



International Civil Aviation Organization

CAR/SAM REGIONAL PLANNING IMPLEMENTATION GROUP (GREPECAS)

**Fifth Meeting of the CNS Committee of the GREPECAS ATM/CNS Subgroup (CNS/COMM/5)**

Lima, Peru, 13 to 17 November 2006

CNS/COMM/5-WP/03

25/10/06

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**Agenda Item 1:                   Communication systems developments**  
**1.2       Review of the air-ground data links implementation plan**

**FOLLOW-UP TO THE REVIEW OF THE AIR-GROUND DATA LINKS REGIONAL PLAN**

(Presented by the Secretariat)

**SUMMARY**

This working paper presents the follow-up to the review of the SMA and SMAS implementation regional plan, including the air-ground data links and proposes some actions to the Meeting in order to amend the Table CNS 2A of the FASID.

**References:**

- CAR/SAM Regional Air Navigation Plan, Doc 8733.
- Annex 10, Volume III.
- GREPECAS/13 Meeting Report.
- Amendment 2 to the Global Air Navigation Plan (Doc 9750 – AN/963)

**1.       Background**

***Work made by the GREPECAS mechanism on SMA and SMAS***

1.1           The Fourth Meeting of the CNS Committee began the review of the *CAR/SAM Regional Plan for the Aeronautical Mobile Service (AMS) and the Aeronautical-Mobile Satellite Service (AMSS)* contained in Table CNS 2A of the CAR/SAM Regional Air Navigation Plan, Doc 8733, Volume II (FASID); which includes the data communication requirements for VHF, HF, satellite as well as Mode S data link.

1.2           Regarding air-ground data links, the GREPECAS/13 Meeting, held in Santiago, Chile, from 14 to 18 November 2005, based on the work of the CNS Committee presented through the ATM/CNS Subgroup, drafted Conclusion 13/71 – *Update and implementation of the VHF, HF and Satellite Voice Communication of the AMS and AMSS Plan*, which, among other aspects, urged Aeronautical Administrations to encourage the implementation of improvement plans and to mitigate the VHF, HF/SMA coverage and complete the implementation of satellite voice communications.

1.3 Regarding air-ground data communications, GREPECAS/13 drafted Conclusion 13/72 – *Regional Strategy for updating evolutionary implementation of the air-ground data links plan*, through which it adopted the regional Strategy to update and implement the air-ground data links plan, which is formed by the Plan of Activities and the Implementation Programme, both included in Appendices AW and AX to Agenda Item 3 of the GREPECAS/13 Report. Likewise, this conclusion urges Administrations to review and propose updates to the data links plan contained in Table CNS 2A of the FASID.

1.4 In addition, GREPECAS/13 adopted Decision 13/73 – *Development of a Proposal for Amendment and Enhancement to the FASID Table CNS 2A, AMS and AMSS Plan*, through which it guides the CNS Committee to develop a proposal for amendment and enhancement of the Table CNS 2A, based on the results of the actions contained in Conclusions 13/71 and 13/72. Furthermore, in accordance to Task CNS/2-2.1 of the CNS work programme, the Committee has to follow-up the development of the air-ground data communications.

***Initiative for Amendment 2 to the Global Air Navigation Plan on air-ground data links***

1.5 In October 2006, the Air Navigation Commission (ANC) approved Amendment 2 to the Global Air Navigation Plan (Doc 9750 – AN/963), which established the Global Efficiency Initiative (GEI) 17 regarding air-ground data links and which is included in **Appendix A** to this working paper.

***SARPs development status and ICAO guidance material on the use of IPS in the ATN air-ground subnet***

1.6 In July 2006, the Aeronautical Communications Panel (ACP) concluded that the IPS protocol was feasible to use ATN air-ground subnets. Based on this and on the Air Navigation Commission (ANC) requirement, the ACP is developing the ATN/IPS air-ground SARPs; the preliminary document of this topic will be presented for the review of the ANC on July 2007. The guidance material will be completed once the SARPs are applicable (scheduled for November 2008).

## **2. Discussion**

2.1 The Secretariat considers that the regional Strategy for the evolutionary update and implementation of the air-ground data links plan, drafted by GREPECAS through Conclusion 13/72, is harmonised with Amendment 2 to the Global Plan.

