

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE**

**TWENTY-SIXTH EASTERN CARIBBEAN INFORMAL WORKING GROUP MEETING
(26TH E/CAR IWG)**

(Barbados, 3 to 7 June 2002)

Agenda Item 2: ATM Developments

2.2 Air Traffic Services (ATS):

2.2.5 New letters of agreement including contingency

(Working Paper presented by France)

SUMMARY	
Following the job done at the last ECWG meeting, these 4 draft letters of agreement are presented with the aim to include the change of limit between upper and lower airspace but also above all the introduction of the contingency measures already adopted.	
REFERENCES	
•	Caribbean Contingency Procedure approved at the 16th ECWG in 1992
	Annexes :
	• 1 Draft Letter of agreement TAPA TFFR (LOA in force dated 13 December 1990)
	• 2 Draft Letter of agreement TBPB TFFF (LOA in force dated 02 April 1992)
	• 3 Draft Letter of agreement TFFF TTPP (LOA in force dated 07 February 1991)
•	4 Draft Letter of agreement TFFR TTPP (LOA in force dated 07 February 1991)

1 Introduction

1.2 At the 25th E/CAR IWG meeting, a table top exercise permitted to assess the option described in the East Caribbean Contingency Plan.

1.2 At this same meeting, the change of the level of the ceiling of the E/CAR TMAs (simultaneously with the raise of the upper/lower airspace boundary) was decided and then endorsed by the 17th E/CAR DCAs meeting.

2. Discussion

2.1 When the table top exercise took place, it was agreed that the working procedures linked with Contingency should be reflected in the different letters of agreement linking the E/CAR ATC units.

2.2 The draft letters of agreement annexed to this WP (Appendix to this Working Paper) try to concretize this necessity.

3. Suggested Action

3.1 The meeting is invited to discuss these draft LOAs, including their possible amendments in order

- a) to reach their signature as rapidly as possible, and
- b) to possibly help the other ATS units to write and sign the other updated LOAS needed in the region

APPENDIX

LETTER OF AGREEMENT BETWEEN
FORT-DE-FRANCE AND ADAMS RADAR APPROACH CONTROL
(RAPCO) UNITS

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1. INTRODUCTION

1.1. Effective date :

1.2. Objective

1.2.1. The objective of this letter of agreement is to establish operating procedures for the co-ordination and transfer of control of air traffic between the Adams and Fort de France Approach control units.

1.2.2. This letter of agreement cancels and replaces all previous letters of agreement between the Adams and Fort de France ATS units.

1.3. Scope

1.3.1. The procedures contained in this letter of agreement which supplement or detail, when so required, the procedures prescribed by ICAO and the procedures prescribed in French Air Traffic Rules, shall apply to all IFR and VFR flights which cross the common boundary of Fort de France TMA and Barbados TMA.

2. CONTROL PROCEDURES

2.1. Limit and responsibility

2.1.1. Fort de France APP shall be responsible for the provision of air traffic services to all aircraft within the airspace of Fort de France TMA, defined in appendix number 1 to this letter.

2.1.2. Adams APP shall be responsible for the control of all aircraft within the airspace of Barbados TMA, defined in appendix number 1 to this letter.

2.2. Routes of flights

2.2.1. Except for prior co-ordination effected individually for each flight off ATS routes, the IFR air traffic between the Adams TMA and the Fort-de-France TMA shall be routed along ATS routes defined in the Record of ATS Routes and associated Radio Navigation Aids Caribbean Region and in the AIP CAR/NAM.

2.2.2. Each ATC Unit shall ensure that all IFR aircraft are established on routes or radial assigned by the other prior to the aircraft leaving the transmitting ATC Unit.

2.2.3. Where it is not possible or practicable to conform with 2.2.2., prior approval must be obtained from the receiving unit.

2.2.4. The receiving unit shall not vary the clearance of traffic entering its area of

responsibility until the traffic is inside, unless with prior co-ordination.

2.2.5. When GPS flights cannot be handled on RNAV routes, they shall be re-routed to ground based radio navigation aids.

2.3. Assignment of Flight Levels

2.3.1. Except for prior coordination, PIARCO ACC and Fort de France APP shall assign Flight Levels to the magnetic track shown in the table of cruising levels in Appendix "C" of Annex 2.

2.4. Transfer of responsibility

2.4.1. Except by prior co-ordination, the transfer of responsibility of aircraft operating between the Martinique TMA and the Barbados TMA shall be at the common boundary.

2.5. Transfer of communication

2.5.1. Frequencies indicated in appendix 2 to this letter of agreement shall be used for transfer of communication.

2.5.2. The transfer of communications of an aircraft from a transferring ATS unit to a receiving ATS unit shall be made prior to entering the airspace of the receiving ATS unit except when, with the concurrence of both ATS units, the requirement for separation determines otherwise.

2.5.3. When requested, the receiving ATS unit shall notify the transferring ATS unit that the traffic is in communication with the receiving ATS unit and has crossed the common boundary.

2.6. Rules of separation for IFR traffic

2.6.1. Lateral Separation shall be in accordance with Procedures for Air Navigation Services, Rules of the Air and Air Traffic Services, ICAO Doc. 4444 and Regional Supplementary Procedures, Doc. 7030

2.6.2. Vertical separation shall be in accordance with ICAO Annex 2 Appendix 3.

2.6.3. Longitudinal Separation

When radar equipment is operating in the both Adams and Fort-de-France TMAs, longitudinal separation of at least 20 NM shall be applied between aircraft at the same level with the followings requirements :

- radar identification of the concerned aircraft must be effected.
- The transfer of communication of the concerned aircraft must be simultaneously effected.

Standard separation of 15 minutes longitudinal shall be restored in case of:

- radar failure in one of the two ATS units.
- E/CAR network failure.
- On request of one of the two ATS units.

2.7. Use of transponder

2.7.1. ATS units shall instruct all aircraft to squawk the SSR code assigned according to the ORCAM method.

2.7.2. Adams APP and Fort de France APP shall instruct all transponder equipped aircraft to squawk the SSR code assigned by the respective ATS Units.

3. CO-ORDINATION PROCEDURES

3.1. General

3.1.1. Co-ordination between the Barbados TMA unit and the Martinique TMA unit shall be effected in accordance with standards, recommended practices and procedures prescribed by ICAO.

3.1.2. The E/CAR network circuit shall be used as the primary means of coordination for air traffic.

3.1.3. All co-ordination/approval shall be effected with the appropriate ATS unit at least 15 minutes prior to the aircraft's estimate of the common boundary.

3.1.4. The transferring Unit shall forward the following information to the receiving ATS Unit in the prescribed order:

- (a) Aircraft Identification
- (b) Type of Aircraft
- (c) Point of Departure
- (d) Destination
- (e) Route of Flight
- (f) Boundary Estimate
- (g) Flight Level/Altitude
- (h) SSR code

3.1.5. In the case of traffic which will depart from a location where the flying time for a particular aircraft is less than fifteen 15 minutes from the common boundary, prior co-ordination must be effected between the respective units.

3.2. Traffic between Barbados and Hewanorra

3.2.1. For traffic operating between the Barbados TMA and the airspace delegated by the Fort-de-France ATS unit to the Hewanorra ATS unit from 4500 ft to FL 105, co-ordination shall be made directly between the two Adams and Hewanorra control units during the opening hours of Hewanorra ATC.

3.3. Flight Plans

3.3.1. The submission and dissemination of flight plans including Repetitive Flight Plans shall be in accordance with PANS/RAC Doc.4444.

4. FAILURE / CONTINGENCY PROCEDURES

4.1. General

4.1.1. In all contingency situations the following actions, shall be taken :

- An assessment of the outage (actual or anticipated),
- An assessment of the traffic (present and anticipated),
- An assessment of what is available.

4.1.2. All alternate methods of communication require acknowledgement from the receiving ATS unit.

4.2. Radar / radio-navigation facilities failure

4.2.1. Each Unit shall advise the other of any malfunction of radio-navigation facilities or radar failure in its area of responsibility.

4.3. AFTN Failure

4.3.1. In the event that the relevant ATS units are unable to forward flight plan information via AFTN or approved Repetitive Flight Plan listed within sufficient time to permit preparation and analysis, all such reasonable efforts shall be made to copy same on any appropriate communication facility as listed in appendix number 3

4.4. Point to Point failure procedures

4.4.1. In the event of failure of the Fort de France-Adams E/CAR network line, all means of alternate communications shall be utilized for the co-ordination of IFR aircraft (e.g. public telephone number listed in appendix 3 or relay through another facility).

