A I P

AERONAUTICAL INFORMATION PUBLICATION

EASTERN CARIBBEAN

7TH EDITION

PART 2

ENROUTE (ENR)

EASTERN CARIBBEAN STATES
ANGUILLA - ANTIGUA & BARBUDA - BRITISH VIRGIN ISLANDS - DOMINICA - GRENADA - MONTSERRAT - ST. CHRISTOPHER (ST. KITTS) & NEVIS - SAINT LUCIA ST. VINCENT & THE GRENADINES - TRINIDAD & TOBAGO

PART 2 - EN-ROUTE (ENR)

ENR 0

ENR 0.1 PREFACE - Not applicable

ENR 0.2 RECORD OF AIP AMENDMENTS - Not applicable

ENR 0.3 RECORD OF AIP SUPPLEMENTS - Not applicable

ENR 0.4 CHECKLIST OF AIP PAGES - Not applicable

ENR 0.5 LIST OF HAND AMENDMENTS TO THE AIP - Not applicable

ENR 0.6 TABLE OF CONTENTS TO PART 2

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ENR 1 GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

The air traffic rules and procedures applicable to air traffic in the Eastern Caribbean States conform to Annexes 2 and 11 to the Convention on International Civil Aviation and to those portions of the *Procedures for Air Navigation Services – Rules of the Air and Air Traffic Services* applicable to aircraft and of the *Regional Supplementary Procedures* applicable to the Caribbean Region, except for the differences listed in GEN 1.7.

1. Minimum Safe Height

Aircraft shall not be flown below the minimum safe height except when necessary for take-off and landing.
The minimum safe height is the height at which neither an unnecessary noise disturbance nor unnecessary hazards to persons and property in the event of an emergency landing are to be feared; however, over cities, other densely populated areas and assemblies of persons, this height shall be at least 300 m (1 000ft) above the highest obstacle within a radius of 5NM, and elsewhere at least 150m (500ft) above ground or water. Aircraft shall not be flown below bridges and similar constructions nor below overhead lines and antennas. For flights conducted for special purposes, the local aeronautical authority may grant exemptions.

2. Dropping of objects

The dropping or spraying of objects or other substances out of or from aircraft is prohibited. This does not apply to crop spraying, ballast in the form of water or fine sand, fuel, tow ropes, tow banners and similar objects if dropped or discharged at places where no danger to persons or property exists. The local aeronautical authority may grant exemptions to the interdiction if no danger to persons or property exists.

3. Acrobatic Flying

Acrobatic flights are only permitted in visual meteorological conditions and with the explicit consent of all persons on board. The local aeronautical authority may grant exception in individual cases. Acrobatic flights require special permission from the Civil Aviation Administration of the respective states.

4. Towing and Advertising Flights

Advertising flights with towed objects require permission from the Aeronautical Administration of the respective states.

5. Times and units of measurement

Co-ordinated Universal Time (UTC) and the prescribed units of measurement shall be applied to flight operations. The units of measurement are published in the Eastern Caribbean Aeronautical Information Publication (AIP).

6. Airspace Structure

For the performance of Flight Information Service and Alerting Service, the Fight Information Region (FIR) is established and is published in the Aeronautical Information Publication, Eastern Caribbean.

6.1 The airspace of all States and Territories of the Eastern Caribbean Islands including adjacent international waters comprise a single FIR (Piarco FIR). Air traffic control is exercised:

a) In the control area;

b) In terminal control areas and in control zones at controlled aerodromes

c) In aerodrome traffic zones at other controlled aerodromes.

6.2 Flight information service and alerting service within the FIR and air traffic control service in the control area is provided by Piarco Area Control Centre (ACC). This service is also provided by the relevant Aerodrome Control Tower in coordination with Piarco ACC for arriving and departing flights at the Eastern Caribbean Aerodromes. The air traffic services route pattern within the control area comprises controlled routes, the axis of which is constituted by a line joining reference points identified as a rule by radio navigational facilities.

6.3 The classification of the controlled and uncontrolled airspace according to the extent of air traffic services maintained there, are based on the classification described in subsection ENR 1.4.

7. Prohibited Areas and Flight Restrictions

7.1 Prohibited, Restricted and Danger areas are established within Piarco FIR for the prevention of danger to public safety or order, especially for the safety of air traffic. The areas are published in the AIP.

7.2 Activation of areas subject to intermittent activity is notified well in advance by NOTAM giving reference to the area only by its identification.

8. Take offs and Landings of Aeroplanes, rotocraft, and airships, outside aerodrome admitted for them.

For take-offs and landings of aeroplanes, rotocraft and airships, permission from the States' relevant authority is required.

9. Ascents of balloons, kites, self-propelled flying models and flying bodies

Balloon ascents require permission from the States' relevant aeronautical authorities. Kites' ascents within a distance of 3km from the boundary of airfields are prohibited. Consent is required if kites are held by a rope more than 90m (300ft) in length. The local aeronautical authorities may grant exemptions.

Within Trinidad and Tobago, a kite shall not be flown within 5km of an aerodrome. A captive balloon or kite shall not be flown at a height of more than 60m (200ft) above the ground level or within 60m (200ft) of any vessel, vehicle or structure.

ENR 1.2 VISUAL FLIGHT RULES

1. General Conditions for Operations

1.1 Except when operating as a special VFR flight, VFR flights shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in Table 1 below.

1.2 Except when a clearance is obtained from an air traffic control unit, VFR flights shall not take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or traffic pattern:

a) when the ceiling is less than 450 m (1 500 ft); or

b) when the ground visibility is less than 5 km.

1.3 VFR flights between sunset and sunrise, or such other period between sunset and sunrise as may be prescribed by the appropriate ATS authority, shall be operated in accordance with the conditions prescribed by such authority.

1.4 Unless authorized by the appropriate ATS authority, VFR flights shall not be operated:

a) above FL 200;

b) at transonic and supersonic speeds.

1.5 Authorization for VFR flights to operate above FL290 shall not be granted in areas where a vertical separation minimum of 300m (1000 ft) is applied above FL290.

1.6 Except when necessary for take-off or landing, or except by permission from the appropriate authority, a VFR flight shall not be flown:

a) over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 300 m (1000 ft) above the highest obstacle within a radius of 600 m from the aircraft;

b) elsewhere than as specified in 1.6 a), at a height less than 150 m (500 ft) above the ground or water.

Note 1: When permission is granted in accordance with 1.6, aircraft shall be flown at such a height as will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface.

1.7 Except where otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority, VFR flights in level cruising flight when operated above 900 m (3 000 ft) from the ground or water, or a higher datum as specified by the appropriate ATS authority, shall be conducted at a flight level appropriate to the track as specified in the tables of cruising levels found in section ENR 1.7 paragraph 4.

1.8 VFR flights shall comply with the provisions of 3.6 of ICAO Annex 2:

a) when operated within Classes B, C and D airspace;

b) when forming part of aerodrome traffic at controlled aerodromes; or

c) when operated as special VFR flights.

1.9

A VFR flight operating within or into areas, or along routes, designated by the appropriate ATS authority in accordance with 3.3.1.2 c) or d) of ICAO Annex 2, shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and report its position as necessary to, the air traffic services unit providing flight information service.

Note: 1 S*ELCAL or similar automatic signalling devices satisfy the requirement to maintain an air/ground voice communication watch.*

Note: 2 *The requirements for an aircraft to maintain an air/ground voice communication watch, remains in effect after CPDLC has been established.*

1.10 An aircraft operated in accordance with the visual flight rules which wishes to change to compliance with the instrument flight rules shall:

a) if a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan, or

b) when so required by 3.3.1.2 of ICAO Annex 2, submit a flight plan to the appropriate air traffic services unit and obtain a clearance prior to proceeding IFR when in controlled airspace.

Table 1*
(see paragraph 1.1 above)

Altitude band	Airspace Class	Flight Visibility	Distance from Cloud
At and above 3 050 m (10 000 ft) AMSL	A***B C D E F G	8 km	1500 ft horizontally 300 m (1000 ft) vertically
Below 3 050 m (10 000 ft) AMSL and above 900 m (3000 ft) AMSL, or above 300m (1000 ft) above terrain, whichever is higher	A***B C D E F G	5 km	1500 ft horizontally 300 m (1000 ft) vertically
At and below 900 m (3 000 ft) AMSL, or 300 m (1000 ft) above terrain, whichever is the higher	A***B C D E	5km	1500m horizontally 300m(1000 ft) vertically
	F G	5 km**	Clear of cloud and with the surface in sight

* When the height of the transition altitude is lower than 3 050 m (10 000 ft) AMSL, FL100 should be used in lieu of 10 000FT.

** When so prescribed by the appropriate ATS authority:

a) flight visibilities reduced to not less than 1 500 m may be permitted for flights operating:

1) at speeds that, in the prevailing visibility, will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or

2) in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels.

b) HELICOPTERS may be permitted to operate *in less than 1 500 m* flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

*** The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.

2. Individual State Information

2.1 ***Trinidad and Tobago*** (This information is for use by local Civil Aviation Personnel)

2.1.1 VFR reporting departure and destination points.

The following table contains VFR reporting points within Trinidad and Tobago: *see 2.1.5.1*

Table 2

Name	Designation	Coordinates	Island
Blanchisseuse	BLC	10 47 30N 061 18 30W	Trinidad
Brigand Hill	BRG	10 29 36N 061 04 12W	Trinidad
Chaguanas	CNS	10 31 00N 061 25 00W	Trinidad
Icacos	ICS	10 03 00N 061 55 42W	Trinidad
Manzanilla	MNZ	10 31 12N 061 00 54W	Trinidad
Maracas	MCS	10 42 00N 061 25 00W	Trinidad
Matelot	MTL	10 49 12N 061 07 42W	Trinidad
Matura	MTR	10 40 12N 061 03 12W	Trinidad
Mayaro	MYR	10 17 18N 061 00 06W	Trinidad
Moruga	MRG	10 04 24N 061 15 30W	Trinidad
Point Fortin	PTF	10 10 54N 061 40 30W	Trinidad
Point Lisas	PTL	10 24 00N 061 29 00W	Trinidad
Point Radix	RDX	10 20 00N 060 58 18W	Trinidad
Pointe -a- Pierre	PAP	10 18 30N 061 27 30W	Trinidad
Princes Town	PRT	10 16 00N 061 21 30W	Trinidad
Queens Park	QPS	10 40 12N 061 31 00W	Trinidad
Rio Claro	RCL	10 18 00N 061 10 18W	Trinidad
San Fernando	SDO	10 16 30N 061 28 00W	Trinidad
Soldado	SOL	10 04 18N 062 00 18W	Trinidad
Tabaquite	TBQ	10 23 30N 061 18 00W	Trinidad
Toco	TOC	10 50 00N 060 55 00W	Trinidad
Buccoo	BUC	11 11 00N 060 49 00W	Tobago
Little Tobago	LTB	11 17 18N 060 30 00W	Tobago
Plymouth	PLY	11 13 06N 060 46 30W	Tobago
Roxborough	ROX	11 15 00N 060 35 00W	Tobago
Scarborough	SCB	11 10 00N 060 43 30W	Tobago
Shaw Park	SHW	11 10 00N 060 45 00W	Tobago
Speyside	SPY	11 18 00N 060 32 30W	Tobago

2.1.2 ATZ entry and exit points

2.1.2.1 The following table contains entry/exit points for the Piarco and Robinson Aerodrome Traffic Zones: *see 2.1.5.1*

Table 3

Aerodrome Traffic Zone	Reporting Point Designator	Coordinates
Robinson	NAPLI	11 03 57N 060 49 56W
	ROKLI	11 14 00N 060 49 56W
Piarco	ANTIX	10 30 42N 061 20 14W
	DESTA	10 40 45N 061 20 14W

2.1.3 Land Helipads

2.1.3.1 The following table contains land helipad identification and coordinates: *see 2.1.5.2*

Table 4

Name	Designator	Location Indicator	Coordinates
Camden	CAM	TTCM	10 25 48N 061 26 48W
Mt. Hope	MHP	TTMH	10 38 30N 061 26 00W
Galeota	GAL	TTGL	10 08 42N 060 59 42W
Chaguaramas	CMS	TTCH	10 41 00N 061 37 06W
Augustus Long	AUG	TTAL	10 19 00N 061 27 30W
Foreshore	FSH	TTFS	10 39 54N 061 32 18W
Clifton Hill	CLF	TTCL	10 11 18N 061 40 24W
San Fernando	SDO	TTSD	10 16 30N 061 28 00W
Wallerfield	WLF	TTWF	10 38 07N 061 12 33W

2.1.4 Helipads on offshore Platforms

2.1.4.1 The following table contains identification and coordinates for helipads located on offshore-platforms. *(Coordinates subject to change): see 2.1.5.2*

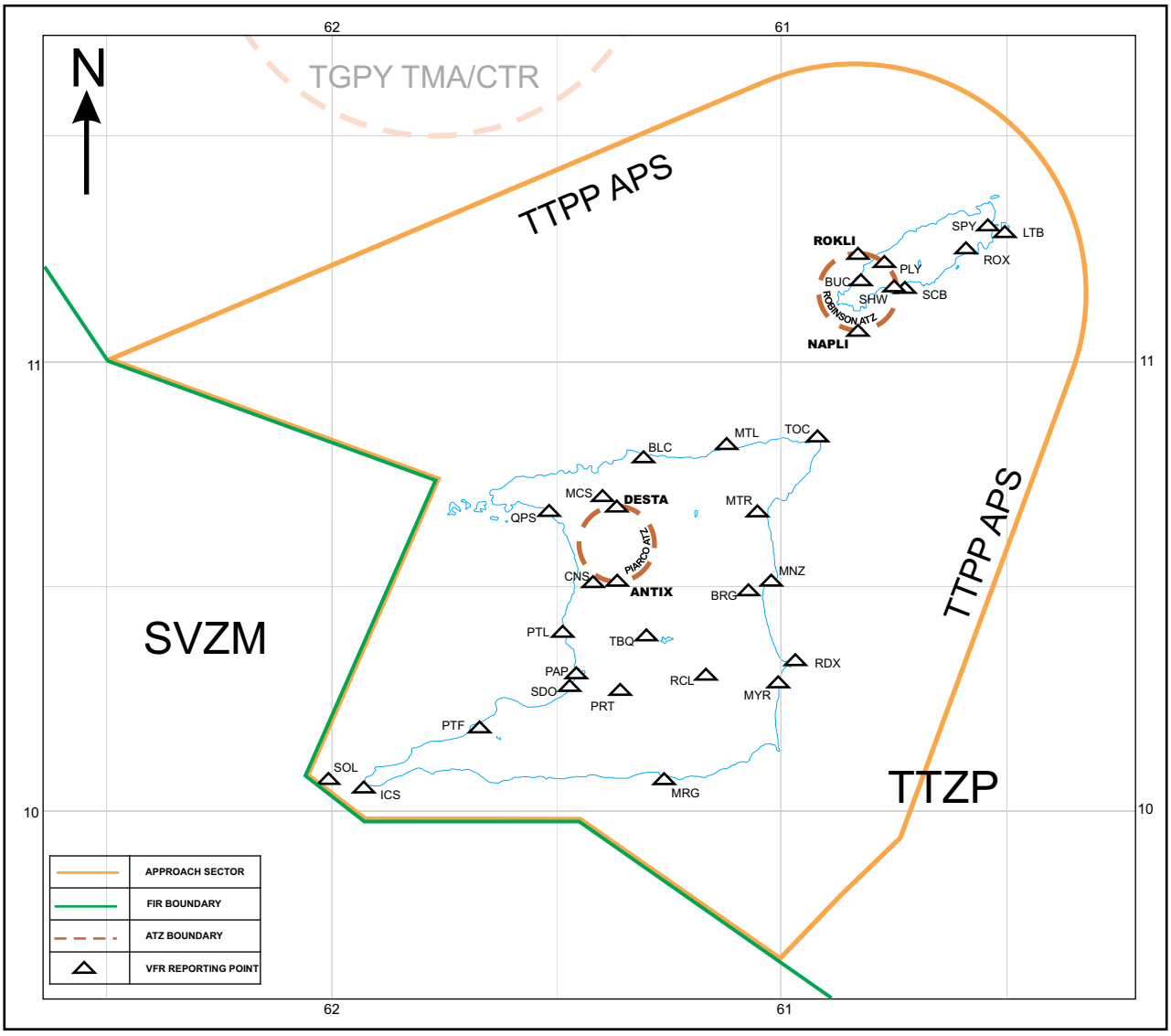
Table 5

Name	Designator	Coordinates
Hibiscus	HBS	11 08 00N 061 39 00W
Cassia	CSA	09 55 18N 060 31 54W
Flamboyant	FLB	10 02 37N 060 24 44W
Ibis	IBS	10 00 18N 060 43 24W
Mahogany	MGY	10 07 22N 060 18 40W
Poui	PUI	10 06 42N 060 49 42W
Samaan	SMN	10 20 42N 060 40 42W
Teak	TEK	10 10 36N 060 39 54W

2.1.5 Diagrams showing VFR Reporting Points and Helipads

2.1.5.1 VFR Reporting Points

VFR REPORTING POINTS AND ATZ ENTRY/EXIT POINTS



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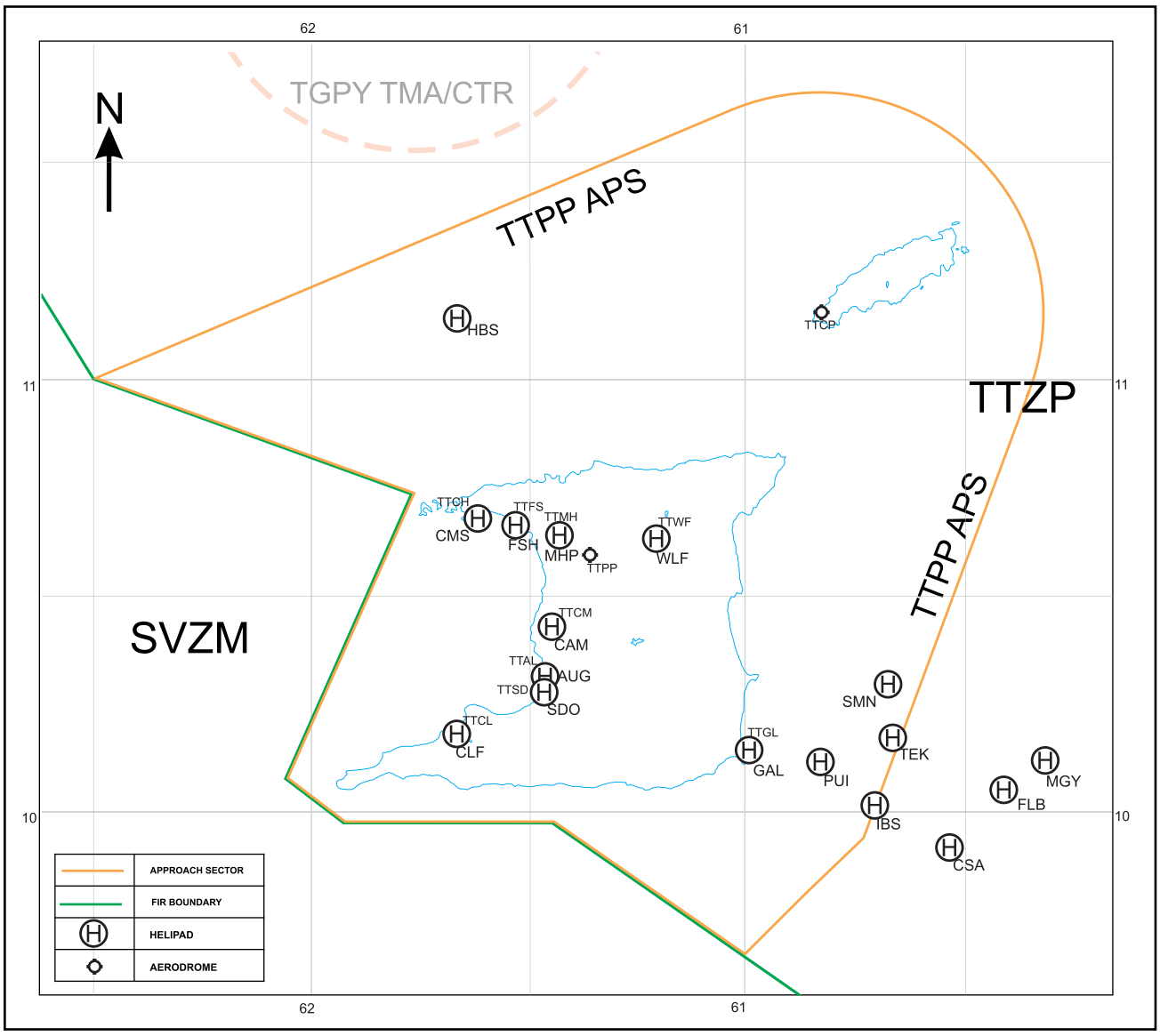
2.1.5.2 Helipads

LAND AND OFFSHORE HELIPADS



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ENR 1.3 INSTRUMENT FLIGHT RULES

1. Rules applicable to all IFR flights

1.1 Aircraft equipment

Aircraft shall be equipped with suitable instruments and with navigation equipment appropriate to the route to be flown. Flights operating in the Piarco CTA/UTA, FIR/UIR are required to carry transponder and automatic altitude reporting equipment (mode C transponder) and to operate them on a continuous basis.

Flights operating in Piarco Controlled Airspaces (CTA/UTA) shall use pressure altitude reporting transponders.

All civil fixed wing turbine engine aircraft having a maximum take-off mass exceeding 15,000 kg, or a maximum approved passenger seating configuration of more than 30 shall be required to be equipped with ACAS 2.

In the interest of the earliest safety benefit, all aircraft operators are encouraged to equip with ACAS 2 compatible equipment as soon as possible in anticipation of any future compulsory date.

1.2 Minimum levels

Except when necessary for take-off or landing or when specifically authorized by the appropriate authority, an IFR flight shall be flown at a level that is not below the minimum flight altitude established by the State whose territory is overflown, or where no such minimum flight altitude has been established:

a) over high terrain or in mountainous areas, at a level which is at least 600 m (2 000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft;

b) elsewhere than as specified in a), at a level which is at least 300 m (1 000 ft) above the highest obstacle located within 8 km of the estimated position of the aircraft.

Note.- The estimated position of the aircraft will take account of the navigational accuracy which can be achieved on the relevant route segment, having regard to the navigational facilities available on the ground and in the aircraft.

1.3 Change from IFR to VFR flight

1.3.1 An aircraft electing to change the conduct of its flight from compliance with the instrument flight rules to compliance with the visual flight rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

1.3.2 When an aircraft operating under the instrument flight rules is flown in or encounters visual meteorological conditions, it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

2. Rules applicable to IFR flights within controlled airspace

2.1 IFR flights shall comply with the provisions of 3.6 of ICAO Annex 2 to the Convention on International Civil Aviation when operated in controlled airspace.

2.2 An IFR flight operating in cruising flight in controlled airspace shall be flown at a cruising level, or if authorized to employ cruise climb techniques, between two levels or above a level, selected from:

a) the tables of cruising levels in Appendix 3 of ICAO Annex 2, or

b) a modified table of cruising levels, when so prescribed in accordance with Appendix 3 of ICAO Annex 2 for flight above FL 410, except that the correlation of levels to track prescribed therein shall not apply whenever otherwise indicated in air traffic control clearances or specified by the appropriate ATS authority in the Eastern Caribbean Aeronautical Information Publication (AIP).

3. Rules applicable to IFR flights outside controlled airspace

3.1 Cruising levels

An IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in:

a) the tables of cruising levels in Appendix 3 of ICAO Annex 2, except when otherwise specified by the appropriate ATS authority for flights at or below 900 m (3 000 ft) above mean sea level; or

b) a modified table of cruising levels, when so prescribed in accordance with Appendix 3 of ICAO Annex 2 for flights above FL 410.

Note. - This provision does not preclude the use of cruise climb techniques by aircraft in supersonic flight.

3.2 Communications

An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by the appropriate ATS authority in accordance with 3.3.1.2 c) or d) of ICAO Annex 2 shall maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information services.

3.3 Position reports

An IFR flight operating outside controlled airspace and required by the appropriate ATS authority to:

- submit a flight plan, and
- maintain a listening watch on the appropriate radio frequency and establish two-way communication, as necessary, with the air traffic services unit providing flight information service
- shall report position as specified in 3.6.3 of ICAO Annex 2 for controlled flights.

Note. - Aircraft electing to use the air traffic advisory service whilst operating IFR within specified advisory airspace are expected to comply with the provisions of 3.6 of ICAO Annex 2, except that the flight plan and changes thereto are not subject to clearances and that two-way communication will be maintained with the unit providing the air traffic advisory service.

ENR 1.4 ATS AIRSPACE CLASSIFICATION

1. Classification of airspaces

ATS airspaces are classified and designated in accordance with the following:

Class A. IFR flights only are permitted, all flights are subject to air traffic control service and are separated from each other.

Class B. IFR and VFR flights are permitted, all flights are subject to air traffic control service and are separated from each other.

Class C. IFR and VFR flights are permitted, all flights are subject to air traffic control service and IFR flights are separated from other IFR flights and from VFR flights. VFR flights are separated from IFR flights and receive traffic information in respect of other VFR flights.

Class D. IFR and VFR flights are permitted and all flights are subject to air traffic control service, IFR flights are separated from other IFR and receive traffic information in respect of VFR flights, VFR flights receive traffic information in respect of all other flights.

Class E. IFR and VFR flights are permitted, IFR flights are subject to air traffic control service and are separated from other IFR flights. All flights receive traffic information as far as is practical.

Class F. IFR and VFR flights are permitted, all participating IFR flights receive an air traffic advisory service and all flight information service if requested.

Class G. IFR and VFR flights are permitted and receive flight information service if requested.

The requirements for the flights within each class of airspace are as shown in the following table.

Class	Type of flight	Separation Provided	Service provided	VMC visibility and distance from cloud minima*	Speed limitation*	Radio communication requirements	Subject to an ATC clearance
A	IFR only	All aircraft	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
B	IFR	All aircraft	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
	VFR	All aircraft	Air traffic control service	8 KM at and above 3050 m (10000 FT) AMSL 5 KM below 3050 m (10000 FT) AMSL Clear of clouds	Not applicable	Continuous two-way	Yes

Class	Type of flight	Separation Provided	Service provided	VMC visibility and distance from cloud minima*	Speed limitation*	Radio communication requirements	Subject to an ATC clearance
C	IFR	IFR from IFR IFR from VFR	Air traffic control service	Not applicable	Not applicable	Continuous two-way	Yes
	VFR	VFR from IFR	1) Air traffic control service for separation from IFR; 2) VFR/VFR traffic information (and traffic avoidance advice on request)	8 KM at and above 3050 m (10 000 FT) AMSL 5 KM below 3050 m (10 000 FT) AMSL 1500 m horizontal; 300 m vertical distance from cloud	250 KT IAS below 3050 m (10000FT) AMSL	Continuous two-way	Yes
D	IFR	IFR from IFR	Air traffic control service including traffic information about VFR flights (and traffic avoidance advice on request)	Not applicable	250 KT IAS below 3050 m (10000FT) AMSL	Continuous two-way	Yes
	VFR	Nil	Traffic information between VFR and IFR flights (and traffic avoidance advice on request)	8 KM at and above 3050 m (10000 FT) AMSL 5 KM below 3 050 m (10 000 FT) AMSL 1500 m horizontal; 300 m vertical distance from cloud	250 KT IAS below 3050 m (10000FT) AMSL	Continuous two-way	Yes

Class	Type of flight	Separation Provided	Service provided	VMC visibility and distance from cloud minima*	Speed limitation*	Radio communication requirements	Subject to an ATC clearance
E	IFR	IFR from IFR	Air traffic control service and traffic information about VFR flights as far as practical	Not applicable	250 KT IAS below 3050 m (10000FT) AMSL	Continuous two-way	Yes
	VFR	Nil	Traffic information as far as practical	8 KM at and above 3050 m (10 000 FT) AMSL 1500 m horizontal; 300 m vertical distance from cloud	250 KT IAS below 3050 m (10000FT) AMSL	No	No
F	IFR	IFR from IFR as far as practical	Air traffic advisory service; flight information service	Not applicable	250 KT IAS below 3050 m /(10000FT) AMSL	Continuous two-way	No
	VFR	Nil	Flight information service	8 KM at and above 3050m (10000 FT) AMSL 5 KM below 3050 m (10000 FT) AMSL 1500 m horizontal; 300 m vertical distance from cloud At and below 900 m AMSL or 300 m above terrain, whichever is higher – 5 KM***, clear of cloud and in sight of ground or water	250 KT IAS below 3050 m (10000FT) AMSL	No	No

Class	Type of flight	Separation Provided	Service provided	VMC visibility and distance from cloud minima*	Speed limitation*	Radio communication requirements	Subject to an ATC clearance
G	IFR	Nil	Flight information service	Not applicable	250 KT IAS below 3050 m/ (10000FT) AMSL	Continuous two-way	No
	VFR	Nil	Flight information servicev	8 KM at and above 3050m (10000FT) AMSL 5KM below 3050 m (10000 FT) AMSL 1500 m horizontal; 300 m vertical distance from cloud. At and below 900 m AMSL or 300 m above terrain, whichever is higher – 5 KM***, clear of cloud and in sight of ground or water	250 KT IAS below 3050 m/ (10000FT) AMSL	No	No

• When the height of the transition altitude is lower than 3 050 m (10 000 FT) AMSL, FL 100 should be used in lieu of 10 000 FT.

*** When so prescribed by the appropriate ATS authority:

a) lower flight visibilities to 1 500 m may be permitted for flights operating:

1) at speeds that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or

2) in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low traffic volume and for aerial work at low levels;

b) helicopters may be permitted to operate in less than 1 500 m flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES

1. General

1.1 The holding, approach and departure procedures in use are based on those contained in the latest edition of ICAO Doc 8168 – *Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS).*

1.2 The holding and approach procedures in use have been based on the values and factors contained in Parts III and IV of Vol. I of the PANS-OPS. The holding patterns shall be entered and flown as indicated below.

1.3 Procedures to be used in communication failure situations are in accordance with PANS-ATM Doc 4444 Section 15.3.

2. Arriving flights

2.1 IFR flights entering and landing within a terminal control area will be cleared to a specified holding point and instructed to contact approach control at a specified time, level or position. The terms of this clearance shall be adhered to until further instructions are received from approach control. If the clearance limit is reached before further instructions have been received, holding procedure shall be carried out at the level last authorized.