2.2 Considering the responses received and the follow-up made to GREPECAS Conclusions 13/71 and 13/72 by the ICAO NACC and SAM Regional Offices, and also considering that the SARPs and guidance material on the ATN/IPS air-ground subnet will be available for implementation on November 2008; **Appendix B** to this working paper presents Table CNS 2A of the FASID, duly updated with information from both the CAR and SAM regions available to the Secretariat. These updates include VHF, HF, satellite and Mode S data implementation requirements for ATC units. Consequently, the Meeting is presented with the following Draft Conclusion:

**DRAFT  
CONCLUSION 5/X**

**UPDATING OF THE AMS AND AMSS REGIONAL PLAN**

That ICAO amends the *CAR/SAM Regional Plan for the Aeronautical Mobile Service (AMS) and the Aeronautical-Mobile Satellite Service (AMSS)* included in the Table CNS 2A of the FASID as presented in Appendix B to this working paper.

**3. Suggested actions**

3.1 The Meeting is invited to:

- a) take note of the information contained in this working paper;
- b) review and enhance the revised AMS and AMSS Plan, which includes the air-ground data links presented in Appendix B to this paper; and
- c) review and propose other actions deemed appropriate.

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**APPENDIX A****(GEI-17) IMPLEMENTATION OF DATA LINK APPLICATIONS**

**Scope:** Increase the use of data link applications.

**Related ATM objectives:** Application of data link; Functional integration of ground systems; with airborne systems; ATS inter-facility data communication (AIDC)

**Description of strategy**

1.78 The implementation of less complex data link services (e.g. pre-departure clearance, oceanic clearance, D-ATIS, automatic position reporting, etc) can bring immediate efficiency benefits to the provision of ATS. Transition to the use of data link communications for more complex safety related uses that take advantage of a wide variety of Controller Pilot Datalink Communication (CPDLC) messages, including ATC clearances is already being successfully implemented.

1.79 Use of CPDLC and implementation of other data link applications can bring significant advantages in terms of workload and safety over voice communication for both pilots and controllers. In particular, they can provide efficient linkages between ground and airborne systems, improved handling and transfer of data, reduced channel congestion, reduced communication errors, interoperable communication media and reduced workload. The reduction of workload per flight translates into capacity increases and enhances safety.

1.80 Communication data link and data link surveillance technologies and applications must be selected and harmonized for seamless and interoperable global operations. ADS-C, ADS-B and CPDLC are in service in various regions of the world but lack global harmonization. Current regional initiatives, including utilizing unique message subsets and CPDLC procedures, hinder efficient development and acceptance for global aircraft operations. Existing and emerging technologies should be implemented in a harmonized global manner in the near term to support long-term goals. Harmonization will define global equipage requirements and therefore minimize user investment.

1.81 FANS-1/A and ATN applications support similar functionality, but with different avionics requirements. Many internationally operated aircraft are equipped with FANS-1/A avionics initially to take advantage of data link services offered in certain oceanic and remote regions. FANS-1/A equipage on international business aviation aircraft is underway and is expected to increase.