4.4.2. If the aforementioned means of alternate communication cannot be utilized, and unless different clearance has been given by receiving ATS unit and reported to the transferring one, the following shall be apply :

4.4.3. VFR aircraft shall be instructed to proceed direct and to contact receiving ATS unit as soon as possible, before crossing the airspace common

boundary; these flight shall advise the transferring ATS unit when communication has been established.

4.4.4. **Self transfer** shall be apply for IFR : aircraft shall only be cleared to a point completely within the transferring ATS unit's airspace, at an appropriate flight level for direction of flight, and advised to contact the receiving ATS unit to obtain clearance before entering its airspace. The receiving ATS unit shall clear the aircraft concerned into its airspace and shall not authorize flight level changes until the aircraft is beyond the common boundary. Furthermore the aircraft concerned shall inform the transferring ATS unit when it has established contact with the receiving ATS unit.

4.5. Air to ground failure procedures at Adams

4.5.1. In the event of complete radio failure at Adams unit, PIARCO shall take the responsibility of Barbados TMA downgraded in class G. In this case, Fort de France shall contact PIARCO to obtain clearances.

4.5.2. Furthermore, ADAMS APP shall :

- Advise all the adjacent ATS units including PIARCO ACC of the situation by any appropriate means
- Reclassify ADAMS TMA as class G airspace
- Issue a NOTAM by any available means

4.5.3. The CTR shall continue as class «D » airspace and shall be controlled by ADAMS with a portable VHF equipment.

4.6. Air to ground failure procedures at Fort de France

4.6.1. In the event of complete radio failure at Fort de France unit, Pointe à Pitre APP shall take over the responsibility of the Martinique TMA. In this case Adams shall contact Pointe à Pitre to obtain clearances.

4.6.2. Furthermore, Fort de France APP shall :

- Advise all the adjacent ATS units including PIARCO ACC of the situation by any appropriate means
- Reclassify Fort de France TMA as class G airspace
- Issue a NOTAM by any available means

4.6.3. Fort de France shall retain control of aircraft operating in its CTR classified D airspace, with a standby portable radio.

4.7. Flow-control

4.7.1. In the event of reduced capacity at each unit, prior permission request (PPR) procedure or flow control measures, shall be applied.

5. ALERTING SERVICE

5.1.1. In all cases alerting service co-ordination shall be the responsibility of the unit within whose TMA the aircraft are at the time.

5.1.2. Both units shall provide each other with whatever information is available and provide assistance in order to comply with 5.1.1

6. MISCELLANEOUS

6.1. Deviation

6.1.1. Deviation from the procedures established in this letter of agreement shall be effected only after prior co-ordination is accomplished with completely define responsibilities in each case.

6.2. Amendment

6.2.1. This agreement is subject to revision whenever there is a change of ICAO standards, recommended practices or supplementary regional procedures which affects the procedures contained therein, or when new radio navigational aids, communication facilities or air traffic services which might affect those procedures, are introduced.

6.2.2. In the event of a change of ICAO regulations, either party to this agreement may propose an amendment to the other party.

6.2.3. For any other matter which makes it advisable to vary this agreement, the interested party shall propose the pertinent amendment.

For ADAMS

For FORT DE FRANCE

7. APPENDIX NUMBER ONE

7.1. AIRSPACE DESCRIPTION : FORT DE FRANCE TMA

Name and lateral limits	Class	Vertical limits FL, m or ft	ATS unit	Hours of service
PART 1 Broken line joining points 14°06'41" N, 061°20'05" W 14°28'26" N 061°26'28" W, Arc of circle radius 25 NM centered on VOR/DME " FOF " (14°35'26.69"N, 061°01'22.11" W) joining preceding point to 14°18'53" N, 061°41'31" W, 14°10'36"N, 060°49'44"W 14°13'00" N, 060°52'00"W 14°06'41" N, 061°20'05" W	D	<u>FL 105</u> 460m(1500ft)asfc	FORT DE FRANCE APPROCHE/APPROACH	H 24
PART 2 Broken line joining points: 14°13'00"N, 060°52'00"W - 14°02'00"N, 060°40'00"W, Arc of circle radius 25 NM centered on VOR « BNE » (13°44'04"N, 060°58'37"W) joining preceding point to: 13°19'00"N, 060°59'30"W, 13°34'00"N, 061°30'00"W 14°02'05" N, 061°40'05" W 14°13'00"N, 060°52'00"W	D	<u>FL105</u> 1370m (4500ft) asfc	HEWANORRA APPROCHE/APPROACH FORT DE FRANCE APPROCHE/APPROACH	from 1000 to 0300 h UTC from 0300 to 1000 h UTC
PART 3 Broken line joining points: 16°10'00"N, 060°18'00"W 14°52'30"N, 059°48'00"W 13°55'25"N, 060°34'30"W, Arc of circle radius 25 NM centered on VOR « BNE » (13°44'04"N, 060°58'37"W) joining preceding point to: 13°19'00"N, 060°59'30"W, 13°34'00"N, 061°30'00"W 14°54'00"N, 061°57'00"W 16°10'00"N, 060°18'00"W	D	<u>FL195</u> <u>FL105</u>	FORT DE FRANCE APPROCHE/APPROACH	H 24
PART 4 Broken line joining points: 16°10'00"N, 060°18'00"W 14°52'30"N, 059°48'00"W 13°55'25"N, 060°34'30"W, Arc of circle radius 25 NM centered on VOR « BNE » (13°44'04"N, 060°58'08"W) joining preceding point to : 14°02'00"N, 060°40'00"W 14°10'36"N, 060°49'44"W 14°18'53" N, 061°41'31" W, Arc of circle radius 25 NM centered on VOR/DME «FOF » (14°35'27" N, 061°01'22" W) joining preceding point to: 14°28'26" N 061°26'28" W, 14°04'42" N, 061°18'11" W 14°02'05" N, 061°40'05" W 14°54'00"N, 061°57'00"W 16°10'00"N, 060°18'00"W	E	<u>FL105</u> 900 m(3000ft)amsl 300 m(1000ft)asfc	FORT DE FRANCE APPROCHE/APPROACH	H 24
PART 5 Broken line joining points: 16°10'00"N, 060°18'00"W 14°52'30"N, 059°48'00"W 13°55'25"N, 060°34'30"W, Arc of circle radius 25 NM centered on VOR « BNE » (13°44'04"N, 060°58'37"W) joining preceding point to: 13°19'00"N, 060°59'30"W, 13°34'00"N, 061°30'00"W 14°54'00"N, 061°57'00"W 16°10'00"N, 060°18'00"W	A	<u>FL245</u> <u>FL105</u>	FORT DE FRANCE APPROCHE/APPROACH	H 24

7.2. AIRSPACE DESCRIPTION : BARBADOS TMA

<i>Name Lateral limits</i>	<i>Class</i>	<i>Vertical limits</i>	<i>Call sign</i>	<i>Hours of service</i>
ADAMS TERMINAL CONTROL AREA An arc of circle radius 25 NM Centered on VOR BNE 134400N0605837W joining points 131900N0605930W – 135525N0603430W then joining points 135525N0603430W – 14230N0594800W – 135500N0584300W, then an arc of circle radius 68nm centered on 'BGI' VOR 130430N0592902W joining points 135500N0584300W - 123530N0603130W , then joining points 123530N0603130W – 131900N0605930W	A – above FL90 D – FL85/3000ft G – below TMA and outside CTR	FL245 3000 ft	ADAMS APPROACH	H24

8. APPENDIX NUMBER TWO

8.1. FREQUENCIES

Fort-De-France	APP	⇒	121,000 MHz	
		⇒	129,050 MHz	(secondary)

Raizet	APP	⇒	121,300 MHz	
		⇒	129,800 MHz	
		⇒	119,050 MHz	(secondary)

Adams radar		⇒	129,350 MHz	
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PIARCO		⇒	123,700 MHz	(primary)
		⇒	125,400 MHz	(south sector)

HEWANORRA		⇒	119,800 MHz	
CHARLES			118,000 MHz	

9. APPENDIX NUMBER THREE

9.1. PHONE NUMBERS

Fort-De-France TWR	Tel.	⇒ (596) 596 42 26 00
	Tel.	⇒ (596) 596 42 26 05
Fort-De-France AIS	Tel.	⇒ (596) 596 42 25 24
Fort-De-France AIS	Fax	⇒ (596) 596 51 10 63

