





Scale 1:250,000

NOT TO BE USED FOR NAVIGATION

## NAME (NAM)

Unpaved Runways  
NAME (NAM)

VOR  **DLG 138.8**

PPS 121.8  
VOR-DME

Class B Airspace Examples of Class B Airspace Altitudes

Class B/C Surface Area

Areas do not extend into Class A, and D airspace, or Class E airport terminal airspace.

IFR Arrival Routes  
IFR Arrival/Departure

(Selected)  
(may be lit or unlit)

△△

Navigation  
Reference Point

11/11/2019 11:11 AM

 Mountain Top or Peak

THE ENTIRE MIAMI AREA IS HEAVILY CONGESTED WITH MANY DIFFERENT AIRCRAFT TYPES. THESE ROUTE SUGGESTIONS ARE NOT STERILE OF OTHER TRAFFIC; THEY ARE AREAS WE BELIEVE LEAST CONGESTED IN AN AREA OF HEAVY CONGESTION. PILOT ADHERENCE TO VFR RULES MUST BE EXERCISED AT ALL TIMES. COMMUNICATIONS MUST BE MAINTAINED BETWEEN AIRCRAFT AND CONTROL TOWERS WHILE IN CLASS D AIRSPACE.

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Year	1990	2000	2010	2015	2020
Population (millions)	1.2	1.5	1.8	2.1	2.4
GDP (trillion USD)	0.5	1.0	1.5	2.0	2.5
Life expectancy (years)	70	75	80	82	84
Urban population (%)	30	45	60	70	75
Renewable energy (%)	10	15	20	25	30
Carbon emissions (Gt CO <sub>2</sub> e)	0.5	1.0	1.5	2.0	2.5
Healthcare expenditure (%)	5	8	12	15	18
Education expenditure (%)	3	4	5	6	7
Research & Development (%)	2	3	4	5	6
Government expenditure (%)	15	18	20	22	24
Private sector expenditure (%)	10	12	14	16	18
Non-profit expenditure (%)	5	6	7	8	9
Household expenditure (%)	40	42	44	46	48
Business expenditure (%)	20	22	24	26	28
Government expenditure (%)	15	18	20	22	24
Private sector expenditure (%)	10	12	14	16	18
Non-profit expenditure (%)	5	6	7	8	9
Household expenditure (%)	40	42	44	46	48
Business expenditure (%)	20	22	24	26	28

DoD users refer to Area Planning AP/1B Military Training Routes North and South America for current routes.

(ATC CLEARANCE REQUIRED)  
ALTITUDE ASSIGNED BY ATC

THIS CHART ALSO IDENTIFIES VFR TRANSITION ROUTES IN THE MIAMI CLASS B AIRSPACE. OPERATION ON THESE ROUTES REQUIRES AN AUTHORIZATION FROM MIAMI APPROACH. ADVISE ATTEMPTING TO ENTER CLASS B AIRSPACE WHEN A CLEARENCE IS RECEIVED, REFER TO CLASS B AIRSPACE. DEPICTION OF THESE ROUTES IS TO ASSIST PILOTS IN POSITIONING THE AIRCRAFT IN AN AREA OUTSIDE THE CLASS B AIRSPACE WHERE AT CLEARANCE CAN NORMALLY BE EXPECTED WITH MINIMAL OR NO DELAY. ON INITIAL CONTACT, ADVISE AT CT POSITION, ALTITUDE, ROUTE NAME DESIRED, AND DIRECTION OF FLIGHT. REFER TO CURRENT MIAMI VFR TERMINAL AREA CHART FOR USER REQUIREMENTS.

**OPERATING RULES AND PILOT/EQUIPMENT REQUIREMENTS.** Regardless of weather conditions, an ATC authorization is required prior to operating within the Class B Airspace. Pilots should not request an authorization to operate within the Class B Airspace unless the requirements of FAR 91.215 and FAR 91.131 are met. Included among those requirements are:

- Unless otherwise authorized by ATIS, an operable two-way radio capable of communicating with ATIS on appropriate frequencies for the Class II Airspace.
- No person may take off or land at the Miami International Airport unless the pilot in command holds at least a Private Pilot certificate.
3. Except as noted in 2 above, no person may take off or land a civil aircraft or an aircraft within the Class II Airspace or operate a civil aircraft within the Class B Airspace unless:
- (a) The pilot in command holds at least a Private Pilot certificate, or holds a Recreational Pilot certificate and has met the requirements of FAR 61.011(d); or holds a Sport Pilot certificate and has met the requirements of FAR 61.325; or
- (b) The aircraft is operated by a student pilot who has met the requirements of FAR 61.314 or FAR 61.95 as applicable.
4. Unless otherwise authorized by ATIS, each person operating a large turbine engine-powered aircraft to or from a primary airport shall operate at or above the designated floors within the lateral limits of the Class B Airspace.
5. An operable VOR or TACAN receiver for IFR operations.

NOTE: ATC may, upon notification, immediately authorize a deviation from the altitude reporting equipment requirement or for a transponder failure; however, other requests for deviations from the transponder equipment requirement must be submitted to the controlling ATC facility at least one hour before the proposed operation.

**IFR FLIGHTS**—Aircraft operating within the Miami Class B Airspace must be operated in accordance with ATC clearances and instructions.

- ### VFR FLIGHTS—
1. Arriving aircraft should contact the appropriate approach control on specified frequencies and in relation to geographic fixes shown on the accompanying chart. Although arriving aircraft may be operating beneath the floor of the Class B Airspace on initial contact, communications should be established with approach control in relation to the points indicated for sequencing and spacing purposes.
  2. Aircraft departing the primary airports are requested to advise clearance delivery prior to taxiing of their intended altitude and direction of flight to depart the Class B Airspace. Aircraft departing from other than the primary airports whose route of flight would penetrate the Class B Airspace should give this information to ATIS on the appropriate frequencies.
  3. Aircraft desiring to transit the Class B Airspace must obtain an ATIS clearance to enter the Class B Airspace

All aircraft will be controlled and separated while operating within the Class B Airspace, except helicopters need not be separated from other helicopters. Although radar separation will be the primary standard used, approved visual

NOTE: Assignment of radar headings and/or altitudes is based on the provision that a pilot operating in accordance with visual flight rules is expected to advise ATC if compliance with an assigned route, radar heading, or altitude will cause the pilot to violate such rules.