## APÉNDICE B

IV-CNS 2A-1

## Table CNS 2A — Tableau CNS 2A — Tabla CNS 2A

**AERONAUTICAL MOBILE SERVICE AND AMSS  
SERVICE MOBILE AÉRONAUTIQUE ET SMAS  
SERVICIO MÓVIL AERONÁUTICO Y SMAS**

## EXPLANATION OF THE TABLE

*Column*

- |          |   |
|----------|---|
| 1        | The name of the State and the locations within the same where the service is provided.                                    |
| 2        | The required services or functions are provided. Suitable abbreviations for these services or functions are listed below. |
| ACC-L    | Area control service for flights up to FL 250.  |
| ACC-SR-I | Area radar control service up to FL 250.  |
| ACC-SR-U | Area radar control service up to FL 450.  |
| ACC-U    | Area control service up to FL 450.  |
| AFIS     | Aerodrome flight information service.   |
| APP-L    | Approach control services below FL 120.   |
| APP-I    | Approach control service below FL 250.  |
| APP-PAR  | Precision approach radar service up to FL 40.   |
| APP-SR-I | Surveillance radar approach control service up to FL 250.   |
| APP-SR-L | Surveillance radar approach control service up to FL 120.   |
| APP-SR-U | Surveillance radar approach control service up to FL 450.   |
| APP-U    | Approach control service below FL 450.  |
| ATIS     | Automatic terminal information service.   |
| D-ATIS   | Data link-automatic terminal information service.   |
| CLRD     | Clearance delivery.   |
| FIS      | Flight information service.   |
| VHF-ER   | VHF — Extended range.   |
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	GP	Facility providing VHF or HF en-route general purpose system (GPS) communication. These facilities provide air-ground radiotelephony for all categories of messages listed in Annex 10, Volume II, 5.1.8. This system of communication is normally indirect, i.e. exchanged through the intermediary of a third person who is usually a communicator at an aeronautical station.
	SMC	Surface movement control up to limits of aerodrome.
	TWR	Aerodrome control service.
	VOLMET	VOLMET broadcast.
3		Number of voice VHF channels for the corresponding services indicated in column 2. The number of implemented channels is shown in parentheses.
4		Number of VHF channels for data communication for the corresponding services indicated in column 2. The implementation date (month/year) is shown in parentheses.
5		HF network designators for the corresponding services indicated in column 2. The number of implemented frequencies is shown in parentheses.
6		Requirement for HF data link (x) for the corresponding services indicated in column 2. The implementation date (month/year) of the service is shown in parentheses.
7		Requirement for satellite voice communications (x) for the corresponding services indicated in column 2. The implementation date (month/year) of the service is shown in parentheses.
8		Requirement for satellite data communications (x) for the corresponding services indicated in column 2. The implementation date (month/year) of the service is shown in parentheses.
9		Requirement for Mode S data communications (x) for the corresponding services indicated in column 2. The implementation date (month/year) of the service is shown in parentheses.
10		Remarks.

*Note.—The implementation year for the data links and satellite voice communication are indicated by two digits.*

#### EXPLICATION DU TABLEAU

##### *Colonne*

1	Nom de l'État et des emplacements de cet État où le service est assuré.
2	Services ou fonctions requis assurés. Les abréviations utilisées ont les significations suivantes:
	ACC-L      Contrôle régional jusqu'au FL 250
	ACC-SR-I    Contrôle radar régional jusqu'au FL 250
	ACC-SR-U    Contrôle radar régional jusqu'au FL 450
	ACC-U      Contrôle régional jusqu'au FL 450
	AFIS        Service d'information de vol d'aérodrome
	APP-L      Contrôle d'approche au-dessous du FL 120

APP-I	Contrôle d'approche au-dessous du FL 250
APP-PAR	Radar d'approche de précision jusqu'au FL 40
APP-SR-I	Contrôle d'approche au radar de surveillance jusqu'au FL 250
APP-SR-L	Contrôle d'approche au radar de surveillance jusqu'au FL 120
APP-SR-U	Contrôle d'approche au radar de surveillance jusqu'au FL 450
APP-U	Contrôle d'approche au-dessous du FL 450
ATIS	Service automatique d'information de région terminale
D-ATIS	Service automatique d'information de région terminale par liaison de données
CLRD	Délivrance des autorisations
FIS	Service d'information de vol
VHF-ER	VHF à portée étendue
GP	Installation de communications VHF ou HF en route d'emploi général (GP). Permet des communications radiotéléphoniques air-sol pour toutes les catégories de messages énumérées dans l'Annexe 10, Volume II, 5.1.8. Système normalement indirect, c'est-à-dire dans lequel les communications se font par l'intermédiaire d'un tiers, généralement un opérateur de télécommunications situé dans une station aéronautique.
SMC	Contrôle des mouvements à la surface jusqu'aux limites de l'aérodrome
TWR	Contrôle d'aérodrome
VOLMET	Émissions VOLMET
3	Nombre de canaux vocaux VHF pour les services indiqués dans la colonne 2. Le nombre des canaux mis en œuvre est indiqué entre parenthèses.
4	Nombre de canaux VHF pour les communications de données des services indiqués dans la colonne 2. La date de mise en œuvre (mois/année) est indiquée entre parenthèses.
5	Identification du réseau HF pour les services indiqués dans la colonne 2. Le nombre de fréquences utilisées est indiqué entre parenthèses.
6	Besoin d'une liaison de données HF (X) pour les services indiqués dans la colonne 2. La date de mise œuvre (mois/année) est indiquée entre parenthèses.
7	Besoin de communications vocales par satellite (X) pour les services indiqués dans la colonne 2. La date de mise en œuvre (mois/année) est indiquée entre parenthèses.
8	Besoin de communications de données par satellite (X) pour les services indiqués dans la colonne 2. La date de mise en œuvre (mois/année) est indiquée entre parenthèses.
9	Besoin de communications de données mode S (X) pour les services indiqués dans la colonne 2. La date de mise en œuvre (mois/année) est indiquée entre parenthèses.
10	Remarques