Adams radar	Tel.	⇒ 1 246 428 6162
Adams TWR	Tel.	⇒ 1 246 428 0956
Barbados AIS	Tel.	⇒ 1 246 428 7101
Barbados AIS	Fax	⇒ 1 246 420 7333

Pointe à Pitre TWR	Tel.	⇒ (590) 590 89 05 26
	Tel.	⇒ (590) 590 48 21 14
Pointe à Pitre AIS	Tel.	⇒ (590) 590 48 21 43
Pointe à Pitre AIS	Fax	⇒ (590) 590 48 21 40

Hewanorra TWR	Tel	1 758 4546343
Hewanorra AIS	Fax	1 758 454 6900

IACL NUMBERS			
ADAMS	6001	6002	6003
LE RAIZET	7201	7202	7203
FORT DE FRANCE	6401	6402	6403

**LETTER OF AGREEMENT BETWEEN
PIARCO AREA CONTROL CENTER (ACC)
AND FORT-DE-FRANCE RADAR APPROACH CONTROL (RAPCO) UNIT**

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1. INTRODUCTION

1.1.Effective date :

1.2. Objective

1.2.1.The objective of this letter of agreement is to establish operating procedures for the management of air traffic between the PIARCO ACC and the Fort de France APP.

1.2.2.This letter of agreement cancels and replaces all previous letters of agreement between the between the PIARCO and Fort de France ATS units.

1.3.Scope

1.3.1.The procedures contained in this letter of agreement which supplement or detail, when so required, the procedures prescribed by ICAO and the procedures prescribed in French Air Traffic Rules, shall be applied to all air traffic which cross the common boundary of the PIARCO CTA/FIR or UTA/UIR and the Fort de France TMA.

2. CONTROL PROCEDURES

2.1.Airspace

2.1.1.Fort de France APP shall be responsible H24 for the provision of Air Traffic services to all aircraft within the airspace of Fort de France TMA defined in appendix number 1 attached hereto.

2.1.2.PIARCO Control Center shall be responsible H24 for the provision of Air Traffic Services to all aircraft within the airspace of PIARCO CTA/FIR or UTA/UIR, defined in appendix number 1 attached hereto.

2.2.Routes of IFR Air Traffic

2.2.1.Except for prior co-ordination effected individually for each flight off ATS Routes, the IFR air traffic between the PIARCO CTA/FIR and the Fort de France TMA shall be routed along ATS Routes defined in the Record of ATS Routes and associated Radio Navigation Aids - Caribbean Region and in the AIP CAR/NAM.

2.2.2.Each ATC Unit shall ensure that all IFR aircraft are established on routes assigned by the other prior to the aircraft leaving the transmitting ATC Unit. Where not practicable, prior approval must be obtained from the receiving ATC Unit.

2.2.3. The receiving unit shall not vary the clearance of traffic entering its area of responsibility until the traffic is inside, unless with prior co-ordination.

2.2.4. When GPS flights cannot be handled on RNAV routes, they shall be re-routed to ground based radio navigation aids.

2.3 Assignment of Flight Levels

2.3.1. Except for prior coordination, PIARCO ACC and Fort De France APP shall assign Flight Levels to the magnetic track shown in the table of cruising levels in Appendix "C" of Annex 2.

2.4 Transfer of responsibility

2.4.1. Except for prior co-ordination, the transfer of responsibility of aircraft operating between the PIARCO UTA/CTA/FIR and the Fort de France TMA shall be at the lateral/vertical limits of the FORT DE France TMA..

2.5 Transfer of communication

2.5.1. The transfer of air- ground communications of an aircraft from the transferring ATS Unit to the receiving ATS Unit shall be made prior to entering the airspace of the receiving ATS Unit, except where, with the concurrence of both ATS, the requirement for separation determine otherwise.

2.5.2. When requested, the receiving ATS Unit shall notify the transferring ATS Unit that the traffic is in communication with the receiving ATS Unit and has crossed the common (lateral/vertical) boundary.

2.5.3. Frequencies indicated in appendix 2 to this letter of agreement shall be used for transfer of communication.

2.6 Rules of separation for IFR traffic

2.6.1. Rules of separation shall be applied according to Procedures for Air Navigation Services, Rules of the Air and Air Traffic Services, ICAO Doc. 4444 and Regional Supplementary Procedures, Doc. 7030.

2.7. Use of transponder

2.7.1. ATS Units shall instruct all aircraft to squawk the SSR code according to the ORCAM method.

2.7.2. PIARCO ACC and Fort De France APP shall instruct all transponder equipped aircraft to squawk the SSR code assigned by the respective ATS Units.

3. CO-ORDINATION PROCEDURES

3.1.General

3.1.1.Coordination between the PIARCO ACC and the Fort De France APP Unit shall be effected in accordance with standards, recommended practices and procedures prescribed by ICAO.

3.1.2.The E/CAR network circuit shall be used as the primary means of coordination for all air traffic.

3.1.3.Information to be forwarded by one Unit to the Other :

- a) Aircraft Identification
- b) Type of Aircraft
- c) Point of Departure
- d) Destination
- e) Route of flight
- f) Boundary estimate, ETD or ETA as appropriate
- g) Flight level/altitude.
- h) SSR code

3.2. Flights Plans

3.2.1.The submission and dissemination of flight Plans, including Repetitive Flight Plans shall be in accordance with PANS RAC DOC 4444 as amended.

3.3. Co-ordination procedures for IFR flights

3.3.1.All co-ordination/approval shall be effected with the appropriate ATS Unit at least fifteen (15) minutes, but not more than sixty (60) minutes, prior to the aircraft's estimate as described in 3.1.3.

3.3.2.In the case of traffic which will depart from locations where the flying time for the particular aircraft will be less than fifteen (15) minutes from the lateral/vertical limits of Fort De France TMA, prior co-ordination must be effected between the respective Units.

3.3.3.In the case of traffic from PIARCO UTA/CTA flying through Fort De France TMA with George Charles / Hewanorra Airports as destination, PIARCO ACC shall be responsible for forwarding to the Fort De France APP unit the relevant information described in 3.1.3. The Fort De France APP Unit shall be responsible for forwarding to St. Lucia Approach the relevant information received from PIARCO ACC. According to the traffic, Fort De France may ask to PIARCO to send it directly in contact with Saint Lucia APP.

3.3.4.OCEANIC CLEARANCE

Flights departing from Martinique or Saint Lucia and entering the New York Oceanic Control Area (NY-OCA) must be issued Oceanic Clearance by PIARCO ACC.

Because of the short flying time from Fort De France or Saint Lucia to the PIARCO New York CTA/FIR boundary (18°N), Fort De France APP must contact the PIARCO ACC at least twenty (20) minutes prior to the E.T.D. of concerned flights in order to co-ordinate the issue of the Oceanic Clearance.

3.3.5.Fort De France APP shall forward to PIARCO effective departures times for flights above FL245, and departure times and boundary estimates for flights below FL245, which will enter the PIARCO UTA/CTA/FIR.

3.4.Co-ordination procedures for VFR flights

3.4.1.Departure messages shall be passed, via AFTN.

3.4.2.Co-ordination shall be effected with the appropriate ATS unit at least 10 minutes before the crossing times of common boundary, so that the receiving unit can make proper use of the co-ordination.

3.4.3.Each unit shall inform the other when VFR operations are suspended at their respective airfield(s).

4. FAILURE / CONTINGENCY PROCEDURES

4.1.General

4.1.1.In all contingency situations the following actions, shall be taken :

- An assessment of the outage (actual or anticipated),
- An assessment of the traffic (present and anticipated),
- An assessment of what is available.

4.1.2.V.C.BIRD APP will be the distribution point of Fort De France APP for information concerning a PIARCO ACC communications outage.

4.1.3.Any alternate or supplementary method to what is describe hereafter requires acknowledgement from the receiving ATS unit.

4.2.Radio-navigation facilities / Radar failure

4.2.1.Each Unit shall advise the other of any malfunction of radio-navigation facilities or radar failure in its area of responsibility.

