MIAMI LEGEND

Airports having Control Towers are shown in Blue, all others in Magenta. Green if Seaplane Base. Airport symbols show runway layout, lighting, weather service, and fuel availability. Hot airports are circled. For additional symbol information, see the Chart User's Guide.

AIRPORTS

- Control tower (land airport)
- Seaplane Base
- Hard surfaced runways longer than 8,999 ft. or in good condition runways less than 8999 ft.
- Hard surfaced runways greater than 8999 ft. or good condition runways less than 8999 ft.
- Runways other surfaced hard surfaced (concrete, bituminous, brick, or macadam) or unpaved (dirt, gravel, or earth) runways. Runways may be another or private.

AIRPORT DATA

FSS — Flight Service Station
NOTAM — Notices to Airmen Facility
CT - 118.3 — Control Tower Frequency
ATIS — Automatic Terminal Information Service
AWOS — Automatic Weather Observing System
ASOS — Automatic Surface Weather Observing System
AFIS — Automatic Flight Information Service (Alaska FSS)
CPT — Control Point
ARSR — Air Route Surveillance Radar
ARTCC — Air Route Traffic Control Center
ACR — Airport of Entry
CBP — Customs and Border Protection

ADDITIONAL AIRPORT INFORMATION

- Private "Ghost" – Non-public use having emergency or military priority
- Hard surface runway with approach lights and/or markings by visual/non-visual NPA, NAS, IAP, ILS
- Abandoned – overall condition questionable
- Closed – Not in service
- Changes – Recent changes

Airport symbols shown in VIOLET are for VFR operations only. Airport symbols shown in MAGENTA are for instrument operations. Consult Supplement for details and for availability of airports with hard-surfaced runways less than 8,000 feet.

Shading around bases in operation Sunset to Sunrise.

OBJECTIONABLE – Airport may adversely affect airspace use.

AIRPORT TRAFFIC SERVICE AND AIRSPACE INFORMATION

Class B Airspace
Class C Airspace
Class D Airspace
Class E Airspace with floor of 700 feet AGL or less and/or at an airport
Class E Airspace with floor of 1,200 feet AGL or less and/or at an airport
Class E Airspace with floor of 14,500 MSL or less
Class E Airspace with floor of 18,000 MSL or more
Class G Airspace
Class B Airspace shown in MAGENTA, other airspace shown in BLUE. Class B, Class C, and Class D airspace areas are depicted to show vertical limits in hundreds of feet MSL. Class E airspace areas are depicted to show vertical limits in hundreds of feet AGL when associated with an airport. Class E airspace areas are depicted by center blue vignette. Class G airspace (uncontrolled airspace) is the area outside of the controlled airspace.

Class B Airspace
Class C Airspace
Class D Airspace
Class E Airspace
Class G Airspace
Class B Airspace with floor of 10,000 MSL or higher
Class E Airspace with floor of 10,000 MSL or higher
Class E Airspace with floor of 14,500 MSL or higher
Class E Airspace with floor of 18,000 MSL or higher
Class G Airspace with floor of 14,500 MSL or higher
Class G Airspace with floor of 18,000 MSL or higher

Total Obstruction Marking and Lighting
Partial Obstruction Marking and Lighting
Obstructions Marked/Lighted
Obstructions Marked/Lighted Over 500 ft. above Surface
Obstructions Marked/Lighted Over 1000 ft. above Surface
Obstructions Marked/Lighted Over 2000 ft. above Surface
Obstructions – Groups are denoted by a dashed line surrounding the obstructions
Total Obstruction Marking and Lighting
Partial Obstruction Marking and Lighting
Obstructions Marked/Lighted
Obstructions Marked/Lighted Over 500 ft. above Surface
Obstructions Marked/Lighted Over 1000 ft. above Surface
Obstructions Marked/Lighted Over 2000 ft. above Surface
Obstructions – Groups are denoted by a dashed line surrounding the obstructions

Airport Traffic Service (ATS) Boundary
Airport Traffic Service (ATS) Boundary Extension
Canadian Airspace, Charges, Procedures Apply
Special Airport Traffic Area (SATA) – Non-Tower
SATA – Non-Tower
SATA – Tower
Class E Airspace Extension Beyond Shelf Limits
Area Where Special Flight Rules Are Effective
Training Route