2.2 Due to the limited airspace available, it is important that the approaches to the patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if for any reason the approach and/or holding cannot be performed as required.

2.3 Holding and Approach procedures for individual E/CAR aerodromes are contained in the relevant AD sections.

3. Departing flight

3.1 IFR flights departing from controlled aerodromes will receive initial ATC clearance from the local aerodrome control tower. The clearance limit will normally be the aerodrome of destination. IFR flights departing from non-controlled aerodromes must make arrangements with the area control centre concerned prior to take-off.

3.2 Detailed instructions with regard to routes, turns, etc. will be issued after take-off.

3.3 Departure procedures for individual E/CAR aerodromes are contained in the relevant AD sections.

<table>
<tr><td rowspan="2">Flight level (FL)</td><td rowspan="2">Category A and B aircraft</td><td colspan="2">Jet aircraft</td></tr>
<tr><td>Normal Conditions</td><td>Turbulence conditions</td></tr>
<tr><td>Up to FL 140
(4 250 M) inclusive</td><td>170 KT</td><td>230 KT
(425 KM/H)</td><td rowspan="3">280 KT (520 KM/H) or
Mach 0.8, whichever is less</td></tr>
<tr><td>Above FL 140 (4 250 M)
To FL 200 (6 100 M) inclusive</td><td colspan="2">240 KT
(445 KM/H)</td></tr>
<tr><td>Above FL 200 (6 100 M)
To FL 340 (10 350 M) inclusive</td><td colspan="2">265 KT
(490 KM/H)</td></tr>
<tr><td>Above FL 340
(10 350 M)</td><td colspan="2">Mach 0.83</td><td>Mach 0.83</td></tr>
</table>

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ENR 1.6 ATC SURVEILLANCE SERVICES AND PROCEDURES

1. Use of Radar in Air Traffic Services

1.1 General

1.1.1 A radar unit normally operates as an integral part of the parent ATS unit and provides radar service to aircraft, to the maximum extent practicable, to meet the operational requirements.

1.1.2 Many factors, such as radar coverage, controller workload and equipment capabilities, may affect these services, and the radar controller shall determine the practicability of providing or continuing to provide radar services in any specific case.

1.1.3 A Pilot will know when radar services are being provided because the radar controller will use the relevant ATS callsign depending on the position of the aircraft in the Piarco FIR and under what ATS unit the aircraft is operating, followed by 'Radar'.
For example:

a) Aircraft under Area Control – 'Piarco Radar'
b) Aircraft under Approach Control – 'Piarco Approach Radar'

1.2 Radar Coverage

1.2.1 Radar identification is achieved according to the provisions specified by ICAO

1.2.2 Radar control service when provided may consist of the following services.

1.2.3 Approach Control RADAR service may be provided within those portions of the Piarco Approach Sector under RADAR cover, vertically from SFC to FL155, and laterally within the sector boundaries, provided that accurate and reliable RADAR surveillance data is received and displayed.

1.2.4 Area Control RADAR service may be provided within the controlled airspace of the Piarco FIR's area of jurisdiction under RADAR cover, vertically from FL135 to unlimited, and laterally within 230nm from any RADAR head, provided that accurate and reliable RADAR surveillance data is received and displayed. Area Control RADAR Service shall not be provided within the TMAs of Barbados, Martinique, Guadeloupe, Antigua, Grenada and St. Vincent, within the airspace of the Piarco Approach sector or within the airspace of any adjacent FIR.

1.3 The Application of Radar Control Service

1.3.1 Radar identification is achieved in accordance with the provisions specified by ICAO

1.3.2 The minimum horizontal radar separation is 5 NM within the Piarco Approach Sector and 10NM in all other areas.

1.3.3 Radar control service when provided in the Piarco FIR may consist of the following services:

*radar separation of arriving, departing and en-route traffic at FL60 and above

*radar monitoring of arriving, departing and en-route traffic in areas and at flight levels as indicated in a) above.

*radar vectoring when required

*assistance to aircraft in emergency;

*warning and position information on other aircraft considered to constitute a hazard;

*information to assist in the navigation of aircraft;

*information on observed weather.

1.3.4 Radar services will be provided using the following Radars when they are available.

RADAR HEAD NAME	RANGE	COORDINATES
PIARCO MORNE CATHERINE (SSR)	250 NM	10 42 52N 061 37 53W
MARTINIQUE (SSR)	250 NM	14 31 38N 060 53 55W
GUADELOUPE (SSR)	250 NM	16 17 13N 061 27 10W
BARBADOS (SSR)	250 NM	13 05 13N 059 29 02W

1.4 Radar and Air-Ground Communication Failure Procedures

1.4.1 Radar Failure

1.4.1.1 In the event of radar failure or loss of radar identification, instructions will be issued to restore non-radar standard separation.

1.4.2 Air-Ground Communication Failure

1.4.2.1 The radar controller will establish whether the aircraft radio receiver is functioning by instructing the pilot to operate the SPI feature (Squawk Ident) or carry out a turn or turns. If the squawk or turns are observed, the radar controller will continue to provide radar service to the aircraft.

1.4.2.2 If the aircraft's radio is completely unserviceable, the pilot should carry out the procedures for radio failure in accordance with ICAO provisions. If radar identification has already been established, the radar controller will vector other identified aircraft clear of its track until such time as the aircraft leaves radar cover.

1.5 Voice and CPDLC position reporting requirements

1.5.1 In Piarco's Oceanic Airspace, CPDLC shall be the primary means of communication and voice via HF shall be the alternate.

1.5.2 Within Piarco's continental Airspace (west of 57°W), CPDLC is a supplementary means of communication. Voice over Radio Telephony remains the primary means of communication.

1.5.3 On entry to Piarco's Oceanic Airspace, a CPDLC position report should be made to verify that Piarco is the Current Data Authority (CDA). All other position reports shall be made via ADS-C.

1.6 Graphic portrayal of area of radar coverage.

See diagram on page ENR 1.6-6

2. Secondary Surveillance Radar- SSR

2.1 Operating procedures

2.1.1 Except as provided for under paragraph 2.2 and 2.3 below, pilots shall operate transponder and select modes and codes in accordance with ATC instructions.

2.1.2 When entering the Piarco FIR, pilots who have already received specific instructions concerning the setting of the transponder, shall maintain that setting until otherwise instructed. If no such instructions have been received, operate transponder on mode A/3 code 2000.

2.1.3 In order to improve radar detection of non-controlled flights in the Piarco FIR, pilots of SSR- equipped aircraft having setting of transponder, shall squawk mode A/3 code 2000.

2.1.4 Aircraft equipped with Mode C shall operate this function continuously except when instructed otherwise by Piarco Radar.

2.1.5 The SPI (IDENT) feature shall be operated only when directed by ATC.

2.2 Emergency procedures

2.2.1 If the pilot of an aircraft encountering a state of emergency has previously been directed by ATC to operate the transponder as a specific code, this code setting shall be maintained until otherwise advised. In all other circumstances, the transponder shall be set to mode A/3 code 7700.

2.2.2 Notwithstanding the procedure in paragraph 2.2.1 above, a pilot may select mode A/3 code 7700, whenever the nature of the emergency is such that this appears to him to be the most suitable course of action.
Note -: Continuous monitoring of responses on Mode A/3 Code 77 is provided.

2.3 Air-ground communication failure and unlawful interference procedures

2.3.1 Air-ground communication failure procedure

In the event of an aircraft radio receiver failure, a pilot shall select Mode A/3, Code 76 (or 7600) and follow established procedures; subsequent control of the aircraft will be based on those procedures.

2.3.2 Unlawful interference procedure

Pilots of aircraft in flight subjected to unlawful interference shall endeavour to set the transponder to Mode A, Code 7500 to make the situation known, unless circumstances warrant the use of Mode A/B, Code 77 (7700).

Note -Mode A, Code 7500 is permanently monitored in the Piarco FIR/UIR

2.4 System of SSR Code assignment – Eastern Caribbean

2.4.1 Eastern Caribbean SSR Code Allotment Plan

2.4.1.1 The SSR Code Allotment Plan is adopted to provide CAR/SAM States with the means to co- ordinate the use of 4,096 Mode A/3 SSR Codes as efficiently and economically as possible. Codes to be used as international transit codes are allocated for their use in the participant areas (PA) formed by ATS responsibility areas of a suitable group of FIRs. Codes for domestic purposes are allocated to States for their use by ATS units that require limited geographical protection for said codes.

2.4.1.2 This new code allotment plan takes into consideration the need to distribute the international transit code assigned to Piarco FIR and to adopt a plan of distribution of domestic SSR codes to prevent difficulties associated with the use of similar codes by adjacent ATS units. A flight exiting a TMA but remaining within Piarco FIR would keep the code allocated. Pilots are not to select code setting unless instructed to do so by the appropriate controlling ATS Units.

2.4.1.3 Table. - The Eastern Caribbean SSR codes allotment plan.

Controlling ATS Units	***International SSR codes***	***Domestic SSR Codes***	***Local SSR Codes***
V.C. Bird Approach	6300-6337	14	21
Adams APP	27	17	10
Pointe-a-Pitre APP	65	15	31
Fort de France APP	64	11	40
Saint Lucia APP	6340-6377	12	46
Piarco ACC	30, 60, 72	42, 44	50, 04
Reserved Codes	-	43, 46	-

International flight: *Flight originating from an aerodrome in the Piarco FIR and going to a destination outside its boundary and vice versa.*

Domestic flight: *Flight originating from an aerodrome in the Piarco FIR and flying to another TMA inside Piarco FIR.*

Local flight: *Flight within a TMA/CTR.*

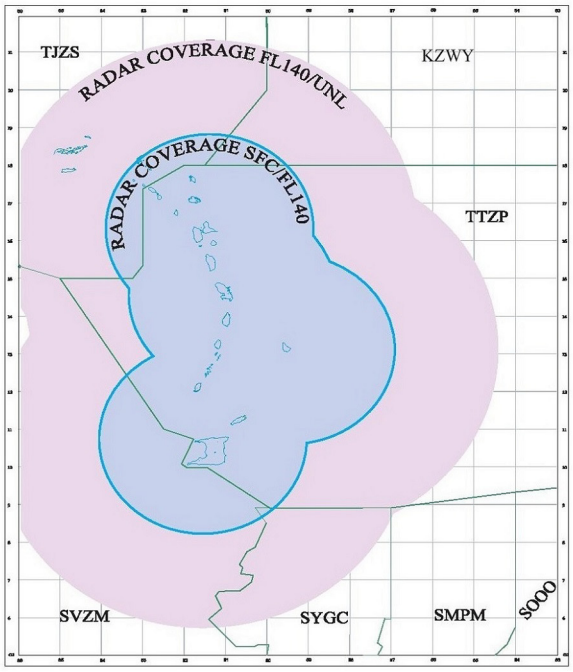
2.5 Voice and CPDLC position reporting requirements

2.5.1 In Piarco's Oceanic Airspace, CPDLC shall be the primary means of communication and voice via HF shall be the alternate.

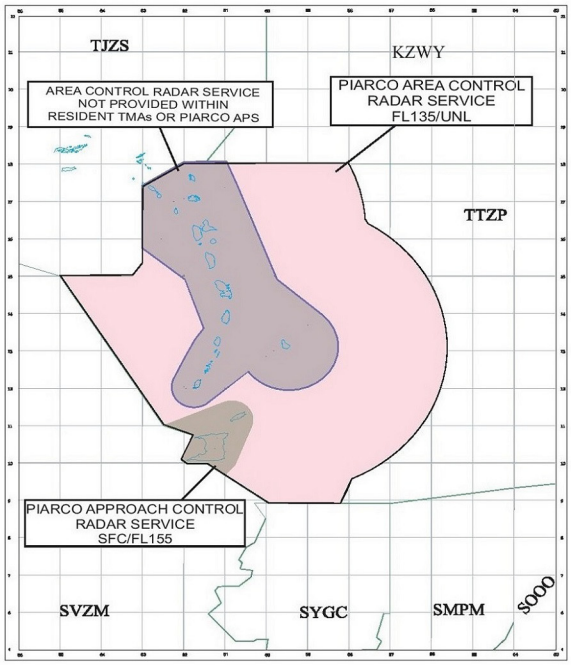
2.5.2 Within Piarco's continental Airspace (west of 57°W), CPDLC is a supplementary means of communication. Voice over Radio Telephony remains the primary means of communication.

2.5.3 On entry to Piarco's Oceanic Airspace, a CPDLC position report should be made to verify that Piarco is the Current Data Authority (CDA). All other position reports shall be made via ADS-C.

2.6 Graphical portrayal of area of SSR Coverage



Area of Radar Coverage TTZP FIR



Area and Approach Radar Control Service TTZP FIR

3. Automatic dependent surveillance - broadcast (ADS-B)

NIL

ENR 1.7 ALTIMETER SETTING PROCEDURES

1. Introduction

The altimeter setting procedures in use in the Eastern Caribbean generally conform to those contained in ICAO Doc 8168-, Vol 1, Part III Section I applicable parts of which are given below.

Transition altitudes for all aerodromes are given in the tabulation in AD 2 and on the instrument approach charts. Exceptions are those aerodromes, which can accommodate only VFR flights.

QNH reports and temperature information for use in determining adequate terrain clearances are provided in approach clearances and/or ATIS and are available on request from Air Traffic Service Units. QNH values are given in whole hectopascals.

Altimeter setting in inches will be supplied on request.

2. Basic Altimeter Setting Procedures

2.1 General

2.1.1 A transition altitude is specified for each Aerodrome.
No transition altitude is less than 2,500 feet above an aerodrome.

2.1.2 Vertical positioning of aircraft when at or below the transition altitude is expressed in terms of altitude, whereas such positioning at or above the transition level is expressed in terms of flight levels. While passing through the transition layer, vertical positioning is expressed in terms of altitude when descending and in terms of flight levels when ascending.

2.1.3 Flight level zero is located at the atmospheric pressure level of 1 013.2 hPa (29.92 in). Consecutive flight levels are separated by a pressure interval corresponding to500ft (152.4m) in the standard atmosphere.

Note: Examples of the relationship between flight levels and altimeter indications are given in the following table, the metric equivalents being approximate:

FLIGHT LEVEL NUMBER	ALTIMETER INDICATION		FLIGHT LEVEL NUMBER	ALTIMETER INDICATION	
	FEET	METRES		FEET	METRES
10	1000	300	50	5000	1500
15	1500	450	---	---	---
20	2000	600	100	10000	3050
25	2500	750	---		---
30	3000	900	150	15000	4550
35	3500	1050	---	---	---
40	4000	1200	200	20000	6100
45	4500	1350	---	---	---
			500	50000	15250

2.2 Take-off and climb

2.2.1 A QNH altimeter setting is made available to aircraft in taxi clearance prior to take-off.

2.2.2 Vertical positioning of aircraft during climb is expressed in terms of altitude until reaching the transition altitude above which vertical positioning is expressed in terms of flight level.

2.3 Vertical separation – en route

2.3.1 Vertical separation during en-route flight shall be expressed in terms of flight levels at all times "during IFR flight and at night":

2.3.2 IFR flights, and VFR flights above 900 m (3000ft), when in level cruising flight, shall be flown at such flight levels, corresponding to the magnetic tracks shown in the following table, so as to provide the required terrain clearance:

FLIGHT LEVELS			
000° - 179°		180° - 359°	
IFR	VFR	IFR	VFR
10	-	20	-
30	35	40	45
50	55	60	65
70	75	80	85
90	95	100	105
...	etc.	...	etc.
270		280	
290		300	
310		320	
330		340	
350		360	
etc.		etc.	

Note: - some of the lower levels in the above table may not be usable due to terrain clearance requirements

2.4 **Approach and landing**

2.4.1 A QNH altimeter setting is made available in approach clearance to enter the traffic circuit.

2.4.2 A QFE altimeter setting, as such, is made available in approach and landing clearances, on request.

2.4.3 Vertical positioning of aircraft during approach is controlled by reference to flight levels until reaching the transition level below which vertical positioning is controlled by reference to altitudes.

Note: This does not preclude a pilot using a QFE setting for terrain clearance purposes during the final approach to the runway

2.5 Missed approach

2.5.1 The altimeter settings used while completing a missed approach procedure will be dependent upon whether or not the procedure can be carried out below the transition altitude and in any event they should be consistent with the relevant portions of 2.1.2, 2.2 and 2.4.

3. Procedures applicable to operators (including pilots)

3.1 Flight planning

3.1.1 The levels at which a flight is to be conducted shall be specified in a flight plan:

(a) in terms of flight levels if the flight is to be conducted at or above the transition level or the lowest usable flight level, whichever is applicable: or,

(b) in terms of altitude if the flight is to be conducted in the vicinity of an aerodrome, or between adjacent aerodromes at or below the transition altitude or altitudes concerned.

Note 1: Short flights in the vicinity of an Aerodrome may often be conducted only at altitudes below the transition altitude.

Note 2: Flight Levels are specified in a plan by number and not in terms of feet or meters as in the case with altitudes.

4. Tables of Cruising levels.

The cruising levels to be observed when so required are as follows: -

TABLES OF CRUISING LEVELS											
MAGNETIC TRACK											
FROM 000° TO 179°						FROM 180° TO 359°					
IFR FLIGHTS			VFR FLIGHTS			IFR FLIGHTS			VFR FLIGHTS		
FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet	FL	Metres	Feet
00		-	-	-	-	0	-	-	-	-	-
10	300	1000	-	-	-	20	600	2000	-	-	-
30	900	3000	35	1050	3500	40	1200	4000	45	1350	4500
50	1500	5000	55	1700	5500	60	1850	6000	65	2000	6500
70	2150	7000	75	2300	7500	80	2450	8000	85	2600	8500
90	2750	9000	95	2900	9500	100	3050	10000	105	3200	10500
110	3350	11000	115	3500	11500	120	3650	12000	125	3800	12500
130	3950	13000	135	4100	13500	140	4250	14000	145	4400	14500
150	4550	15000	155	4700	15500	160	4900	16000	165	5050	16500
170	5200	17000	175	5350	17500	180	5500	18000	185	5650	18500
190	5800	19000	195	5950	19500	200	6100	20000	VFR FLIGHTS ABOVE FL200 ARE PROHIBITED		
210	6400	21000	VFR FLIGHTS ABOVE FL200 ARE PROHIBITED			220	6700	22000			
230	7000	23000				240	7300	24000			
250	7600	25000				260	7900	26000			
270	8250	27000				280	8550	28000			
***290**	**8850**	**29000**				***300**	**9150**	**30000**			
310	**9450**	**31000**				**320**	**9750**	**32000**			
330	**10050**	**33 000**				**340**	**10350**	**34000**			
350	**10650**	**35000**				**360**	**10950**	**36000**			
370	**11300**	**37000**				**380**	**11550**	**38000**			
390	**11900**	**39000**				***400**	**12200**	**40000**			
***410**	**12500**	**41000**				430	13100	43000			
450	13700	45000				470	14350	47000			
490	14950	49000				510	15500	51000			
530	16150	53000				550	16750	55000			
570	17400	57000				590	18000	59000			
610	18600	61000									

*** FL410/FL290 RVSM AIRSPACE**

ENR 1.8 REGIONAL SUPPLEMENTARY PROCEDURES (DOC 7030)

PART 1 - RULES OF THE AIR, AIR TRAFFIC SERVICES AND SEARCH AND RESCUE

The supplementary procedures in force and applicable to the Eastern Caribbean and the Piarco CTA/FIR are given in their entirety.

These procedures are supplementary to the provisions in Annex 2, Annex6, (Part II) Annex 11, PANS-ATM (Doc-4444) and PANS-OPS (Doc-8168).

1. Flight Plans

1.1 Contents of Flight Plans
(A2 – 3.3; P-ATM, Ch 4 - 4.4 and Appendix 2)

1.1.1 Route

1.1.1.1 Flight plans for flights or portions thereof along oceanic routes not defined by specified reporting points shall be made in accordance with the following:

1) For flights whose flight path is generally oriented in an east-west direction, the planned track shall normally be defined by significant points formed by the intersection of half or whole degrees of latitude with meridians spaced at intervals of 10 degrees.

2) For flights whose flight path is generally oriented in a north-south direction, the planned track shall normally be defined by significant points formed by the intersection of whole degrees of longitude with specified parallels of latitude spaced at 5 degrees intervals.

1.1.2 Aircraft exiting the TTZP CTA/FIR to enter the KZWY OCA shall:

1) Request Oceanic Clearance at least 30 minutes before reaching the TTZP/KZWY boundary,

2) Request Oceanic Clearance before departure from airports within V.C. Bird and Point-a-Pitre TMA's,

3) Indicate on flight plans coordinates at the TTZP/KZWY boundary preceded by TAS given as a Mach number.

2. Air-Ground Communications and In-Flight Reporting

Note: Annex 2, 3.63, 3.6.5.1 and 5.3.3, and PANS-ATM, Ch 4, require controlled flights and certain IFR flights outside controlled airspace to maintain a continuous listening watch on the appropriate radio frequency and to report positions in specified circumstances. The following expands such requirements and specifies additional details regarding the transmission and contents of in-flight reports.

2.1 Application
(A2 – 3.6.5, 5.3.2; P-ATM, Ch 4)

All aircraft on VFR flights and aircraft on IFR flights outside controlled airspace, shall maintain a watch on a radio station furnishing communications for the unit providing flight information service in the flight information region and file with that station information as to their position unless otherwise authorized by the State overflown.

2.2 Time or place of position reports
A2-3.6.3 3.6.5 5.3.3 P-ATM Ch 4 – 4.11.1)

2.2.1 Unless otherwise required by Air Traffic Services, position reports for flights on routes not defined by designated reporting points shall be made at the significant points listed in the flight plan.

2.2.2 Air Traffic Services may require any flight operating generally in an east-west direction to report its position at any of the intermediate meridians spaced at intervals of 10° of longitude when deemed necessary.

2.2.3 Air Traffic Services may require any flight operating generally in a north-south direction to report its position at any intermediate parallel of latitude when deemed necessary.

2.2.4 In requiring aircraft to report their position at intermediate intervals, the Air Traffic Services authorities will be guided by the requirement to have position information at approximately hourly intervals and also by the need to cater for varying types of aircraft and for varying traffic and meteorological conditions.

2.3 Contents of position report
(P-ATM Ch 4 – 4.11.2)

2.3.1 Position

"Position" shall for flights in oceanic areas outside the ATS routes network, be expressed by the latitude and longitude. For flights whose tracks are predominantly east or west, latitude shall be expressed in degrees and minutes, longitude in degrees only. For flights whose tracks are predominantly north or south, latitude shall be expressed in degrees only, longitude in degrees and minutes.

2.4 Transmission of position reports
(P-ATM Ch4 – 4.11.1)

2.4.1 ADS-C shall be the primary means of position reporting in airpace east of 57°W longitude. Flights that are not ADS-C capable shall make reports via CPDLC or voice on the HF assigned.

2.4.2 The last position report before passing from one flight information region to an adjacent flight information region shall also be made to the air traffic services unit serving the airspace about to be entered.

2.4.3 Position reports made by aircraft operating within an oceanic control area at a distance of 60 nautical miles or less from the common boundary with an adjacent oceanic control area, including aircraft operating on tracks through successive points on such boundary, shall also be made to the area control centre serving the adjacent control area.

2.4.4 Responsibility for the transmission of position reports to the additional Air Traffic Services Units specified in 2.4.3 may be delegated to the appropriate communications station(s) through local arrangements.

NOTE: Position reports referred to in 2.4 may be made to Piarco Oceanic Sector on the appropriate frequencies

3. Special procedures for in-flight contingencies (Doc. 7030 4.1)

3.1 The following procedures are intended for guidance only. Although all possible contingencies cannot be covered, they provide for cases of inability to maintain the assigned level due to weather, aircraft performance, pressurization failure and problems associated with high level supersonic flight. They are applicable primarily when rapid descent, turn back or both are required. The pilot's judgment shall determine the sequence of actions taken and having regard to the specific circumstances.

3.2 General procedures

The following procedures apply to subsonic and supersonic aircraft.

3.2.1 If an aircraft is unable to continue flight in accordance with its Air Traffic Control clearance, a revised clearance shall, whenever possible, be obtained prior to initiating any action, using the Radio telephony distress or urgency signal as appropriate.

3.2.2 If prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time and in the meantime, the aircraft shall broadcast its position (including the ATS route designator or track code, as appropriate and intentions, on frequency 121.5 MHz at suitable intervals until Air Traffic Control clearance is received.

4. Air Traffic Control Clearances

4.1 Contents of Clearance
(A11-3.7; P-ATM Ch 4 – 5; Ch 5 – 9; Ch 6 – 3.2, 5.2; Ch 7 – 3.1, 5.3.1.1, 8.4; Ch 10 – 4.3.2)

4.1.1 A Pilot-in-command shall if at any time in doubt, request a detailed description of the route from ATS.

5. Separation of aircraft

5.1 Lateral separation
(P-ATM Ch 5 – 4.1)

5.1.1 Minimum lateral separation shall be:

a) 100NM between aircraft in the Piarco CTA/FIR West of 55°W

b) 120 nautical miles between aircraft operating in the Piarco CTA/FIR east of 55 degrees West (over the Atlantic Ocean), except that the lower minima in 5.4.1 of Ch 5 of the PANS/ATM (Doc. 4444) may be applied or further reduced in accordance with 5.11.1 of the same chapter, where the conditions specified in the relevant PANS/ATM provisions are met.

5.1.2 In addition to the track separation criteria set forth in PANS-ATM Ch 5, minimum lateral separation, where radar is the means of confirming initial aircraft positions and track will diverge until other lateral separation is achieved, shall be:

Distance between tracks	Minimum degree divergence
5 NM	30
10 NM	20
15 NM	15
20 NM	10

5.2 **Longitudinal separation**
(P-ATM Ch 5 – 4.2)

5.2.1 Minimum longitudinal separation shall be 20 minutes between aircraft operating below FL200 West of 55 degrees West longitude and between aircraft operating at all levels East of 55 degrees West longitude, within San Juan, Piarco, Paramaribo and Rochambeau Flight Information Regions.

6. Use Of Secondary Surveillance Radar (SSR)
(P-ATM, Ch 8 – 5; P-OPS, Vol. I, Part VIII)

6.1 Assignment of SSR Codes

6.1.1 Except when otherwise prescribed by bilateral agreement between adjacent area control centres located in different ICAO Regions, area control centres providing air traffic services in flight information regions adjacent to other regions should, when properly equipped, assign individual SSR codes to aircraft entering their flight information regions from the adjacent regions. Such codes should be selected from the subset allocated to the area control centres for assignment to international flights.

6.1.2 *As* a general rule, an individual SSR code assigned to an international flight may be reassigned to another flight:

1) three hours after the departure of the leading aircraft; or

2) when it is estimated that the lead aircraft has landed;

whichever is the earlier.

7. Altimeter Setting Procedures Applicable To
Air Traffic Service And Minimum Levels
(P-ATM, Ch 4 - 10)

7.1 The lowest usable flight level for flights en-route may be calculated with reference to climatological data.

8. Flight information service

8.1 Information on runway conditions (A11-4.2.1; P-ATM Ch 9 – 1)

Unless otherwise provided, area control centres shall have available for transmission to aircraft on request, immediately prior to descent, information on the prevailing runway conditions at the aerodrome of International landing.

8.2 Transmission of SIGMET information (P-ATM Ch 9 – 1.3.2)

8.2.1 Transmission of SIGMET information to aircraft shall be at the initiative of the appropriate ATS unit, by the preferred method of directed transmission followed by acknowledgement, or by a general call when the number of aircraft would render the preferred method impracticable.

SIGMET information passed to aircraft shall cover a portion of the route up to two hours flying time ahead of the aircraft.

8.3 Transmission of amended aerodrome forecast (P-ATM, Ch 9 – 1.3.52)

8.3.1 Amended aerodrome forecast shall be passed to aircraft within 60 minutes from the aerodrome of destination, unless the information would have been made available through other means.

9. Air traffic services co-ordination

9.1 Co-ordination between units providing Area Control Service (P-ATM Ch 10 - 4).

9.1.1 If a flight should enter an adjacent area, information concerning any revision of estimates of 3 minutes or more shall be forwarded to the adjacent control centre.

10. Air traffic services messages

10.1 Flight plan and departure messages (P-ATM Ch 11 and APP3)

10.1.1 Filed Flight Plan messages for flights intending to operate within the NAT Region at a distance of 60 NM or less from the northern and southern boundaries of Gander Oceanic and Shanwick Oceanic Flight Information Regions, shall be addressed to the area control centres in charge of the NAT Flight Information Regions along the route and, in addition, to the area control centres in charge of the nearest adjacent NAT Flight Information Regions.

10.1.2 For flights departing from points within adjacent regions and entering the NAT Region without intermediate stops, filed flight plan messages shall be transmitted to the appropriate area control centres immediately after the flight plan has been submitted.

11. Alerting and search and rescue services

11.1 Routes and equipment of private aircraft.
(A6. Part II-6.3 and 6.4)

11.1.1 General aviation aircraft shall:

a) Carry appropriate survival equipment; and,

b) Be equipped with functioning two-way radio communications equipment except that under special local circumstances, the appropriate authorities may grant exemption from this requirement.

11.2 Alerting services
(P-ATM Ch 9 - 2)

11.2.1 The procedures for "Alerting Service" detailed in the PANS/ATM (Doc. 4444) Ch 9 para. 2 are applicable to all sectors of flights over mountainous or sparsely populated areas, including sea areas.

PART 2 – COMMUNICATIONS

These procedures are supplementary to the provisions contained in Annex 10 Vol II.

1. Aeronautical Mobile Service

1.1 Languages to be used in radiotelephony
(A10, Vol. II, 5.2.1.2, Note 2)

1.1.1 In English-speaking countries the alternative shall be Spanish.

Note: - Maintenance of this procedure does not require implementation beyond the extent to which it has been carried out so far.

ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT (ATFM)

TO BE DEVELOPED

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ENR 1.10 FLIGHT PLANNING

(Restriction, limitation or advisory information)

1. Procedures for the submission of a flight plan

1.1 Flight Plan

A flight plan shall be submitted in accordance with ICAO Annex 2, 3.3.1 and PANS ATM 4.4, prior to operating:

a) any flight or portion thereof to be provided with Air Traffic Control Services;

b) any IFR flight;

c) any VFR flight:

- departing from or destined for an-aerodrome within a control zone;

- crossing all Eastern Caribbean TMAS.

- across the Piarco FIR boundary, i.e. international flights.

1.2 Time of submission

Except for repetitive flight plans, a flight plan shall be submitted at least 30 minutes prior to departure, taking into account the requirements of ATS units in the airspace along the route to be flown for timely information, including requiements for early submission for Air Traffic Flow Management(AFTM) purposes..