4.3.AFTN network failure

4.3.1.In the event that the relevant ATS units are unable to forward flight plan information via AFTN or approved Repetitive Flight Plan listed within sufficient time to permit preparation and analysis, all such reasonable efforts shall be made to copy same on any appropriate communication facility as listed in appendix number 3.

4.4.Procedures for point to point failure

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4.4.1.In the event of the failure of the ATS direct circuits, all means of alternate communications shall be exhausted for the coordination of all IFR air traffic (e.g. Commercial Telephone; self transfer; relay through another ATS facility; appropriate HF for aircraft on the ground Fort de France Airport; AFTN - provided aircraft are held within the lateral/vertical limits of the transferring ATS Unit until an acceptance message is received).

4.4.2.All alternate methods of communications require acknowledgement from the receiving ATS Unit.

4.4.3.**Self transfer :** IFR aircraft shall only be cleared to a point completely within the lateral/vertical limits and level of the transmitting unit at an appropriate flight level for direction of flight, and instructed to contact the receiving ATS Unit and obtain clearance prior to entering the adjacent airspace. The receiving ATS Unit shall clear the aircraft into its area and shall not authorize flight level changes until the aircraft is beyond the common boundary, unless the aircraft advises that the transferring ATS Unit has no control restrictions regarding descent/climb. Furthermore, the receiving ATS Unit shall instruct the aircraft to advise the transferring ATS Unit when crossing the common boundary.

Note: Self-Transfer will be the preferred alternate initial means of notification if the aircraft is airborne

4.5.Air to Ground failure

4.5.1.In the event of radio failure at Fort de France,

Fort de France APP shall :

- notify PIARCO by phone
- send a NOTAM to advise that Le Raizet APP shall be responsible for the provision of Air Traffic services within the volume of Fort de France TMA downgraded in G.
- Send flow control restrictions.
- Fort De France shall retain control of aircraft operating in its CTR airspace, using 118,5 with a standby portable radio.

4.5.2.In the event of complete radio and point to point failure in Fort de France APP **AND** Pointe à Pitre APP, any suitable means of communication shall be used to advise PIARCO ACC.

- PIARCO ACC shall be responsible for the provision of Air Traffic services within the volume of Fort de France APP and Pointe à Pitre APP TMA downgraded in G.
- Flow control restrictions shall be put into effect.
- Fort De France shall retain control of aircraft operating in its CTR airspace, using 118,5 with a standby portable radio.
- Pointe à Pitre shall retain control of aircraft operating in its CTR airspace, using 118,4 with a standby portable radio.

4.5.3.In the event of complete radio failure at PIARCO ACC, East Caribbean Contingency Procedures shall take place :

- Fort De France Approach shall assume responsibility for communications and the management of that additional airspace, which overlies the Fort De France and Pointe-A-Pitre TMAs FL245 to Unlimited, plus that airspace towards the west bounded by 1334N 06130W – 1215N 06315W – 1500N 06500W – 1500N 06315W – 1520N 06300W – 1545N 06300W – 1454N 06157W and to point of origin, and that airspace towards the east bounded by 1725N 06046W – 1800N 06016W – 1800N 05700W – 145230N 05948W and to point of origin from Surface to Unlimited.

- Arriving European Traffic destined to Airports within the Piarco FIR shall be routed as follows:

Destination

Routing

- VC Bird via 18N061W DCT ANU
- Le Raizet via 18N060W DCT PPR
- Le Lamentin via 18N058W DCT 16N060W DCT BONID DCT FOF
- Hewanorra via 18N058W DCT 16N060W DCT BONID DCT FOF UA324 BNE

- Departing European bound Traffic from Airports within the Piarco FIR shall be routed as follows:

Departure Point

Routing

- VC Bird via ANU UA/A632 TOTEM
- Le Raizet via PPR DCT 18N060W Atlantic Route
- Le Lamentin via FOF DCT BONID DCT 16N060W DCT 18N058W Atlantic Route
- Hewanorra via BNE UA324 FOF DCT BONID DCT 16N060W DCT 18N058W Atlantic Route

- Transiting Traffic to/from the NAT, destined to or originating from the Maiquetia FIR and already in flight when contingency procedures are activated shall be accommodated along two (2) routes only and at a minimum altitude of Flight Level 310/330, as appropriate for direction of flight as follows:

- Either 1800N058W DCT FOF UA551 ONGAL and Reverse
- Or, 1800N056W or 1800N053W and East of this Meridian DCT BGI UA561 DAREK and Reverse..

- Traffic from San Juan, Maiquetia, Georgetown, Paramaribo and Cayenne FIRs with destinations within the Piarco FIR shall be routed along published ATS Routes, and accepted at a rate as determined by the appropriate TMA Unit.

- Traffic from San Juan, Maiquetia, Georgetown, Paramaribo and Cayenne FIRs from locations within the Piarco FIR shall be routed along published ATS Routes, and released for departure at a rate as determined by the appropriate TMA Unit.

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- Route Non-availability. The following routes shall not be available during the period Contingency Measures are in force, effectively reducing all route crossing other than overhead nav aids:
 - UA632 between BGI and ANU
 - A312/UA312 between DALGA and FOF
 - G449/UG449 between KORTO and ANADA
 - UA324 between POS and BNE
 - A511/UA511 between BGI and BOGSI
 - A550/UA550 between PPR and ITEGO
 - A555/UA555 between FOF and ILURI
 - UL205 between POS and ANU
- At the earliest opportunity, San Juan ACC shall check with all appropriate ATS Units to ensure that all Aircraft which were operating in the Piarco FIR or flight planned to operate are accounted for:
- Appropriate Charts indicating all the Predetermined Routings and Control Frequencies shall be provided at Fort de France TMAs and Piarco ACC.

4.6.Flow-control

In the event of reduced capacity at each unit, prior permission request (PPR) procedure or flow control measures, shall be applied.

5. ALERTING SERVICE

5.1.1.In all cases except when aircraft are operating within the Fort De France TMA area, alerting service coordination shall be the responsibility of PIARCO ACC/RCC.

5.1.2.Both units shall provide each other with whatever information is available and provide assistance in order to comply with 5.1.1.

6. MISCELLANEOUS

6.1.Deviation

6.1.1.Deviation from the procedures established in this letter of agreement shall be effected only after prior co-ordination is accomplished with completely define responsibilities in each case.

7. REVISIONS

7.1.1.This agreement is subject to revision whenever there is a change of ICAO standards, recommended practices or supplementary regional procedures which affects the procedures contained therein, or when new radio navigational aids, communication facilities or air traffic services which might affect those procedures, are introduced.

7.1.2.In the event of a change of ICAO regulations, either party to this

agreement may propose an amendment to the other party.

7.1.3. For any other matter which make it advisable to vary this agreement, the interested party shall propose the pertinent amendment.

For PIARCO ACC

For Fort De France APP

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8. APPENDIX NUMBER ONE :Airspace description**8.1.TMA Fort De France**

Name and lateral limits	Class	Vertical limits FL, m or ft	ATS unit	Hours of service
PART 1 Broken line joining points 14°06'41" N, 061°20'05" W 14°28'26" N 061°26'28" W, Arc of circle radius 25 NM centered on VOR/DME " FOF " (14°35'26.69"N, 061°01'22.11" W) joining preceding point to 14°18'53" N, 061°41'31" W, 14°10'36"N, 060°49'44"W 14°13'00" N, 060°52'00"W 14°06'41" N, 061°20'05" W	D	<u>FL 105</u> 460m(1500ft)asfc	FORT DE FRANCE APPROCHE/APPROAC H	H 24
PART 2 Broken line joining points: 14°13'00"N, 060°52'00"W - 14°02'00"N, 060°40'00"W, Arc of circle radius 25 NM centered on VOR «BNE » (13°44'04"N, 060°58'37"W) joining preceding point to: 13°19'00"N, 060°59'30"W, 13°34'00"N, 061°30'00"W 14°02'05" N, 061°40'05" W 14°13'00"N, 060°52'00"W	D	<u>FL105</u> 1370m (4500ft) asfc	HEWANORRA APPROCHE/APPROAC -----H----- FORT DE FRANCE APPROCHE/APPROAC H	from 1000 to 0300 h UTC ----- from 0300 to 1000 h UTC
PART 3 Broken line joining points: 16°10'00"N, 060°18'00"W 14°52'30"N, 059°48'00"W 13°55'25"N, 060°34'30"W, Arc of circle radius 25 NM centered on VOR «BNE » (13°44'04"N, 060°58'37"W) joining preceding point to: 13°19'00"N, 060°59'30"W, 13°34'00"N, 061°30'00"W 14°54'00"N, 061°57'00"W 16°10'00"N, 060°18'00"W	D	<u>FL195</u> FL105	FORT DE FRANCE APPROCHE/APPROAC H	H 24
PART 4 Broken line joining points: 16°10'00"N, 060°18'00"W 14°52'30"N, 059°48'00"W 13°55'25"N, 060°34'30"W , Arc of circle radius 25 NM centered on VOR «BNE » (13°44'04"N, 060°58'08"W) joining preceding point to : 14°02'00"N, 060°40'00"W 14°10'36"N, 060°49'44"W 14°18'53" N, 061°41'31" W, Arc of circle radius 25 NM centered on VOR/DME « FOF » (14°35'27" N, 061°01'22" W) joining preceding point to: 14°28'26" N 061°26'28" W, 14°04'42" N, 061°18'11" W 14°02'05" N, 061°40'05" W 14°54'00"N, 061°57'00"W 16°10'00"N, 060°18'00"W	E	<u>FL105</u> 900 m(3000ft)amsl 300 m(1000ft)asfc	FORT DE FRANCE APPROCHE/APPROAC H	H 24
PART 5 Broken line joining points: 16°10'00"N, 060°18'00"W 14°52'30"N, 059°48'00"W 13°55'25"N, 060°34'30"W, Arc of circle radius 25 NM centered on VOR «BNE »	A	<u>FL245</u> FL105	FORT DE FRANCE APPROCHE/APPROAC	H 24