*Note.— L'année de mise en œuvre des liaisons de données et des communications vocales par satellite est indiquée par deux chiffres.*

## EXPLICACIÓN DE LA TABLA

*Columna*

1	El nombre del Estado y de las localidades dentro del mismo donde se proporciona el servicio.
2	Se proporcionan los servicios o funciones que se requieren. Se enumeran a continuación las abreviaturas correspondientes a estos servicios o funciones.
ACC-L	Servicio de control de área hasta el FL 250
ACC-SR-I	Servicio de control de área radar hasta el FL 250
ACC-SR-U	Servicio de control de área radar hasta el FL 450
ACC-U	Servicio de control de área hasta el FL 450
AFIS	Servicio de información de vuelo de aeródromo
APP-L	Servicio de control de aproximación por debajo del FL 120
APP-I	Servicio de control de aproximación por debajo del FL 250
APP-PAR	Servicio radar para la aproximación de precisión hasta el FL 40
APP-SR-I	Servicio de aproximación de control con radar de vigilancia hasta el FL 250
APP-SR-L	Servicio de aproximación de control con radar de vigilancia hasta el FL 120
APP-SR-U	Servicio de aproximación de control con radar de vigilancia hasta el FL 450
APP-U	Servicio de control de aproximación por debajo del FL 450
ATIS	Servicio automático de información terminal
D-ATIS	Servicio automático de información terminal por enlace de datos
CLRD	Servicio de entrega de autorización de tránsito
FIS	Servicio de información de vuelo
VHF-ER	VHF —Alcance ampliado
GP	Instalación que proporciona comunicaciones VHF o HF en ruta para fines generales (GPS). Estas instalaciones suministran transmisión radiotelefónica aeroterrestre en todas las categorías de mensajes citadas en el Anexo 10, Vol II, 5.1.8. En este sistema las comunicaciones son normalmente indirectas, es decir, que son intercambiadas por intermedio de un tercero que habitualmente es un operador de comunicaciones de una estación aeronáutica.
SMC	Control del movimiento en la superficie hasta los límites del aeródromo.

- TWR            Servicio de control de aeródromo.
- VOLMET        Radiodifusiones VOLMET.
- 3            Número de canales VHF para comunicaciones orales para los correspondientes servicios indicados en la Columna 2. El número de canales implantados se indica entre paréntesis.
- 4            Número de canales VHF para comunicaciones en datos para los correspondientes servicios indicados en la Columna 2. La fecha de implantación (mes/año) se indica entre paréntesis.
- 5            Designadores de red HF para comunicaciones orales para los correspondientes servicios indicados en la Columna 2. El número de frecuencias implantados se indica entre paréntesis.
- 6            Requisito para enlace de datos HF (x) para los correspondientes servicios indicados en la Columna 2. La fecha de implantación (mes/año) del servicio se indica entre paréntesis.
- 7            Requisito para comunicaciones orales por satélite (x) para los correspondientes servicios indicados en la Columna 2. La fecha de implantación (mes/año) del servicio se indica entre paréntesis.
- 8            Requisito para comunicaciones de datos por satélite (x) para los correspondientes servicios indicados en la Columna 2. La fecha de implantación (mes/año) del servicio se indica entre paréntesis.
- 9            Requisito para comunicaciones de datos en Modo S (x) para los correspondientes servicios indicados en la Columna 2. La fecha de implantación (mes/año) del servicio se indica entre paréntesis.
- 10          Observaciones.

*Nota.—El año de implementación para los enlaces de datos y comunicaciones orales por satélite se indican en dos dígitos.*