***1.3* Place of submission**

a) (i)Flight plans shall be submitted at the Air Traffic Services Reporting Office (ARO) at the departure aerodrome.

(ii)Flight plans submitted during flight shall be transmitted to the appropriate ATS Unit or air-ground radio station

b) In the absence of such an office at the departure aerodrome, a flight plan shall be submitted by telephone or teletype to the nearest ARO.Under some circumstances and according to the discretion of the ARO officer, a flight plan may be accepted by telephone.

c) For domestic flights from an uncontrolled to a controlled aerodrome, a flight plan shall be submitted by telephone to the ARO at destination.

VFR flight plan for alerting service only

An alerting service is, in principle, provided to flights for which a flight plan has been submitted.

1.4 Contents and form of a flight plan

a) ICAO flight plan forms are available at AROs and airport offices at uncontrolled aerodromes. The instructions for completing those forms shall be followed. Forms and instructions are also available on the TTCAA website http://caa.gov.tt/ICAO-flight-plan-form/

b) Flight plans concerning IFR flights along ATS routes need not include FIR-boundary estimates. Inclusion of FIR-boundary estimates is, however, required for off-route IFR flights and international VFR flights.

c) When a flight plan is submitted by telephone, teletype or telefax, the sequence of items in the flight plan form shall be strictly followed.

d) Further information regarding content of a flight plan is published via AIC.

1.5 Adherence to ATS route structure

No flight plans shall be filed for routes deviating from the published ATS route structure unless prior permission has been obtained from the relevant ATC authorities.

1.6 Authorization for special flights

Flights of a specific character, such as survey flights, scientific research flights, etc., may be exempted from the restriction specified above. A request for exemption shall be mailed so as to be received at least one week before the intended day of operation to the relevant authority as listed at GEN 3.1-1.

1.7 Responsibility for Transmission of Flight Plans

ATS units at the departure aerodromes or agencies delegated by these units are responsible for transmitting of flight plan messages and relevant ATS messages.ATS authorities and relevant aircraft operating agencies are required to come to an agreement about where the final responsibility for transmission of flight plan and related ATS messages reside.The responsibilities specified by these agreements must be respected by each party in order to minimize the incidences of missing and duplicate flight plans.

2. Repetitive flight plan system

2.1 General

The procedures concerning the use of Repetitive Flight Plans (RPL) conform to ICAO Doc 7030 and the PANSATM.

RPL lists relating to flights within the Piarco FIR which are outside of the TMA's of the relevant Eastern Caribbean States as well as flights over flying the Piarco FIR shall be submitted at least two weeks in advance in duplicate to: -

Piarco Aeronautical Information Service
Trinidad and Tobago Civil Aviation Authority
ANS Building
TTCAA Complex
Caroni North Bank Road,
Piarco,
Trinidad and Tobago W.I.
Email: ais@caa.gov.tt Fax: (868) 669- 1716

RPL lists relating to flights within the Piarco FIR which remain within the TMA's of the relevant Eastern Caribbean States shall be submitted at least two weeks in advance in duplicate to the relevant ATS units of the Aerodromes concerned.

RPL lists shall be replaced in their entirety by new lists prior to the introduction of the summer and winter schedules.

2.2 Incidental changes and cancellations of RPL

2.2.1 Incidental changes to and cancellations of RPL for flights within, entering, leaving or transiting the Piarco FIR the routes of which:

a) go beyond the TMA's of the relevant Eastern Caribbean States shall be notified as early as possible and not later than 30 minutes before departure to:

Piarco Aeronautical Information Services
Telephone: (868) 669-4128 Fax: (868) 669 1716
Email: ais@caa.gov.tt

b) remain within the TMA's of the relevant Eastern Caribbean States shall be notified as early as possible and not later than 30 minutes before departure to the relevant ATS unit at the departure aerodromes

c) any flight for which an RPL has been submitted which is cancelled, the ATS unit responsible for the departure aerodrome shall be notified.

2.2.2 ATS units or any other delegated unit responsible for transmission of changes or cancellations must use the relevant ICAO message format as specified in Appendices 2 and 3 to the PANS ATM for changes/cancellation of RPLs which have become filed flight plans (FPLs).

2.3 List of Country, Aerodrome/Heliport and Telephone Numbers

COUNTRY / AERODROME and/or HELIPORT	TELEPHONE NUMBERS
ANGUILLA / **Clayton J. Lloyd**	264-497-2526/1646
ANTIGUA / **VC Bird**	268-462-4703/4675
B.V.I / **Auguste George**	284-495-1811/0415
Oil Nut Bay	284-393-1000
Terrance B. Lettsome	284-468-6494/3701
Virgin Gorda	284-495-5994, 496-7519
DOMINICA **/ Canefield**	767-449-2559/1199
Douglas Charles	767-255-9100/9180/9184
GRENADA / **Lauriston**	473-444-4101 Ext 2073
Maurice Bishop	-
MONTSERRAT**/John A. Osborne Airport**	664-491-4229/6218
NEVIS / **Vance Winkworth Amory**	869-469-9040
ST. KITTS / **Robert L. Bradshaw**	869-465-1820/2750
ST. LUCIA / **George F.Charles**	758-452-5860/2426
Hewanorra	758-454-6355 Ext 126
ST. VINCENT AND THE GRENADINES/ **Argyle**	784-458-5555
Bequia	784 482 1482
Canouan	784 456 0082
Mustique	784-488-8620/8896
Union Island	782 458 8750
TRINIDAD AND TOBAGO / **Piarco**	868-669-4128
A.N.R. Robinson	868-639-8759

2.4 Delay

When a specific flight is likely to encounter a delay of one hour or more in excess of the departure time stated in the RPL, the ATS units serving the departure aerodrome shall be notified immediately.

Note- Failure to comply with this procedure may result in the automatic cancellation of the RPL for that specific flight at one or more of the ATS units concerned

2.5 ATS messages

For a flight operated on an RPL, a flight plan message (FPL) will be transmitted. Departure messages (DEP) or delay messages (DLA) relating to such flights will Not be transmitted to relevant ATS units. Departure and Arrival Messages for filed VFR Flights will be transmitted.

3. Changes to the submitted flight plan

All changes to a flight plan submitted for an IFR flight or a controlled VFR flight and significant changes to a flight plan submitted for an uncontrolled VFR flight shall be reported as soon as possible to the appropriate ATS unit. In the event of a delay in departure of 30 minutes or more for a controlled flight or a delay of one hour for an uncontrolled flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan shall be submitted **after** the old plan has been cancelled.

Note 1: If a delay in departure of a controlled flight is not properly reported, the relevant flight plan data may no longer be readily available to the appropriate ATS unit when a clearance is ultimately requested, which will consequently result in extra delay for the flight.

Note 2: If a delay in departure (or cancellation) of an uncontrolled VFR flight is not properly reported, alerting or search and rescue action may be unnecessarily initiated when the flight fails to arrive at the destination aerodrome within 30 minutes after its current ETA.

3.2 Whenever a flight, for which a flight plan has been submitted, is cancelled, the appropriate ATS unit shall be informed immediately.

3.3 ATS units or any other delegated unit with the responsibility of transmitting flight plans and related ATS messages must use the relevant ICAO format for changes, cancellations, delays etc.
Duplication of flight plans are to be avoided by:

1) first, attempting to issue relevant changes by use of (CHG), (DLA) etc

2) if, the action at 1) is not possible, first, issue a cancellation (CNL) before re-transmission of a modified flight plan.

3.4 Changes to a current flight plan for a controlled flight during flight shall be reported or requested, subject to the provisions in ICAO Annex 2, 3.6.2. (Adherence to flight plan). Significant changes to a flight plan for an uncontrolled VFR flight include changes in endurance or in the total number of persons on board and changes in time estimates of 30 minutes or more.

4. Arrival report (closing a flight plan)

A plan of arrival shall be made at the earliest possible moment after landing to the airport office of the arrival aerodrome by any flight for which a flight plan has been submitted except when the arrival has been acknowledged by the local ATS unit. After landing at an aerodrome which is not the destination aerodrome (diversionary landing), the local ATS unit shall be specifically informed accordingly. In the absence of a local ATS unit at the aerodrome of diversionary landing, the pilot is responsible for passing the arrival report to the destination aerodrome. Arrival reports shall contain the following elements of information;

- aircraft identification
- departure aerodrome
- destination aerodrome
- time of arrival.

In the case of diversion, insert the “arrival aerodrome” between “destination aerodrome” and “time of arrival” e.g.

- destination aerodrome
- arrival aerodrome
- time of arrival.

ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

Flight movement messages relating to traffic into or via the Piarco FIR, including Anguilla and BVI shall be addressed as below in order to warrant correct relay and delivery. See diagram on page ENR 1.11-5.

Note 1: Flight movement messages in this context comprise flight plan messages, amendment messages relating thereto and flight plan cancellation messages (ICAO PANS-ATM, Doc 4444, Ch 11 par 11.1.3 refers).

Note 2: Some information concerning Flight Plan addressing is promulgated via AIC.

Category of flight (IFR, VFR or both)	**Route (into or via FIR and/or TMA and/or AD)**	**Message address**
1	2	3
IFR/VFR	Via PIARCO FIR	TTZPZQZX
IFR/VFR	Into PIARCO CTR/AD or A.N.R. ROBINSON AD	TTZPZQZX
IFR/VFR	**Southbound** into GRANTLEY ADAMS TMA/CTR/AD via Martinique TMA	TFFFZTZX TBPBZTZX
IFR/VFR	**Northbound** into GRANTLEY ADAMS TMA/CTR/AD via Maurice Bishop TMA and/or Piarco FIR	TTZPZQZX TBPBZTZX TGPYZPZX
IFR/VFR	**Eastbound** into GRANTLEY ADAMS TMA/CTR/AD via Argyle TMA	TBPBZTZX TVSAZPZX
IFR/VFR	**Southbound** into MARTINIQUE TMA/CTR/AD via Point-a-Pitre TMA	TFFFZTZX TFFRZTZX
IFR/VFR	**Northbound** into MARTINIQUE TMA/CTR/AD via Argyle TMA and/ or St. Lucia CTR	TFFFZTZX TLPLZTZX TVSAZPZX
IFR/VFR	**Northbound** into MARTINIQUE TMA/CTR/AD via Grantley Adams TMA	TBPBZPZX TBPBZTZX TFFFZTZX
IFR/VFR	**Southbound** into POINT-A-PITRE TMA/CTR/AD via V.C. Bird TMA	TAPAZPZX TFFRZTZX
IFR/VFR	**Northbound** into POINT-A-PITRE TMA/CTR/AD via Martinique TMA	TFFRZTZX TFFFZTZX
IFR/VFR	**Northbound** into V.C. Bird TMA/ CTR/AD via Point-a-Pitre TMA	TFFRZTZX TAPAZTZX
IFR/VFR	**Southbound** into V.C. BIRD TMA/ CTR/AD via Juliana TMA	TNCMZPZX TAPAZTZX

Category of flight (IFR, VFR or both)	Route (into or via FIR and/or TMA and/or AD)	Message address
1	2	3
IFR/VFR	**Southbound** into MAURICE BISHOP TMA/CTR/AD/ LAURISTON AD via Argyle TMA	TGPYZTZX TVSAZPZX
IFR/VFR	**Northbound** into ST. LUCIA CTR/ GEORGE F. CHARLES AD/ HEWANORRA AD via Martinique TMA/Argyle TMA	TFFFZTZX TVSAZPZX TLPCZTZX *(if DEST/ALT)* TLPLZTZX *(if DEST/ALT)*
IFR/VFR	**Southbound** into ST. LUCIA CTR/ GEORGE F. CHARLES AD/ HEWANORRA AD via Martinique TMA	TFFFZTZX TLPCZTZX *(if DEST/ALT)* TLPLZTZX *(if DEST/ALT)*
IFR/VFR	**Northbound** or **Westbound** into ROBERT L. BRADSHAW CTR/AD/ Vance Winkworth Amory AD via Point-a- Pitre TMA/ V. C. Bird TMA	TFFRZTZX TAPAZPZX TKPKZTZX *(if DEST/ALT)* TKPNZTZX *(if DEST/ALT)*
IFR/VFR	**Southbound** into ROBERT L. BRADSHAW CTR/AD/Vance Winkworth Amory AD via Juliana TMA/ V. C. Bird TMA	TNCMZPZX TAPAZPZX TKPKZTZX *(if DEST/ALT)* TKPNZTZX *(if DEST/ALT)*
IFR/VFR	**Northbound** into C. J. LLOYD CTR/ AD via Juliana TMA/V. C. Bird TMA	TAPAZPZX TNCMZPZX TQPFZTZX
IFR/VFR	**Southbound** into C. J. LLOYD CTR/ AD via Juliana TMA/San Juan FIR	TJZSZQZX *(IFR)* TJSJYFYX *(VFR)* TNCMZPZX TQPFZTZX KZMAZQZX
IFR/VFR	**Northbound** into JOHN A. OSBORNE AIRPORT via Point-a-Pitre TMA/V.C. Bird TMA	TFFRZTZX TAPAZPZX TRPGZTZX
IFR/VFR	**Southbound** into JOHN A. OSBORNE AIRPORT via V.C. Bird TMA	TAPAZPZX TRPGZTZX TFFRZTZX
IFR/VFR	Into DOUGLAS CHARLES CTR/ AD/ CANEFIELD AD/ via Martinique TMA/Point-a-Pitre TMA	TFFFZTZX TFFRZTZX TDCFZTZX *(if DEST/ALT)* TDPDZTZX *(if DEST/ALT)*

Category of flight (IFR, VFR or both)	Route (into or via FIR and/or TMA and/or AD)	Message address
1	2	3
IFR/VFR	**Northbound** into ARGYLE TMA/ CTR/AD/BEQUIA AD/ CANOUAN AD/MUSTIQUE AD/ UNION ISLAND AD via Maurice Bishop TMA	TVSAZTZX TGPYZPZX
IFR/VFR	**Southbound** into ARGYLE TMA/ CTR/AD/BEQUIA AD/ CANOUAN AD/MUSTIQUE AD/ UNION ISLAND AD via Martinique TMA and/or Hewanorra CTR	TFFFZTZX TVSAZTZX TLPLZTZX
IFR/VFR	Into TERRANCE B. LETTSOME CTR/ AD/ AUGUSTE GEORGE AD/ VIRGIN GORDA AD	TJZSZQZX *(IFR)* TJSJYFYX *(VFR)* TUPJZTZX KZMAZQZX
IFR/VFR	Entering NEW YORK Airspace from PIARCO FIR	KNYCZZZX TTZPZQZX
IFR/VFR	Operating EAST OF 58W within PIARCO FIR	KNYCZZZX TTZPZQZX

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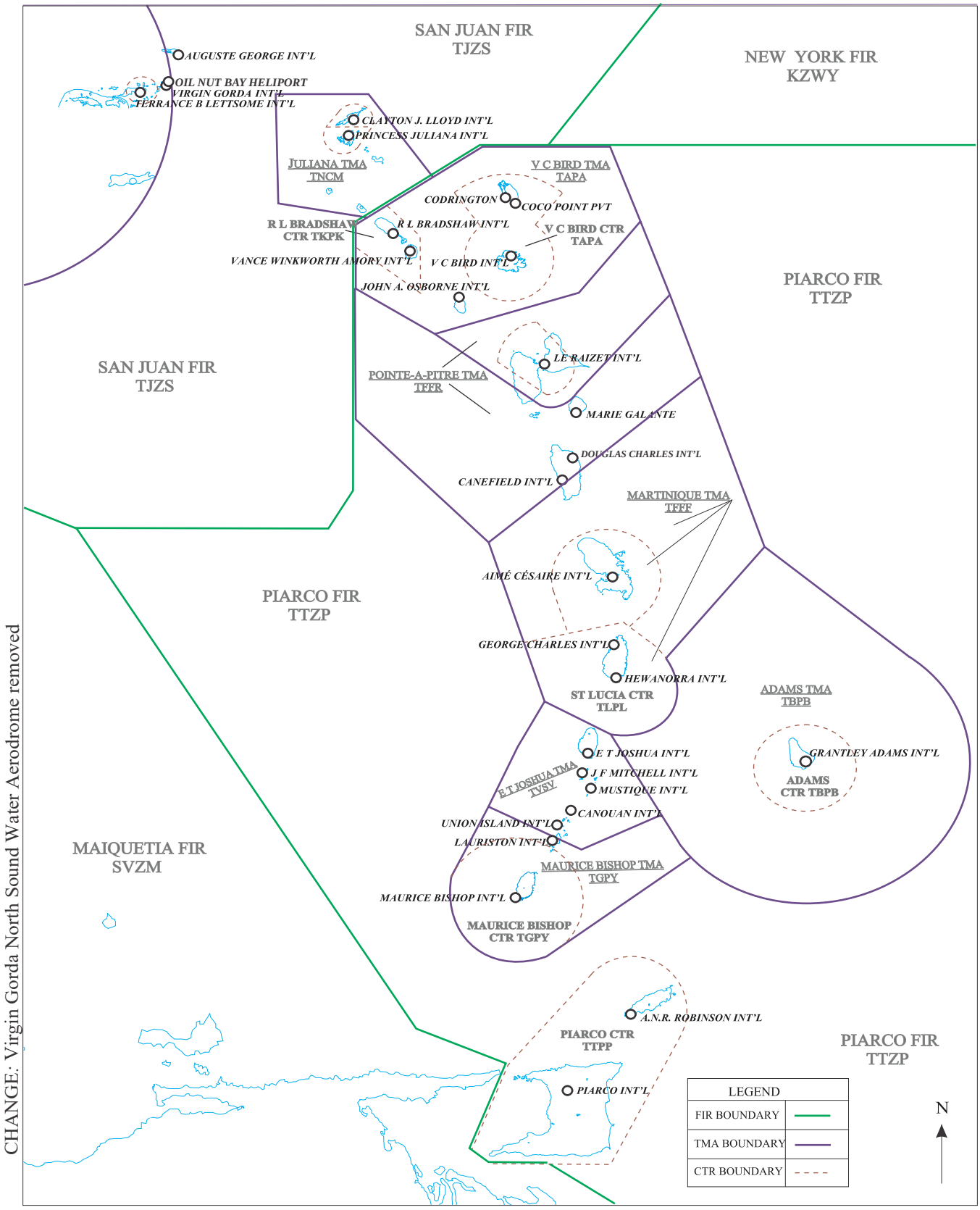
EASTERN CARIBBEAN CHART FOR FLIGHT PLAN ADDRESSING



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ENR 1.12 INTERCEPTION OF CIVIL AIRCRAFT

1. Interception procedures

1.1 The following procedures and visual signals apply over the territory and territorial waters of Eastern Caribbean States in the event of interception[1] of an aircraft. An aircraft which is intercepted by another aircraft shall immediately:

a) follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in Appendix 1 of ICAO Annex 2;

b) notify, if possible, the appropriate air traffic services unit;

c) attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identity of the intercepted aircraft and the nature of the flight; if no contract has been established and if practicable, repeat this call on the emergency frequency 243 MHz;

d) if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate air traffic services unit.

1.2 If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the phrases and pronunciations in the following table, transmitting each phase twice:

1. The word "interception" in this context does not include intercept and escort service provided, on request, to an aircraft in distress, in accordance with the Search and Rescue Manual (Doc 7333).

Phrase	Pronunciation[1]	Meaning
CALL SIGN (call sign)[2]	**KOL** SA-IN (call sign)	My call sign is (call sign)
WILCO	**VILL-**KO	Understood, Will comply
CAN NOT	**KANN** NOTT	Unable to comply
REPEAT	REE-**PEET**	Repeat your instruction
AM LOST	**AM LOSST**	Position unknown
MAYDAY	**MAYDAY**	I am in distress
HIJACK[3]	**HI-JACK**	I have been hijacked
LAND (place name)	**LAAND** **(place name)**	I request to land at (place name)
DESCEND	DEE-**SEND**	I require descent

1. Syllables to be emphasized are printed in bold letters.

2. The call sign required to be given is that used in radiotelephony communication with air traffic services units and corresponding to the aircraft identification in the flight plan.

3. Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

1.3 The phrases shown in the table below shall be used by the intercepting aircraft and transmitted twice in the circumstances described in the preceding paragraph.

Phrase	*Pronunciation*[1]	*Meaning*
CALL SIGN	**KOL** SA-IN	What is your call sign?
FOLLOW	**FOL-LO**	Follow me
DESCEND	DEE-**SEND**	Descend for landing
YOU LAND	**YOU LAAND**	Land at this aerodrome
PROCEED	PRO-**SEED**	You may proceed

1. Syllables to be emphasized are printed in bold letters.

1.4 If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

1.5 If instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

1.6 The visual signals for use in the event of interception are detailed on page ENR 1.12-3.

SIGNALS FOR USE IN THE EVENT OF INTERCEPTION

Signals initiated by intercepting aircraft and responses by intercepted aircraft

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
1.	DAY or NIGHT – Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of a helicopter) on the desired heading. *Note 1.- Meteorological conditions or terrain may required the intercepting aircraft to reverse the positions and direction of turn given above in Series 1.* *Note 2.- If the intercepted aircraft is not able to keep pace with intercepting aircraft, the latter is expected to fly a series of racetrack patterns and to rock the aircraft each time it passes the intercepted aircraft*	You have been intercepted. Follow me.	DAY or NIGHT- Rocking aircraft, flashing navigational lights at irregular intervals and following *Note.- Additional action required to be taken by intercepted aircraft is prescribed in Annex 2, Chapter 3, 3.8.*	Understood, will comply.
2	DAY or NIGHT- An abrupt break-away manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT – Rocking the aircraft.	Understood, will comply.
3	DAY or NIGHT- Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT – Lowering landing gear, (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overflying the runway in use or helicopter landing area, landing is considered safe, proceeding to land.	Understood, will comply.

Signals initiated by intercepted aircraft and responses by intercepting aircraft

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
4	DAY or NIGHT – Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 300 M (1 000 FT) but not exceeding 600 M (2 000 FT) (in the case of a helicopter, at a height exceeding 50 M (170 FT) but not exceeding 100 M (330 FT) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	Day or Night – If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the Series 1 signals prescribed for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.	Understood, follow me. Understood, you may proceed.
	DAY or NIGHT – Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply.	DAY or NIGHT – Use Series 2 signals prescribed for intercepting aircraft.	Understood.
	DAY or NIGHT – Irregular flashing of all available lights.	In distress.	DAY or NIGHT – Use Series 2 signals prescribed for intercepting aircraft.	Understood.

ENR 1.13 UNLAWFUL INTERFERENCE

1. General

The following procedures are intended for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this fact.

2. Procedures

2.1 Unless consideration aboard the aircraft dictate otherwise, the pilot-in-command should attempt to continue flying on the assigned track and at the assigned cruising level at least until notification to an ATS unit is possible or the aircraft is within radar coverage.

2.2 When an aircraft subjected to an act of unlawful interference must depart from its assigned track or its assigned cruising level without being able to make radiotelephony contact with ATS, the pilot-in-command should, whenever possible:

a) attempt to broadcast warnings on the VHF emergency frequency and other appropriate frequencies, unless considerations aboard the aircraft dictate otherwise. Other equipment such as onboard transponders, data links, etc. should also be used when it is advantageous to do so and circumstances permit; and

b) proceed in accordance with applicable special procedures for in-flight contingencies, where such procedures have been established and promulgated in Doc 7030 – *Regional Supplementary Procedures*; or

c) if no applicable regional procedures have been established, proceed at a level which differs from the cruising levels normally used for IFR flight in the area by 300 m (1 000 ft) if above FL 290 or by 150 m (500 ft) if below FL 290.

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ENR 1.14 AIR TRAFFIC INCIDENTS

1. Definition of air traffic incidents

1.1 "Air traffic incident" is used to mean a serious occurrence related to the provision of air traffic services, such as:

a) aircraft proximity (AIRPROX);

b) serious difficulty resulting in a hazard to aircraft caused, for example, by:

1) faulty procedures

2) non-compliance with procedures, or

3) failure of ground facilities.

1.1.1 Definitions for aircraft proximity and AIRPROX.

Aircraft proximity. A situation in which, in the opinion of the pilot or the air traffic services personnel, the distance between aircraft, as well as their relative positions and speed, has been such that the safety of the aircraft involved may have been compromised. Aircraft proximity is classified as follows:

Risk of collision. The risk classification of aircraft proximity in which serious risk of collision has existed.

Safety not assured. The risk classification of aircraft proximity in which the safety of the aircraft may have been compromised.

No risk of collision. The risk classification of aircraft proximity in which no risk of collision has existed.

Risk not determined. The risk classification of aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.

AIRPROX. The code word used in an air traffic incident report to designate aircraft proximity.

1.2 Air traffic incidents are designated and identified in reports as follows:

Type	***Designation***
Air traffic incident	Incident
As a) above	AIRPROX (aircraft proximity)
As b) 1) and 2) above	Procedure
As b) 3) above	Facility

2. Use of the Air Traffic Incident report Form
(See model on pages ENR 1.14-4 to 1.14-7)

The Air Traffic Incident Report Form is intended for use:

a) by a pilot for filing a report on an air traffic incident after arrival or for confirming a report made initially by radio during flight.

Note.- The form, if available on board, may also be of use in providing a pattern for making the initial report in flight.

b) by an ATS unit for recording an air traffic incident report received by radio, telephone or teleprinter.

Note.- The form may be used as the format for the text of a message to be transmitted over the AFS network.

3. Reporting procedures (including in-flight procedures)

3.1 The following are the procedures to be followed by a pilot who is or has been involved in an incident:

a) during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the facts to be ascertained immediately;

b) as promptly as possible after landing, submit a completed Air Traffic Incident Report Form:

1) for confirming a report of an incident made initially as in a) above, or for making the initial report on such an incident if it had not been possible to report it by radio;

2) for reporting an incident which did not require immediate notification at the time of occurrence.

3.2 An initial report made by radio should contain the following information

a) aircraft identification;

b) type of incident, e.g. aircraft proximity;

c) the incident; 1. a) and b); 2. a), b), c), d), n); 3.a), b), c), i); 4. a), b);

d) miscellaneous: 1. e).

3.3 The confirmatory report on an incident of major significance initially reported by radio or the initial report on any other incident should be submitted to the relevant aeronautical authority governing the airspace within which the incident took place, or to the ATS reporting office at the aerodrome of first landing for submission to the relevant aeronautical authority. The pilot should complete the Air Traffic Incident Report Form, supplementing the details of the initial reports as necessary.

Note.- Where there is no ATS Reporting Office, the report may be submitted to another ATS unit.

4. Purpose of reporting and handling of the form

4.1 The purpose of the reporting of aircraft proximity incidents and their investigation is to promote the safety of aircraft. The degree of risk involved in an aircraft proximity incident should be determined in the incident investigation and classified as “risk of collision” “safety not assured”, “no risk of collision” or “risk not determined”.

4.2 The purpose of the form is to provide investigating authorities with as complete information on an air traffic incident as possible and to enable them to report back with the least possible delay to the pilot or operator concerned, the result of the investigation of the incident and, if appropriate, the remedial action taken.

AIR TRAFFIC INCIDENT REPORT FORM

For use when submitting and receiving reports on air traffic incidents. In an initial report by radio, shaded items should be included.

A — AIRCRAFT IDENTIFICATION	B — TYPE OF INCIDENT
	AIRPROX / PROCEDURE / FACILITY*

C — THE INCIDENT

1. General

a) Date / time of incident _____ UTC

b) Position _____

2. Own aircraft

a) Heading and route _____

b) True airspeed _____ measured in ( ) kt _____ ( ) km/h _____

c) Level and altimeter setting _____

d) Aircraft climbing or descending

( ) Level flight ( ) Climbing ( ) Descending

e) Aircraft bank angle

( ) Wings level ( ) Slight bank ( ) Moderate bank

( ) Steep bank ( ) Inverted ( ) Unknown

f) Aircraft direction of bank

( ) Left ( ) Right ( ) Unknown

g) Restrictions to visibility (select as many as required)

( ) Sun glare ( ) Windscreen pillar ( ) Dirty windscreen

( ) Other cockpit structure ( ) None

h) Use of aircraft lighting (select as many as required)

( ) Navigation lights ( ) Strobe lights ( ) Cabin lights

( ) Red anti-collision lights ( ) Landing / taxi lights ( ) Logo (tail fin) lights

( ) Other ( ) None

i) Traffic avoidance advice issued by ATS

( ) Yes, based on ATS surveillance system ( ) Yes, based on visual sighting ( ) Yes, based on other information

( ) No

j) Traffic information issued

( ) Yes, based on ATS surveillance system ( ) Yes, based on visual sighting ( ) Yes, based on other information

( ) No

k) Airborne collision avoidance system — ACAS

( ) Not carried ( ) Type ( ) Traffic advisory issued

( ) Resolution advisory issued ( ) Traffic advisory or resolution advisory not issued

l) Identification

( ) No ATS surveillance system available ( ) Identification ( ) No identification

m) Other aircraft sighted

( ) Yes ( ) No ( ) Wrong aircraft sighted

n) Avoiding action taken

( ) Yes ( ) No

o) Type of flight plan IFR / VFR / none*

3. Other aircraft

a) Type and call sign / registration (if known) _____

b) If a) above not known, describe below

( ) High wing ( ) Mid wing ( ) Low wing

( ) Rotorcraft

( ) 1 engine ( ) 2 engines ( ) 3 engines

( ) 4 engines ( ) More than 4 engines

Marking, colour or other available details

_____

_____

_____

_____

c) Aircraft climbing or descending

( ) Level flight ( ) Climbing ( ) Descending

( ) Unknown

d) Aircraft bank angle

( ) Wings level ( ) Slight bank ( ) Moderate bank

( ) Steep bank ( ) Inverted ( ) Unknown

e) Aircraft direction of bank

( ) Left ( ) Right ( ) Unknown

f) Lights displayed

( ) Navigation lights ( ) Strobe lights ( ) Cabin lights

( ) Red anti-collision lights ( ) Landing / taxi lights ( ) Logo (tail fin) lights

( ) Other ( ) None ( ) Unknown

g) Traffic avoidance advice issued by ATS

( ) Yes, based on ATS surveillance system ( ) Yes, based on visual sighting ( ) Yes, based on other information

( ) No ( ) Unknown

h) Traffic information issued

( ) Yes, based on ATS surveillance system ( ) Yes, based on visual sighting ( ) Yes, based on other information

( ) No ( ) Unknown

i) Avoiding action taken

( ) Yes ( ) No ( ) Unknown

4. Distance

a) Closest horizontal distance _____

b) Closest vertical distance _____

5. Flight meteorological conditions

a) IMC / VMC*

b) Above / below* clouds / fog / haze or between layers*

c) Distance vertically from cloud _____ m / ft* below _____ m / ft* above

d) In cloud / rain / snow / sleet / fog / haze*

e) Flying into / out of* sun

f) Flight visibility _____ m / km*

6. Any other information considered important by the pilot-in-command

_____

_____

_____

_____

_____

D — MISCELLANEOUS

1. Information regarding reporting aircraft

a) Aircraft registration _____

b) Aircraft type _____

c) Operator _____

d) Aerodrome of departure _____

e) Aerodrome of first landing _____ Destination _____

f) Reported by radio or other means to _____ (name of ATS unit) at date/time _____ UTC

g) Date / time / place of completion of form _____

2. Function, address and signature of person submitting report

a) Function _____

b) Address _____

c) Signature _____

d) Telephone number _____

3. Function and signature of person receiving report

a) Function _____ b) Signature _____

E — SUPPLEMENTARY INFORMATION BY ATS UNIT CONCERNED

1. Receipt of report

a) Report received via AFTN / radio / telephone / other (specify)* _____

b) Report received by _____ (name of ATS unit)

2. Details of ATS action

Clearance, incident seen (ATS surveillance system/visually, warning given, result of local enquiry, etc.)

