJSJ)

V Baro-VNAV NA below $-15^{\circ} \mathrm{C}\left(5^{\circ} \mathrm{F}\right)$. GPS or RNP-0.3 Required.
A NA

DME/DME RNP-0.3 not authorized. WAAS VNAV NA.
For inoperative MALS, increase LNAV Cat. A/B visibility to 1.
Inoperative table does not apply to LNAV/VNAV.

MISSED APPROACH: Climb to 3000 direct UPRAF WP then turn left via $358^{\circ}$ track to DEEDY WP and hold.


| APP CRS | Rwy Id | $\mathbf{9 7 8 3}$ |
| :---: | :--- | ---: |
|  | aDZE | $\mathbf{7}$ |
|  | Apt Elev | $\mathbf{9}$ |

## RNAV (GPS) RWY 26

SAN JUAN/LUIS MUNOZ MARIN INTL (SJU)(TJSJ)

- GPS or RNP-0.3 Required. DME/DME

A NA RNP-0.3 NA. Baro-VNAV NA below $-15^{\circ} \mathrm{C}$ ( $5^{\circ} \mathrm{F}$ ). WAS VNAV NA.

MISSED APPROACH: Climb to 3000 direct POVEE WP and then right turn via $014^{\circ}$ track to DEEDY WP and hold.

## SAN JUAN TOWER 132.05257 .8

GND CON 121.9348 .6

CLNC DEL
126.4284 .6



NOTE: Radar Required.
NOTE: GPS Required.
NOTE: RNAV1

## ARRIVAL ROUTE DESCRIPTION

## LENNT TRANSITION (LENNT.SAALR1):

THANK TRANSITION (THANK.SAALR1):
Landing East Rwy 08: From over SAALR WP via $187^{\circ}$ track to MYLET WP, then via $154^{\circ}$ track to WESEN WP, thence via assigned runway transition.
Landing East Rwy 10: From over SAALR WP via $187^{\circ}$ track to MYLET WP, then via $140^{\circ}$ track to TNNER WP, thence via assigned runway transition.
Landing West Rwys 26/28: From over SAALR WP via $162^{\circ}$ track to PAPPO WP, then via $105^{\circ}$ track to MAELO WP, then via $105^{\circ}$ heading.

Expect radar vectors to runway transition.

## ATIS 125.8

CLNC DEL
126.4284 .6

SAN JUAN TOWER
132.05257 .8

GND CON
121.9348 .6

SAN JUAN DEP CON
119.4269 .2 (West \& SW)
120.9290 .2 (North \& East)


TAKE-OFF MINIMUMS:
RWY 8, 10: NA-ATC.
RWY 26: STANDARD with minimum obstacle climb of $311^{\prime}$ per NM to 4800.
ATC climb of $350^{\prime}$ per NM to 5000 .
RWY 28: STANDARD with minimum obstacle climb of $323^{\prime}$ per NM to 4800.
ATC climb of $350^{\prime}$ per NM to 5000.
NOTE: GPS Required.
NOTE: For Prop and Turboprop aircraft only.
NOTE: RNAV 1.
NOTE: RADAR Required.

## TAKE-OFF OBSTACLE NOTES:

Rwy 26: Bldg and trees beginning $8^{\prime}$ from DER, 339' right of centerline, up to $138^{\prime} \mathrm{AGL} / 154^{\prime} \mathrm{MSL}$. Sign and bushes beginning $381^{\prime}$ from DER, $374^{\prime}$ left of centerline, up to $28^{\prime} \mathrm{AGL} / 35^{\prime} \mathrm{MSL}$.
Rwy 28: Bush and trees beginning $159^{\prime}$ from DER, $476^{\prime}$ left of centerline, up to $61^{\prime} A G L / 71^{\prime} \mathrm{MSL}$.
Pole 438' from DER, $587^{\prime}$ left of centerline, $31^{\prime}$ AGL/38' MSL.
NOTE: Chart not to scale.

## $\nabla$

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 26: Climb heading $258^{\circ}$ to 520 , continue climb expect vectors to SNGRA, then via $113^{\circ}$ track to CHAKA. Thence. . . .

TAKE-OFF RUNWAY 28: Climb heading $281^{\circ}$ to 520 , continue climb expect vectors to SNGRA, then via $113^{\circ}$ track to CHAKA. Thence. . . .
. . . Via assigned transition. Maintain 5000 unless assigned lower altitude. Expect clearance to FL280, or requested altitude if lower, ten minutes after departure.


 4
$8{ }^{\circ}$
8
8







NOTE: This STAR applicable to Turbojet aircraft only.
NOTE: Radar Required.
NOTE: GPS Required.
NOTE: RNAV 1.
NOTE: This STAR applicable to Turbojet aircraft only.
NOTE: Radar Required.
NOTE: GPS Required.
NOTE: RNAV 1.