COMMUNICATION BOXES

Frequency Box — 122.18 – 122.6 — CAMDEN — 122.7 — CAMDEN — 122.8 — CAMDEN — 122.9 — CAMDEN — 123.0 — CAMDEN
Frequency Box — 122.55 — PINE COVE — 122.7 — PINE COVE — 122.8 — PINE COVE — 122.9 — PINE COVE — 123.0 — PINE COVE

This Icon Box indicates Flight Service Station (FSS) Frequencies (121.5, 122.0, 122.2 and 122.1). Currently, 122.0, 122.2 and 122.0 are available in Alaska only. 122.1 is receive only in Alaska. Other frequencies are shown.

R – Receive only

Frequencies above this line box are remoted to NAVAID site. Other FSS frequencies providing coverage are remoted to Flight Service Station (FSS) or Remote Communications Outlet (RCO) sites as shown in blue.

RADIO AIDS TO NAVIGATION

VHF Omni-directional range
VOR-DME
Non-Directional Beacon (Non-Federal)
VORTAC
Other facilities, i.e., FSS Outlet, TACAN, etc.
VOR - DME

OBSTRUCTIONS

Lighted and longer AGL
Above 1000 ft. AGL or in urban area
Below 1000 ft. AGL or in rural area
Wind Turbine Farm
Group Obstructions
Elevation of the highest obstacle in the group
Highest obstacle in group above group elevation
Highest obstacle in group reported position and elevation
NOTICE: Guy wires may extend outside charted obstacle area.

MISCELLANEOUS

Aerobatic Practice Area (Non-Federal)
Glider Operations
Hang Glider Activity
Parachute Jump Areas
Unmanned Aircraft Area (Non-Federal)
Space Launch Activity Area (Non-Federal)
VFR/IFR Waypoints (Non-Fed) Identification for latitude/longitude
Warren Lough
NURE (VFR/IFR)

TOPOGRAPHIC INFORMATION

Power Transmission Line
Pipeline
Elevation of Pass (Elevation Base of Tower)
Mountain Pass
Elevation of Pass
Pass symbol does not indicate a recommended flyable pass. Elevation of the pass may exceed above mountain peaks.

MIAMI SECTIONAL

SECTIONAL AERONAUTICAL CHART SCALE 1:500,000

Federal Aviation Administration

99TH EDITION EFFECTIVE 09/01/2 **18 AUG 2016**
TO 09/01/2 **2 FEB 2017**

Includes airspace amendments effective **21 JUL 2016**
and all other aeronautical data received by **23 JUN 2016**

Information on this chart will change, consolidated major updates of chart changes are available every 56 days in the Chart Supplement publication. Minor updates are available every 28 days in the Chart Supplement publication.
NOTICE TO AIRMEN (NOTAMS) and other FLIGHT INFORMATION PUBLICATIONS (FLIPs) for the latest changes. Consult/Subscribe to FAA Safety Alerts and Charting Notices at
http://www.faa.gov/air_traffic/flight_info/aeronautical/notices_alerts/

Published from digital files compiled in accordance with Interagency Air Cartographic Committee specifications and agreements approved by Department of Defense - Federal Aviation Administration.

Warning: Refer to current foreign charts and flight information publications for information within foreign airspace.

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PLOTTING DIRECT ROUTE ON NORTH/SOUTH SIDE