_____

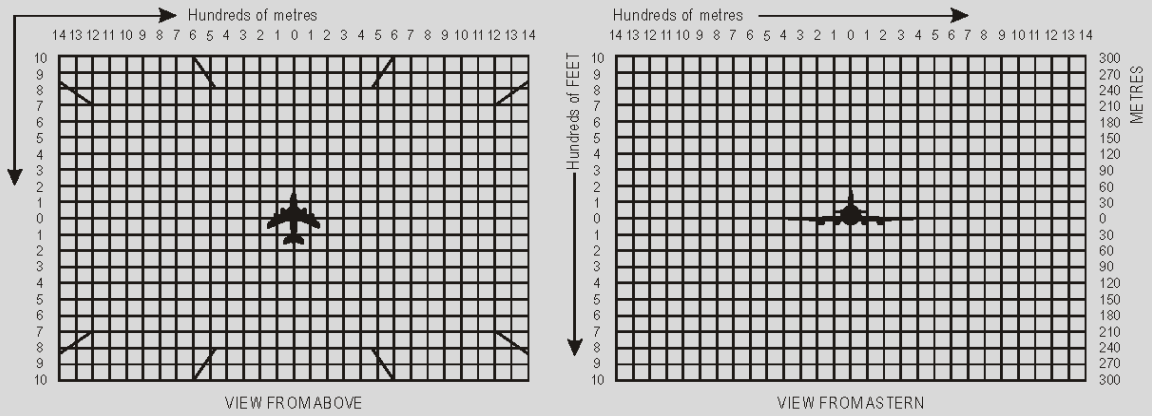
_____

_____

_____

DIAGRAMS OF AIRPROX

Mark passage of other aircraft relative to you, in plan on the left and in elevation on the right, assuming YOU are at the centre of each diagram. Include first sighting and passing distance.



Instructions for the completion of the Air Traffic Incident Report Form

Item	
A	Aircraft identification of the aircraft filing the report.
B	An AIRPROX report should be filed immediately by radio.
C1	Date/time UTC and position in bearing and distance from a navigation aid or in LAT/LONG.
C2	Information regarding aircraft filing the report, tick as necessary.
C2 c)	E.g. FL 350/1 013 hPa or 2 500 ft/QNH 1 007 hPa or 1200 ft/QFE 998 hPa.
C3	Information regarding the other aircraft involved.
C4	Passing distance – state units used.
C6	Attach additional papers as required. The diagrams may be used to show aircraft's positions.
D1 f)	State name of ATS unit and date/time in UTC.
D1 g)	Date and time in UTC and place of completion of form
E2	Include details of ATS unit such as service provided, radiotelephony frequency, SSR Codes assigned and altimeter setting. Use diagram to show the aircraft's position and attach additional papers as required.

ENR 2. AIR TRAFFIC SERVICES AIRSPACE

ENR 2.1 FIR

ENR 2.1.1 FIR, UTA, CTA

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PIARCO FIR Area bounded by lines joining points 150000N/0650000W; 150000N/0631500W; 152000N/0630000W; 172200N/0630000W; 180000N/0620000W; 180000N/0450000W; 221800N/0400000W; 170000N/0373000W; 133000N/0373000W; 100000N/0480000W; 092000N/0540000W; 085500N/0570000W; 085500N/0595700W; 095923N/0612757W; 095923N/0615540W; 100506N/0620328W; 104400N/0614700W; 110000N/0623000W to point of origin. UNL MSL RVSM AIRSPACE: FL410/FL290	PIARCOACC	PIARCO RADAR ENGLISH PIARCO OCEANIC ENGLISH H24	123.700MHZ (1) 124.000MHZ (2) 125.400MHZ (2) 126.500MHZ (2) 133.100MHZ (1) 11396KHZ 13306KHZ 17946KHZ 21925KHZ 3016KHZ 5520KHZ 5598KHZ 8906KHZ	(1)North Sector/Combined Sector (2)South Sector Note: No VHF coverage east of 57°W Operating Authority Trinidad & Tobago Civil Aviation Authority ADS-C shall be the primary means of position reporting in airspace east of 57° W longitude. Flights not ADS-C capable shall make reports via CPDLC or Voice on the HF assigned. New York ARINC will provide a relay service for all airspace users operating in the Piarco FIR.

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PIARCO UPPER CONTROL AREA (PIARCO UTA) Area bounded by lines joining points 150000N/0650000W; 150000N/0631500W; 152000N/0630000W; 172200N/0630000W; 180000N/0620000W; 180000N/0450000W; 221800N/0400000W; 170000N/0373000W; 133000N/0373000W; 100000N/0480000W; 092000N/0540000W; 085500N/0570000W; 085500N/0595700W; 095923N/0612757W; 095923N/0615540W; 100506N/0620328W; 104400N/0614700W; 110000N/0623000W to point of origin. UNL FL245 CLASS of Airspace: A RVSM AIRSPACE: FL410/FL290				Information same as for Piarco CTA all columns.
PIARCO LOWER CONTROL AREA (PIARCO CTA) Area bounded by lines joining points 150000N/0650000W; 150000N/0631500W; 152000N/0630000W; 172200N/0630000W; 180000N/0620000W; 180000N/0450000W; 221800N/0400000W; 170000N/0373000W; 133000N/0373000W; 100000N/0480000W; 092000N/0540000W; 085500N/0570000W; 085500N/0595700W; 095923N/0612757W; 095923N/0615540W; 100506N/0620328W; 104400N/0614700W; 110000N/0623000W to point of origin. Excluding TMAs and Piarco CTR FL245 FL055 Class of Airspace: FL245/FL195: A Class of Airspace: FL195/FL55: E	PIARCO ACC	PIARCO RADAR ENGLISH PIARCO OCEANIC ENGLISH H24	123.700MHZ (1) 124.000MHZ (2) 125.400MHZ (2) 126.500MHZ (2) 133.100MHZ (1) 11396KHZ 13306KHZ 17946KHZ 21925KHZ 3016KHZ 5520KHZ 5598KHZ 8906KHZ	(1)North Sector/Combined Sector (2)South Sector Note: No VHF coverage east of 57°W Operating Authority Trinidad & Tobago Civil Aviation Authority ADS-C shall be the primary means of position reporting in airspace east of 57° W longitude. Flights not ADS-C capable shall make reports via CPDLC or Voice on the HF assigned. New York ARINC will provide a relay service for all airspace users operating in the Piarco FIR.

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PIARCO LOWER FLIGHT INFORMATION REGION (PIARCO FIR) Area bounded by lines joining points 150000N/0650000W; 150000N/0640846W; 150000N/0631500W; 152000N/0630000W; 161800N/0630000W; 165732N/0630000W; 172200N/0630000W; 180000N/0620000W; 180000N/0615254W; 180000N/0613000W; 180000N/0450000W; 221800N/0400000W; 170000N/0373000W; 133000N/0373000W; 100000N/0480000W; 092000N/0540000W; 085500N/0570000W; 085500N/0595700W; 095923N/0612757W; 095923N/0615540W; 100506N/0620328W; 104400N/0614700W; 110000N/0623000W to point of origin. Excluding TMAs and Piarco CTR FL055 MSL CLASS of Airspace: G				Information same as for Piarco CTA all columns.

ENR 2.1.2 TMA

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
ADAMS TERMINAL CONTROL AREA (TMA) Area bounded by lines joining points 131855N/0605941W then along the counter clockwise arc of a circle of 25NM radius centred on 134400N/0605837W (VOR/DME BNE); to 135357N/0603502W; 145230N/ 0594800W; 135523N/0584229W then along the clockwise arc of a circle of 68NM radius centred on 130430N/0592902W (DVOR/ DME BGI); to 122858N/0602828W to point of origin. FL245 3000FT AMSL Class of Airspace: between FL245/FL085: A between FL085/3000FT AMSL: D	ADAMS APP	ADAMS APPROACH ENGLISH H24	120.700MHZ (2) 121.200MHZ (2) 121.500MHZ (3) 128.850MHZ (2) 129.350MHZ (1)	CTR within TMA (1) APP FREQ (2) ARR/DEP FREQs (3) Emergency FREQ For Continuation SEE AIP BARBADOS
ARGYLE TMA **(ST. VINCENT AND THE GRENADINES)** Area bounded by lines joining points 133400N/0613000W; 131855N/0605941W; 124230N/0603654W; 122543N/0611249W; 124702N/0615750W; 131555N/0614322W to point of origin. FL135 FL055 CLASS of Airspace: D	ARGYLE TMA UNIT PIARCO ACC	ARGYLE APPROACH ENGLISH 1000-0200 PIARCO RADAR ENGLISH 0200-1000	120.800MHZ 123.700MHZ 125.400MHZ	Two-way radio contact is required for VFR Flights

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
MARTINIQUE TERMINAL CONTROL AREA (TMA) **PART 1** Area bounded by lines joining points 140641N/0612005W; 142826N/0612628W then along the clockwise arc of a circle of 25NM radius centred on 143527N/ 0610122W (VOR/DME FOF); to 141853N/ 0604131W; 141036N/0604944W; 141300N/ 0605200W to point of origin. FL105 1500FT CLASS of Airspace: D	MARTINIQUE APP	MARTINIQUE APPROACH FRENCH ENGLISH H24	121.000MHZ 129.050MHZ	Martinique CTR and St. Lucia CTR within TMA.
PART 2 Area bounded by lines joining points 141300N/0605200W; 141036N/0604944W; 140147N/0604029W then along the clockwise arc of a circle of 25NM radius centred on 134400N/0605837W (VOR/DME BNE); to 131855N/0605941W; 133400N/ 0613000W; 140205N/0614005W to point of origin. FL105 4500FT CLASS of Airspace: D	MARTINIQUE APP SAINT LUCIA APP	MARTINIQUE APPROACH FRENCH ENGLISH 0300-1000 SAINT LUCIA APPROACH ENGLISH 1000-0300	121.000MHZ 129.050MHZ 119.800MHZ 121.500MHZ	

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PART 3 Area bounded by lines joining points 161000N/0601800W; 145230N/0594800W; 135357N/0603502W then along the clockwise arc of a circle of 25NM radius centred on 134400N/0605837W (VOR/DME BNE); to 131855N/0605941W; 133400N/0613000W; 140205N/0614005W; 145400N/0615700W to point of origin. FL195 FL105 CLASS of Airspace: D	MARTINIQUE APP	MARTINIQUE APPROACH FRENCH ENGLISH H24	121.000MHZ 129.050MHZ	Except when TFD3 activated Activation by NOTAM.
PART 4 Area bounded by lines joining points 161000N/0601800W; 145230N/0594800W; 135357N/0603502W then along the counter clockwise arc of a circle of 25NM radius centred on 134400N/0605837W (VOR/DME BNE); to 140147N/0604029W; 141036N/0604944W; 141853N/0604131W then along the counter clockwise arc of a circle of 25NM radius centred on 143527N/0610122W (VOR/DME FOF); to 142826N/0612628W; 140641N/0612005W; 140205N/0614005W; 145400N/0615700W to point of origin. (for upper/lower limits see AIP France CAR/SAM/NAM) FL105 3000FT AMSL CLASS of Airspace: E	MARTINIQUE APP	MARTINIQUE APPROACH FRENCH ENGLISH H24	121.000MHZ 129.050MHZ	Except when TFD3 activated Activation by NOTAM. For continuation See French CAR/SAM/NAM AIP.

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PART 5 Area bounded by lines joining points 161000N/0601800W; 145230N/0594800W; 135357N/0603502W then along the clockwise arc of a circle of 25NM radius centred on 134400N/0605837W (VOR/DME BNE); to 131855N/0605941W; 133400N/0613000W; 140205N/0614005W; 145400N/0615700W to point of origin. FL245 FL195 CLASS of Airspace: A	MARTINIQUE APP	MARTINIQUE APPROACH FRENCH ENGLISH H24	121.000MHZ 129.050MHZ	See French CAR/SAM/NAM AIP
MAURICE BISHOP TMA (GRENADA) **PART 1** Area bounded by lines joining points 124230N/0603654W; 122858N/0602828W then along the counter clockwise arc of a circle of 68NM radius centred on 130430N/0592902W (DVOR/DME BGI); to 122038N/0602221W; 113516N/0612948W then along the clockwise arc of a circle of 30NM radius centred on 120006N/0614707W (VOR/DME GND); to 121322N/0621437W; 124702N/0615750W; 122543N/0611249W to point of origin. FL135 3000FT AMSL CLASS of Airspace: E	MAURICE BISHOP TMA UNIT	MAURICE BISHOP APPROACH ENGLISH 1000-0230	119.400MHZ	Two-way radio contact is required for VFR Flights

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	**2**	**3**	**4**	**5**
PART 2 Area bounded by lines joining points 124230N/0603654W; 122858N/0602828W then along the counter clockwise arc of a circle of 68NM radius centred on 130430N/ 0592902W (DVOR/DME BGI); to 122038N/0602221W; 113516N/0612948W then along the clockwise arc of a circle of 30NM radius centred on 120006N/ 0614707W (VOR/DME GND); to 121322N/ 0621437W; 124702N/0615750W; 122543N/ 0611249W to point of origin. FL135 FL055 CLASS of Airspace: E	PIARCO ACC	PIARCO RADAR ENGLISH 0230-1000	123.700MHZ 125.400MHZ	
PART 3 Area bounded by lines joining points 124230N/0603654W; 122858N/0602828W then along the counter clockwise arc of a circle of 68NM radius centred on 130430N/ 0592902W (DVOR/DME BGI); to 122038N/0602221W; 113516N/0612948W then along the clockwise arc of a circle of 30NM radius centred on 120006N/ 0614707W (VOR/DME GND); to 121322N/ 0621437W; 124702N/0615750W; 122543N/ 0611249W to point of origin. FL055 3000FT AMSL CLASS of Airspace: G	PIARCO ACC	PIARCO RADAR ENGLISH 0230-1000	123.700MHZ 125.400MHZ	

Name Lateral limits Vertical limits Class of airspace	*Units providing service*	*Call sign Languages Area and conditions of use Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
POINTE-A-PITRE TERMINAL CONTROL AREA (TMA) **PART 1** Area bounded by lines joining points 172500N/0604600W; 164810N/0603210W; 160240N/0611650W then along the clockwise arc of a circle of 20NM radius centred on 161555N/0613225W (VOR/DME PPR); to 155550N/0613157W; 163000N/ 0622330W; 165000N/0611500W to point of origin. (For Upper /Lower Limits see French CAR/ SAM/NAM AIP) FL105 3000FT AMSL CLASS of Airspace: D	POINT-A-PITRE APP	RAIZET APPROACH FRENCH ENGLISH H24	119.050MHZ 121.300MHZ	For Continuation, See French CAR/SAM/NAM AIP
PART 2 Area bounded by lines joining points 172500N/0604600W; 164810N/0603210W; 161000N/0601800W; 145400N/0615700W; 154500N/0630000W; 164600N/0630000W; 163000N/0622330W; 165000N/0611500W to point of origin. FL195 FL105 CLASS of Airspace: D	POINT-A-PITRE APP	RAIZET APPROACH FRENCH ENGLISH H24	119.050MHZ 121.300MHZ	

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PART 3 Area bounded by lines joining points 164810N/0603210W; 161000N/0601800W; 145400N/0615700W; 154500N/0630000W; 164600N/0630000W; 163000N/0622330W; 155550N/0613157W then along the counter clockwise arc of a circle of 20NM radius centred on 161555N/0613225W (VOR/DME PPR); to 160240N/0611650W to point of origin. (For Upper/Lower Limit See French CAR/ SAM/NAM AIP) FL105 3000FT AMSL CLASS of Airspace: E	POINT-A-PITRE APP	RAIZET APPROACH FRENCH ENGLISH H24	119.050MHZ 121.300MHZ	
PART 4 Area bounded by lines joining points 172500N/0604600W; 164810N/0603210W; 161000N/0601800W; 145400N/0615700W; 154500N/0630000W; 164600N/0630000W; 163000N/0622330W; 165000N/0611500W to point of origin. FL245 FL195 CLASS of Airspace: A	POINT-A-PITRE APP	RAIZET APPROACH FRENCH ENGLISH H24	119.050MHZ 121.300MHZ	See French CAR/SAM/NAM AIP for more Information

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	**2**	**3**	**4**	**5**
V.C BIRD TERMINAL CONTROL AREA (TMA) Area bounded by lines joining points 164600N/0630000W; 172200N/0630000W; 180000N/0620000W; 180000N/0610000W; 172500N/0604600W; 165000N/0611500W; 163000N/0622330W to point of origin. FL245 3000FT Class of Airspace between FL195/3000ft: E Class of Airspace between FL245/FL195: A	V.C. BIRD APP	V.C. BIRD APPROACH ENGLISH H24	119.100MHZ 121.500MHZ (1)	CTR within TMA continuous two-way radio communications required for VFR flights. (1)Emergency frequency

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AIR TRAFFIC SERVICES AIRSPACE/SECTORS
PIARCO FIR (TTZP)

PIARCO UTA UNL/FL245
AIRSPACE CLASS A
PIARCO CTA FL245/FL55
EXCLUDING TMAs AND PIARCO CTR
AIRSPACE CLASS A FL245/FL195
AIRSPACE CLASS E FL195/FL55
PIARCO LOWER FIR FL55/MSL
EXCLUDING TMAs AND PIARCO CTR
AIRSPACE CLASS G

WHEN ALL NORTH OR NORTH AND SOUTH SECTORS ARE COMBINED, FREQUENCIES IN USE: 123.700MHz PRIMARY, 133.100MHz SECONDARY. WHEN ALL SOUTH SECTORS ARE COMBINED, FREQUENCIES IN USE: 125.000MHz PRIMARY, 126.500MHz & 124.000MHz SECONDARY

CPDLC/ADS-C LOGON ADDRESSES:
Piarco- TTZP
New York - KZWY
Santa Maria - LPPO
Sal - GVSC
Dakar - GOOO
Cayenne - SOOO

N

KZWY

LPPO

GOOO

TJZS

TTZP

SVZM

SYGC

SMPM

SOOO

CALLSIGN: PIARCO RADAR FREQ: 123.700MHz, 133.100MHz

CALLSIGN: PIARCO RADAR FREQ: 133.100MHz, 123.700MHz

CALLSIGN: PIARCO RADAR FREQ: 123.700MHz, 133.100MHz

CALLSIGN: PIARCO RADAR FREQ: 125.400MHz, 126.500MHz, 124.000MHz

CALLSIGN: PIARCO RADAR FREQ:126.500MHz, 125.400MHz, 124.000MHz

CALLSIGN: PIARCO APS FREQ: 119.000MHz, 119.550MHz

CALLSIGN: PIARCO OCEANIC
ARINC FREQ (KHz): 3016, 5520, 5598, 8906, 11396, 13306, 17946, 21925

NORTHEAST SECTOR (NES)

NORTHWEST SECTOR (NWS)

SOUTH SECTOR (SS)

PIARCO APPROACH SECTOR (APS)

OCEANIC SECTOR (OS)

NOTES
NEW YORK OCEAN DESIGNATOR KZWY

180000N0615758W
180000N0573000W
180000N0450000W
221800N0400000W
170000N0373000W
172200N0630000W
152000N0630000W
150000N0631500W
150000N0650000W
125200N0633917W
130430N0571832W
133000N0373000W
110000N0623000W
104400N0614700W
100500N0620300W
095900N0615600W
095900N0612800W
093858N0610050W
100918N0570000W
100000N0480000W
092000N0540000W
085500N0595700W
085500N0574000W
085500N0570000W

CHANGE: Sectors redefined

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ENR 2.2 OTHER REGULATED AIRSPACE
CONTROL ZONES (CTR) AND AERODROME TRAFFIC ZONES (ATZ) WITHIN PIARCO FIR INCLUDING B.V.I. AND ANGUILLA.

ENR 2.2.1 CONTROL ZONES (CTR)

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
ADAMS CONTROL ZONE (CTR) (Barbados) Circular area centered on 130430N/ 0592902W (DVOR/DME BGI) within a 25NM radius. 3000FT SFC CLASS of Airspace: D	ADAMS TWR	ADAMS GROUND ENGLISH H24 ADAMS TOWER ENGLISH H24	121.900MHz 118.700MHz 121.500MHz Emergency Frequency	For continuation See AIP Barbados
ARGYLE CONTROL ZONE (CTR) (St. Vincent and The Grenadines) **PART 1** Area bounded by lines joining points 133400N/0613100W; 131855N/ 0605941W; 124230N/0603654W; 122543N/0611249W; 124702N/0615750W; 131555N/0614322W to point of origin. FL055 SFC CLASS of Airspace: D	ARGYLE APP/ TWR	ARGYLE APPROACH ENGLISH 1000 – 0200	120.800MHz 121.500MHz Emergency Frequency	Two way radio contact is required for VFR Flights.

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PART 2 Area bounded by lines joining points 133400N/0613100W; 131855N/ 0605941W; 124230N/0603654W; 122543N/0611249W; 124702N/0615750W; 131555N/0614322W to point of origin. FL055 SFC CLASS of Airspace: G	PIARCO ACC	PIARCO RADAR ENGLISH	123.700MHz 124.000MHz 125.400MHz 126.500MHz 133.100MHz	0200 - 1000 Except: TVSA ATZ TVSC ATZ TVSB ATZ TVSM ATZ TVSU ATZ
C. J. LLOYD CONTROL ZONE (CTR) (Anguilla) Area bounded by lines joining points 180900N/0631522W; 181521N/0631314W then along the clockwise arc of a circle of 10NM radius centred on 181217N/ 0630314W to 180913N/0625314W; 180900N/0625318W to point of origin. 2600FT SFC CLASS of Airspace: D	C.J. LLOYD TWR JULIANA APP	C.J.LLOYD TOWER ENGLISH 1045 - 2300 JULIANA APPROACH ENGLISH 1100-0200	118.500MHz 118.700MHz (2) 128.950MHz (1) 121.500MHz Emergency Frequency	(1) Primary (2) Secondary
MARTINIQUE CONTROL ZONE (CTR). (Martinique/French Antilles) Circular area centered on 143527N/ 0610122W (VOR/DME FOF) within a 10NM radius. 1500FT SFC CLASS of Airspace: D	MARTINIQUE APP MARTINIQUE TWR	MARTINIQUE APPROACH FRENCH ENGLISH H24 MARTINIQUE TOWER FRENCH ENGLISH H24	121.000MHz 129.050MHz 118.500MHz 129.000MHz	For continuation See AIP FRANCE CAR/SAM/NAM

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
MAURICE BISHOP CONTROL ZONE (CTR) (Grenada) **PART 1** Circular area centered on 120006N/ 0614707W (VOR/DME GND) within a 30NM radius. FL055 SFC CLASS of Airspace: E	MAURICE BISHOP APP MAURICE BISHOP TWR	MAURICE BISHOP APPROACH ENGLISH 1000-0230 MAURICE BISHOP TOWER ENGLISH 1000-0230	119.400MHz (1) 118.900MHz (2) 121.500MHz Emergency Frequency	(1) Non-radio aircraft not permitted (2) Two way radio contact required for VFR Flights.
PART 2 Circular area centered on 120006N/ 0614707W (VOR/DME GND) within a 30NM radius. FL055 SFC CLASS of Airspace: G	PIARCO ACC	PIARCO RADAR ENGLISH 0230-1000 Except Circuits	123.700MHz 125.400MHz	

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PIARCO CONTROL ZONE (CTR). (Trinidad and Tobago) **PART A** Area bounded by lines joining points 103502N/0615041W; 104400N/ 0614700W; 104451N/0614916W then along the clockwise arc of a circle of 30NM radius centred on 103543N/0612014W to 105553N/0614253W; 112910N/0611238W then along the clockwise arc of a circle of 30NM radius centred on 110859N/ 0604956W to 104850N/0602716W; 101533N/0605737W then along the clockwise arc of a circle of 30NM radius centred on 103543N/0612014W to to point of origin. FL055 3500FT CLASS of Airspace: D	PIARCO APP	PIARCO APPROACH ENGLISH H24	119.000MHz 119.550MHz 121.500MHz Emergency Frequency	See chart on page AD 2.10-1-21 Non-radio Aircraft not permitted
PART B1 Circular area centered on 103543N/ 0612014W (ARP) within a 20NM radius. 3500FT AMSL 2500FT CLASS of Airspace: D	PIARCO APP	PIARCO APPROACH ENGLISH H24	119.000MHz 119.550MHz 121.500MHz Emergency Frequency	See chart on page AD 2.10-1-21 Non-radio Aircraft not permitted
PART B2 Circular area centered on 110859N/ 0604956W (ARP) within a 20NM radius. 3500FT AMSL 2500FT CLASS of Airspace: D	PIARCO APP	PIARCO APPROACH ENGLISH H24	119.000MHz 119.550MHz 121.500MHz Emergency Frequency	See chart on page AD 2.10-1-21 Non-radio Aircraft not permitted

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
PART C1 Area bounded by lines joining points 102833N/0613001W then along the clockwise arc of a circle of 12NM radius centred on 103543N/0612014W to 102658N/0611152W to point of origin. Excluding ATZs 2500FT AMSL SFC CLASS of Airspace: D	PIARCO APP	PIARCO APPROACH ENGLISH H24	119.000MHz 119.550MHz 121.500MHz Emergency Frequency	See chart on page AD 2.10-1-21 Non-radio Aircraft not permitted
PART C2 Circular area centered on 110859N/ 0604956W (ARP) within a 12NM radius. Excluding ATZs 2500FT AMSL SFC CLASS of Airspace: D	PIARCO APP	PIARCO APPROACH ENGLISH H24	119.000MHz 119.550MHz 121.500MHz Emergency Frequency	See chart on page AD 2.10-1-21 Non-radio Aircraft not permitted
POINT-A-PITRE CONTROL ZONE (CTR) (Guadeloupe) Area bounded by lines joining points 163551N/0613406W; 161835N/0611812W then along the clockwise arc of a circle of 14NM radius centred on 161555N/ 0613225W (VOR/DME PPR); to 160201N/0613029W; 161740N/0615305W then along the clockwise arc of a circle of 20NM radius centred on 161555N/ 0613225W (VOR/DME PPR); to to point of origin. 3000FT SFC CLASS of Airspace: D	RAIZET APP RAIZET TWR	RAIZET APPROACH FRENCH ENGLISH H24 RAIZET TOWER FRENCH ENGLISH H24	119.050MHz 121.300MHz 118.400MHz	For Continuation See AIP FRANCE CAR/ SAM/ NAM Navigational Aid DCF replaced by reporting point KATIM Acft entering/exiting the ATZs of Douglas Charles / Canefield and operating below 3000FT in the eastern/ western semi-circle within 15nm of Douglas Charles Airport or 5nm of Canefield Airport are requested to make two-way radio contact with Douglas CharlesTWR on freq 118.900MHz or Canefield TWR on freq 118.700MHz.

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
ROBERT L. BRADSHAW CONTROL ZONE (CTR) (St Christopher/ St. Kitts/ Nevis) Area bounded by lines joining points 172200N/0630000W; 173140N/ 0624430W; 171700N/0623000W; 165000N/0623000W; 171100N/0630000W to point of origin. FL065 SFC CLASS of Airspace: E	ROBERT L. BRADSHAW APP	ROBERT L. BRADSHAW APPROACH ENGLISH 1000-0100	119.600MHz 121.500MHz Emergency Frequency	
SAINT LUCIA CONTROL ZONE (CTR) (St. Lucia) Area bounded by lines joining points 140147N/0604029W then along the clockwise arc of a circle of 25NM radius centred on 134400N/0605837W (VOR/ DME BNE); to 131855N/0605941W; 133400N/0613000W; 140205N/ 0614005W; 141300N/0605200W to point of origin. 4500FT SFC CLASS of Airspace: D	SAINT LUCIA APP	SAINT LUCIA APPROACH ENGLISH 1000-0300	119.800MHz 121.500MHz Emergency Frequency	Within Fort-de-France TMA
TERRANCE B. LETTSOME CONTROL ZONE (CTR). (Tortola/ B.V.I.) Circular area centered on 182645N/ 0643228W (ARP) within a 5NM radius. 3500FT AMSL SFC CLASS of Airspace: D	TERRANCE B. LETTSOME TWR	BEEF ISLAND GROUND ENGLISH 1100-0200 BEEF ISLAND TOWER ENGLISH 1100-0200	121.900MHz Clearance delivery and Startup request only 118.400MHz 121.500MHz Emergency Frequency	Approach Control Service provided by San Juan CERAP Freq: 128.650MHz 132.250MHz

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
V.C. BIRD CONTROL ZONE (CTR) (Antigua and Barbuda) Area bounded by lines joining points 172335N/0613525W then along the clockwise arc of a circle of 20NM radius centred on 170733N/0614801W (VOR/ DME ANU); to 172322N/0620053W; 173910N/0621348W then along the clockwise arc of a circle of 40NM radius centred on 170733N/0614801W (VOR/ DME ANU); to 173936N/0612248W to point of origin. 3000FT AMSL SFC CLASS of Airspace: E	V.C. BIRD APP/ TWR	V.C. BIRD APPROACH ENGLISH H24 V.C. BIRD GROUND ENGLISH H24 V.C. BIRD TOWER ENGLISH H24	119.100MHz 121.900MHz 118.200MHz 121.500MHz Emergency Frequency	TWR FREQ 118.200MHz AVBL when advised by GND or APP. In V.C. Bird TMA:- When AD and APP services are provided independently V.C. Bird TWR is responsible for flights in V.C. Bird TMA. FL040/SFC When AD and APP services are combined V.C. Bird APP is responsible for AD, APP, FIS and ALR services. Continuous two-way radio communication required for VFR flights VFR Flights restricted to a maximum ALT of 2000ft AMSL except as directed by ATC.