(13°44'04"N, 060°58'37"W) joining preceding point to: 13°19'00"N, 060°59'30"W, 13°34'00"N, 061°30'00"W 14°54'00"N, 061°57'00"W 16°10'00"N, 060°18'00"W			H	
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8.2.PIARCO UTA/CTA

<i>Name Lateral limits</i>	<i>Classe</i>	<i>Vertical limits</i>	<i>Call sign</i>	<i>Hours of service</i>
PIARCO UPPER CONTROL AREA PIARCO UTA 1500N06500W – 1500N06315W – 1520N06300W – 1722N06300W – 1800N06200W – 1800N05600W – 0905N05600W – 0855N05700W – 0855N05957W – 0959N06128W – 0959N06156W – 1005N06203W – 1044N06147W – 1100N06230W.	A	UNL FL 245	PIARCO CONTROL	H24
PIARCO UPPER CONTROL AREA PIARCO CTA 1500N06500W – 1500N06315W – 1520N06300W – 1722N06300W – 1800N06200W – 1800N05600W – 0905N05600W – 0855N05700W – 0855N05957W – 0959N06128W – 0959N06156W – 1005N06203W – 1044N06147W – 1100N06230W	E	_____ FL 245 FL 60	PIARCO CONTROL	H24

9. APPENDIX NUMBER TWO : Frequencies

Fort de France	APP	⇒	121,000 MHz
(secondary)		⇒	129,050 MHz

Raizet	APP	⇒	121,300 MHz
		⇒	129,800 MHz
(secondary)		⇒	119,050 MHz

Adams radar		⇒	129,350 MHz
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VC Bird	APP	⇒	119,100 MHz
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PIARCO		⇒	123,700 MHz (primary)
		⇒	125,400 MHz (south sector)

ST LUCIA		⇒	119,800 MHz
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10. APPENDIX NUMBER THREE : Phone numbers

Fort de France TWR	Tel.	⇒	(596) 596 42 26 00
	Tel.	⇒	(596) 596 42 26 05
Fort de France AIS	Tel.	⇒	(596) 596 42 25 24
Fort de France AIS	Fax	⇒	(596) 596 51 10 63

Piarco ACC	Tel.	⇒	1 868 669 4852
	Fax	⇒	1 868 669 4259
Piarco AIS	Tel.	⇒	1 868 669 4128
	Fax	⇒	1 868 669 1716

Pointe à Pitre TWR	Tel.	⇒	(590) 590 89 05 26
	Tel.	⇒	(590) 590 48 21 14
Pointe à Pitre BDP Tel.		⇒	(590) 590 48 21 43
Pointe à Pitre BDP Fax		⇒	(590) 590 48 21 40

VC BIRD TWR	Tel/Fax	1 268 4624703
VC BIRD AIS	Tel	1 268 4624675
VC BIRD AIS	Fax	1 268 5623040
VC BIRD Coor	Tel	1 268 4804422

ADAMS RADAR	TEL	1 246 428 6162
ADAMS TWR	TEL	1 246 428 0956
ADAMS AIS	TEL	1 246 428 7101
ADAMS AIS	TEL	1 246 420 7333

IACL NUMBERS		
PIARCO	5001 (north)	5011 (south)
LE RAIZET	7201 (COOR)	7203 (APP)
FORT DE FRANCE	6401 (ASS)	6403 (APP)
VC BIRD		
ADAMS	6001, 6002	6003

EMERGENCY DIRECTORY

Service	Number
Chief of Civil aviation division Piarco	1 868 625 4011/4003
Le Raizet airfield director	(590) 590 93 98 01
Fort de France airfield director	(596) 596 42 24 87
INMARSAT Le Raizet	(00).870.76.212.35.76
INMARSAT Fort De France	(00).870.76.212.35.72
VC Bird Chief ATC	1 268 4620642

**OPERATIONAL LETTER OF AGREEMENT
BETWEEN THE LE RAIZET RADAR APPROACH CONTROL
(RAPCO) AND THE V.C BIRD APPROACH CONTROL (APCON)**

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1. INTRODUCTION

1.1. Effective Date :

1.2. Objectives :

1.2.1. The objective of this Letter of Agreement is to establish operating procedures for the management of air traffic between V.C.BIRD APCON and Le Raizet RAPCO

1.2.2. This Letter of Agreement cancels and replaces all previous Letters of Agreement between the ATS Units of Antigua and Guadeloupe

1.3. Scope :

1.3.1. The procedures contained in this operational letter of agreement supplement or detail when so required, the procedures prescribed by ICAO in the pertinent documents and shall be applied to all air traffic that cross the common boundary of the V.C BIRD and the Le Raizet TMAs.

2. CONTROL PROCEDURES

2.1. Airspace

2.1.1. Le Raizet RAPCO shall be responsible for the provision of Air Traffic services to all aircraft within the Le Raizet airspace defined by the lateral limits of the POINTE A PITRE TMA from SFC to FL 245.

2.1.2. V.C BIRD APCON shall be responsible for the provision of Air Traffic services to all aircraft within the VC BIRD airspace defined by the lateral limits of the VC BIRD TMA from SFC to FL 245.

2.2. Routing of Air Traffic :

2.2.1. Except prior coordination, the air traffic between the Le Raizet TMA and the V.C. BIRD TMA shall be routed along the ATS Routes defined in the Record of ATS Routes and associated Radio Navigation Aids - Caribbean Region and in the AIP CAR/NAM.

2.2.2. Each ATC unit shall ensure that all IFR aircraft are established on routes assigned by the other prior to the aircraft leaving the transmitting ATC unit. Where not practicable, prior approval must be obtained from the receiving ATC unit.

2.2.3. The receiving unit shall not vary the clearance of traffic entering its area of responsibility until the traffic is inside, unless with prior co-ordination.

2.3. Assignment of Flight Levels:

2.3.1. Except for prior coordination, VC BIRD APCON and Le Raizet RAPCO shall assign flight levels corresponding to the magnetic tracks shown in the table of cruising levels in Appendix "C" of Annex 2.

2.4. Transfer of Responsibility of Air Traffic Services (T.C.P.)

2.4.1. The Transfer of control points (T.C.P). for aircraft operating between the Le Raizet TCA and the V.C BIRD TCA shall be the common boundary for flight off ATS Routes (Random tracks) or the following points :

GORET BIMBO KASKI MEDUS

2.5. Transfer of communication

2.5.1. The transfer of air-ground communications of an aircraft from the transferring ATS Unit to the receiving ATS Unit shall be made prior to entering the airspace of the receiving ATS Unit, except where, with the concurrence of both ATS, the requirement for separation determines otherwise.

2.5.2. The receiving unit shall not notify the transferring unit that it has established air/ground communications with the transferred aircraft unless specifically requested to do so.