There are approximately two minutes of latitude overlap between the north and south sides of each sectional(NRC) chart. To plot a course line from one side to the other, the user must first locate two parallels of corresponding latitude on both sides of the chart. Then, to plot a course line from one side to the other:
STEP 1 - Draw a horizontal line (MATCH LINE) between each pair of corresponding latitude but outside the area covered by the chart. Place a right or left angle (Figure 1) at the point where the course line leaves the chart. Place the departure or destination point closer to the edge of the chart. Place a right or left angle (Figure 2) along the MATCH LINE (the angle should be compatible on the chart, not excluding beyond its edge). Place the right or left angle (Figure 3) along the first or side edge of the paper along with the destination or departure point. Mark the point (POINT A) on or edge of the paper where it meets that MATCH LINE.
STEP 2 - Without moving the paper, on the opposite edge as MARK A, extend a short line on the chart along the same MATCH LINE as POINT A. Mark this MATCH LINE out to the edge of the chart. Make that point (POINT B).
STEP 3 - Turn the chart over and transfer the end of the MATCH LINE you just extended (straight to the MATCH LINE). (Figure 4)
STEP 4 - Take the sheet of paper with MARK A on it and place it on the chart so that the edge of the paper is the MATCH LINE and side edge with LINE B with the line on the sheet extending off of the chart. Pivot the paper on MARK A until the other MARK (POINT B) is on the chart. (Figure 5)
STEP 5 - Where your plot line crosses the MATCH LINE mark a MARK C. Extend a line straight from MARK A through MARK C.
STEP 6 - Turn the chart back over and transfer MARK C to that side and extend it to the MATCH LINE. Put a line from MARK C to the destination. (Figure 6)

CONTROL TOWER FREQUENCIES ON MIAMI SECTIONAL CHART

Airports with control towers are indicated on the face of the chart by the letter CT followed by the primary VHF tower frequency(ies). Information for each tower is listed in the table below. Operational hours are local time. The primary VHF and ZHF tower and ground control frequencies are listed.
Automatic Terminal Information Service (ATIS) frequencies shown on the face of the chart are primary VHF/UHF frequencies. All ATIS frequencies are listed in the table below. ATIS operational hours may differ from tower operational hours.
"H24" indicates tower or ATIS facility is continuously manned or available.
"HO/AP/SS" indicates Monday through Friday.
"NOTAM" indicates operation is NOTAM dependent.

CONTROL TOWER	OPERATES	TOWER	GND CON	ATIS	ASR/PRM
AVENTURA	07:00-11:00 PM EST (MAR-NOV) 07:00-10:00 PM EST (DEC-FEB) (ON DEMAND) (NOTAM)	119.0			
BOCA RATON	(NOTAM)	118.425	121.8		
BROWARD	(NOTAM)	118.225	121.8		
CAPE KENNEDY (TEL)	(NOTAM)				
CAPE KENNEDY (MIL)	CONTINUOUS	135.9 225.1	121.75		119.85
CHARLOTTE HARBOR	(NOTAM)	123.4 257.8	121.9		118.6
CRESTVIEW (EGLIN AFB)	(NOTAM)				
DEERFIELD BEACH	0400-2300	118.3	121.9		
FT LAUDERDALE	0630-0400 (NEXT DAY)	118.9 124.1	121.65	119.275	118.3
FT MYERS	CONTINUOUS	118.7	121.9	124.375	118.7
FT PIERCE	0630-0400 (NEXT DAY)	118.3	121.9		
GREATER MIAMI	CONTINUOUS	118.3 124.175	121.9		118.225
HOLLYWOOD INTL	(NOTAM)	119.0	121.9		118.7
KEY WEST INTL	0700-2300	118.3 257.8	121.9	127.075	118.3
MARATHON	0700-2300	118.3	122.1	124.35	127.025
MIAMI INTL	CONTINUOUS	118.3 120.5 257.8	121.65	119.275	118.9
MIAMI OPA-LOCKA	0700-2300	124.675	122.025		125.4
NAPLES	0900-2300	118.3	121.9		118.3
NEW TAMIAMI	0700-2300	118.3	121.9	124.4	118.3
PALM BEACH	0700-2300	119.0 269.75	121.9	125.275	123.725
PALM BEACH INTL	0700-2300	118.3 257.8	121.9	127.3	118.3
PERRY-FOLEY	0700-2300				118.3
PUNTA GORDA	0700-2300	118.3	121.9		118.3
SANFORD	0700-2300	118.3	121.9	124.275	118.3
SARASOTA-BRADENTON	0700-2300	118.3	121.9		118.3
TAMIAMI	0700-2300	118.3	121.9		118.3
VERO BEACH	0700-2300	118.3	121.9	124.375	118.3
WESTSIDE	0700-2300	118.3	121.9		
WINGATE	0700-2300	118.3	121.9		118.3
Vitrano	(NOTAM)				124.475