ENR 2.2.2 AERODROME TRAFFIC ZONES (ATZ)

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
ADAMS AERODROME TRAFFIC ZONE (ATZ) (Barbados) Circular area centered on 130429N/ 0592932W (ARP) within a 5NM radius. 2000FT AAL SFC CLASS of Airspace: D	ADAMS GND ADAMS TWR	ADAMS GROUND ENGLISH H24 ADAMS TOWER ENGLISH H24	121.900MHz 118.700MHz 118.800MHz 121.500MHz Emergency Frequency	
ARGYLE AERODROME TRAFFIC ZONE (ATZ) (St. Vincent) Circular area centered on 130936N/ 0610855W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: D	ARGYLE TWR	ARGYLE GROUND ENGLISH 1000 - 0200 ARGYLE TOWER ENGLISH 1000 - 0200	121.900 MHz 121.500MHz	
CANEFIELD AERODROME TRAFFIC ZONE (ATZ) (Dominica) Circular area centered on 152015N/ 0612332W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: G	CANEFIELD TWR	CANEFIELD TOWER ENGLISH 1200 - 2000 Mon - Fri	118.700MHz	Pilots MUST maintain two-way radio contact with Canefield TWR. See Pointe-a-Pitre CTR Remarks ENR 2.2-5.

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
CANOUAN AERODROME TRAFFIC ZONE (ATZ) (Canouan) Circular area centered on 124203N/ 0612042W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: G	CANOUAN TWR	CANOUAN GROUND ENGLISH 1200-SS CANOUAN TOWER ENGLISH 1200-0000	121.600MHz 118.050MHz	Flights arriving or departing must contact Argyle Approach on 120.800MHz
DOUGLAS CHARLES AERODROME TRAFFIC ZONE (ATZ) (Dominica) Circular area centered on 153248N/ 0611805W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: G	DOUGLAS CHARLES TWR	DOUGLAS CHARLES TOWER ENGLISH 1000 - 0200 UTC	118.900MHz	Pilots are requested to maintain two-way radio contact with Douglas Charles TWR. See Pointe-a-Pitre CTR Remarks ENR 2.2-4
GEORGE F. L. CHARLES AERODROME TRAFFIC ZONE (ATZ) (St. Lucia) Circular area centered on 140108N/ 0610000W (ARP) within a 2.5NM radius. 2000FT AAL SFC CLASS of Airspace: D	GEORGE F. CHARLES TWR	GEORGE CHARLES GROUND ENGLISH 1000 – 0000 GEORGE CHARLES TOWER ENGLISH 1000 – 0000	121.800 MHz 118.000MHz	

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
HEWANORRA AERODROME TRAFFIC ZONE (ATZ) (St. Lucia) Circular area centered on 134356N/ 0605707W (ARP) within a 2.5NM radius. 2000FT AAL SFC CLASS of Airspace: D	HEWANORRA TWR	HEWANORRA GROUND ENGLISH 1000 – 0300 HEWANORRA TOWER ENGLISH 1000 – 0300	121.600MHz 118.300MHz	
J.F. MITCHELL AERODROME TRAFFIC ZONE (ATZ) (Bequia) Circular area centered on 125919N/ 0611544W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: G	J.F. MITCHELL TWR	J.F. MITCHELL GROUND ENGLISH 1000-SS J.F.MITCHELL TOWER ENGLISH 1000-SS	121.900MHz 118.450MHz	Flights arriving or departing must contact Argyle Approach
JOHN A. OSBORNE AERODROME TRAFFIC ZONE (ATZ) (Montserrat) Circular area centered on 164729N/ 0621136W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: G	JOHN A. OSBORNE TWR	JOHN A. OSBORNE GROUND ENGLISH 1000 - 2200 JOHN A. OSBORNE TOWER ENGLISH 1000 - 2200	121.900MHz 118.800MHz	

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
MUSTIQUE AERODROME TRAFFIC ZONE (ATZ) (Mustique) Circular area centered on 125316N/ 0611048W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: G	MUSTIQUE TWR	MUSTIQUE TOWER ENGLISH SR - SS	123.000MHz Flight ARR or DEP contact Argyle APP 120.800MHz	Flights ARR or DEP must contact Argyle APP 120.800MHz
PIARCO AERODROME TRAFFIC ZONE (ATZ) (Trinidad) Circular area centered on 103543N/ 0612014W (ARP) within a 5NM radius. 2000FT AMSL SFC CLASS of Airspace: D	PIARCO TWR	PIARCO TWR ENGLISH H24	118.100MHz	Piarco Ground Frequency 121.900MHz
ROBERT L. BRADSHAW AERODROME TRAFFIC ZONE (ATZ) (St. Kitts) Circular area centered on 171838N/ 0624310W (ARP) within a 2.5NM radius. 2000FT AAL SFC CLASS of Airspace: E	ROBERT L. BRADSHAW TWR	ROBERT L. BRADSHAW GROUND ENGLISH 1000 – 0100 ROBERT L. BRADSHAW TOWER ENGLISH 1000 – 0100	121.900MHz 118.300MHz	

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
ROBINSON AERODROME TRAFFIC ZONE(ATZ) (Tobago) Circular area centered on 110859N/ 0604956W (ARP) within a 5NM radius. 2000FT AMSL SFC CLASS of Airspace: D	ROBINSON TWR	ROBINSON TOWER ENGLISH 1000 – 0200	118.400MHz	Outside of these hours 24 hrs PPR
UNION ISLAND AERODROME TRAFFIC ZONE (ATZ) (Union Island) Circular area centered on 123555N/ 0612453W (ARP) within a 2NM radius. 2000FT AAL SFC CLASS of Airspace: G	UNION TWR	Union Island Tower ENGLISH 1000-SS	122.800MHz	Flights ARR or DEP must contact Argyle APP 120.800MHz
VANCE WINKWORTH AMORY AERODROME TRAFFIC ZONE (ATZ) (Nevis) Circular area centered on 171220N/ 0623524W (ARP) within a 1.5NM radius. 2000FT AAL SFC CLASS of Airspace: D	VANCE WINKWORTH AMORY TWR	AMORY TOWER ENGLISH 1100 – 0100	120.500MHz	

ENR 2.2.3 PIARCO AIR TRAFFIC SERVICES SECTORS

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
OCEANIC SECTOR (OS) Area bounded by lines joining points 180000N/0573000W; 180000N/0450000W (ROHPL); 221800N/0400000W; 170000N/0373000W (TUTLO); 133000N/0373000W; 100000N/0480000W (PANON); 092000N/0540000W; 085500N/0570000W; 100918N/0570000W (ROSLU); 130430N/0571832W (ROVBA) to point of origin. UNL SFC	PIARCO ACC	PIARCO OCEANIC ENGLISH H24	11396KHZ 13306KHZ 17946KHZ 21925KHZ 3016KHZ 5520KHZ 5598KHZ 8906KHZ	New York ARINC will provide a relay service for all airspace users operating in the Piarco Oceanic Sector. ADS-C shall be the primary means of position reporting in the airspace east of 57° W longitude. Flights not ADS-C capable shall make reports via CPDLC or Voice on HF assigned. CPDLC shall be the primary means of communication See chart on page ENR 2.1-13
NORTH EAST SECTOR (NES) Area bounded by lines joining points 180000N/0573000W; 130430N/0571832W (ROVBA); 130430N/0592902W (DVOR/DME BGI); 134400N/0605837W (VOR/DME BNE); 140051N/0610022W (NDB SLU); 143527N/0610122W (VOR/DME FOF); 161555N/0613225W (VOR/DME PPR); 170733N/0614801W (VOR/DME ANU); 180000N/0615758W (LAMKN) to point of origin. Excluding the TMAs of Antigua, Guadeloupe, Martinique and Barbados UNL SFC	PIARCO ACC	PIARCO RADAR ENGLISH H24	123.700MHz 133.100MHz	When all North Sectors or North and South sectors are combined frequency in use is: 123.700MHz. Primary and 133.100MHz. Secondary See chart on page ENR 2.1-13

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	2	3	4	5
NORTH WEST SECTOR (NWS) Area bounded by lines joining points 150000N/0650000W; 150000N/0631500W (GEECE); 152000N/0630000W; 172200N/0630000W; 180000N/0615758W (LAMKN); 170733N/0614801W (VOR/DME ANU); 161555N/0613225W (VOR/DME PPR); 143527N/0610122W (VOR/DME FOF); 140051N/0610022W (NDB SLU); 134400N/0605837W (VOR/DME BNE); 131512N/0630417W (PERRY); 125200N/0633917W (ONGAL) to point of origin. Excluding the TMAs of Antigua , Guadeloupe and Martinique UNL SFC	PIARCO ACC	PIARCO RADAR ENGLISH H24	123.700MHz 133.100MHz	When all North Sectors or North and South sectors are combined frequency in use is: 123.700MHz. Primary and 133.100MHz. Secondary See chart on page ENR 2.1-13
PIARCO APPROACH SECTOR (APS) Area bounded by lines joining points 110000N/0623000W; 113716N/0610253W then along the clockwise arc of a circle of 30.86NM radius centred on 110851N/0605001W (NDB TAB); to 105804N/0602033W; 095638N/0604355W (MITAK); 094835N/0605206W (BOVEL); 093858N/0610050W; 095900N/0612800W; 095900N/0615600W; 100500N/0620300W; 104400N/0614700W to point of origin. Excluding the Piarco and Robinson Aerodrome Traffic Zones FL155 SFC	PIARCO APP	PIARCO APPROACH ENGLISH H24	119.000MHz 119.550MHz	See chart on page ENR 2.1-13

Name *Lateral limits* *Vertical limits* *Class of airspace*	*Units providing service*	*Call sign* *Languages* *Area and conditions of use* *Hours of service*	*Frequency/ Purpose*	*Remarks*
1	**2**	**3**	**4**	**5**
SOUTH SECTOR (SS) Area bounded by lines joining points 085500N/0570000W; 085500N/0574200W; 085500N/0595700W; 095900N/0612800W; 095900N/0615600W; 100500N/0620300W; 104400N/0614700W; 110000N/0623000W; 112949N/0624820W (DAREK); 125200N/0633917W (ONGAL); 131512N/0630417W (PERRY); 134400N/0605837W (VOR/DME BNE); 130430N/0592902W (DVOR/DME BGI); 130430N/0571832W (ROVBA); 100918N/0570000W (ROSLU) to point of origin. Excluding the TMAs of Martinique, St Vincent, Grenada, Piarco Approach Sector and Piarco CTR UNL SFC	PIARCO ACC	PIARCO RADAR ENGLISH H24	124.000MHz 125.400MHz 126.500MHz	When North and South sectors are combined, frequencies in use 123.700MHz Primary, 133.100MHz Secondary See chart on page ENR 2.1-13

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A312		**AIRSPACE CLASS A ABOVE FL 195 ALL SEGMENTS**				For continuation see AIP Guyana
▲ **DALGA** 08 55 09N 059 04 16W	357° 177° 202	FL245 3000 FT ALT FL030 **FL195/FL055-CLASS E FL055/3000FT CLASS G**	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **LOGAN** 12 08 18N 060 08 34W	355° 175° 85	FL245 3000 FT ALT FL030 **FL195/FL085 CLASS A FL085/3000FT CLASS D**	10			ADAMS APP FREQ: 129.350MHz
▲ **DAMOV** 13 28 58N 060 38 04W	356° 176° 70	FL245 4000 FT ALT FL070 **FL195/4000FT CLASS D**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz (SAINT LUCIA APP FREQ: 119.800MHz FL105 & BLW IN CTR)
▲ **MARTINIQUE AIME CESAIRE VOR/DME (FOF)** 14 35 27N 061 01 22W	359° 179° 60	FL245 7000 FT ALT FL070 **FL195/FL105 CLASS D FL105/7000FT CLASS E**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz (SAINT LUCIA APP FREQ: 119.800MHz FL105 & BLW IN CTR)
▲ **DOUGLAS CHARLES NDB (DOM)** 15 33 03N 061 17 44W	356° 176° 45	FL245 6300 FT ALT FL070 **FL195/FL105 CLASS D FL105/7000FT SEE FRENCH CAR/SAM/NAM AIP**	10			RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ **POINTE-A-PITRE LE RAIZET VOR/DME (PPR)** 16 15 55N 061 32 25W	358° 178° 28	FL245 3500 FT ALT FL040 **FL195/3500FT CLASS D**	10			RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ **KASKI** 16 42 37N 061 40 28W	358° 178° 26	FL245 2500 FT ALT FL040 **FL195/3000FT CLASS E**	10			V.C. BIRD APP FREQ: 119.100MHz NOTE: VOR "ANU" AND NDB "ZDX" ARE CONSIDERATED COLOCATED FOR NAVIGATION PURPOSES

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
▲ **V.C. BIRD** **VOR/DME (ANU)** 17 07 33N 061 48 01W						

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A324		**AIRSPACE CLASS A FL195/FL245 ALL SEGMENTS**				For continuation see AIP Guyana
▲ **MINDA** 08 55 00N 060 09 35W	337° 157° 68	FL245 4100 FT ALT FL060 **FL195/FL055 CLASS E**	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ: 119.000MHz 119.550MHz FL155 & BLW)
▲ **BOVEL** 09 48 35N 060 52 06W	337° 156° 50	FL245 4100 FT ALT FL060 **FL195/FL055 CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ: 119.000MHz 119.550MHz FL155 & BLW)
▲ **PIARCO DVOR/DME (POS)** 10 27 59N 061 23 33W	000° 180° 56	FL245 4100 FT ALT FL060 **FL195/4100FT CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ: 119.000MHz 119.550MHz FL155 & BLW)
▲ **DUKLA** 11 22 28N 061 37 27W	000° 180° 9	FL245 4100 FT ALT FL060 **FL195/4100FT CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL 135 &BLW IN TMA)
▲ **IMORO** 11 30 53N 061 39 36W	000° 180° 30	FL245 4000 FT ALT FL060 **FL195/4000FT CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL 135 &BLW IN TMA)
▲ **MAURICE BISHOP VOR/DME (GND)** 12 00 06N 061 47 07W	040° 220° 30	FL245 4000 FT ALT FL060 **FL195/4000FT CLASS E**	10	↓	↑	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL 135 &BLW IN TMA)

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
▲ **DUSAL** 12 27 15N 061 33 50W	040° 220° 8	FL245 5200 FT ALT FL060 **FL195/FL055** **CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (ARGYLE APP FREQ: 120.800MHz FL 135 & BLW IN TMA)
▲ **RESAS** 12 34 06N 061 30 28W	040° 221° 38	FL245 5200 FT ALT FL060 **FL195/FL055** **CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (ARGYLE APP FREQ: 120.800MHz FL 135 & BLW IN TMA)
▲ **ST VINCENT** **NDB (SV)** 13 08 26N 061 13 34W	037° 217° 16	FL245 5200 FT ALT FL060 **FL195/FL055** **CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (ARGYLE APP FREQ: 120.800MHz FL 135 & BLW IN TMA)
▲ **RIBOR** 13 22 50N 061 07 32W	037° 217° 23	FL245 4500 FT ALT FL070 **FL195/4500FT** **CLASS D**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz (SAINT LUCIA APP FREQ: 119.800MHz FL105 & BLW IN CTR AS DELEGATED BY MARTINIQUE APP)
▲ **HEWANORRA (SAINT LUCIA)** **VOR/DME (BNE)** 13 44 00N 060 58 37W	012° 192° 27	FL245 4500 FT ALT FL070 **FL195/4500FT** **CLASS D**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz (SAINT LUCIA APP FREQ: 119.800MHz FL105 & BLW IN CTR AS DELEGATED BY MARTINIQUE APP)
▲ **KISES** 14 11 11N 061 00 04W	012° 192° 24	FL245 5500 FT ALT FL070 **FL195/5500FT** **CLASS D**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz (SAINT LUCIA APP FREQ: 119.800MHz FL105 & BLW IN CTR AS DELEGATED BY MARTINIQUE APP)
▲ **MARTINIQUE AIME CESAIRE** **VOR/DME (FOF)** 14 35 27N 061 01 22W						

Wpt BOVEL, DUKLA: FIX UPPER LIMIT FL155
Wpt IMORO, RESAS: FIX UPPER LIMIT FL135

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A511		**AIRSPACE CLASS A FL195/ FL245 ALL SEGMENTS**				From WPT BOGSI, for continuation see AIP Venezuela
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	288° / 107° 82	FL245 / 3000 FT ALT FL030 **FL195/ FL085 CLASS A FL085/ 3000 FT CLASS D**	10	↑	↓	ADAMS APP FREQ: 129.350MHz
▲ **GOTER** 13 07 42N 060 52 40W	287° / 107° 20	FL245 / 5200 FT ALT FL060 **FL195/5200FT CLASS E**	10			FREQ : 125.400MHz 126.500MHz 124.000MHz (ARGYLE APP FREQ: 120.800MHz FL135 & BLW IN TMA)
▲ **ST VINCENT NDB (SV)** 13 08 26N 061 13 34W	299° / 119° 30	FL245 / 5200 FT ALT FL060 **FL195/5200FT CLASS D**	10			FREQ : 125.400MHz 126.500MHz 124.000MHz (ARGYLE APP FREQ: 120.800MHz FL135 & BLW IN TMA)
▲ **LENAL** 13 15 55N 061 43 22W	299° / 119° 38	FL245 / 3000 FT ALT FL060 **FL195/ FL055 CLASS E FL055/ 3000 FT CLASS G**	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ALGUS** 13 25 19N 062 20 44W	299° / 117° 118	FL245 / 3000 FT ALT FL060 **FL 195/ FL 055 CLASS E FL055/ 3000 FT CLASS G**	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **BOGSI** 13 54 01N 064 18 10W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A517		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT ZPATA,for continuation see U.S.A. and Netherlands Antilles Publications
▲ **POINTE-A-PITRE LE RAIZET VOR/DME (PPR)** 16 15 55N 061 32 25W	326° 146° 33	FL245 3500 FT ALT FL070 **FL195/3500FT CLASS D**	10	↑	↓	RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ **BIMBO** 16 37 36N 061 57 37W	326° 146° 60	FL245 5000 FT ALT FL060 **FL195/5000FT CLASS E**	10			V. C. Bird APP FREQ: 119.100MHz (ROBERT L. BRADSHAW APP FREQ: 119.600MHz FL65 & BLW IN CTR)
▲ **BRADSHAW NDB (SKB)** 17 17 43N 062 44 38W	349° 168° 12	FL245 5000 FT ALT FL060 **FL195/5000FT CLASS E**	10			V. C. Bird APP FREQ: 119.100MHz (ROBERT L. BRADSHAW APP FREQ: 119.600MHz FL65 & BLW IN CTR)
▲ **ZPATA** 17 28 23N 062 49 59W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A550		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT ITEGO, for continuation see AIP Venezuela
▲ **ITEGO** 13 37 32N 064 07 48W	057° 237° 43	FL245 3000 FT ALT FL030 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10	↓	↑	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **PELMA** 14 09 05N 063 37 17W	057° 238° 97	FL245 3000 FT ALT FL030 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **TULEX** 15 19 31N 062 28 24W	058° 238° 24	FL245 3500 FT ALT 3500FT **FL195/FL105 CLASS D FL105/3500FT CLASS E**	10			RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ **DUNTA** 15 36 32N 062 11 35W	058° 239° 54	FL245 7200 FT ALT 7200FT **FL195/FL105 CLASS D FL105/7200FT SEE FRENCH CAR/SAM/NAM AIP**	10			RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ **POINTE-A-PITRE LE RAIZET VOR/DME (PPR)** 16 15 55N 061 32 25W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A551		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT ONGAL, for continuation see AIP Venezuela
▲ **ONGAL** 12 52 00N 063 39 17W	070° 250° 41	FL245 3000 FT ALT FL030 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10	↓	↑	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **PERRY** 13 15 12N 063 04 17W	070° 251° 97	FL245 3000 FT ALT FL030 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **SOMON** 14 09 15N 061 41 51W	071° 251° 47	FL245 4000 FT ALT FL070 **FL195/FL105 CLASS D FL105/4000FT SEE FRENCH CAR/SAM/NAM/ AIP**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz
▲ **MARTINIQUE AIME CESAIRE VOR/DME (FOF)** 14 35 27N 061 01 22W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A552		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT MEGIR, for continuation see AIP Venezuela
▲ **PIARCO** **DVOR/DME (POS)** 10 27 59N 061 23 33W	291° 111° 29	FL245 4100 FT ALT FL060 **FL195/FL060 CLASS E** **FL060/4100FT CLASS G**	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ: 119.000MHz 119.550MHz FL155 & BLW)
▲ **MEGIR** 10 31 00N 061 52 20W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A555		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				For continuation see AIP Suriname From WPT ILURI, for continuation see U.S.A. Publication
▲ **TRAPP** 09 05 05N 055 59 29W	336° 155° 247	FL245 3000 FT ALT FL030 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **KELSO** 12 13 02N 058 43 18W	335° 154° 68	FL245 3000 FT ALT FL030 **FL195/FL085 CLASS A FL085/3000FT CLASS D**	10			ADAMS APP FREQ : 129.350MHz
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	331° 150° 82	FL245 3000 FT ALT FL030 **FL195/FL085 CLASS A FL085/3000FT CLASS D**	10			ADAMS APP FREQ : 129.350MHz
▲ **BORUS** 14 02 46N 060 27 59W	330° 150° 46	FL245 4000 FT ALT FL070 **FL195/FL105 CLASS D FL105/4000FT SEE FRENCH CAR/SAM/NAM AIP**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz
▲ **MARTINIQUE AIME CESAIRE VOR/DME (FOF)** 14 35 27N 061 01 22W	327° 146° 49	FL245 4000 FT ALT FL070 **FL195/FL105 CLASS D FL105/4000FT SEE FRENCH CAR/SAM/NAM AIP**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz
▲ **EMOLA** 15 08 07N 061 38 47W	326° 146° 43	FL245 3500 FT ALT 3500FT **FL195/FL105 CLASS D FL105/3500FT CLASS E**	10			RAIZET APP FREQ : 121.300MHz 119.050MHz
▲ **DUNTA** 15 36 32N 062 11 35W	326° 146° 62	FL245 3500 FT ALT 3500FT **FL195/FL105 CLASS D FL105/3500FT CLASS E**	10			RAIZET APP FREQ : 121.300MHz 119.050MHz

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	**2**	**3**	**4**	**5**		**6**
▲ **ILURI** 16 18 04N 063 00 00W						

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A561		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT DAREK, for continuation see AIP Venezuela
▲ **DAREK** 11 29 49N 062 48 20W	077° / 258° 41	FL245 / 3000 FT ALT 3000FT **FL195/FL055 CLASS E FL055/3000FT CLASS G**	10	↓	↑	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL135 & BLW IN TMA)
▲ **PERGA** 11 48 05N 062 11 30W	078° / 258° 27	FL245 / 4000 FT ALT FL060 **FL195/4000FT CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL135 & BLW IN TMA)
▲ **MAURICE BISHOP VOR/DME (GND)** 12 00 06N 061 47 07W	079° / 259°	FL245 / 4000 FT ALT FL060 **FL195/4000FT CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL135 & BLW IN TMA)
▲ **LEXAS** 12 13 07N 061 19 30W	079° / 260° 51	FL245 / 4000 FT ALT FL060 **FL195/4000FT CLASS E COP 64/86**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL135 & BLW IN TMA)
▲ **RAKAN** 12 35 12N 060 32 20W	080° / 260° 68	FL245 / 3000 FT ALT FL030 **FL195/FL085 CLASS A FL085/3000FT CLASS D**	10			ADAMS APP FREQ: 129.350MHz
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W						

Wpt LEXAS: FIX UPPER LIMIT FL135

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A562		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT PARIA, for continuation see AIP Venezuela
▲ **PARIA** 10 13 15N 061 59 37W	082° 262° 39	FL245 4100 FT ALT FL060 **FL195/FL060 CLASS E** **FL060/4100FT CLASS G**	10	↓	↑	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ: 119.000MHz 119.550MHz FL155 & BLW)
▲ **PIARCO** **DVOR/DME (POS)** 10 27 59N 061 23 33W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A563		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT MEGIR, for continuation see AIP Venezuela
▲ **PIARCO** **DVOR/DME (POS)** 10 27 59N 061 23 33W	291° 111° 29	FL245 4100 FT ALT FL060 **FL195/FL060 CLASS E** **FL060/4100FT CLASS G**	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ: 119.000MHz 119.550MHz FL155 & BLW)
▲ **MEGIR** 10 31 00N 061 52 20W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
A632		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				For continuation see AIP Guyana
▲ **EGEMA** 08 55 10N 058 42 15W	005° / 185° 184	FL245 / 3000 FT ALT FL060 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **ERROL** 11 57 21N 059 16 18W	005° / 185° 68	FL245 / 3000 FT ALT 3000FT **FL195/FL085 CLASS A FL085/3000FT CLASS D**	10			ADAMS APP FREQ: 129.350MHz REFER TO NOTE BELOW
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	347° / 166° 88	FL245 / 3000 FT ALT 3000FT **FL195/FL085 CLASS A FL085/3000FT CLASS D**	10			ADAMS APP FREQ: 129.350MHz REFER TO NOTE BELOW
▲ **BIRNO** 14 21 55N 060 12 38W	346° / 166° 89	FL245 / 3500 FT ALT FL070 **FL195/FL105 CLASS D FL105/3500FT CLASS E**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz
▲ **TASAR** 15 40 04N 060 57 16W	346° / 165° 73	FL245 / 3500 FT ALT FL070 **FL195/FL105 CLASS D FL105/3500FT SEE FRENCH CAR/SAM/NAM AIP**	10			RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ **MEDUS** 16 44 22N 061 34 28W	345° / 165° 27	FL245 / 2500 FT ALT FL040 **FL195/3000FT CLASS E**	10			V.C. BIRD APP FREQ: 119.100MHz
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W						

Note EXCEPTION ATS ROUTE UA632/A632

AIRCRAFT ON ROUTE SEGMENTS TO BE FLOWN AT CRUISING LEVELS CORRESPONDING TO MAG TRACKS AS FOLLOWS :

1. (a) EGEMA TO ADAMS VOR/DME - 180° TO 359° (b) ADAMS VOR/DME TO EGEMA 000° TO 179°

2. VOR/DME ANU AND NDB ZDX CONSIDERED COLOCATED FOR NAVIGATION PURPOSES

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
B520		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT ELOPO, for continuation see U.S.A. and Netherlands Antilles Publications
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W	321° 140° 53	FL245 2500 FT ALT FL040 **FL195/2500FT CLASS E**	10	↑	↓	V.C. BIRD APP FREQ: 119.100MHz
▲ **ELOPO** 17 39 00N 062 33 16W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
G449		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				For continuation see AIP Guyana From WPT ANADA, for continuation see U.S.A. Publication
▲ **KORTO** 08 55 06N 059 26 47W	324° 144° 98	FL245 4100 FT ALT FL060 **FL195/FL060 CLASS E FL060/4100FT CLASS G**	10	↑	↓	PIARCO ACC FREQ : 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ 119.000MHz 119.550MHz FL155 AND BLW)
▲ **MITAK** 09 56 38N 060 43 55W	324° 143° 50	FL245 4100 FT ALT FL060 **FL195/FL060 CLASS E FL060/4100FT CLASS G**	10			PIARCO ACC FREQ : 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ 119.000MHz 119.550MHz FL155 AND BLW)
▲ **PIARCO** **DVOR/DME (POS)** 10 27 59N 061 23 33W	344° 164° 56	FL245 4100 FT ALT FL060 **FL195/FL060 CLASS E FL060/4100FT CLASS G**	10			PIARCO ACC FREQ : 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ 119.000MHz 119.550MHz FL155 AND BLW)
▲ **ITRAK** 11 16 08N 061 52 18W	344° 164° 37	FL245 4100 FT ALT FL060 **FL195/FL060 CLASS E FL060/4100FT CLASS G**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PERGA** 11 48 05N 062 11 30W	344° 163° 101	FL245 3000 FT ALT FL060 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PERRY** 13 15 12N 063 04 17W	343° 163° 63	FL245 3000 FT ALT FL060 **FL195/FL060 CLASS E FL060/3000FT CLASS G**	10			PIARCO ACC FREQ : 123.700MHz 133.100MHz

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	**2**	**3**	**4**	**5**		**6**
▲ **PELMA** 14 09 05N 063 37 17W	343° 162° 59	FL245 3000 FT ALT FL060 **FL195/FL060** **CLASS E** **FL060/3000FT** **CLASS G**	10			PIARCO ACC FREQ : 123.700MHz 133.100MHz
▲ **ANADA** 15 00 00N 064 08 46W						

Wpt MITAK, ITRAK: FIX UPPER LIMIT FL155

ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
G633		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT GABAR, for continuation see U.S.A. Publication
▲ **V.C. BIRD** **VOR/DME (ANU)** 17 07 33N 061 48 01W	295° 115° 55	FL245 5000 FT ALT FL060 **FL195/5000FT CLASS E**	10	↑	↓	V.C. BIRD APP FREQ: 119.100MHz (ROBERT L. BRADSHAW APP FREQ: 119.600MHz FL065 & BLW IN CTR)
▲ **BRADSHAW** **NDB (SKB)** 17 17 43N 062 44 38W	298° 118° 15	FL245 5000 FT ALT FL060 **FL195/5000FT CLASS E**	10			V.C. BIRD APP FREQ: 119.100MHz (ROBERT L. BRADSHAW APP FREQ: 119.600MHz FL065 & BLW IN CTR)
▲ **GABAR** 17 21 12N 063 00 00W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
G642		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	318° 137° 74	FL245 3000 FT ALT 3000FT **FL195/FL085 CLASS A** **FL085/3000FT CLASS D**	10	↑	↓	ADAMS APP FREQ: 129.350MHz
▲ **TEDDY** 13 44 02N 060 32 56W	317° 137° 32	FL245 4200 FT ALT 4200FT **FL195/4200FT CLASS D**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz (SAINT LUCIA APP FREQ: 119.800MHz FL105 & BLW IN CTR)
▲ **GEORGE F. CHARLES NDB (SLU)** 14 00 51N 061 00 22W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
R508		**AIRSPACE CLASS A FL195/FL245 ALL SEGMENTS**				
▲ **A.N.R ROBINSON NDB (TAB)** 11 08 51N 060 50 01W	327°/147° 34	FL245/FL055 FL060 **CLASS E**	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL135 & BLW IN TMA)
▲ **ELTUN** 11 31 47N 061 15 30W	327°/147° 11	FL245/FL055 FL060 **CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL135 & BLW IN TMA)
▲ **OLASA** 11 39 16N 061 23 53W	327°/147° 31	FL245/FL055 FL060 **CLASS E**	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (MAURICE BISHOP APP FREQ: 119.400MHz FL135 & BLW IN TMA)
▲ **MAURICE BISHOP VOR/DME (GND)** 12 00 06N 061 47 07W						