2.5.3. Frequencies indicated in appendix A to this letter of agreement shall be used for transfer of communication

2.6. Longitudinal separation

2.6.1. The minimum longitudinal separation to be used between aircraft flying at the same altitude/flight level and on the same route or track shall be of **10 minutes**

2.7. Use of transponder

2.7.1. ATS Units shall instruct all aircraft to squawk the SSR code according to the ORCAM method.

2.7.2. The receiving unit shall instruct all transponder equipped aircraft to squawk the discrete beacon code assigned by the other one.

3. COORDINATION PROCEDURES

3.1. General :

3.1.1. Coordination between the V.C BIRD APCON and the Le Raizet RAPCO shall be effected in accordance with the standards, recommended practices, and procedures prescribed by ICAO.

3.1.2. The V.C BIRD/Le Raizet dedicated speech circuit and IACL speech network shall be used as the primary means of coordination for all active air traffic.

3.1.3. Positions serving as coordination points are the same as TCP's contained in paragraph 2.4.

3.1.4. Information to be forwarded by one unit to the other

- (a) Aircraft Identification;
- (b) Type of Aircraft;
- (c) Point of Departure; .
- (d) Destination;
- (e) Route of Flight;
- (f) Boundary estimate, ETD or ETA as appropriate;
- (g) Flight Level/altitude.
- (h) SSR code

3.2. Flights Plans

3.2.1. The submission and dissemination of flight Plans, including Repetitive Flight Plans shall be in accordance with PANS RAC DOC 4444 as amended.

3.3. Coordination for IFR Flights :

3.3.1. Departure and arrival messages shall not be required for flights originating and terminating at airports located within the Pointe à Pitre TCA and the VC BIRD TCA boundaries.

3.3.2. All coordination involving active IFR air traffic shall be forwarded at least ten (10) minutes prior to the aircraft's estimate for the position serving as the coordination point for the route involved.

3.3.3. Clearance for all departing IFR Flights must be given by the receiving TCA prior to the aircraft departure.

3.4. Coordination for VFR Flights :

3.4.1. The exchange for coordination shall use the direct speech circuit.

3.4.2. The exchange for information shall use the AFTN (departure, delay and arrival messages). In the event of an AFTN failure, information could be passed via the direct speech circuit.

3.4.3. In any case VC BIRD APCON and THE RAIZET RAPCO will make sure that a VFR flight plan has been filed.

3.4.4. Departure messages shall be passed via AFTN.

3.4.5. Each unit shall inform the other when VFR operations are suspended at their respective airfield(s)

4. FAILURE / CONTINGENCY PROCEDURES :

4.1. General

4.1.1. In all contingency situations the following actions, shall be taken :

- An assessment of the outage (actual or anticipated),
- An assessment of the traffic (present and anticipated),
- An assessment of what is available.

4.1.2. Any alternate or supplementary method to what is describe hereafter requires acknowledgement from the receiving ATS unit

4.2. Radio-navigation / radar failure

4.2.1. Each unit shall advise the other of any malfunction of radio navigation facilities / radar failure in its area of responsibility.

4.3. AFTN network failure

4.3.1. In the event that the relevant ATS Units are unable to forward flight plan information via AFTN or approved Repetitive Flight Plan listing within sufficient time to permit preparation and analysis, all such reasonable efforts shall be made to copy same on any appropriate communication facility as listed in appendix B

4.4. Point to point failure:

4.4.1. In the event of failure of both the VC BIRD/Le Raizet dedicated speech circuit and IACL/ speech network, co-ordination of all active IFR air traffic shall be effected as follows :

- By relaying through any other ATS station on the speech circuit. If unable,
- Via commercial telephone: See Appendix B, telephone numbers. If unable,
- **Self transfer :** IFR aircraft shall only be cleared to a point completely within the lateral/vertical limits and level of the transmitting unit at an appropriate flight level for direction of flight, and instructed to contact the receiving ATS Unit and obtain clearance prior to entering the adjacent airspace. The receiving ATS Unit shall clear the aircraft into its area and shall not authorize flight level changes until the aircraft is beyond the common boundary, unless the aircraft advises that the transferring ATS Unit has no control restrictions regarding descent/climb. Furthermore, the receiving ATS Unit shall instruct the aircraft to advise the transferring ATS Unit when crossing the common boundary.

Note: Self-Transfer will be the preferred alternate initial means of notification if the aircraft is airborne.

4.5. Air to Ground failure at V.C BIRD

4.5.1. In the event of failure of the air/ground frequencies or the VC BIRD APCON unit being rendered inoperable, VC BIRD shall :

- Advise all the adjacent ATS units including PIARCO ACC of the situation by any appropriate means
- Reclassify VC BIRD TMA as class G airspace
- Issue a NOTAM by any available means

4.5.2. In the event of a programmed shutdown of the V.C. BIRD APCON, (e.g. maintenance, approaching tropical storm/hurricane) V.C. BIRD APCON shall, in addition to 4.5.1,

- coordinate the release program with LE RAIZET RAPCO in a timely manner, and agree on a time prior to the intended transfer at which final transfer of control arrangements will be made.

(N.B.: V.C. BIRD Airport / ATSU closes by 6 (six) hours prior to the forecast onset of tropical storm force winds).

4.5.3. Release of V.C. BIRD TMA

In the occurrences described in 4.5.1. and 4.5.2 the V.C. BIRD TMA, downgraded to class « G », shall be released to LE RAIZET RAPCO. The CTR shall continue as class « E » airspace and shall be controlled by VC BIRD with a portable VHF equipment.

4.6. Air to Ground failure at LE RAIZET

4.6.1. In the event of failure of the air/ground frequencies, or the Le Raizet ATS unit being rendered inoperable, LE RAIZET shall :

- Advise the adjacent ATS units including PIARCO ACC of the situation via any appropriate means
- Release the LE RAIZET TMA to FORT DE FRANCE RAPCO, as in 4.2.2 below.
- Issue a NOTAM by any available means

4.6.2. Release of POINTE A PITRE TMA

In the occurrence described in 4.6.1, the POINTE A PITRE TMA downgraded to class « G » shall be released to FORT DE FRANCE RAPCO. The CTR shall continue as class « D » airspace and shall be controlled by LE RAIZET with a portable VHF equipment.

4.7.Flow-control

In the event of reduced capacity at each unit, prior permission request (PPR) procedure or flow control measures, shall be applied.

5. DEVIATION

Deviation from procedures established in this Letter of Agreement shall be effected only after prior coordination is accomplished which completely defined responsibilities in each case.

6. REVISIONS

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6.1.1. This agreement shall be subject to revision whenever a modification of standards, recommended methods or supplementary regional procedures of ICAO occur which might affect the procedures contained in this agreement, or when new communications, facilities, or new air traffic services which might affect these procedures are commissioned.

6.1.2. In the case of changes in ICAO regulations, the ATS unit concerned shall initiate the modification procedure.

6.1.3. For any other matter which might make it advisable to change this agreement, the interested facility shall propose the pertinent revision.

6.1.4. The dissemination of this agreement and of its subsequent modification shall be made in full to all interested parties at least twenty-eight (28) days before the effective date.

For VC BIRD APCON	For LE RAIZET RAPCO
Dated	Dated

7. Appendix A : FREQUENCIES

Raizet APP	⇒	121,300 MHz	
	⇒	129,800 MHz	
	⇒	119,050 MHz	(secondary)

Fort De France APP	⇒	121,000 MHz	
	⇒	129,050 MHz	(secondary)

VC Bird APP	⇒	119,100 MHz	
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PIARCO	⇒	123,700 MHz (primary)	
	⇒	125,400 MHz (south sector)	

8. Appendix B : TELEPHONE / FAX NUMBERS

Pointe à Pitre TWR	Tel.	⇒	(590) 590 89 05 26
	Tel.	⇒	(590) 590 48 21 14
Pointe à Pitre AIS	Tel.	⇒	(590) 590 48 21 43
Pointe à Pitre AIS	Fax	⇒	(590) 590 48 21 40

VC BIRD TWR	Tel/Fax	1 (268) 462 4703
VC BIRD AIS	Tel	1 268 462 4675
VC BIRD AIS	Fax	1 268 562 3040
VC BIRD Coor	Tel	1 268 480 4422

Piarco ACC	Tel.	⇒	1 868 669 4852
	Fax	⇒	1 868 669 4259
Piarco AIS	Tel.	⇒	1 868 669 4128
	Fax	⇒	1 868 669 1716