CLASS B, CLASS C, TRSA, AND SELECTED APPROACH CONTROL FREQUENCIES

FACILITY	FREQUENCIES	SERVICE AVAILABILITY
MIAMI CLASS B	120.35 125.5 239.0 (MPT) 118.3 257.8 (MPT) (NOTAM)	CONTINUOUS
TAMPA CLASS B	118.8 125.9 (MPT) 124.65 255.0 (CYP CHPT) 118.3 257.8 (MPT) (NOTAM)	CONTINUOUS
FORT LAUDERDALE CLASS C	118.3 257.8 (NOTAM)	CONTINUOUS
FORT MYERS CLASS C	118.7 124.2 (CYP CHPT) 118.7 257.8 (MPT) (NOTAM) 119.15 255.4 (MAR CHPT) 124.175 255.4 (MAR CHPT) (NOTAM)	0400-0400, CLT CLASS D
WEST PALM BEACH CLASS C	118.3 257.8 (NOTAM)	CONTINUOUS
JACKSON-BRASHEAR CLASS D	119.0 255.375	0400-0400, CLT CLASS D
HOMESTEAD CRB	122.1 257.8 (NOTAM) 122.1 255.2 (HO, AP)	0400-0400
KEY WEST FAC/BOCA CHICA	125.1 255.4 (NOTAM) 125.1 255.4 (MAR, OCT)	0400-0400

SPECIAL USE AIRSPACE ON MIAMI SECTIONAL CHART

Unless otherwise noted altitudes are MSL and the Time Code is continuous. Contact controlling agency for activation.
R) - Right hand
L) - Left hand
Contact Flight Service for information.

T) Other times by NOTAM.
NOTAM - Use of the facility is expected to be infrequent. Pilots should check NOTAMs for current status.
Use of the area is off limits to all aircraft.
Contact controlling agency for further information.

U.S. P-PROHIBITED, R-RESTRICTED, W-WARNING, A-ALERT, MOA-MILITARY OPERATIONS AREA

NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FREQUENCY	FREQUENCIES
R-2901 A, C	100 BLK INDF AKA 14,000	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2903 B	14,000 TO BLK INDF AKA 18,000	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2903 C	200 TO BLK INDF AKA 18,000 (LAKE OKEECHOBEE)	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2907 A	4000 TO BLK INDF AKA 18,000	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2907 C	10 TO BLK INDF AKA 18,000	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2911	1500 TO BLK INDF AKA 18,000	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2913	4500 TO BLK INDF AKA 18,000	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2915	2000 TO BLK INDF AKA 18,000 (LAKE OKEECHOBEE)	INTERMITTENT 0900-1800 (M-F) 0900-1800 (M-SA) 0900-1800 (SU) 15 HRS IN ADVANCE	MIAMI CARTC	MIAMI CARTC
R-2916	SFC TO BLK INDF AKA 18,000	INTERMITTENT BY NOTAM 0700-2300 (M-F) 0700-2300 (SA) 0700-2300 (SU)	MIAMI CARTC	MIAMI CARTC
W-174	SFC TO 10,000	INTERMITTENT 0700-2300 (M-F) 0700-2300 (SA) 0700-2300 (SU)	MIAMI CARTC	MIAMI CARTC
W-174 A, B	SFC TO FL 100	INTERMITTENT 0700-2300 (M-F) 0700-2300 (SA) 0700-2300 (SU)	MIAMI CARTC	MIAMI CARTC
W-174 C, D	SFC TO FL 100	INTERMITTENT 0700-2300 (M-F) 0700-2300 (SA) 0700-2300 (SU)	MIAMI CARTC	MIAMI CARTC
A-231 A, C	SFC TO FL 100	0400-0400	MIAMI CARTC	MIAMI CARTC
A-231 B, D	SFC TO FL 200	0400-0400	MIAMI CARTC	MIAMI CARTC