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Country and location Pays et emplacement País y localidad	Service or function Service ou fonction Servicio o función	VHF voice Voix VHF Voz VHF	VHF data Données VHF Datos VHF	HF voice Voix HF Voz HF	HF data Données HF Datos HF	Satellite voice Voix satellite Voz por satélite	Satellite data Données satellite Datos por satélite	Mode S Modo S	Remarks Remarques Observaciones
1	2	3	4	5	6	7	8	9	10
<b>ANGUILLA (United Kingdom)</b>									
TQPF THE VALLEY/Wall Blake, Anguilla I.	TWR	(1) 1							
<b>ANTIGUA AND BARBUDA</b>									
TAPA SAINT JOHNS/ V.C. Bird Antigua I.	APP TWR SMC APP-SR-I <u>D-ATIS</u>	1 (1) 1 (1) 1 (1) 1 <u>1</u>							
<b>ARGENTINA</b>									
SAEU BUENOS AIRES	ACC-U GP	<u>5 (5)</u> <u>2 (1)</u>	2 (06/05)	SAM-1(5) SAM-2 (5)	X (06/08)	X (06/08)	X (06/08)		
SABE BUENOS AIRES/ Aeroparque Jorge Newbery	APP-L APP-SR-I TWR SMC ATIS CLRD	1 (1) <u>1 (1)</u> <u>1 (1)</u> 1 (1) 1 (1) 1 (1)							
SAEZ BUENOS AIRES/ Ezeiza, Ministro Pistarini	APP-SR-I APP-L ATIS SMC TWR <del>CLRD</del>	1 (1) 1 1 (1) 1 (1) 1 (1) <u>1*</u>							* Implementation by 2002 *Mise en oeuvre en 2002 *Implantación prevista en 2002
SADD BUENOS AIRES/Don Torcuato	TWR SMC	1 (1) 1 (1)							
SADF BUENOS AIRES/San Fernando	APP TWR SMC	1 1 (1) 1 (1)							
SARI CATARATAS DEL IGUAZU/My. Carlos Eduardo K.	TWR	1 (1)							
SAVF COMODORO RIVADAVIA	ACC-U ACC-L GP	2 (2) 1 (1) 1 (1)	1 (06/06)	SAM-1 (5)	X (06/08)	X (06/08)	X (06/08)		
SAVC COMODORO RIVADAVIA/General Mosconi	APP TWR	<u>1 (1)</u> 1 (1)							
SACF CORDOBA	ACC-U GP	3 ( <u>3</u> ) 1	1 (06/06)	SAM-1 (3)					
SACO CORDOBA/Ing. A. Taravella	APP-SR-I TWR	<u>1 (1)</u> 1 (1)							

Country and location Pays et emplacement País y localidad	Service or function Service ou fonction Servicio o función	VHF voice Voix VHF Voz VHF	VHF data Données VHF Datos VHF	HF voice Voix HF Voz HF	HF data Données HF Datos HF	Satellite voice Voix satellite Voz por satélite	Satellite data Données satellite Datos por satélite	Mode S Modo S	Remarks Remarques Observaciones
1	2	3	4	5	6	7	8	9	10
SARF FORMOSA/Formosa	SMC APP-L TWR	1 (1) 1 (1) 1 (1)							
SASJ JUJUY/Gobernador Guzmán	APP-SR-1 TWR	1 (1) 1 (1)							
SAZM MAR DEL PLATA/ Brig. Gral. B. de la Colina	APP-SR-I TWR SMC ATIS	1 (1) 1 (1) 1 (1) 1 (1)							
SAMF MENDOZA	ACC-U GP	3 (1) 1 (1)	1 (06/06)	SAM-1 (3)					
SAME MENDOZA/EI Plumerillo	APP-SR-I TWR SMC ATIS	1 1 (2) 1 (1) 1 (1)							
SAZN NEUQUEN/Presidente Perón	APP TWR	1 1 (1)							
SARP POSADAS/Libertador Gral. D. José de San Martín	APP-L TWR	1 (1) 1 (1)							
SARR RESISTENCIA	ACC-U GP	3 (4) 1 (1)	1 (06/06)	SAM-1 (3)	X (06/06)				
SARE RESISTENCIA/ Resistencia	APP-SR-I TWR ATIS	1 (1) 1 (1) 1							Implementation by 2002 Mise en œuvre en 2002 Implantación prevista en 2002
SAWG RIO GALLEGOS/ Piloto Civil N. Fernández	APP-L TWR ATIS GP	1 (1) 1 (1) 1 (1) 1 (2)							
SAWE RIO GRANDE/ Rio Grande	APP TWR	1 1 (2)							
SAAR ROSARIO/Rosario	APP-L TWR ATIS	1 1 (2) 1							Implementation by 2002 Mise en œuvre en 2002 Implantación prevista en 2002
SASA SALTA/Salta	APP-L TWR GP	1 (1) 1 (1) 1 (1)							
SAZS SAN CARLOS DE	APP-SR-I	1							