ARRIVAL ROUTE DESCRIPTION
GABAR TRANSITION (GABAR.TROCO 1):
ILURI TRANSITION (ILURI.TROCOI):
MODUX TRANSITION (MODUX.TROCO 1):
SAINT MARTEN TRANSITION (PJM.TROCO1):
Landing East Rwy 08: From over TROCO WP via $328^{\circ}$ track to REKUA WP,
then via 260 track to PLENA WP, then via $347^{\circ}$ track to WESEN WP,
thence via assigned runway transition.
Landing East Rwy 10: From over TROCO WP via $328^{\circ}$ track to REKUA WP,
then via $281^{\circ}$ track to GARCY WP, then via $011^{\circ}$ track to TNNER WP,
thence via assigned runway transition.
Landing West Rwy $26 / 28$ : From over TROCO WP via $328^{\circ}$ track to
YUNKE WP, then via 023 ${ }^{\circ}$ heading. Expect radar vectors to runway transition.
ARRIVAL ROUTE DESCRIPTION
GABAR TRANSITION (GABAR.TROCO 1):
ILURI TRANSITION (ILURI.TROCOI):
MODUX TRANSITION (MODUX.TROCO 1):
SAINT MARTEN TRANSITION (PJM.TROCO1):
Landing East Rwy 08: From over TROCO WP via $328^{\circ}$ track to REKUA WP,
then via 260 track to PLENA WP, then via $347^{\circ}$ track to WESEN WP,
thence via assigned runway transition.
Landing East Rwy 10: From over TROCO WP via $328^{\circ}$ track to REKUA WP,
then via $281^{\circ}$ track to GARCY WP, then via $011^{\circ}$ track to TNNER WP,
thence via assigned runway transition.
Landing West Rwy $26 / 28$ : From over TROCO WP via $328^{\circ}$ track to
YUNKE WP, then via 023 ${ }^{\circ}$ heading. Expect radar vectors to runway transition.
OLOZ AVN 90 Ot OLOZ प्वdV 80 ' $\varepsilon-\exists S$


## TAKE-OFF OBSTACLE NOTES:

Rwy 8: Trees beginning $21^{\prime}$ from DER, left and right of centerline, up to $84^{\prime} \mathrm{AGL} / 107^{\prime} \mathrm{MSL}$.
Rwy 10: Trees beginning $157^{\prime}$ from DER, left and right of centerline, up to $54^{\prime} \mathrm{AGL} / 61^{\prime} \mathrm{MSL}$.
Rwy 26: Bldg and trees beginning $8^{\prime}$ from DER, $339^{\prime}$ right of centerline, up to $138^{\prime} \mathrm{AGL} / 154^{\prime} \mathrm{MSL}$.
Sign and bushes beginning 381' from DER, $374^{\prime}$ left of centerline, up to $28^{\prime}$ AGL/35' MSL.
Rwy 28: Bush and trees beginning 159' from DER, 476' left of centerline, up to $61^{\prime} \mathrm{AGL} / 71^{\prime} \mathrm{MSL}$.
Pole $438^{\prime}$ from DER, $587^{\prime}$ left of centerline, $31^{\prime}$ AGL/38' MSL.

NOTE: Radar Required.
NOTE: Chart not to scale.

TAKE-OFF RUNWAY 8: Climbing left turn heading $020^{\circ}$ or as assigned by ATC, expect vectors to intercept SJU R-004 to VERMO INT. Thence. . . . TAKE-OFF RUNWAY 10: Climbing left turn heading $020^{\circ}$ or as assigned by ATC, expect vectors to intercept SJU R-004 to VERMO INT. Thence. . . .
TAKE-OFF RUNWAY 26: Climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to intercept SJU R-004 to VERMO INT. Thence. . . . TAKE-OFF RUNWAY 28: Climb heading $280^{\circ}$ or as assigned by ATC, expect vectors to intercept SJU R-004 to VERMO INT. Thence. . . .
. . . . Maintain 5000 unless assigned lower altitude. Expect clearance to FL 280 , or requested altitude if lower, ten minutes after departure.

SAN JUAN, PUERTO RICO

| VORTAC SJU | APP CRS | Rwy Idg | $\mathbf{9 7 8 3}$ |
| :---: | :---: | :--- | ---: |
| 114.0 |  | $\mathbf{9}$ |  |
| Chan $\mathbf{8 7}$ | $\mathbf{0 8 2}$ | Apt Elev | $\mathbf{9}$ |

## VOR or TACAN RWY 8

SAN JUAN/ LUIS MUNOZ MARIN INTL (SJU)(TJSJ)
T For inoperative MALSR, increase S-8 Cat E visibility A to 2 miles.


SAN JUAN, PUERTO RICO

| VORTAC SJU | APP CRS | Rwy Idg | $\mathbf{8 0 1 6}$ |
| :---: | :---: | :--- | ---: |
| $\underline{114.0}$ | TDZE | $\mathbf{9}$ |  |
| Chan $\mathbf{8 7}$ | $\mathbf{0 8 2}$ | Apt Elev | $\mathbf{9}$ |

AL-784 (FAA)
VOR or TACAN RWY 10 SAN JUAN/ LUIS MUNOZ MARIN INTL (SJU)(TJSJ)
$\stackrel{\nabla}{\Delta}$

MISSED APPROACH: Climb to 2000 then climbing
leff turn to 3000 via heading $320^{\circ}$ and SJU VORTAC
R-004 to DEEDY INT/SJU 15 DME and hold.


SAN JUAN，PUERTO RICO

| VORTAC SJU | APP CRS | Rwy Idg | $\mathbf{9 7 8 3}$ |
| :---: | :---: | :--- | ---: |
| $\underline{114.0}$ | $\mathbf{T D Z E}$ | $\mathbf{7}$ |  |
| Chan $\mathbf{8 7}$ | $\mathbf{2 4 9}$ |  | Apt Elev |

VOR or TACAN RWY 26 SAN JUAN／LUIS MUNOZ MARIN INTL（SJU）（TJSJ）

Visibility reduction by helicopters NA．



[^0]:    

[^1]:    OLOZ 人甘W 90 of OlOZ प्वd甘 80 ＇ －$\exists \mathrm{S}$