BAHAMAS P-PROHIBITED, D-DANGER

NUMBER	LOCATION	ALTITUDE	TIME OF USE	CONTROLLING AGENCY
D-3001	ANDROS BANKER	SFC TO UNLIMITED	BY NOTAM	NASSAU ACC
D-3002 A	ANDROS BANKER	UNLIMITED	BY NOTAM	NASSAU ACC
D-3002 B	ANDROS BANKER	UNLIMITED	BY NOTAM	NASSAU ACC
D-3002 C	ANDROS BANKER	UNLIMITED	BY NOTAM	NASSAU ACC
D-3003 A	ANDROS BANKER	UNLIMITED	BY NOTAM	NASSAU ACC
D-3003 B	ANDROS BANKER	UNLIMITED	BY NOTAM	NASSAU ACC

MOA NAME	ALTITUDE*	TIME OF USE	CONTROLLING AGENCY/ CONTACT FREQUENCY
AVON DUE	500 AKA SFC TO 6,000 AKA 5,500	INTERMITTENT 08:30 - 00:30 (NOTAM)	MIAMI CARTC
AVON DUE WEST	1,500	INTERMITTENT SUNRISE-SUNSET 0900-0030 (NOTAM)	MIAMI CARTC
BARNES	500 AKA TO 5000	INTERMITTENT 0900-0030 (NOTAM) 0700-0030	MIAMI CARTC
HARE RUNLO EAST	7000	INTERMITTENT 0900-0030 (NOTAM) 0700-0030	MIAMI CARTC
HARRIS	500 AKA TO 5000	INTERMITTENT SUNRISE-SUNSET 0900-0030 (NOTAM)	MIAMI CARTC
TORTUGAS	2000	INTERMITTENT 0700-2300 (NOTAM)	MIAMI CARTC

*Altitudes indicate flow of MOA. All MOAs extend to but do not include 18,000 unless otherwise indicated in indication or on chart.
†Other times by NOTAM.

MIAMI VFR WAYPOINTS

VFR Waypoint names consist of five letters beginning with "VP". Stand-alone VFR Waypoints are identified on the chart by using the same four-point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.
VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a Checkpoint flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual Checkpoint name.
VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC Communications.

VPAGW		N25°52'.07 / W080°34'.00
VPBOW		N26°32'.07 / W080°05'.00
VPCLE		N26°37'.07 / W082°00'.00
VPCOL	DADE CITY	N28°21'.07 / W082°12'.00
VPCUT		N27°33'.07 / W080°21'.00
VPDAL		N27°57'.07 / W082°05'.10
VPFAR	CLEARWATER BEACH	N27°54'.07 / W082°49'.00
VPFTM	WEST PALM BEACH	N26°42'.07 / W080°08'.00
VPKAI	ST PETE BEACH	N27°45'.07 / W082°73'.67
VPLAK		N28°12'.07 / W082°24'.00
VPMOT		N27°15'.07 / W082°42'.07
VPNEW	LAKE PARKER	N27°46'.07 / W081°42'.00
VPNOB		N27°12'.07 / W082°27'.00
VPOCE		N27°46'.07 / W081°55'.00
VPOCO		N28°24'.07 / W082°13'.00
VPOLD	GULFSTREAM PARK POINTING STATION	N26°08'.07 / W080°09'.00
VPRIC		N27°55'.07 / W082°56'.10
VPRIV	RANGER STATION	N27°55'.07 / W082°56'.10
VPSAN		N27°55'.07 / W082°56'.00

CAUTION: GPS accuracy necessitates extra vigilance when using the same four-point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

CAUTION: This chart is primarily designed for VFR navigational purposes but does not purport to indicate the presence of all power transmission and telecommunication lines, terrain or obstacles which may be encountered below reasonable and safe altitudes.

Flight Following Services are available on request and highly recommended in and around Class B, C, and TRSA areas.

Pilots are encouraged to use the ORLANDO TERMINAL AREA VFR Terminal Area Chart for flights at or below 10,000'.

Pilots are encouraged to use the Miami VFR Terminal Area Chart for flights at or below 7000'.

EXAMPLES OF CLASS B ALTITUDES
70 - - - Ceiling in hundreds of feet MSL
30 - - - Floor in hundreds of feet MSL

MIAMI OCEANIC CENTER
FL 240
SFC
135.6 269.05

MIAMI OCEANIC CENTER
FL 240
SFC
133.4 263.1

CONTIGUOUS U.S. ADIZ

DEFENSE AREA

GULF OF MEXICO

ATLANTIC OCEAN

THE BAHAMAS

MIAMI