Country and location Pays et emplacement País y localidad	Service or function Service ou fonction Servicio o función	VHF voice Voix VHF Voz VHF	VHF data Données VHF Datos VHF	HF voice Voix HF Voz HF	HF data Données HF Datos HF	Satellite voice Voix satellite Voz por satélite	Satellite data Données satellite Datos por satélite	Mode S Modo S	Remarks Remarques Observaciones
1	2	3	4	5	6	7	8	9	10
BARILOCHE/San Carlos de Bariloche	TWR ATIS	1 (1) 1 (1)							
SANT TUCUMAN/Tte. Benjamin Matienzo	APP-L TWR GP	1 (1) 1 (2) 1 (1)							
SAWH USHUAIA/Malvinas Argentinas	APP-L TWR GP	1 1 (1) 1 (1)							
<b>ARUBA (Netherlands)</b>									
TNCA ORANJESTAD/ Reina Beatriz, Aruba I.	APP-SR-L APP-L TWR SMC <u>D-ATIS</u>	1 (1) 1 (1) 1 (1) 1 (1) 1 (1)							
<b>BAHAMAS</b>									
MYBS ALICE TOWN/ South Bimini, Bimini I.	TWR	1							
MYSM COCKBURN TOWN/ San Salvador I.	TWR	1							
MYGF FREEPORT/Intl., Grand Bahama I.	APP-U APP-L TWR SMC	1 1 1 1							
MYEG GEORGETOWN/ Georgetown, Exuma Intl.	APP-L TWR	1 1							
MYEM GOVERNOR'S HARBOUR/ Governor's Harbour, Eleuthera I.	APP-L TWR	1 1							
MYNA NASSAU	ACC-U GP ACC-L	3 1 1							
MYNN NASSAU/Intl., New Providence I.	APP-I TWR SMC APP-SR-I <u>D-ATIS</u>	1 1 1 1 <u>1</u>							
MYEH NORTH ELEUTHERA/ New Providence I.	TWR	1 1							
MYLS STELLA MARIS/Long Island I.	TWR	1							
MYAT TREASURE CAY/ Treasure Cay, Abaco I.	TWR APP-L	1 1							
MYGW WEST END/West End, Grand Bahama I.	TWR	1							

Country and location Pays et emplacement País y localidad	Service or function Service ou fonction Servicio o función	VHF voice Voix VHF Voz VHF	VHF data Données VHF Datos VHF	HF voice Voix HF Voz HF	HF data Données HF Datos HF	Satellite voice Voix satellite Voz por satélite	Satellite data Données satellite Datos por satélite	Mode S Modo S	Remarks Remarques Observaciones
1	2	3	4	5	6	7	8	9	10
<b>BARBADOS</b>									
TBPB BRIDGETOWN/ Grantley Adams Intl.	APP-U APP-I TWR SMC APP-SR-U <u>D-ATIS</u>	1 5 1 1 1 <u>1</u>							
<b>BELIZE</b>									
MZBZ BELIZE/Intl.	APP-I APP-I TWR SMC <u>D-ATIS</u>	1 1 1 1 <u>1</u>							
<b>BOLIVIA</b>									
SLCB COCHABAMBA/Jorge Wilsterman	TWR APP-I SMC	1 (1) 2 (1) 1 (1)							
SLLP LA PAZ	ACC-U ACC-U GP ACC-L	1 1 (1)-ER 1 1 (1)	1 (06/06)	SAM-1 (3) SAM-2 (3)	X (06/06)				
SLLP LA PAZ/EI Alto Intl.	APP-I TWR SMC <u>ATIS</u>	3 1 (1) 1 (1) <u>±</u>							
SLVR SANTA CRUZ/Viru-Viru Intl.	APP-I TWR SMC <u>ATIS</u>	3 (1) 1 (1) 1 (1) <u>±</u>							
SLTJ TARIJA/Oriel Lea Plaza	APP-I TWR	1 (1) 1 (1)							
SLTR TRINIDAD/Tte. Av. Jorge Henrich Arauz	APP-I TWR SMC	2 (1) 1 (1) 1							
<b>BRAZIL</b>									
SB.. AMAZONICA	ACC-SR-U GP	24 (24) 1	2 (06/08)	SAM-2 (4)	X (06/08)				
SB.. ATLANTICA	ACC-U			SAM-2 (4) SAT-1 SAT-2	X (06/08)	X (06/08)	X (06/68)		
SBBE BELEM/Val de Cães Intl.	APP-SR-I TWR SMC	4 (4) 1 (1) 1 (1)							
SBCF BELO HORIZONTE/	APP-SR-I	4 (4)							