Fort De France TWR	Tel.	⇒	(596) 596 42 26 00
	Tel.	⇒	(596) 596 42 26 05
Fort De France AIS	Tel.	⇒	(596) 596 42 25 24
Fort De France AIS	Fax	⇒	(596) 596 51 10 63

	IACL NUMBERS	
PIARCO	5001 (north)	5011 (south)
LE RAIZET	7201 (COOR)	7203 (APP)
FORT DE FRANCE	6401 (ASS)	6403 (APP)
VC BIRD	7409	

EMERGENCY DIRECTORY

Service	Number
Chief of Civil aviation division Piarco	1 868 625 4011/4003
Le Raizet airfield director	(590) 590 93 98 01
Fort de France airfield director	(596) 596 42 24 87
INMARSAT Le Raizet	(00).870.76.212.35.76
INMARSAT Fort De France	(00).870.76.212.35.72
VC Bird Chief ATC	1 268 4620642

9. SUPPLEMENTARY LETTER OF AGREEMENT BETWEEN THE LE RAIZET RADAR APPROACH CONTROL (RAPCO) AND THE V.C BIRD APPROACH CONTROL (APCON)

9.1.Subject : Management of ATS route R888 between MODUX and GORET

9.1.1. Effective date :.

9.1.2. In order to reduce coordination process, delegation for the management responsibility of the portion of the R888 comprise between MODUX and GORET is given to Le Raizet RAPCO.

9.1.3. Le Raizet RAPCO shall provides the ATC services in the airspace defined below :

Lateral limits

Broken line joining 17°08'30"N 063°00'00"W, 16°35'50"N 062°03'40" W, 16°30'00"N 062°23'30"W, 16°46'00"N 063°00'00"W, to origin.

Vertical limits

FL 070 (usable) to FL 245

For VC BIRD APCON	For LE RAIZET RAPCO
Dated	Dated

**LETTER OF AGREEMENT BETWEEN
THE PIARCO AREA CONTROL CENTRE (ACC) AND
LE RAIZET RADAR APPROACH CONTROL (RAPCO)**

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1. INTRODUCTION

1.1. Effective Date:

1.2. Objective:

1.2.1. The objective of this Letter of Agreement is to establish operating procedures for the management of air traffic between Piarco ACC and Le Raizet RAPCO.

1.2.2. This Letter of Agreement cancels and replaces all previous Letters of Agreement between the ATS Units of Trinidad and Tobago and Guadeloupe.

1.3.Scope

1.3.1. The procedures contained in this Letter of Agreement supplement or detail, when so required, the procedures prescribed in ICAO documents and shall be applied to all air traffic that cross the common boundary of the Piarco CTA/FIR and the Le Raizet airspace.

2. CONTROL PROCEDURES

2.1. Airspace

2.1.1. Le Raizet RAPCO shall be responsible for the provision of Air Traffic services to all aircraft within the Le Raizet airspace defined by the lateral limits of the POINTE A PITRE TMA from SFC to FL 245 and the portion of the V.C.BIRD TMA defined in Appendix "A" attached hereto.

2.1.2. PIARCO Control Center shall be responsible for the provision of Air Traffic Services to all aircraft within the airspace of PIARCO CTA/FIR or UTA/UIR.

2.2. Routing of IFR Air Traffic

2.2.1. Except for prior coordination effected individually for each flight off ATS Routes, the IFR air traffic between the Piarco CTA/FIR and the Le Raizet airspace shall be routed along ATS Routes defined in the Record of ATS Routes and associated Radio Navigation Aids - Caribbean Region and in the AIP CAR/NAM.

2.2.2. Each ATC unit shall ensure that all IFR aircraft are established on routes assigned by the other prior to the aircraft leaving the transmitting

ATC unit. Where not practicable, prior approval must be obtained from the receiving ATC unit.

2.2.3. The receiving unit shall not vary the clearance of traffic entering its area of responsibility until the traffic is inside, unless with prior co-ordination.

2.3. Assignment of Flight Levels:

2.3.1. Except for prior coordination, Piarco ACC and Le Raizet RAPCO shall assign flight levels corresponding to the magnetic tracks shown in the table of cruising levels in Appendix "C" of Annex 2.

2.4. Transfer of Responsibility of Air Traffic Services

2.4.1. Except for prior coordination, the transfer of responsibility for aircraft operating between the Piarco UTA/CTA/FIR and the Le Raizet airspace shall be lateral/vertical limits of the Le Raizet airspace.

2.5. Transfer of communication

2.5.1. The transfer of air-ground communications of an aircraft from the transferring ATS Unit to the receiving ATS Unit shall be made prior to entering the airspace of the receiving ATS Unit, except where, with the concurrence of both ATS, the requirement for separation determines otherwise.

2.5.2. When requested, the receiving ATS Unit shall notify the transferring ATS Unit that the traffic is in communication with the receiving ATS Unit and has crossed the common (lateral/vertical) boundary.

2.5.3. Frequencies indicated in appendix B to this letter of agreement shall be used for transfer of communication

2.6. Rule of separation for IFR traffic

2.6.1. Rules of separation shall be applied according to Procedures for Air Navigation Services, Rules of the Air and Air Traffic Services, ICAO Doc. 4444 and Regional Supplementary Procedures, Doc. 7030.

3. COORDINATION PROCEDURES

3.1. General:

3.1.1. Coordination between the Piarco ACC and Le Raizet RAPCO shall be effected in accordance with standards, recommended practices, and procedures prescribed by ICAO.

3.1.2. The ATS direct speech circuits shall be used as the primary means of coordination for all air traffic.

3.1.3. Information to be forwarded by one unit to the other

- (a) Aircraft Identification;
- (b) Type of Aircraft;
- (c) Point of Departure; .
- (d) Destination;
- (e) Route of Flight;
- (f) Boundary estimate, ETD or ETA as appropriate;
- (g) Flight Level/altitude.
- (h) SSR code

3.2. Co-ordination for IFR flights

3.2.1. All coordination/approval shall be effected with the appropriate ATS Unit at least fifteen (15) minutes, but not more than thirty (60) minutes prior to the aircraft's estimate as described in 3.1.3.(f).

3.2.2. In the case of traffic, which will depart from locations where the flying time for the particular aircraft will be less than fifteen (15) minutes from the lateral/vertical limits of the Le Raizet airspace, prior coordination must be effected between the respective units.

3.2.3. **Oceanic clearances** : Flights departing from Guadeloupe and entering the New York Oceanic Control Area (NY-OCA) must be issued Oceanic Clearance by PIARCO ACC. Because of the short flying time from Guadeloupe to the PIARCO New York CTA/FIR boundary (18°N), Le Raizet RAPCO shall contact the PIARCO ACC at least twenty (20) minutes prior to the E.T.D. of concerned flights in order to co-ordinate the issue of the Oceanic Clearance

3.2.4. **Departures:** Le Raizet RAPCO shall forward effective departure times for flights above FL 245, and departure times and boundary estimates for flights below FL 245, which will enter the Piarco UT/CTA/FIR.

3.2.5. **Arrivals:** When requested, Le Raizet RAPCO shall inform Piarco ACC of the times at which arriving aircraft have vacated FL245.

3.2.6. ***Over-flights:*** Le Raizet RAPCO shall coordinate with Piarco ACC when over flying aircraft will exit the Le Raizet airspace to enter the Piarco CTA/FIR

3.3. Co-ordination for VFR flights

3.3.1. Departure messages shall be passed via AFTN.

3.3.2. There shall be an interchange of pertinent information relating to VFR flights at least 10 minutes before crossing the common boundary of the Le Raizet airspace and the Piarco CTA/FIR

3.3.3. Each unit shall inform the other when VFR operations are suspended at their respective airfield(s)

3.4. Flight Plans:

3.4.1. Submission and dissemination of Flight Plans, including Repetitive Flight Plans shall be in accordance with PANS RAC DOC 4444 as amended.

3.5. Transponder use:

3.5.1. ATS Units shall instruct all aircraft to squawk the SSR code according to the ORCAM method.

3.5.2. Piarco ACC and Le Raizet RAPCO shall instruct all transponder equipped aircraft to squawk the SSR code assigned by the respective ATS Units.

4. FAILURE / CONTINGENCY PROCEDURES

4.1. General:

4.1.1. In all contingency situations the following actions, shall be taken :

- An assessment of the outage (actual or anticipated),
- An assessment of the traffic (present and anticipated),
- An assessment of what is available.