Wpt ELTUN: FIX UPPER LIMIT FL155
Wpt OLASA: FIX UPPER LIMIT FL135

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
R515		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				
▲ **PIARCO DVOR/DME (POS)** 10 27 59N 061 23 33W	054° 234° 52	FL245 4100 FT ALT 4100FT **FL195/FL060 CLASS E FL060/4100FT CLASS G**	10	↓	↑	PIARCO ACC FREQ : 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ : 119.000MHz 119.550MHz FL155 & BLW)
▲ **A.N.R ROBINSON NDB (TAB)** 11 08 51N 060 50 01W	049° 230° 31	FL245 4100 FT ALT 4100FT **FL195/FL060 CLASS E FL060/4100FT CLASS G**	10			PIARCO ACC FREQ : 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ : 119.000MHz 119.550MHz FL155 & BLW)
▲ **TABEX** 11 34 24N 060 32 14W	049° 230° 41	FL245 4100 FT ALT 4100FT **FL195/FL060 CLASS E FL060/4100FT CLASS G**	10			PIARCO ACC FREQ : 125.400MHz 126.500MHz 124.000MHz (PIARCO APP FREQ : 119.000MHz 119.550MHz FL155 & BLW)
▲ **LOGAN** 12 08 18N 060 08 34W	050° 230° 68	FL245 3000 FT ALT 3000FT **FL195/FL085 CLASS A FL085/3000FT CLASS D**	10			ADAMS APP FREQ: 129.350MHz
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W						

Wpt TABEX: NOT COMPULSORY ABOVE FL085

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
R750		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	310° 129° 71	FL245 3000 FT ALT 3000FT **FL195/FL085 CLASS A** **FL085/3000FT CLASS D**	10	↑	↓	ADAMS APP FREQ: 129.350MHz
▲ **TIBOT** 13 33 45N 060 35 11W	309° 129° 25	FL245 3500 FT ALT 3500FT **FL195/3500FT CLASS D**	10			MARTINIQUE APP FREQ: 121.000MHz 129.050MHz (SAINT LUCIA APP FREQ: 119.800MHz FL105 & BLW IN CTR)
▲ **HEWANORRA (SAINT LUCIA) VOR/DME (BNE)** 13 44 00N 060 58 37W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
R888		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT MODUX, for continuation see U.S.A. Publication
▲ **POINTE-A-PITRE LE RAIZET VOR/DME (PPR)** 16 15 55N 061 32 25W	311° 131° 41	FL245 4700 FT ALT 4700FT **FL195/4700FT CLASS D**	10	↑	↓	RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ **GORET** 16 33 53N 062 10 19W	310° 130° 53	FL245 5000 FT ALT FL060 **FL195/5000FT CLASS E**	10			V.C. BIRD APP FREQ: 119.100MHz
▲ **MODUX** 16 57 10N 063 00 00W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits NM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
R893		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				
▲ **CANOUAN NDB (CAI)** 12 41 46N 061 20 22W	093° 273° 39	FL245 FL055 **CLASS E**	10	↓	↑	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz (ARGYLE APP FREQ: 120.800MHz FL135 AND BLW IN TMA)
▲ **AMULA** 12 49 49N 060 41 28W	093° 274° 72	FL245 3000 FT ALT 3000FT **FL195/FL085 CLASS A** **FL085/3000FT CLASS D**	10			ADAMS APP FREQ: 129.350MHz
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
				Odd	Even	
1	2	3	4	5		6
UA312		**CLASS A RVSM AIRSPACE FL410/FL290 ALL SEGMENTS**				For continuation see AIP Guyana
▲ **DALGA** 08 55 09N 059 04 16W	357° / 176° 295	UNL / FL245	10	↑	↓	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **TOXUN** 13 36 06N 060 40 33W	356° / 176° 63	UNL / FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **MARTINIQUE AIME CESAIRE VOR/DME (FOF)** 14 35 27N 061 01 22W	358° / 178° 104	UNL / FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz NOTE : VOR 'ANU' AND NDB 'ZDX' ARE CONSIDERED COLOCATED FOR NAVIGATION PURPOSES
▲ **POINTE-A-PITRE LE RAIZET VOR/DME (PPR)** 16 15 55N 061 32 25W	358° / 178° 54	UNL / FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz NOTE : VOR 'ANU' AND NDB 'ZDX' ARE CONSIDERED COLOCATED FOR NAVIGATION PURPOSES
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UA324		**CLASS A RVSM AIRSPACE FL410/FL290 ALL SEGMENTS**				For continuation see AIP Guyana
▲ **MINDA** 08 55 00N 060 09 35W	337° 156° 118	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 124.000MHz 125.400MHz 126.500MHz
▲ **PIARCO** **DVOR/DME (POS)** 10 27 59N 061 23 33W	000° 180° 95	UNL FL245	10			PIARCO ACC FREQ: 124.000MHz 125.400MHz 126.500MHz
▲ **MAURICE BISHOP** **VOR/DME (GND)** 12 00 06N 061 47 07W	040° 206° 76	UNL FL245	10			PIARCO ACC FREQ: 124.000MHz 125.400MHz 126.500MHz
▲ **ST VINCENT** **DME (SV)** 13 08 26N 061 13 34W	022° 217° 38	UNL FL245	10			PIARCO ACC FREQ: 124.000MHz 125.400MHz 126.500MHz
▲ **HEWANORRA (SAINT LUCIA)** **VOR/DME (BNE)** 13 44 00N 060 58 37W	012° 192° 51	UNL FL245	10			PIARCO ACC FREQ: 124.000MHz 125.400MHz 126.500MHz
▲ **MARTINIQUE AIME CESAIRE** **VOR/DME (FOF)** 14 35 27N 061 01 22W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UA511		**CLASS A RVSM AIRSPACE FL410/FL290**				From WPT BOGSI, for continuation see AIP Venezuela
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	288° 107° 102	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **ST VINCENT NDB (SV)** 13 08 26N 061 13 34W	299° 119° 68	UNL FL245	10			PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **ALGUS** 13 25 19N 062 20 44W	299° 117° 118	UNL FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **BOGSI** 13 54 01N 064 18 10W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UA555		**CLASS A RVSM AIRSPACE FL410/FL290**				For continuation see AIP Suriname From WPT ILURI, for continuation see U.S.A Publication
▲ **TRAPP** 09 05 05N 055 59 29W	336° 154° 315	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 124.000MHz 125.400MHz 126.500MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	331° 150° 128	UNL FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **MARTINIQUE AIME CESAIRE VOR/DME (FOF)** 14 35 27N 061 01 22W	327° 146° 91	UNL FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **DUNTA** 15 36 32N 062 11 35W	327° 146° 62	UNL FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ILURI** 16 18 04N 063 00 00W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UA562		**CLASS A RVSM AIRSPACE FL410/FL290**				From WPT PARIA, for continuation see AIP Venezuela
▲ **PARIA** 10 13 15N 061 59 37W	082° 262° 39	UNL FL245	10	↓	↑	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PIARCO** **DVOR/DME (POS)** 10 27 59N 061 23 33W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
				Odd	Even	
1	2	3	4	5		6
UA632		**CLASS A RVSM AIRSPACE FL410/FL290**				For continuation see AIP Guyana
▲ **EGEMA** 08 55 10N 058 42 15W	005° / 185° 252	UNL / FL245	10	↑	↓	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	347° / 166° 108	UNL / FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **SEKUN** 14 39 23N 060 22 34W	346° / 165° 169	UNL / FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W						

Note EXCEPTION ATS ROUTE UA632/A632

AIRCRAFT ON ROUTE SEGMENTS TO BE FLOWN AT CRUISING LEVELS CORRESPONDING TO MAG TRACKS AS FOLLOWS :

1. (a) EGEMA TO ADAMS VOR/DME - 180° TO 359°
   (b) ADAMS VOR/DME TO EGEMA - 000° TO 179°

2. VOR/DME ANU AND NDB ZDX CONSIDERED COLOCATED FOR NAVIGATION PURPOSES

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UB520		**CLASS A RVSM AIRSPACE FL410/FL290**				From WPT ELOPO, for continuation see U.S.A Publication
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W	321° 140° 53	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ELOPO** 17 39 00N 062 33 16W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UG449		**CLASS A RVSM AIRSPACE FL410/FL290**				For contination see AIP Guyana From WPT ANADA, for continuation see U.S.A Publication
▲ **KORTO** 08 55 06N 059 26 47W	324° 143° 148	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PIARCO** **DVOR/DME (POS)** 10 27 59N 061 23 33W	344° 164° 93	UNL FL245	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PERGA** 11 48 05N 062 11 30W	344° 163° 101	UNL FL245	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PERRY** 13 15 12N 063 04 17W	343° 163° 63	UNL FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **PELMA** 14 09 05N 063 37 17W	343° 162° 59	UNL FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ANADA** 15 00 00N 064 08 46W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UG633		**CLASS A RVSM AIRSPACE FL410/FL290**				From WPT GABAR, for continuation see U.S.A Publication
▲ **V.C. BIRD** **VOR/DME (ANU)** 17 07 33N 061 48 01W	295° 115° 55	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **BRADSHAW** **NDB (SKB)** 17 17 43N 062 44 38W	298° 118° 15	UNL FL245	10			PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **GABAR** 17 21 12N 063 00 00W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UR515		**CLASS A RVSM AIRSPACE FL410/FL290**				
▲ **PIARCO DVOR/DME (POS)** 10 27 59N 061 23 33W	054° 234° 52	UNL FL245	10	↓	↑	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **A.N.R ROBINSON NDB (TAB)** 11 08 51N 060 50 01W	049° 230° 140	UNL FL245	10			PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UR750		**CLASS A RVSM AIRSPACE FL410/FL290**				
▲ **GRANTLEY ADAMS DVOR/DME (BGI)** 13 04 30N 059 29 02W	310° 129° 96	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **HEWANORRA (SAINT LUCIA) VOR/DME (BNE)** 13 44 00N 060 58 37W						

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ENR 3.1 CONVENTIONAL ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP Specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Minimum flight altitude Airspace Classification	Lateral limits KM	Direction of cruising levels		Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP Specification limitations
				Odd	Even	
1	2	3	4	5		6
UR888		**CLASS A RVSM AIRSPACE FL410/FL290**				From WPT MODUX, for continuation see U.S.A. Publication
▲ **POINTE-A-PITRE LE RAIZET VOR/DME (PPR)** 16 15 55N 061 32 25W	311° 130° 94	UNL FL245	10	↑	↓	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **MODUX** 16 57 10N 063 00 00W						

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Airspace Classification	Direction of cruising levels		Navigation accuracy requirement	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
L451		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From WPT ELOPO, for continuation see U.S.A. and Netherlands Antilles Publications
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W	320° / 140° 53	FL245 / FL055 **FL195/FL055 CLASS E**	↑	↓		Part of West Atlantic Route Structure (WATRS) V. C. Bird APP 119.100MHz
▲ **ELOPO** 17 39 00N 062 33 16W						

1. RNP = Required Navigation Performance.

2. RNP type = A containment value expressed as a distance in nautical miles from the intended position within which flights would be situated for at least 95 percent of the total flying time.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits. Airspace Classification	Direction of cruising levels		Navigation accuracy requirement	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
L462		**AIRSPACE CLASS A ABOVE FL195 ALL SEGMENTS**				From BDRY (LAMKN) for continuation see U.S.A Publication
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W	004° / 184° 53	FL245 / FL055 **FL195/FL055 CLASS E**	↑	↓		Part of West Atllantic Route Structure (WATRS) V.C. BIRD APP 119.100MHz
▲ **LAMKN** 18 00 00N 061 57 58W						

1. RNAV = Area Navigation .
2. RNAV type = A containment value expressed as a distance in nautical miles from the intended position within which flights would be situated for at least 95 percent of the total flying time.
3. Aircraft on route segment to be flown at cruising levels corresponding to MAG tracks as follows:- VOR/DME ‘ANU’ to ‘LAMKN’ - 180° – 359°; ‘LAMKN’ to ’VOR/DME ‘ANU’ - 000 °- 179°
4. Climb to TOC and descent can be accomplished on the UL462 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL329 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				GEORGETOWN ACC For continuation see Guyana Publication SAN JUAN ACC For continuation see USA Publication
▲ **KORTO** 08 55 06N 059 26 47W	355° 174° 226	UNL FL290	↑	↓	+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **YOLKK** 12 27 25N 060 49 00W	354° 174° 77	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **DELNU** 13 39 45N 061 17 32W	354° 173° 100	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **SORRL** 15 13 13N 061 54 53W	353° 173° 145	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ZPATA** 17 28 23N 062 49 59W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.

2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).

3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.

4. Climb to TOC and descent can be acomplished on the UL329 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL452 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				GEORGETOWN ACC For continuation see Guyana Publication
▲ **MINDA** 08 55 00N 060 09 35W	341° 161° 309	UNL FL290	↑	↓	+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **ITLUV** 13 16 20N 062 59 27W	341° 160° 123	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ANADA** 15 00 00N 064 08 46W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be acomplished on the UL452 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL454 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				PARAMARIBO ACC For continuation see Suriname Publication SAN JUAN ACC For continuation see USA Publication
▲ **TRAPP** 09 05 05N 055 59 29W	334° 153° 88	UNL FL290	↑	↓	+/- 5NM	PIARCO ACC FREQ: 126.500MHz 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **ROSLU** 10 09 18N 057 00 00W	333° 152° 144	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **MASEP** 11 54 43N 058 40 39W	332° 152° 117	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **ETBIG** 13 19 35N 060 03 03W	332° 151° 157	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **SORRL** 15 13 13N 061 54 53W	331° 150° 90	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ILURI** 16 18 04N 063 00 00W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.

2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).

3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.

4. Climb to TOC and descent can be acomplished on the UL454 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL462 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				GEORGETOWN ACC For continuation see Guyana Publication For continuation from V.C. Bird VOR/DME (ANU) see UL462 (RNAV10)
▲ **NORWI** 08 55 16N 058 05 45W	351° 171° 287	UNL FL290	↑	↓	+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **ETBIG** 13 19 35N 060 03 03W	352° 171° 143	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **OMIKI** 15 30 54N 061 03 00W	351° 170° 106	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.

2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).

3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.

4. Climb to TOC and descent can be accomplished on the UL462 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL576 (RNAV5)[2]		**CLASS A RVSM AIRSPACE FL410/FL290**				PARAMARIBO ACC For continuation see Suriname Publication
▲ **TRAPP** 09 05 05N 055 59 29W	358° 178° 101	UNL FL290	↑	↓	+/- 5NM	PIARCO ACC FREQ: 126.500MHz, 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **PIPUV** 10 42 25N 056 31 43W	358° 178° 33	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 126.500MHz, 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **NOSOB** 11 14 21N 056 42 10W	359° 178° 115	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 126.500MHz, 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **ROVBA** 13 04 30N 057 18 32W	357° 177° 161	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz, 133.100MHz
▲ **LESUD** 15 38 29N 058 10 46W	357° 177° 148	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz, 133.100MHz
▲ **CITRS** 18 00 00N 059 00 00W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UL576 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL776 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				GEORGETOWN ACC For continuation see Guyana Publication
▲ **KORTO** 08 55 06N 059 26 47W	342° 162° 316	UNL FL290	↑	↓	+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **VIBSI** 13 26 33N 062 15 20W	342° 162° 109	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **GEECE** 15 00 00N 063 15 00W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on a UL776 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points[5] Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL337 (RNAV 5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				MAIQUETIA ACC See Venezuela Publication
▲ **PIARCO VOR/DME (POS)** 10 27 59N 061 23 33W	330° 149° 168	UNL FL245	↑	↓	+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **VUDAL** 12 27 13N 063 24 26W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UL337 track.
5. Compulsory reporting point 'TAMBU' 11 10 15N 062 06 06W exists on the intersection of Piarco APS and the UL337 climb and descent track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL462 (RNAV10)[2]		**CLASS A RVSM AIRSPACE FL410/FL290**				From LAMKN, for continuation see U.S.A. Publication For continuation from V.C. Bird VOR/DME (ANU) see UL462 (RNAV5)
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W	004° 184° 53	UNL FL245	↑	↓	+/- 10NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **LAMKN** 18 00 00N 061 57 58W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 10 represents aircraft and operating requirements, including a 10 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 10 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UL462 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL375 (RNAV 10)[2]		**CLASS A RVSM AIRSPACE FL410/FL290**				For continuation see French CAR/SAM/NAM Publication From DABAK, for the continuation see USA publication
▲ **TODIS** 11 38 12N 043 16 06W	327° 146° 130	UNL FL245	↑	↓	+/- 10NM	HF voice communication provided by New York Radio (ARINC) on behalf of Piarco ACC. Frequencies in use: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Oceanic aircraft are required to make voice reports.
▲ **IRAXI** 13 00 00N 045 00 00W	328° 146° 376	UNL FL245			+/- 10NM	Same remark as for TODIS to IRAXI
▲ **EGIBO** 17 00 00N 050 00 00W	325° 145° 97	UNL FL245			+/- 10NM	Same remark as for TODIS to IRAXI
▲ **DABAK** 18 00 00N 051 19 30W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 10 represents aircraft and operating requirements, including a 10 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 10 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UL375 track

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL435 (RNAV 10)[2]		**CLASS A RVSM AIRSPACE FL410/FL290**				For continuation see ASECNA Publication From BUTUX) for NEW YORK ACC For continuation See U.S.A. Publication
▲ **IRELA** 14 00 00N 037 26 00W	315° 134° 169	UNL FL245	↑	↓	+/- 10NM	HF voice communication provided by New York Radio (ARINC) on behalf of Piarco ACC. Frequencies in use: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Oceanic aircraft are required to make voice reports.
▲ **PAKER** 15 20 00N 040 00 00W	314° 133° 348	UNL FL245			+/- 10NM	HF voice communication provided by New York Radio (ARINC) on behalf of Piarco ACC. Frequencies in use: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Oceanic aircraft are required to make voice reports.
▲ **BUTUX** 18 00 00N 045 22 48W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 10 represents aircraft and operating requirements, including a 10 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 10 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UL435 track

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UL695 (RNAV 10)[2]		**CLASS A RVSM AIRSPACE FL410/FL290**				For continuation see French Publication CAR/SAM/NAM
▲ **BISUK** 10 30 00N 046 30 00W	311° / 130° 225.0	UNL / FL245	↑	↓	+/- 10NM	HF voice communication provided by New York Radio (ARINC) on behalf of Piarco ACC. ARINC will relay voice messages to and from Piarco ACC and aircraft operating in the Piarco Oceanic FIR. PIARCO ACC FREQ: 126.500MHz 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Oceanic aircraft are required to make voice reports. Use address TTZP for logon to CPDLC service.
▲ **ASALI** 12 00 00N 050 00 00W	313° / 131° 322.7	UNL / FL245			+/- 10NM	PIARCO ACC FREQ: 126.500MHz, 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **BOXIT** 14 16 25N 055 00 00W	311° / 129° 201.9	UNL / FL245			+/- 10NM	PIARCO ACC FREQ: 126.500MHz, 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **LESUD** 15 38 29N 058 10 46W	309° / 129° 26.8	UNL / FL245			+/- 10NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz

ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
▲ **RIKIV** 15 49 12N 058 36 17W	309° 129° 27.3	UNL FL245			+/- 10NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **KANUN** 16 00 08N 059 02 14W	309° 129° 25.5	UNL FL245			+/- 10NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
Δ **MEBUK** 16 10 08N 059 26 34W	309° 128° 73.8	UNL FL245			+/- 10NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
Δ **FAMPS** 16 39 06N 060 37 16W	308° 127° 73.5	UNL FL245			+/- 10NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 10 represents aircraft and operating requirements, including a 10 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 10 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished using the UL695 track.

ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UM791 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				PARAMARIBO ACC See CAR/SAM publication
▲ **DOLRO** 09 14 12N 054 44 12W	327° 146° 138	UNL FL245	↑	↓	+/- 5NM	HF voice communication provided by New York Radio (ARINC) on behalf of Piarco ACC. ARINC will relay voice messages to and from Piarco ACC and aircraft operating in the Piarco Oceanic FIR. PIARCO ACC FREQ: 126.500MHz 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Oceanic aircraft are required to make voice reports. Use address TTZP for logon to CPDLC service.
▲ **PIPUV** 10 42 25N 056 31 43W	326° 144° 224	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **GRANTLEY ADAMS VOR/DME (BGI)** 13 04 30N 059 29 02W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UM791 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points[5] Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UM402 (RNAV 5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				MAIQUETIA ACC For continuation, see Maiquetia AIP
▲ **ISIGI** 09 53 28N 061 20 11W	010° 190° 35	UNL FL245	↓	↑	+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PIARCO VOR/DME (POS)** 10 27 59N 061 23 33W	012° 192° 187	UNL FL245			+/- 5NM	PIARCO ACC FREQ 125.400MHz 126.500MHz 124.000MHz
▲ **EMKIS** 13 35 49N 061 34 52W	012° 192° 36	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **LIMBO** 14 12 19N 061 37 06W	012° 191° 175	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **V.C. BIRD VOR/DME (ANU)** 17 07 33N 061 48 01W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UM402 track.
5. Compulsory reporting point 'PIKSO' 11 26 53N 061 27 04W exists on the intersection of Piarco APS and the UM402 climb and descent track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UP671 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL 290**				MAIQUETIA ACC for continuation see Maiquetia Publication (From WPT MEGIR, for continuation see AIP Venezuela)
▲ **ROVBA** 13 04 30N 057 18 32W	254° 072° 286.4	UNL FL245	↑	↓	+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **PIARCO VOR/DME (POS)** 10 27 59N 061 23 33W	291° 110° 28.5	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **MEGIR** 10 31 00N 061 52 20W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UP671 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UT349 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				PARAMARIBO ACC For continuation see Suriname Publication SAN JUAN ACC For continuation see USA Publication
▲ **DOLRO** 09 14 12N 054 44 12W	333° 152° 166.3	UNL FL290	↑	↓	+/- 5NM	PIARCO ACC FREQ: 126.500MHz 133.100MHz NY HF: 3016KHz, 5520KHz, 5598KHz, 8906KHz, 11396KHz, 13306KHz, 17946KHz, 21925KHz. Use address TTZP for logon to CPDLC service.
▲ **NOSOB** 11 14 21N 056 42 10W	332° 151° 154.5	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 124.000MHz 125.400MHz
▲ **KEDMI** 13 04 30N 058 32 29W	331° 150° 206.2	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **OMIKI** 15 30 54N 061 03 00W	330° 150° 34.9	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
△ **OVIVU** 15 55 28N 061 28 47W	330° 149° 122.3	UNL FL290			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **GABAR** 17 21 12N 063 00 00W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UT349 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UM662 (RNAV5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				MAIQUETIA ACC For continuation, Maiquetia AIP
▲ **SALAB** 15 04 24N 057 23 08W	071° 253° 187.1	UNL FL245	↑	↓	+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **ETBIG** 13 19 35N 060 03 03W	065° 246° 197.1	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **ILVAS** 11 13 33N 062 38 19W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UM662 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UN669 (RNAV 5) [2]		**CLASS A AIRSPACE FL410/FL290**				MAIQUETIA ACC For continuation, see Maiquetia AIP
▲ **ELJEZ** 18 00 00N 057 00 00W	068° 248° 35.1	UNL FL245	↑	↓	+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **OTUSU** 17 38 28N 057 29 09W	067° 248° 142.9	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
△ **MEBUK** 16 10 08N 059 26 34W	067° 247° 123.5	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
△ **AGBEL** 14 52 55N 061 06 40W	065° 247° 191.1	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ONGAL** 12 52 00N 063 39 17W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UN669 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UP410 (RNAV 5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				MAIQUETIA ACC For continuation, see Maiquetia AIP
▲ **UKVEN** 16 49 46N 057 27 14W	063° 244° 89.7	UNL FL245	↑	↓	+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **RIKIV** 15 49 12N 058 36 17W	063° 244° 185.9	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
▲ **HEWANORRA (SAINT LUCIA) VOR/DME (BNE)** 13 44 00N 060 58 37W	061° 242° 164.9	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **RENUP** 11 49 04N 063 00 13W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UP410 track.

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ENR 3.2 AREA NAVIGATION ROUTES

Route designator (RNP/RNAV[1]) Name of significant points Coordinates RCP/RSP specification	Track MAG VOR RDL DIST (COP)	Upper Limits Lower Limits[4] Airspace Classification	Direction of cruising levels		Navigation accuracy requirement[3]	Remarks Controlling unit channel Logon address SATVOICE number RCP/RSP specification limitations
			Odd	Even		
1	2	3	4		5	6
UP533 (RNAV 5) [2]		**CLASS A RVSM AIRSPACE FL410/FL290**				MAIQUETIA ACC For continuation, see Maiquetia AIP
▲ **CITRS** 18 00 00N 059 00 00W	064° 245° 123.1	UNL FL245	↑	↓	+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
△ **FAMPS** 16 39 06N 060 37 16W	064° 244° 65.9	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 125.400MHz 126.500MHz 124.000MHz
△ **OVIVU** 15 55 28N 061 28 47W	062° 244° 206.4	UNL FL245			+/- 5NM	PIARCO ACC FREQ: 123.700MHz 133.100MHz
▲ **ITEGO** 13 37 32N 064 07 48W						

1. RNP = required navigation performance specification; RNAV = area navigation specification.
2. RNAV 5 represents aircraft and operating requirements, including a 5 NM lateral performance, that are detailed in the *Performance-based Navigation (PBN) Manual* (Doc 9613).
3. Aircraft must be RNAV 5 equipped using GNSS sensor to fly this route.
4. Climb to TOC and descent can be accomplished on the UP533 track.

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ENR 3.3 OTHER ROUTES

1. Forte-de-France and Point-a-Pitre TMA's

The following routes are within the above TMAs and are not applicable in the Piarco UTA (FL 245/UNL)

Route designator (RNP[1] Type[2]) Name of significant points Coordinates	Track MAG (GEO)	DIST (NM)	Upper Limits / Lower Limits. Airspace Classification	Direction of cruising levels		Remarks Controlling unit Frequency
				Odd	Even	
1	**2**	**3**	**4**	**5**	**6**	**7**
RD2 ▲ AIMÉ CÉSAIRE VOR/DME (FOF) 14 35 27N 061 01 22 W						
	055° 235°	83	FL245 FL195 **CLASS A** FL195 4000FT **CLASS D**	↓	↑	MARTINIQUE APP FREQ: 121.000MHz 129.050MHz
▲ SESPO 15 38 59N 060 05 57W						PIARCO ACC FREQ: 123.700MHz 133.100MHz
RD3 ▲ POINTE A PITRE VOR/DME (PPR) 16 15 55N 061 32 25W						RAIZET APP FREQ: 121.300MHz 119.050MHz
	055° 236°	75	FL 245 FL195 **CLASS A** FL195 3500FT **CLASS D**	↓	↑	
▲ BOSET 17 13 25N 060 41 38W						PIARCO ACC FREQ: 123.700MHz 133.100MHz

Route designator (RNP[1] Type[2]) Name of significant points Coordinates	Track MAG (GEO)	DIST (NM)	Upper Limits Lower Limits. Airspace Classification	Direction of cruising levels		Remarks Controlling unit Frequency
				Odd	Even	
1	2	3	4	5	6	7
RD4						
▲ POINTE A PITRE VOR/DME (PPR) 16 15 55N 061 32 25W	162° 342°	35	8000 FT 3600 FT CLASS E	↓	↑	RAIZET APP FREQ: 121.300MHz 119.050MHz
▲ SEDOG 15 46 06N 061 12 19W						

1. Required navigation performance.

2. A containment value expressed as a distance in nautical miles from the intended position within which flights would be situated for at least 95percent of the total flying time.

2. V.C. Bird TMA

The following route is within the above TMA and is not applicable in the Piarco UTA (FL 245/UNL)

Route designator (RNP[1] Type[2]) Name of significant points Coordinates	Track MAG (GEO)	DIST (NM)	Upper Limits Lower Limits. Airspace Classification	Direction of cruising levels		Remarks Controlling unit Frequency
				Odd	Even	
1	2	3	4	5		7
ANU VOR/DME – 18N060W						
▲ V.C. BIRD VOR/DME(ANU)						Entry/Exit fix BEVAD exists on the V.C. Bird TMA boundary on the direct track 'ANU' VOR /18N060W
	077° 257°	62	FL245 FL195 **CLASS A** FL195 3000FT **CLASS E**	↓	↑	
▲ BEVAD 17 35 46N 060 50 18W						PIARCO ACC FREQ: 123.700MHz 133.100MHz

1. Required navigation performance.

2. A containment value expressed as a distance in nautical miles from the intended position within which flights would be situated for at least 95percent of the total flying time.

3. Piarco UTA/CTA

3.1 General

Routes in the Piarco UTA/CTA shall be selected from the ATS Route structure (ENR 3.1-1 to ENR 3.2-1 refers).

Individual requests for random routes may be approved at the discretion of the Piarco Area Control Centre. *(see3.2)*

Aircraft entering or leaving the Piarco UTA/CTA/FIR on routes other than those published in ENR 3 shall indicate those boundary positions in item 15 of the ICAO Flight Plan.

3.2 Flex Routes

A Flex Route (*also called Random Route, User Preferred Route, Free Route or 4D Trajectory)* is described as a non fixed route calculated on a daily basis to provide the most efficient flight profile or trajectory on a given city pair or through a specific volume of airspace. The Flex Route can be comprised of any combination of elements including but not limited to: five-letter waypoint names; latitude/longitude, existing airways, ground based navigation aids or other significant points.

Flexible routings are available within the Piarco FIR/UIR above FL245 (Piarco UTA)

Aircraft operators will be able to plan user-preferred trajectories through the use of the following fixes which exist on the boundary of the Piarco (TTZP) FIR, adjoining the Santa Maria (LPPO), Sal (GVSC), Dakar (GOOO) and Cayenne (SOOO) FIRs:

EKNUT (20 44 41N 039 14 49W)

IPSIN (19 22 14N 038 35 44W)

NUMGI (18 27 50N 038 10 22W)

TUTLO (17 00 00N 037 30 00W)

GANAK (16 00 00N 037 30 00W)

OPADO (15 00 00N 037 30 00W)

PUBLI (13 00 00N 039 00 00W)

Route portions between waypoints will be indicated by means of "DCT" instruction.