Country and location Pays et emplacement País y localidad	Service or function Service ou fonction Servicio o función	VHF voice Voix VHF Voz VHF	VHF data Données VHF Datos VHF	HF voice Voix HF Voz HF	HF data Données HF Datos HF	Satellite voice Voix satellite Voz por satélite	Satellite data Données satellite Datos por satélite	Mode S Modo S	Remarks Remarques Observaciones
1	2	3	4	5	6	7	8	9	10
Tancredo Neves Intl.	TWR SMC CLRD ATIS	1 (1) 1 (1) 1 (1) 1 (1)	1 (06/01)						
SBBS BRASILIA	ACC-SR-U	16 (16)	8 (06/05)	SAM-2 (4)	X (06/08)				
SBBR BRASILIA/Brasilia Intl.	APP-SR-I TWR SMC CLRD ATIS	4 (3) 1 (1) 1 (1) 1 (1) 1 (1)	1 (06/01)						
SBBV BOA VISTA/ Boa Vista Intl.	APP-I TWR SMC	1 (1) 2 (2) 1							
SBKP CAMPINAS/Viracopos Intl.	APP-SR-I TWR SMC	1 (1) 1 (1) 1							
SBCG CAMPO GRANDE/ Campo Grande Intl.	APP-SR-I TWR ATIS	1 (1) 1 (1) 1							
SBCR CORUMBA/ Corumba Intl.	AFIS	1 (1)							
SBCZ CRUZEIRO DO SUL/ Cruzeiro do Sul Intl.	AFIS	1 (1)							
SBCY CUIABA/Marechal Rondon Intl.	APP-SR-I TWR	1 (1) 1 (1)							
SBCW CURITIBA	ACC-SR-U	10 (10)	2 (06/05)	SAM-2 (4)	X (06/08)				
SBCT CURITIBA/ Afonso Pena Intl.	APP-SR-I TWR ATIS SMC CLRD	3 (3) 2 (2) 1 1 (1) 1 (1)							
SBFL FLORIANÓPOLIS/ Hercílio Luz Intl.	APP-SR-I TWR SMC	3 (3) 2 (2) 1							
SBFZ FORTALEZA/ Pinto Martins Intl.	APP-SR-I TWR SMC CLRD	2 (2) 1 (1) 1 (1) 1 (1)							
SBFI FOZ DO IGUAÇU/ Cataratas Intl.	APP-SR-I TWR	2 (2) 1 (1)							
SBMQ MACAPA/ Macapa Intl.	APP-I TWR	1 1							
SBEG MANAUS/Eduardo Gomes Intl.	APP-SR-I TWR SMC	4 (4) 1 (1) 1 (1)							
SBNT NATAL/Augusto Severo	APP-SR-I	4 (4)							

Country and location Pays et emplacement País y localidad	Service or function Service ou fonction Servicio o función	VHF voice Voix VHF Voz VHF	VHF data Données VHF Datos VHF	HF voice Voix HF Voz HF	HF data Données HF Datos HF	Satellite voice Voix satellite Voz por satélite	Satellite data Données satellite Datos por satélite	Mode S Modo S	Remarks Remarques Observaciones
1	2	3	4	5	6	7	8	9	10
Intl.	TWR SMC CLRD	2 (2) 1 (1) 1							
SBPP PONTA PORÃ/ Ponta Porã Intl.	AFIS	1 (1)							
SBPA PORTO ALEGRE/ Salgado Filho Intl	APP-SR-I TWR SMC CLRD ATIS	4 (4) 1 (1) 1 (1) 1 1							
SBRE RECIFE	ACC-SR-U GP	16 (16) 1	5 (06/08)	SAT-2 (4)	X (06/08)				
SBRF RECIFE/Guararapes Intl.	APP-SR-I TWR SMC ATIS CLRD	4 (4) 1 (1) 1 (1) 1 1							
SBGL RIO DE JANEIRO/ Galeão Antonio Carlos Jobim Intl.	APP-SR-I TWR SMC CLRD ATIS	6 (6) 2 (2) 1 (1) 1 (1) 1 (1)	1 (06/01)						
SBSV SALVADOR/Deputado Luis Eduardo Magalhães Intl.	APP-SR-I TWR SMC GP ATIS	4 (4) 1 (1) 1 (1) 1 1							
SBSN SANTAREM/ Santarem Intl.	APP-I TWR	2 (2) 1 (1)							
SBSL SÃO LUIS/Marechal Cunha Machado Intl.	APP-I TWR	1 (1) 1 (1)							
SBGR SÃO PAULO/ Guarulhos Intl.	TWR SMC CLRD ATIS	3 (3) 1 (1) 1 (1) 1 (1)	1 (06/01)						
SBTT TABATINGA/ Tabatinga Intl.	AFIS	1 (1)							
SBUG URUGUAIANA/ Rubem Berta Intl.	AFIS	1 (1)							
<b>CAPE VERDE</b>									
GVSC SAL I.	ACC-U ACC-L	2-ER 1		SAT-1 SAT-2					
<b>CAYMAN ISLANDS (United Kingdom)</b>									
MWCB CAYMAN BRAC/	TWR	1 (1)							