4.1.2. V.C.BIRD APP will be the distribution point of Le Raizet RAPCO for information concerning a PIARCO ACC communications outage

4.1.3. Any alternate or supplementary method to what is describe hereafter requires acknowledgement from the receiving ATS unit

4.2. Radio-navigation / radar failure

4.2.1. Each unit shall advise the other of any malfunction of radio navigation facilities / radar failure in its area of responsibility.

4.3. AFTN network failure

4.3.1. In the event that the relevant ATS Units are unable to forward flight plan information via AFTN or approved Repetitive Flight Plan listing within sufficient time to permit preparation and analysis, all such reasonable efforts shall be made to copy same on any appropriate communication facility as listed in appendix C

4.4. Point to point failure:

4.4.1. In the event of the failure of the ATS direct circuits, all means of alternate communications shall be exhausted for the coordination of all IFR air traffic (e.g. Commercial Telephone; self transfer; relay through another ATS facility; appropriate HF for aircraft on the ground Le Raizet Airport; AFTN - provided aircraft are held within the lateral/vertical limits of the transferring ATS Unit until an acceptance message is received).

4.4.2. All alternate methods of communications require acknowledgement from the receiving ATS Unit.

4.4.3. *Self transfer* : IFR aircraft shall only be cleared to a point completely within the lateral/vertical limits and level of the transmitting unit at an appropriate flight level for direction of flight, and instructed to contact the receiving ATS Unit and obtain clearance prior to entering the adjacent airspace. The receiving ATS Unit shall clear the aircraft into its area and shall not authorize flight level changes until the aircraft is beyond the common boundary, unless the aircraft advises that the transferring ATS Unit has no control restrictions regarding descent/climb. Furthermore, the receiving ATS Unit shall instruct the aircraft to advise the transferring ATS Unit when crossing the common boundary.

Note: Self-Transfer will be the preferred alternate initial means of notification if the aircraft is airborne.

4.5. Air to Ground Failure:

4.5.1. In the event that Piarco ACC or Le Raizet RAPCO experiences air to ground failure, the relevant E/CAR Contingency Procedures shall be applied. See Appendix `D`

5. ALERTING SERVICE

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1. In all cases except when aircraft are operating within the Le Raizet airspace, alerting coordination shall be the responsibility of Piarco CTA/FIR.
2. Both Units shall provide each other with whatever information is available and provide assistance in order to comply with 5.1.

6. DEVIATION

Deviation from procedures established in this Letter of Agreement shall be effected only after prior coordination is accomplished which completely defined responsibilities in each case.

7. REVISIONS

7.1.1. This Agreement shall be subject to revision whenever a modification of standards, recommended methods or supplementary regional procedures of ICAO occurs which might affect the procedures contained in this Agreement, or when new communication facilities or new Air Traffic Services, which might affect these procedures are commissioned.

7.1.2. In the case of changes in ICAO regulations, either party may initiate the amendment of this Agreement, and in the case of new installations or modification of existing installations, the ATS Unit concerned shall initiate the modification procedure.

7.1.3. For any other matter, which might make it advisable to change this agreement, the interested ATS Unit shall propose the pertinent revision.

For Guadeloupe, FWI.

For Trinidad and Tobago

Manager Air Traffic Operations
Dated

Chief Air Traffic Control Services
Dated

8. APPENDIX "A" VC Bird TMA delegation

AIRSPACE DELEGATED TO LE RAIZET RAPCO

LATERAL LIMITS	UPPER LIMIT	UNIT PROVIDING SERVICE
	LOWER LIMIT	
PORTION OF V.C.BIRD TCA including segment of R888 between MODUX and GORET defined by the following coordinates : 17°08'30 N - 063°00'00 W, 16°35'50 N - 062°03'40 W, 16°30'00 N - 062°23'30 W, 16°46'00 N - 063°00'00 W	<u>FL 245</u> FL 70	Pointe-a-Pitre RAPCO

9. APPENDIX "B" : Frequencies

Raizet APP	⇒	121,300 MHz	
	⇒	129,800 MHz	
	⇒	119,050 MHz	(secondary)

Fort De France APP	⇒	121,000 MHz	
	⇒	129,050 MHz	(secondary)

VC Bird APP	⇒	119,100 MHz	
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Adams radar	⇒	129,350 MHz	
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PIARCO	⇒	123,700 MHz	(primary)
	⇒	125,400 MHz	(south sector)

ST LUCIA	⇒	119,800 MHz	
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10. APPENDIX "C" : Telephone / Fax numbers

Pointe à Pitre TWR	Tel.	⇒	(590) 590 89 05 26
	Tel.	⇒	(590) 590 48 21 14
Pointe à Pitre BDP	Tel.	⇒	(590) 590 48 21 43
Pointe à Pitre BDP	Fax	⇒	(590) 590 48 21 40

Piarco ACC	Tel.	⇒	1 868 669 4852
	Fax	⇒	1 868 669 4259
Piarco AIS	Tel.	⇒	1 868 669 4128
	Fax	⇒	1 868 669 1716

Fort De France TWR	Tel.	⇒	(596) 596 42 26 00
	Tel.	⇒	(596) 596 42 26 05
Fort De France BDP	Tel.	⇒	(596) 596 42 25 24
Fort De France BDP	Fax	⇒	(596) 596 51 10 63

VC BIRD TWR	Tel/Fax	1 268 4624703
VC BIRD AIS	Tel	1 268 4624675
VC BIRD AIS	Fax	1 268 5623040
VC BIRD Coor	Tel	1 268 4804422

	IACL NUMBERS	
PIARCO	5001 (north)	5011 (south)
LE RAIZET	7201 (COOR)	7203 (APP)
FORT DE FRANCE	6401 (ASS)	6403 (APP)
VC BIRD	7409	

EMERGENCY DIRECTORY

Service	Number
Chief of Civil aviation division Piarco	1 868 625 4011/4003
Le Raizet airfield director	(590) 590 93 98 01
Fort de France airfield director	(596) 596 42 24 87
INMARSAT Le Raizet	(00).870.76.212.35.76
INMARSAT Fort De France	(00).870.76.212.35.72
VC Bird Chief ATC	1 268 4620642

11. APPENDIX "D" :CONTINGENCY PROCEDURES

11.1. Preamble

11.1.1. In the event of reduced capacity at any unit, Prior Permission Request (PPR) procedure or Flow control measures may be applied.

11.2. Failure at PIARCO ACC

11.2.1. In the event of complete radio failure of the PIARCO ACC:

Fort de France RAPCO shall be responsible of provision of air traffic services in the portion of the PIARCO UTA/CTA, downgraded in G, which overlies the Fort de France and Pointe a Pitre TMA's FL 245 to unlimited plus the airspace defined by the following coordinates :

- a) 1545N06300W to 1454N06157W to 1334N06130W to 1215N06315W to 1500N06500W to 1500N06315W to 1520N06300W to point of origin.
- b) 1725N 06046W – 1800N 06016W – 1800N 05700W – 145230N 05948W to point of origin from surface to unlimited.

- Arriving European Traffic destined to Airports within Le Raizet airspace shall be routed as follows :

<u>Destination</u>		<u>Routing</u>
Le Raizet	via	18N060W DCT PPR

- Departing European bound Traffic from Airports within Le Raizet airspace shall be routed as follows:

<u>Departure Point</u>		<u>Routing</u>
Le Raizet	via	PPR DCT 18N060W Atlantic Route

11.2.2. V.C. BIRD APCON shall be responsible of provision of air traffic services in the portion of the PIARCO UTA/CTA, downgraded in G, which overlies the V.C. Bird TCA FL 245 to unlimited plus the airspace defined by the following coordinates:

1800N06100W – 1800N06016W - 1725N06046W to point of origin from surface to unlimited.

11.3. Failure at LE RAISET RAPCO

11.3.1. In the event of complete radio failure of LE RAISET RAPCO :
Le Raizet RAPCO shall :

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- a) Advise the adjacent ATS units including PIARCO ACC of the situation via any appropriate means
- b) Release the LE RAIZET airspace downgraded to class "G" to FORT DE FRANCE RAPCO. The CTR should continue as class « D » airspace and should be controlled by LE RAIZET with a relatively low-powered portable WHF equipment.
- c) Issue a NOTAM by any available means