3.3 Piarco FIR 18N Boundary Fixes

As part of the Piarco FIR re-designing concept, the following coordinate points along the 18N latitude have been defined as RNAV compulsory points and named as follows:

ROHPL (18 00 00N 045 00 00 W)

QUETN (18 00 00N 046 00 00 W)

PAPSE (18 00 00N 047 00 00 W)

OXODE (18 00 00N 048 00 00 W)

NEZBT (18 00 00N 049 00 00 W)

MUNTR (18 00 00N 050 00 00 W)

LEARP (18 00 00N 051 00 00 W)

KLUKE (18 00 00N 052 00 00 W)

JTHON (18 00 00N 053 00 00 W)

HIGNZ (18 00 00N 054 00 00 W)

GLAAS (18 00 00N 055 00 00 W)

FISST (18 00 00N 056 00 00 W)

ELJEZ (18 00 00N 057 00 00W)

DRDGE (18 00 00N 058 00 00W)

CITRS (18 00 00N 059 00 00W)

BNJEE (18 00 00N 060 00 00W)

AMTTO (18 00 00N 061 00 00W)

ENR 3.4 ENROUTE HOLDING

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ENR 4. RADIO NAVIGATION AIDS / SYSTEMS

ENR 4.1 RADIO NAVIGATION AIDS – ENROUTE

Name of station (MAG VAR)	ID	Frequency (CH)	Hours of operation	Coordinates	ELEV DME Antenna	Remarks
1	2	3	4	5	6	7
A.N.R ROBINSON DME (15°W)	ITAB	CH30X	H24	11 08 57N 060 48 58W	8M/26FT	Landing Navaid only Co- located with ILS/LOC ITAB
A.N.R ROBINSON NDB (15°W)	TAB	323.0KHZ	H24	11 08 51N 060 50 01W		NDB elev 19M/61FT
BRADSHAW DME (14°W)	SKB	CH57X	H24	17 18 23N 062 43 40W		Associated with VOR frequency 112.000MHz Unusable at 5000ft between QDR 248 Mag to 359 Mag
BRADSHAW NDB (14°W)	SKB	325.0KHZ	H24	17 17 43N 062 44 38W		NIL
CANEFIELD NDB (15°W)	DCF	260.0KHZ	H24	15 20 08N 061 23 34W		NDB DCF unserviceable UFN
CANOUAN DME (15°W)	-	CH51X	H24	12 41 46N 061 20 21W	30M/ 98FT	Co-located with NDB. Not usable below FL070 in the sector clockwise between APPROX 245 deg MAG through RESAS to 296 deg MAG. Freq 111.400MHz
CANOUAN NDB (15°W)	CAI	302.0KHZ	H24	12 41 46N 061 20 22W		Co-located with DME
DOUGLAS CHARLES DME (15°W)	DOM	116.400MHZ CH111X	H24	15 33 02N 061 17 44W		Co-located with NDB. Not usable beyond 18NM on A312 South of NDB (QDR 177)
DOUGLAS CHARLES NDB (15°W)	DOM	273.0KHZ	H24	15 33 03N 061 17 44W		NIL
GEORGE F. CHARLES NDB (15°W)	SLU	415.0KHZ	H24	14 00 51N 061 00 22W		Range 100NM
GRANTLEY ADAMS DVOR/DME (15°W)	BGI	112.700MHZ CH74X	H24	13 04 30N 059 29 02W	60M/ 197FT	NIL
HEWANORRA (SAINT LUCIA) VOR/DME (15°W)	BNE	112.400MHZ CH71X	H24	13 44 00N 060 58 37W		Range 100NM Calibrated at 14°W

Name of station (MAG VAR)	ID	Frequency (CH)	Hours of operation	Coordinates	ELEV DME Antenna	Remarks
1	2	3	4	5	6	7
HEWANORRA NDB (15°W)	BNE	305.0KHZ	H24	13 44 01N 060 58 39W		NIL
MARTINIQUE AIME CESAIRE VOR/DME (15°W)	FOF	113.300MHZ CH80X	H24	14 35 27N 061 01 22W	12M/ 38FT	Range - 100 NM Information unreliable within 325°/ 351° sector below 6000FT beyond 6NM from VOR
MAURICE BISHOP NDB (14°W)	GND	362.0KHZ	H24	12 00 29N 061 46 48W		NIL
MAURICE BISHOP VOR/DME (14°W)	GND	117.100MHZ CH118X	H24	12 00 06N 061 47 07W	25M/ 82FT	VOR/DME unusable as follows: a) 033R-076R beyond 32NM and below 6000FT b) 077R beyond 27NM below 5000FT MSL
PIARCO DVOR/DME (15°W)	POS	116.900MHZ CH116X	H24	10 27 59N 061 23 33W	27M/ 89FT	VOR 100 watts DME 1.2KW peak VOR calibrated at 14°W
PIARCO NDB (15°W)	TRI	382.0KHZ	H24	10 35 42N 061 25 20W		1KW
POINTE-A-PITRE LE RAIZET VOR/DME (15°W)	PPR	112.900MHZ CH76X	H24	16 15 55N 061 32 25W	13M/ 44FT	See French CAR/SAM/NAM AIP for more information
ST VINCENT DME (15°W)	SV	108.400MHZ CH21X	H24	13 08 26N 061 13 34W	60M/ 197FT	SECTOR /ROUTE LIMITATIONS/ RESTRICTIONS Clockwise from northern sector: 346MAG – A324 North -050MAG (MSA5200FT) Minimum usable ALT, 0-12NM:5200FT; minimum usable level, 12.1-20NM:FL110; not usable beyond 20NM. 051MAG – 090MAG (MSA5200FT) Minimum usable level, 0-20NM:FL075; not usable beyond 20NM. 091MAG – 100MAG (MSA4200FT) Minimum usable level, 0-20NM:FL075; not usable beyond 20NM.
ST VINCENT NDB (15°W)	SV	403.0KHZ	H24	13 08 26N 061 13 34W		Range 108 NM
V.C. BIRD VOR/DME (15°W)	ANU	114.500MHZ CH92X	H24	17 07 33N 061 48 01W	122M/ 400FT	Range 250NM VOR calibrated at 15°W

Name of station (MAG VAR)	ID	Frequency (CH)	Hours of operation	Coordinates	ELEV DME Antenna	Remarks
1	2	3	4	5	6	7
V.C. BIRD NDB (15°W)	ZDX	369.0KHZ	H24	17 09 26N 061 47 43W		NIL

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ENR 4.2 SPECIAL NAVIGATION SYSTEMS

TO BE DEVELOPED

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ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)

Name of GNSS element	Frequency	Coordinates	Remarks
GPS	1575.42 MHz	Within Piarco FIR	NIL

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ENR 4.4 NAME-CODE DESIGNATOR FOR SIGNIFICANT POINTS

Name-code desig.	Coordinates	ATS Route Or Other Route
1	2	3
AGBEL	14 52 55N 061 06 40W	UN669 (RNAV 5)
ALGUS	13 25 19N 062 20 44W	A511, UA511
AMTTO	18 00 00N 061 00 00W	ENTRY/EXIT FIR RNAV PT
AMULA	12 49 49N 060 41 28W	R893
ANADA	15 00 00N 064 08 46W	G449, UG449, UL452 (RNAV5) ENTRY/EXIT FIR RNAV5 PT
ASALI	12 00 00N 050 00 00W	UL695 (RNAV 10)
ASDOT	12 32 09N 040 32 32W	ENTRY/EXIT FIR RNAV PT
BETIN	12 21 21N 062 08 50W	TGPY CTR BDRY
BEVAD	17 35 46N 060 50 18W	ENTRY/EXIT PT ON V.C. BIRD TMA ON DIRECT TRACK ANU/ 18N060W
BIMBO	16 37 36N 061 57 37W	A517
BIRNO	14 21 55N 060 12 38W	A632
BISUK	10 30 00N 046 30 00W	UL695 (RNAV 10)
BNJEE	18 00 00N 060 00 00W	ENTRY/EXIT FIR RNAV PT
BOGSI	13 54 01N 064 18 10W	A511, UA511
BORUS	14 02 46N 060 27 59W	A555
BOSET	17 13 25N 060 41 38W	ATS ROUTE FROM VOR 'PPR'
BOVEL	09 48 35N 060 52 06W	A324
BOXIT	14 16 25N 055 00 00W	UL695 (RNAV 10)
BUTUX	18 00 00N 045 22 48W	UL435 (RNAV 10)

Name-code desig.	Coordinates	ATS Route Or Other Route
1	2	3
CITRS	18 00 00N 059 00 00W	UL576 (RNAV5), UP533 (RNAV 5) ENTRY/EXIT FIR RNAV5 PT
DABAK	18 00 00N 051 19 30W	UL375 (RNAV 10)
DALGA	08 55 09N 059 04 16W	A312, UA312
DAMOV	13 28 58N 060 38 04W	A312
DAREK	11 29 49N 062 48 20W	A561
DELNU	13 39 45N 061 17 32W	UL329 (RNAV5)
DOLRO	09 14 12N 054 44 12W	UM791 (RNAV5), UT349 (RNAV5)ENTRY/EXIT FIR RNAV5 PT
DRDGE	18 00 00N 058 00 00W	ENTRY/EXIT FIR RNAV PT
DUKLA	11 22 28N 061 37 27W	A324
DUNTA	15 36 32N 062 11 35W	A550, A555, UA555
DUSAL	12 27 15N 061 33 50W	A324
EGEMA	08 55 10N 058 42 15W	A632, UA632
EGIBO	17 00 00N 050 00 00W	UL375 (RNAV 10)
EKNUT	20 44 41N 039 14 49W	BDRY FIR SANTA MARIA/ PIARCO
ELJEZ	18 00 00N 057 00 00W	UN669 (RNAV 5)
ELOPO	17 39 00N 062 33 16W	B520, L451, UB520
ELTUN	11 31 47N 061 15 30W	R508
EMKIS	13 35 49N 061 34 52W	UM402 (RNAV 5)
EMOLA	15 08 07N 061 38 47W	A555
ERROL	11 57 21N 059 16 18W	A632
ETBIG	13 19 35N 060 03 03W	UL454 (RNAV5), UL462 (RNAV5), UM662 (RNAV 5)
FAMPS	16 39 06N 060 37 16W	UL695 (RNAV 10), UP533 (RNAV 5)

Name-code desig.	Coordinates	ATS Route Or Other Route
1	2	3
FISST	18 00 00N 056 00 00W	ENTRY/EXIT FIR RNAV PT
FRAUN	16 19 40N 057 26 03W	RNAV PT
GABAR	17 21 12N 063 00 00W	G633, UG633, UT349 (RNAV5)ENTRY/EXIT FIR RNAV5 PT
GANAK	16 00 00N 037 30 00W	BDRY FIR DAKAR/PIARCO (FLEX ROUTING)
GEECE	15 00 00N 063 15 00W	UL776 (RNAV5)ENTRY/EXIT FIR RNAV PT
GLAAS	18 00 00N 055 00 00W	ENTRY/EXIT FIR RNAV PT
GORET	16 33 53N 062 10 19W	R888
GOTER	13 07 42N 060 52 40W	A511
HIGNZ	18 00 00N 054 00 00W	ENTRY/EXIT FIR RNAV PT
ILURI	16 18 04N 063 00 00W	A555, UA555, UL454 (RNAV5)
ILVAS	11 13 33N 062 38 19W	UM662 (RNAV 5)
IMORO	11 30 53N 061 39 36W	A324 Also for use in RNAV approaches.
IPSIN	19 22 14N 038 35 44W	BDRY FIR SANTA MARIA/ PIARCO
IRAXI	13 00 00N 045 00 00W	UL375 (RNAV 10)
IRELA	14 00 00N 037 26 00W	UL435 (RNAV 10)
ISIGI	09 53 28N 061 20 11W	UM402 (RNAV 5)
ITEGO	13 37 32N 064 07 48W	A550, UP533 (RNAV 5)
ITLUV	13 16 20N 062 59 27W	UL452 (RNAV5)
ITRAK	11 16 08N 061 52 18W	G449
JTHON	18 00 00N 053 00 00W	ENTRY/EXIT FIR RNAV PT
KADEL	13 21 30N 037 57 22W	ENTRY/EXIT FIR RNAV PT
KANUN	16 00 08N 059 02 14W	UL695 (RNAV 10)

Name-code desig.	Coordinates	ATS Route Or Other Route
1	2	3
KASKI	16 42 37N 061 40 28W	A312
KEDMI	13 04 30N 058 32 29W	UT349 (RNAV5)
KELSO	12 13 02N 058 43 18W	A555
KISES	14 11 11N 061 00 04W	A324
KLUKE	18 00 00N 052 00 00W	ENTRY/EXIT FIR RNAV PT
KORTO	08 55 06N 059 26 47W	G449, UG449, UL329 (RNAV5), UL776 (RNAV5) ENTRY/EXIT FIR RNAV5 PT
LAMKN	18 00 00N 061 57 58W	L462, UL462 (RNAV10)
LEARP	18 00 00N 051 00 00W	ENTRY/EXIT FIR RNAV PT
LENAL	13 15 55N 061 43 22W	A511 Also for use in RNAV approaches.
LESUD	15 38 29N 058 10 46W	UL576 (RNAV5), UL695 (RNAV 10)
LEXAS	12 13 07N 061 19 30W	A561
LIBEV	15 45 00N 057 24 34W	RNAV PT
LIMBO	14 12 19N 061 37 06W	UM402 (RNAV 5)
LOGAN	12 08 18N 060 08 34W	A312, R515
LONEP	11 07 53N 044 45 22W	ENTRY/EXIT FIR RNAV PT
MASEP	11 54 43N 058 40 39W	UL454 (RNAV5)
MEBUK	16 10 08N 059 26 34W	UL695 (RNAV 10), UN669 (RNAV 5)
MEDUS	16 44 22N 061 34 28W	A632
MEGIR	10 31 00N 061 52 20W	A552, A563, UP671 (RNAV5)
MINDA	08 55 00N 060 09 35W	A324, UA324, UL452 (RNAV5) ENTRY/EXIT FIR RNAV5 PT
MITAK	09 56 38N 060 43 55W	G449
MODUX	16 57 10N 063 00 00W	R888, UR888

Name-code desig.	Coordinates	ATS Route Or Other Route
1	2	3
MOTSI	09 51 08N 049 25 07W	ENTRY/EXIT FIR RNAV PT
MUNTR	18 00 00N 050 00 00W	ENTRY/EXIT FIR RNAV PT
NEZBT	18 00 00N 049 00 00W	ENTRY/EXIT FIR RNAV PT
NORWI	08 55 16N 058 05 45W	UL462 (RNAV5) ENTRY/EXIT FIR RNAV5 PT
NOSOB	11 14 21N 056 42 10W	UL576 (RNAV5), UT349 (RNAV5)
NUMGI	18 27 50N 038 10 22W	BDRY FIR SANTA MARIA/ PIARCO
OLASA	11 39 16N 061 23 53W	R508 Also for use in RNAV approaches.
OMIKI	15 30 54N 061 03 00W	UL462 (RNAV5), UT349 (RNAV5)
ONGAL	12 52 00N 063 39 17W	A551, UN669 (RNAV 5)
OPADO	15 00 00N 037 30 00W	BDRY FIR DAKAR/PIARCO (FLEX ROUTING)
OTUSU	17 38 28N 057 29 09W	UN669 (RNAV 5)
OVIVU	15 55 28N 061 28 47W	UP533 (RNAV 5), UT349 (RNAV5)
OXODE	18 00 00N 048 00 00W	ENTRY/EXIT FIR RNAV PT
PAKER	15 20 00N 040 00 00W	UL435 (RNAV 10)
PANON	10 00 00N 048 00 00W	ENTRY/EXIT FIR RNAV PT
PAPSE	18 00 00N 047 00 00W	ENTRY/EXIT FIR RNAV PT
PARIA	10 13 15N 061 59 37W	A562, UA562
PELMA	14 09 05N 063 37 17W	A550, G449, UG449
PERGA	11 48 05N 062 11 30W	A561, G449, UG449
PERRY	13 15 12N 063 04 17W	A551, G449, UG449
PIKSO	11 26 53N 061 27 04W	UM402 CLIMB/DESCENT TRACK FL155 AND BLW
PIPUV	10 42 25N 056 31 43W	UL576 (RNAV5), UM791 (RNAV5)

Name-code desig.	Coordinates	ATS Route Or Other Route
1	2	3
PUBLI	13 00 00N 039 00 00W	BDRY FIR CAYENNE/PIARCO
QUETN	18 00 00N 046 00 00W	ENTRY/EXIT FIR RNAV PT
RAKAN	12 35 12N 060 32 20W	A561
RENUP	11 49 04N 063 00 13W	UP410 (RNAV 5)
RESAS	12 34 06N 061 30 28W	A324
RIBOR	13 22 50N 061 07 32W	A324
RIKIV	15 49 12N 058 36 17W	UL695 (RNAV 10), UP410 (RNAV 5)
ROHPL	18 00 00N 045 00 00W	ENTRY/EXIT FIR RNAV PT
ROSLU	10 09 18N 057 00 00W	UL454 (RNAV5)
ROVBA	13 04 30N 057 18 32W	UL576 (RNAV5), UP671 (RNAV5)
SALAB	15 04 24N 057 23 08W	UM662 (RNAV 5)
SEDOG	15 46 06N 061 12 19W	ATS route from VOR 'PPR'
SEKUN	14 39 23N 060 22 34W	UA632
SEMLO	12 02 50N 042 02 06W	ENTRY/EXIT FIR RNAV PT
SESPO	15 38 59N 060 05 57W	ATS ROUTE FROM VOR 'FOF'
SOMON	14 09 15N 061 41 51W	A551
SORRL	15 13 13N 061 54 53W	UL329 (RNAV5), UL454 (RNAV5)
TABEX	11 34 24N 060 32 14W	R515
TAMBU	11 10 15N 062 06 06W	UL337 CLIMB/DESCENT TRACK FL155 AND BLW
TASAR	15 40 04N 060 57 16W	A632
TEDDY	13 44 02N 060 32 56W	G642
TIBOT	13 33 45N 060 35 11W	R750
TODIS	11 38 12N 043 16 06W	UL375 (RNAV 10)

Name-code desig.	Coordinates	ATS Route Or Other Route
1	2	3
TOXUN	13 36 06N 060 40 33W	UA312
TRAPP	09 05 05N 055 59 29W	A555, UA555, UL454 (RNAV5), UL576 (RNAV5)ENTRY/EXIT FIR RNAV5 PT
TULEX	15 19 31N 062 28 24W	A550
TUTLO	17 00 00N 037 30 00W	BDRY FIR SANTA MARIA/ PIARCO/SAL/DAKAR
TWELM	13 55 20N 058 42 28W	RNAV PT
UKVEN	16 49 46N 057 27 14W	UP410 (RNAV 5)
URSIK	14 12 11N 059 01 48W	RNAV PT
USABO	08 55 00N 057 30 00W	ENTRY/EXIT FIR RNAV5 PT
VALOV	09 40 28N 051 03 00W	ENTRY/EXIT FIR RNAV PT
VIBSI	13 26 33N 062 15 20W	UL776 (RNAV5)
VOKAV	08 55 00N 059 55 00W	ENTRY/EXIT FIR RNAV PT
VUDAL	12 27 13N 063 24 26W	UL337 (RNAV 5)
YOLKK	12 27 25N 060 49 00W	UL329 (RNAV5)
ZPATA	17 28 23N 062 49 59W	A517, UL329 (RNAV5)ENTRY/ EXIT FIR RNAV5 PT

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ENR 4.5 AERONAUTICAL GROUND LIGHTS – EN-ROUTE

Note Coordinates marked with an asterisk (*) are Not WGS 84

Name IDENT (coordinates)	Type and intensity (1 000 Candelas)	Characteristics	Operating hours	Remarks
1	2	3	4	5
ANGUILLA				
Clayton J. Lloyd International 1812N/06303W	IBN	F. FLG CODE AXA	SS-0200	Height: 38.45M Visual range:20 NM
ANTIGUA				
Sandy Island 1709N/06156W*	MARINE 1000 W	FLG	HN and IMC	-
V.C. Bird International 1709N/06148W	ABN 1000 W	F. Rotating EV 10 SEC	HN and IMC	-
Winthorpes Hill 1707N/06148W	-	-	-	OBST/VOR
B.V.I				
Beefisland 1827N/06431W*	HBN	FLG W EV 15 SEC	HJ	-
Terrance B. Letstome 1826N/06432W	ABN	FLG WG	HJ	Atop AD TWR
Tortola 1826N/06434W*	HBN	FLG R EV 1.5 SEC	HJ	-
GRENADA				
Maurice Bishop 1200N/06147W	ABN	F,FLG WG	HN	-
NEVIS				
Vance Winkworth Amory 1712N/06235W	ABN 1000 W	F,FLG WG EV 10 SEC	HN and IMC	-
ST. KITTS				
Robert L. Bradshaw 1719N/06243W	ABN 1000 W	F,FLG WG EV 10 SEC	HN and IMC	-
ST. LUCIA				
Castries	MARINE	FLG G EV 60 SEC	HN	-
George Charles International	ABN		HO and IMC	-

Name IDENT (coordinates)	Type and intensity (1 000 Candelas)	Characteristics	Operating hours	Remarks
1	2	3	4	5
Hewanorra 1401N/06101W*	ABN	F, FLG WG EV 10 SEC	HO and IMC	-
ST. VINCENT AND GRENADINES				
Argyle	ABN	FLG W,G	HO	-
TOBAGO				
Crown Point 1109N/06051W*	MARINE 2.1	F, FLG	HN	-
Fort George 1110N/06044W*	MARINE 4000	F, FLG	HN	-
North 1120N/06032W*	MARINE 2.1	FLG	HN	-
TRINIDAD				
Arenal Point 1004N/06200W*	MARINE 0.1	FLG	HN	-
Brigand Hill 1029N/06104W*	MARINE 1245	FLG	HN	-
Brighton 1015N/06138W*	MARINE 0.25	FLG	HN	-
Brighton 1015N/06138W*	MARINE 17.6	FLG	HN	-
Cedros Pt. 1010N/06155W*	MARINE 0.25	FLG	HN	-
Chacachacare 1042N/06145W*	MARINE 1250	FLG	HN	-
Galeota Point 1008N/06100W*	MARINE 1.09	FLG	HN	-
Galera Point 1050N/06054W*	MARINE 2.91	FLG	HN	-

Name IDENT (coordinates)	Type and intensity (1 000 Candelas)	Characteristics	Operating hours	Remarks
1	2	3	4	5
Guayaguayare 1014N/06100W*	-	FLG R	H24	MAST
Hemmings Point 1048N/06122W*	MARINE 0.96	FLG	HN	-
North Post 1045N/06134W*	MARINE 11	FLG	HN	-
Piarco 1035N/06120W	ABN 40	F, Rotating WG 12 RPM 24 flashes/min	HN and IMC	ELEV 168 FT AMSL
Pointe-a-Pierre 1019N/06129W*	MARINE 10.3	FLG	HN	-
ABN TAPH	ABN			-
ABN TDCF	ABN			-
ABN TDPD	ABN			-
ABN TGPZ	ABN			-
ABN TTCP	ABN	NIL		-
ABN TUPA	ABN			-
ABN TVSB	ABN			-
ABN TVSC	ABN	On AD Tower, Green and White SS to Aerodrome closure		-

Name IDENT (coordinates)	Type and intensity (1 000 Candelas)	Characteristics	Operating hours	Remarks
1	2	3	4	5
ABN TVSM	ABN			-
ABN TVSU	ABN			-
Coco Point Lodge	ABN			-
HBN TUON	HEL_BCN	NIL	NIL	NIL
John A. Osborne	ABN			-

ENR 5 NAVIGATION WARNINGS

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS

1. General

All airspace in which a potential hazard to aircraft operations may exist and all areas over which the operation of civil aircraft may, for one reason or another, be restricted either temporarily or permanently are classified according to the following three types of areas as defined by ICAO.

2. Danger Area

2.1 According to their definitions, a danger area implies the least degree of restriction, while the prohibited area constitutes its most stringent form. It should also be noted, however, that this definition is applied only with respect to airspace which is situated over the territory of a State. In areas where no sovereign rights are exercised (e.g. over the high seas) only danger areas may be established by that body responsible for the activities causing their establishment.

2.2 The establishment of a danger area by a State over its territory is justified when the activity in that area is of such a nature that the risk involved requires non-participating aircraft to be aware of the risk. Since, in all cases, it is mandatory that the reason causing the establishment of an airspace restriction be given in its publication, it remains then at the discretion of the pilot to decide whether or not he can face the risk with a reasonable degree of certainty that it will not have serious consequences for his flight.

2.3 Over the high seas, regardless of the risk involved, only danger areas can be established. Those who initiate danger area restrictions over the high seas are under an increased moral obligation to judge whether establishment of the danger area is unavoidable and if it is, to give full details on the intended activities therein.It would also appear that activities exceeding a certain risk level should not be conducted in such airspace and that other methods of achieving the desired objective, such as temporary airspace reservations, should be applied.

3. Prohibited Area

3.1 The establishment of prohibited areas should be subject to particularly strict requirements because the use of that portion of the airspace encompassed by the prohibited area is completely forbidden to aircraft. It has therefore become general practice to establish such areas only to protect important State installations, critical industrial complexes whose damage as a result of an aircraft accident could assume catastrophic proportions (atomic power plants, sensitive chemical complexes) or especially sensitive installations which are essential for the national security.

4. Restricted Area

4.1 Restricted areas are generally established when the risk level involved in the activities conducted within the area is such that it can no longer be left to the discretion of individual pilots whether or not they want to expose themselves to such risk. In many cases the activities within a restricted area are not permanently present, it is therefore of particular importance that the times when these areas are actually required be closely surveyed and monitored.

5. Area Designation

5.1 Each area is numbered and a single series of numbers is used for all areas, regardless of type, to ensure that a number is never duplicated. Each area is as small as practicable, and contained within simple geometrical limits such as circle, square, etc.

5.2 The type of area involved is indicated by the letter 'P' for Prohibited, 'R' for Restricted and 'D' for Danger, preceded by two (2) letters denoting the AFS Routing Area and State. For example, TTR1 denotes Restricted area R1 within the State of Trinidad and Tobago or its territorial waters. Also, TFD3 denotes Danger Area D3 within the State of Martinique or its territorial waters or Danger Area D3 established by Martinique over waters where no sovereign rights are exercised.

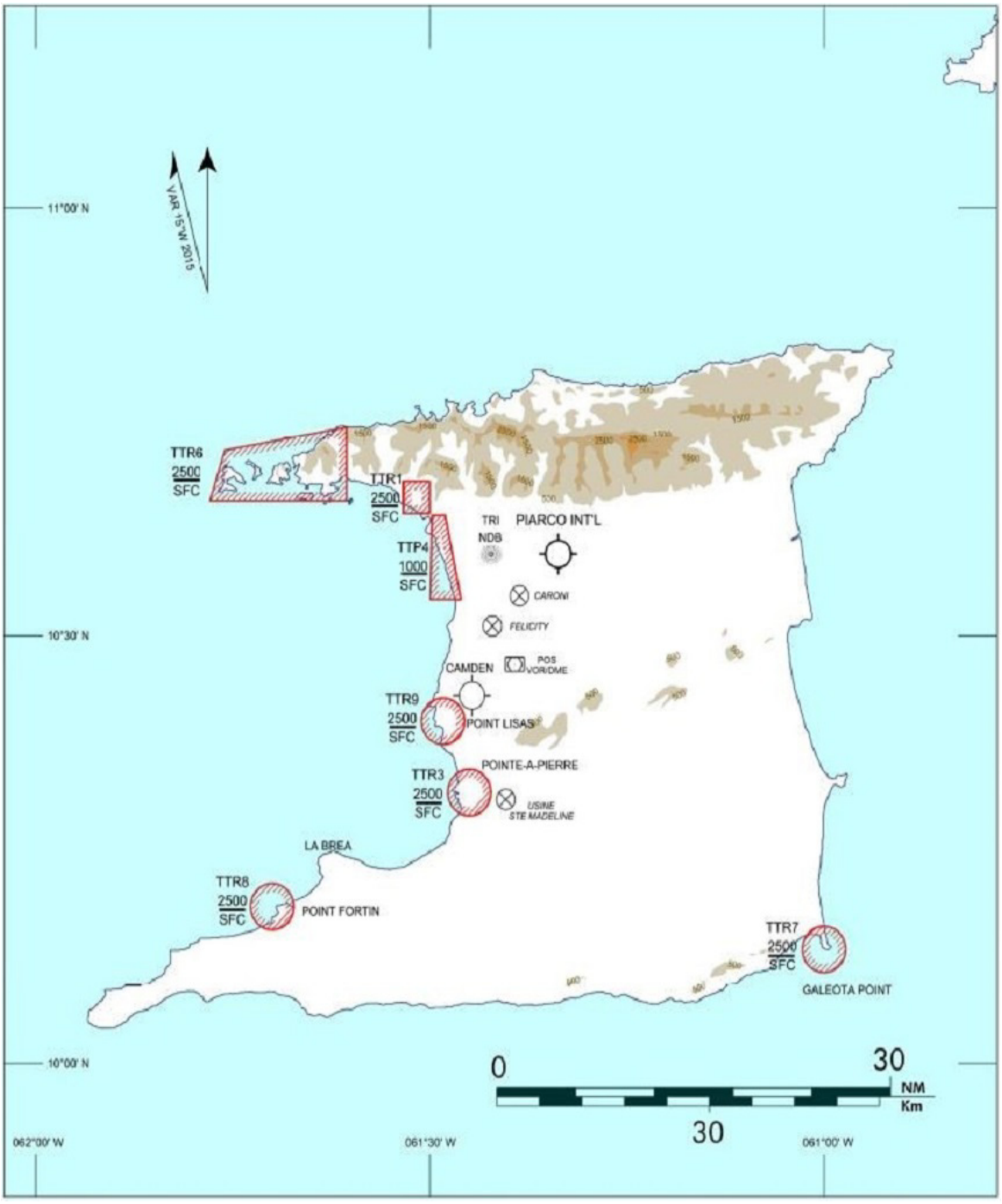
5.3 Each area is described in the tabulation found below which indicates its lateral and vertical limits, the type of restriction or hazard involved, the times at which it applies and other pertinent information.

6. Table of Prohibited Restricted and Danger Areas

Note: Coordinates are not WGS 84

Identification, name and lateral limits	Upper limit Lower limit	Remarks, (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
PROHIBITED AREAS		
MONTSERRAT TRP1 - Area bounded by lines joining points 164750N/0621240W; 164750N/0621044W; 164715N/0621030W; 164715N/0621255W to point of origin.	UNL SFC	Prohibited area pemanently established: UK Air Navigation (Overseas Territories) Order (11 Mar 2016). Small Unmanned Aircraft (SUA) prohibited.
TRINIDAD TTP4 - CARONI BIRD SANCTUARY Area bounded by lines joining points 103826N/0612949W; 103826N/0612850W; 103233N/0612738W; 103233N/0612958W to point of origin.	1000FT SFC	Nature reserve; Continuous
DANGER AREAS		
TFD3 - Military Area Circular area centered on 143514N/0614736W within a 12NM radius.	FL410 SFC	See AIP France CAR/SAM/NAM French Navy artillery fire exercises Activated by NOTAM

Identification, name and lateral limits	Upper limit Lower limit	Remarks, (time of activity, type of restriction, nature of hazard, risk of interception)
1	2	3
RESTRICTED AREAS		
TRINIDAD TTR1 - PORT OF SPAIN Area bounded by lines joining points 104049N/0613200W; 104049N/0613000W; 103834N/0613000W; 103834N/0613200W to point of origin.	2500FT SFC	Continuous MEDEVAC Flights and flights of National Security are exempted.
TTR3 - POINTE A PIERRE Circular area centered on 101900N/0612700W within a 3KM radius.	2500FT SFC	Continuous MEDEVAC Flights and flights of National Security are exempted.
TTR6 - MILITARY AREA Area bounded by lines joining points 104436N/0613620W; 103927N/0613620W; 103927N/0614644W; 104300N/0614536W to point of origin.	2500FT SFC	Continuous
TTR7 - GALEOTA Circular area centered on 100800N/0610000W within a 3KM radius.	2500FT SFC	Continuous MEDEVAC Flights and flights of National Security are exempted.
TTR8 - POINT FORTIN Circular area centered on 101100N/0614200W within a 3KM radius.	2500FT SFC	Continuous MEDEVAC Flights and flights of National Security are exempted.
TTR9 - POINT LISAS Circular area centered on 102400N/0612900W within a 3KM radius.	2500FT SFC	Continuous MEDEVAC Flights and flights of National Security are exempted.


VAR 15°W 2015
11°00' N
10°30' N
10°00' N
062°00' W
061°30' W
061°00' W
TTR6
2500
SFC
TTR1
2500
SFC
TTP4
1000
SFC
TRI
NDB
PIARCO INT'L
CARONI
FELICITY
CAMDEN
POS
VOR/DME
TTR9
2500
SFC
POINT LISAS
POINTE-A-PIERRE
TTR3
2500
SFC
USINE
STE MADELINE
LA BREA
TTR8
2500
SFC
POINT FORTIN
TTR7
2500
SFC
GALEOTA POINT
0
30
NM
Km
30

ENR 5.2 MILITARY EXERCISE AND TRAINING AREAS AND AIR DEFENCE IDENTIFICATION ZONE

None Published

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ENR 5.3 OTHER ACTIVITIES OF A DANGEROUS NATURE AND OTHER POTENTIAL HAZARDS

TO BE DEVELOPED.

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ENR 5.4 AIR NAVIGATION OBSTACLES – AREA 1

Note: Coordinates marked with an asterisk (*) are Not WGS 84

Designation	Type of Obstacle	Coordinates	HEIGHT IN FEET		OBST LGT § Type/Colour
			AGL	AMSL	
ANTIGUA					
-	Antenna	17 08 37N 061 48 15W	-	316	Lighted
Codrington	Antenna Tower	1.7NM from TAPH	-	270	White strobe light
Friars Hill	Transmission Tower	17 08 55N 061 49 50W*	200	550	Lighted
Mc Nish Mountain	Antenna	17 03 30N 061 50 32W	250	1370	Lighted
Mt Pleasant	Tower	17 08 55N 061 48 57W BRG 334 Deg. Mag. 1.3 NM from THR RWY 07	-	590	Lighted
GRENADA					
Aerodrome Control Tower	Tower	12 00 00N 061 47 00W (2251M North RWY 10)	-	453	Lighted
Carriacou Mt Royal	Cable and Wireless	12 28 16N 061 27 11W*	180	915	Lighted
Mt.St. Catherine	Cable and Wireless	12 09 55N 061 39 48W*	213	2411	Lighted
ST.CHRISTOPHER (St. Kitts)					
Canada Hill	Pole	17 19 04N 062 42 46W	86	275	Lighted
Conaree Hill	Pole	17 18 46N 062 42 25W*	-	410	Lighted

Designation	Type of Obstacle	Coordinates	HEIGHT IN FEET		OBST LGT § Type/Colour
			AGL	AMSL	
Radio Mast	Mast	1.6NM North of Aerodrome	350	1326	Lighted
St Anthony's Peak	Pole	17 14 30N 062 37 50W 7 NM SE of R.L. Bradshaw Airport	-	1047	Steady red light
Trinity Broadcasting Network Antenna	Radio Antenna	17 18 57N 062 41 55W (2NM ESE of TKPK)	50	54	Steady red light
TRINIDAD					
Beachfield	Antenna	10 08 17N 061 04 20W	440	535	Marked, Lighting-medium intensity Type B – Flashing red
Caribbean Airlines Antenna	Antenna	10 35 55N 061 21 05W (359 M north of THR RWY 10)	94	-	Lighted
Guayaguayare	Telephone Company Antenna Tower	10 13 56N 061 00 14W*	190	-	-
Point Lisas	TV Antenna	10 24 15N 061 29 05W*	-	500	Lighted
Repeater 1	Antenna	10 09 36N 061 18 57W	230	431	Marked, Lighting-medium intensity Type B – Flashing red

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES

TO BE DEVELOPED

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ENR 5.6 BIRD MIGRATION AND AREAS WITH SENSITIVE FAUNA

1. Bird migration

1.1 General

There are no well defined, heavily-used bird migratory routes within Piarco FIR/CTA.

However, there are bird concentrations in the vicinity of airports, near coastal areas, on airfields when grass cutting is in operation, around farm areas and in the vicinity of garbage disposal areas.

The most noticeable birds near coastal areas are pelicans and gulls: on airfields when grass cutting is in operation, the white egret; and in the vicinity of garbage disposal areas, vultures (corbeaux).

As far as practicable, Aerodrome Control will inform pilots of aircraft of bird activity, its location and estimated height.

Aerodromes which are affected by bird concentration are included at 1.2 below or published via NOTAM.

1.2 Bird Flight patterns and altitudes

1.2.1 A.N.R. Robinson / Tobago

Regular activity of flocks of pelicans and gulls takes place from sunrise to sunset when birds fly over the approach path of Runway 11 to their feeding area over the sea. Height varies from 0 to 1000 ft AMSL.

1.2.2 Piarco / Trinidad

Occasional activity of flocks of vultures (corbeaux) takes place within 5 NM east of Piarco Airfield. Height varies from 0 to 3000 ft AGL.

1.3 Reporting of bird strike

1.3.1 General

To achieve more comprehensive statistics of the bird strikes, the Civil Aviation Administration of the Eastern Caribbean States collects information on bird strike. All pilots on flights within Piarco FIR, including the TMA's are therefore requested to report to the respective Eastern Caribbean States Civil Aviation Administration, all cases of bird strike or incidents where a risk of bird strike has been present.

1.3.2 Reporting

To facilitate the reporting of incidents, a Bird Strike Reporting Form has been produced and may be obtained at airport offices at public aerodromes or from the respective Eastern Caribbean States Civil Aviation Administration. Reports should be forwarded to the appropriate Civil Aviation Administration listed at GEN 1.1.

Any supplementary information on the circumstances under which the incidents took place should also be added.

1.4 Use of the Bird Strike Incident Report Form. (See model on page ENR 5.6-3)

The Bird strike Incident Report Form is intended for use:

a) by a pilot for filing a report on a Bird Strike incident after arrival or for confirming a report made initially by radio during flight.

Note: - The form, if available from aerodrome reporting office, may also be of use in providing a pattern for making the initial report in flight.

b) by an ATS unit for recording a Bird Strike report received by radio, telephone or teleprinter.

Note: - The form may be used as the format for the text of a message to be transmitted over the AFS network.

2. Areas with sensitive fauna

2.1 Many species of birds as well as Mammals are sensitive to noise from aircraft and over flying their breeding and resting places may be critical.

2.2 In the island of Trinidad, a bird sanctuary (Caroni Swamp Reserve) is located 5 NM west of Piarco International Airport, the area is defined at ENR 5.1 TTP4. Flights are prohibited from GND to 1000 ft AGL.

BIRD STRIKE REPORTING FORM

Send to: Trinidad and Tobago Civil Aviation Authority
P.O. Box 2163 National Mail Centre,
Piarco, Trinidad and Tobago, West Indies

Operator 01/02

Aircraft Make/Model 03/04

Engine Make/Model 05/06

Aircraft Registration 07

Date day ..... month ..... year 08

Local time 09
dawn ☐ A *day* ☐ B *dusk* ☐ C *night* ☐ D 10

Aerodrome Name 11/12

Runway Used 13

Location if En Route 14

Height AGL ..... *ft* 15

Speed (IAS) ..... *kt* 16

Phase of Flight 17

parked	☐ A	*en route*	☐ E
taxi	☐ B	*descent*	☐ F
take-off run	☐ C	*approach*	☐ G
climb	☐ D	*landing roll*	☐ H

Part(s) of Aircraft

	Struck		*Damaged*	
radome	☐	18	☐	
windshield	☐	19	☐	
nose (excluding above)	☐	20	☐	
engine no. 1	☐	21	☐	
2	☐	22	☐	
3	☐	23	☐	
4	☐	24	☐	
propeller	☐	25	☐	
wing/rotor	☐	26	☐	
fuselage	☐	27	☐	
landing gear		28		
tail		29		
lights		30		
other (specify)	☐	31		

Effect on Flight

none	☐ 32
aborted take-off	☐ 33
precautionary landing	☐ 34
engines shut down	☐ 35
other (specify)	☐ 36

Sky Condition 37

no cloud	☐ A
some cloud	☐ B
overcast	☐ C

Precipitation

fog	☐ 38
rain	☐ 39
snow	☐ 40

Bird Species* 41

Number of Birds

	Seen 42	*Struck* 43
1	☐ A	☐ A
2-10	☐ B	☐ B
11-100	☐ C	☐ C
more	☐ D	☐ D

Size of Bird 44

small	☐ S
medium	☐ M
large	☐ L

Pilot Warned of Birds 45
yes ☐ Y no ☐ X

Remarks *(describe damage, injuries and other pertinent information)* 46/47

.....

.....

.....

.....

Reported by .....
(Optional)

** Send all bird remains including feather fragments to:*

THIS INFORMATION IS REQUIRED FOR AVIATION SAFETY

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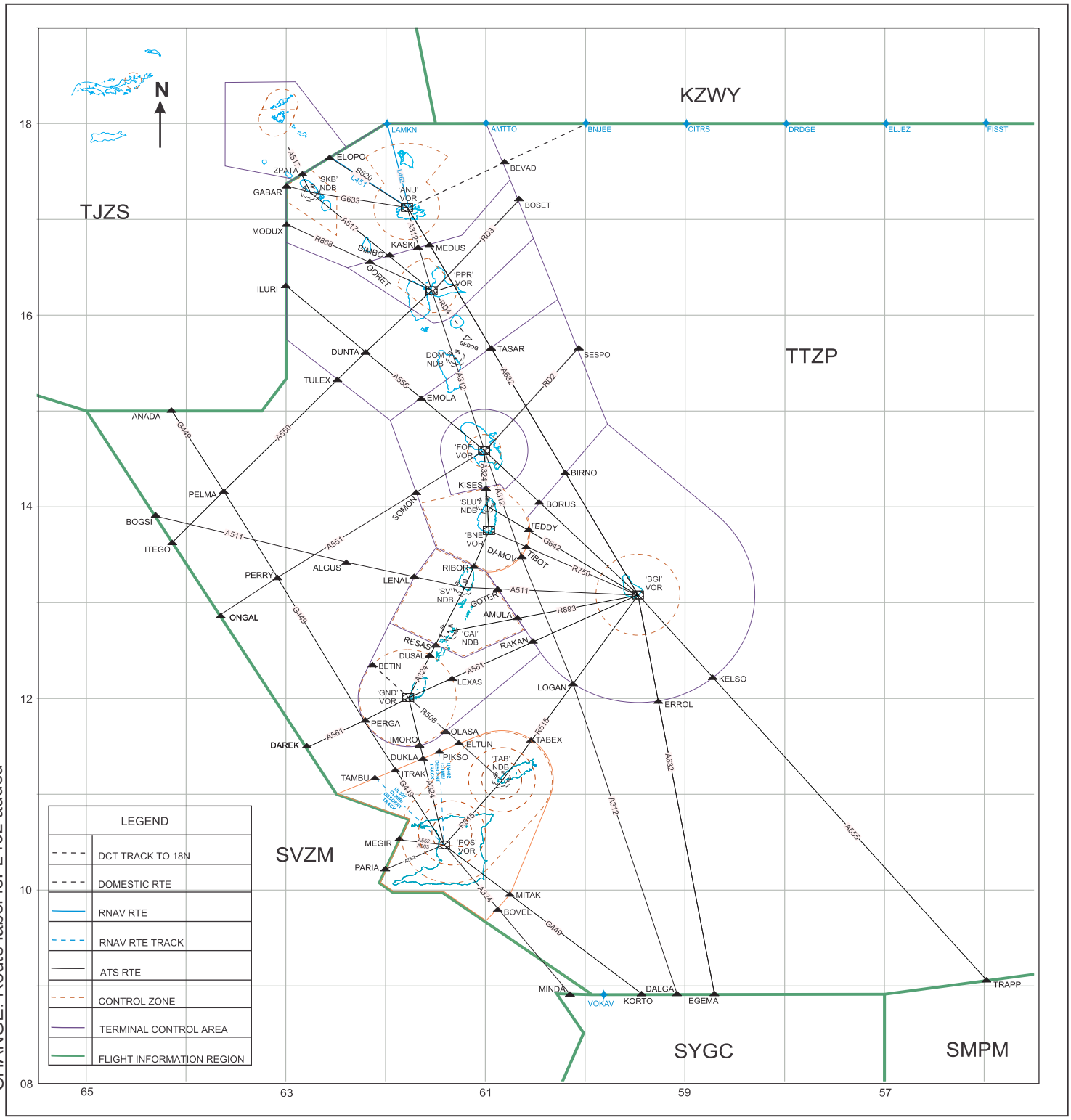
LOWER CONVENTIONAL ROUTES TTZP FIR



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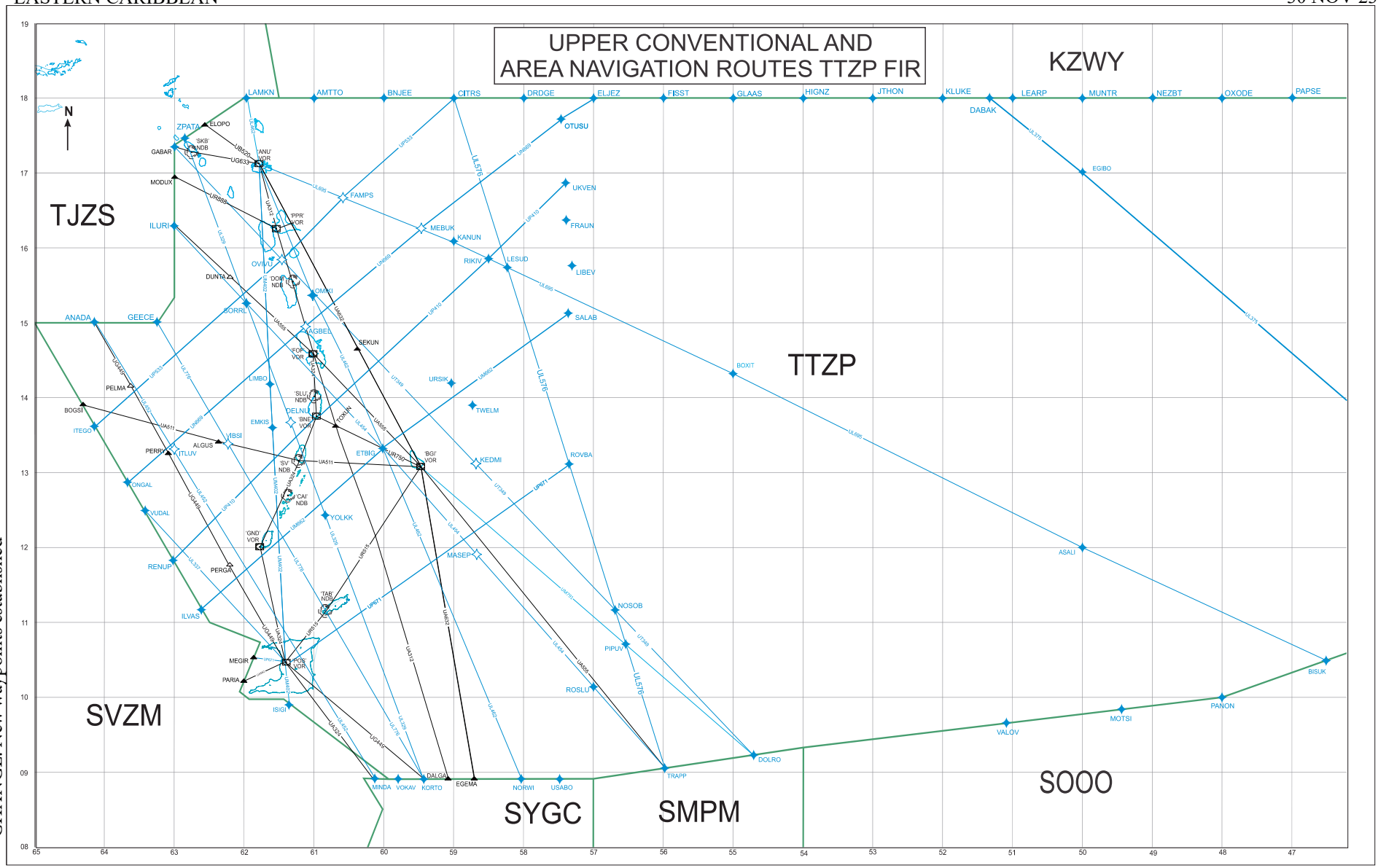

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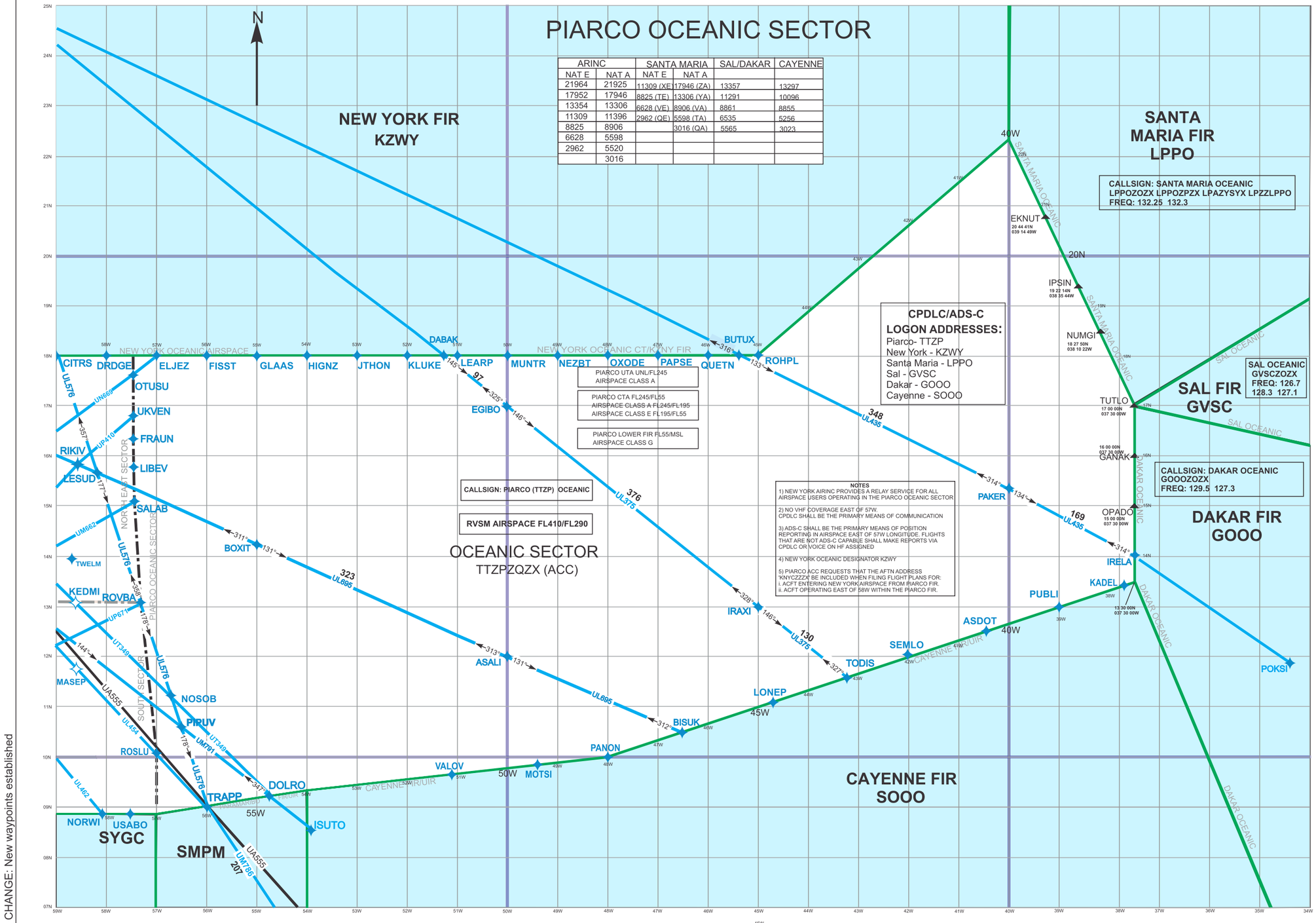
PIARCO OCEANIC SECTOR

ARINC		SANTA MARIA		SAL/DAKAR	CAYENNE
NAT E	NAT A	NAT E	NAT A		
21964	21925	11309 (XE)	17946 (ZA)	13357	13297
17952	17946	8825 (TE)	13306 (YA)	11291	10096
13354	13306	6628 (VE)	8906 (VA)	8861	8855
11309	11396	2962 (QE)	5598 (TA)	6535	5256
8825	8906		3016 (QA)	5565	3023
6628	5598				
2962	5520				
	3016				



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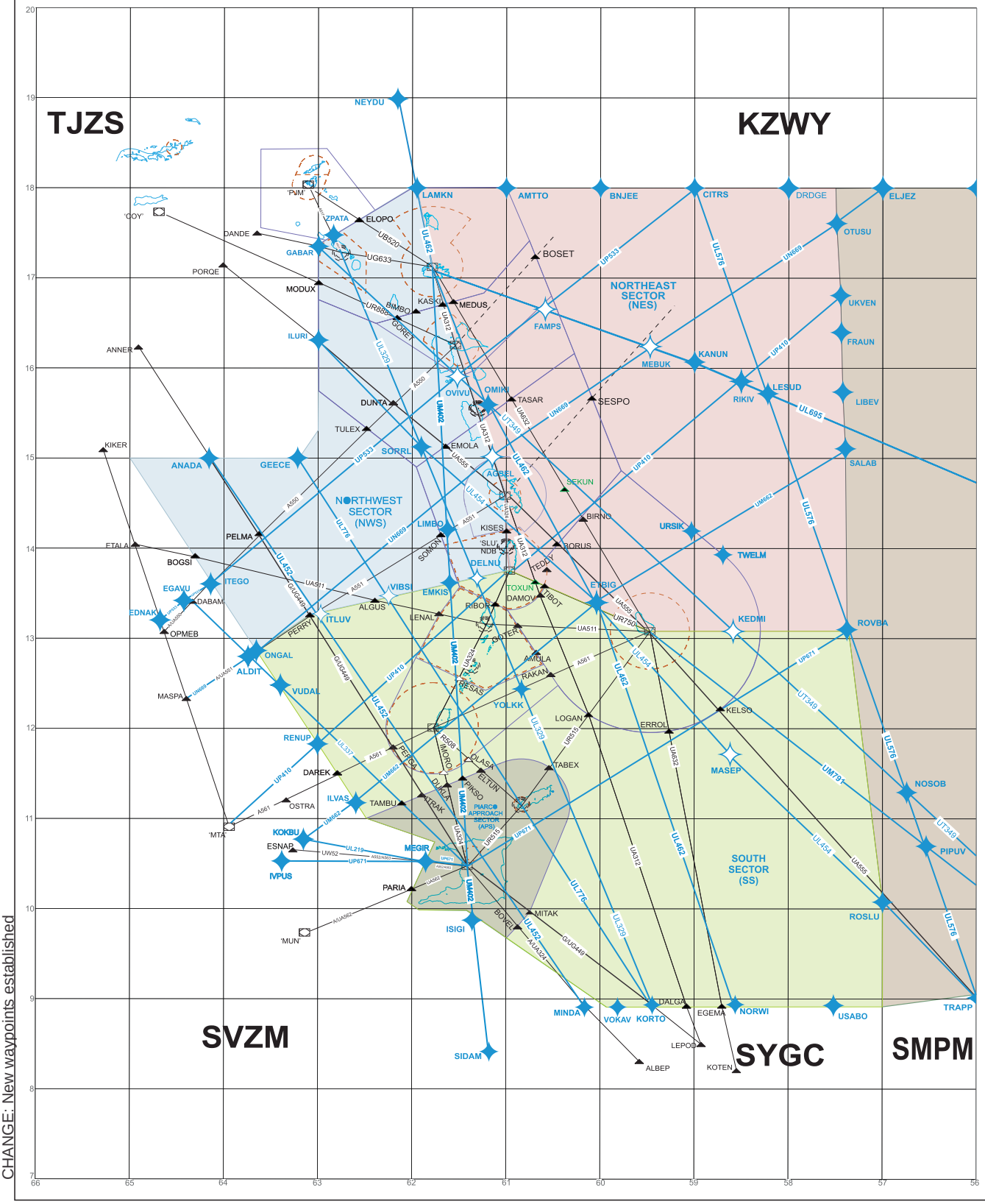
PIARCO CONTINENTAL SECTORS



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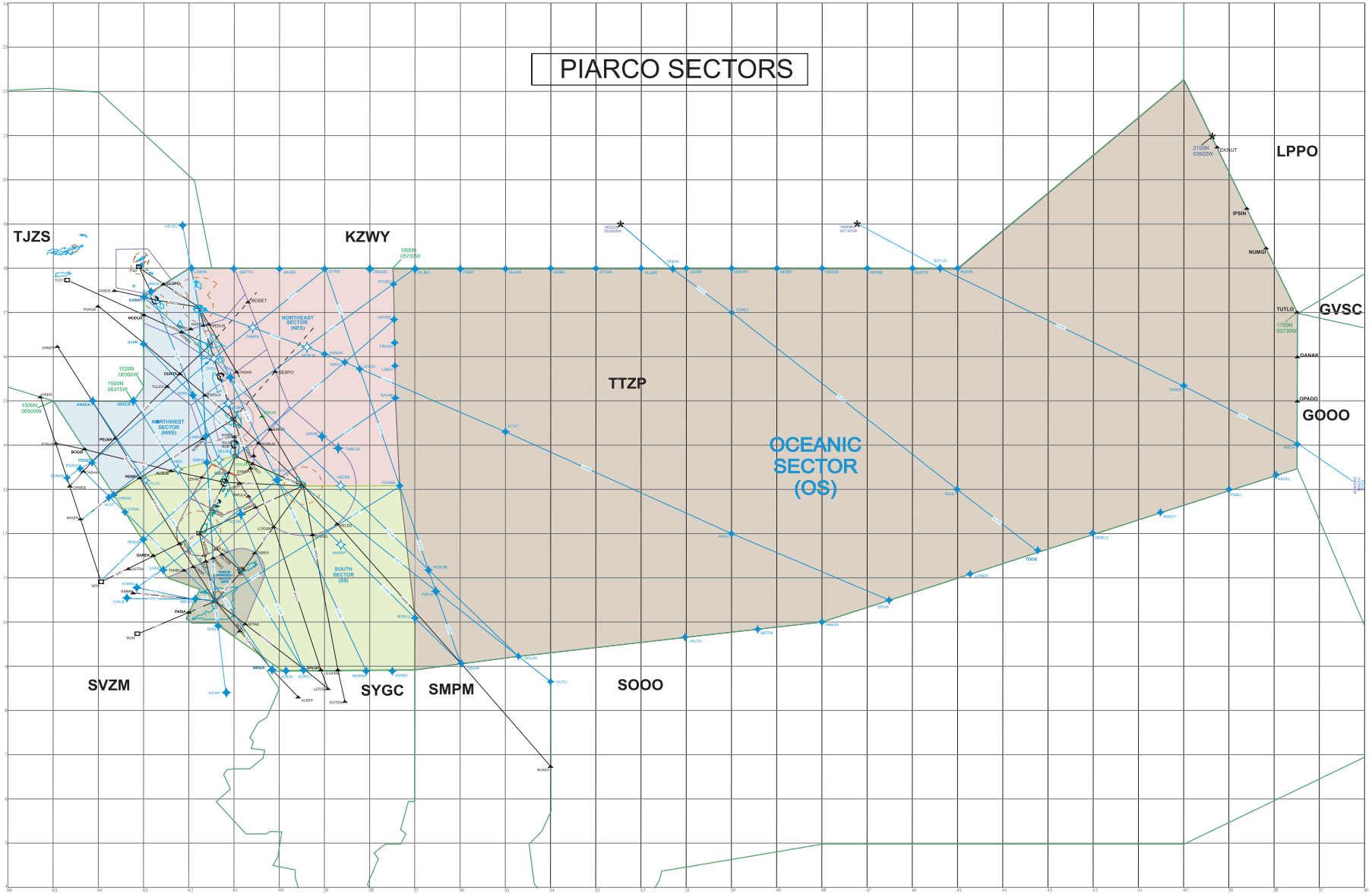

CHANGE: New waypoints established

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