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1	2	3	4	5	6	7	8	9	10
Gerrard Smith Intl.	SMC	1							
MWCR GEORGETOWN/ Owen Roberts Intl.	APP-I TWR SMC <del>D</del> -ATIS	1 -1 1 1 (1)							
<b>CHILE</b>									
SCFA ANTOFAGASTA/ Cerro Moreno	APP-SR-I TWR SMC <del>ATIS</del> GP	2 (2) 1 (1) 1 (1) + 1 (1)-ER	2 (06/08)	SAM-1 (4)	X (06/08)	X (06/08)	X (06/08)		
SCAR ARICA/Chacalluta	APP-I TWR SMC	1 (1) 1 (1) 1 (1)							
SCIE CONCEPCION/ Carriel Sur	APP-I TWR SMC	1 (1) 1 (1) 1 (1)							
SCDA IQUIQUE/Gral. Diego Aracena	APP-SR-I TWR SMC GP	1 (1) 1 (1) 1 (1) 1(1)-ER							
SCTZ PUERTO MONTT <del>Tepual</del>	ACC-U ACC-U GP <del>APP SR-I</del>	2 (1) 1 (1)-ER 1 (1)-ER 2(1)	2 (06/08)	SAM-1 (4)	X (06/08)	X (06/08)	X (06/08)		
SCTE PUERTO MONTT/ <del>El Tepual</del>	TWR SMC <del>ATIS</del>	1 (1) 1 (1) +							
SCCZ PUNTA ARENAS	ACC-U GP-ER APP-SR-I	3 (2) 1 (2) 2 (1)	2 (06/08)	SAM-1 (3)	X (06/08)	X (06/08)	X (06/08)		
SCCI PUNTA ARENAS/ Pdte. C. Ibáñez del Campo	TWR SMC <del>ATIS</del>	1 (1) 1 (1) +							
SCEZ SANTIAGO	ACC-U GP APP-SR-I	4 (4)-ER 2 (2)-ER 4 (4)	2 (06/06)	SAM-1 (3)	X (06/08)	X (06/08)	X (06/08)		
SCEL SANTIAGO/ Arturo Merino Benitez	CLRD TWR SMC ATIS	1 (1) 2 (1) 2(1) 1 (1)	1 (06/08)						
SCTC TEMUCO/Manquehue	APP-L TWR SMC	1 (1) 1 (1) 1 (1)							
<b>COLOMBIA</b>									
SKEC BARRANQUILLA	ACC-U	2 (2)	2 (06/06)	CAR-A (2)	X (06/06)				

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1	2	3	4	5	6	7	8	9	10
	GP	1 (1)							
SKBQ BARRANQUILLA/ Ernesto Cortissoz	APP-SR-I TWR SMC ATIS CLRD	2 (2) 1 (1) 1 (1) 1 1	1 (06/01)						
SKED BOGOTA	ACC-U GP	5 (5) 1 (1)-ER	4 (06/06)	SAM-2 (2)	X (06/06)	X (06/06)			
SKCL CALI	ACC-SR-I GP	1 (1) 1 (1)		SAM-1	X (06/06)				
SKCL CALI/Alfonso Bonilla Aragón	APP-SR-I TWR SMC ATIS	1 (1) 1 (1) 1 (1) 1							
SKCG CARTAGENA/ Rafael Núñez	TWR	1 (1)							
SKCC CUCUTA/Camilo Daza	APP-I TWR	1 (1) 1 (1)							
SLLT LETICIA/Alfredo Vásquez Cobo	APP-SR-I TWR	1 (1) 1 (1)							
SKRG RIO NEGRO/ José María Córdova	APP-SR-I TWR SMC ATIS	1 (1) 1 (1) 1 (1) 1 (1)							
SKSP SAN ANDRES I./ Sesquicentenario	APP-SR-I APP-I TWR SMC	1 (1) 1 (1) 1 (1) 1							
SKBO SANTA FE DE BOGOTA/Eldorado	APP-SR-I TWR SMC ATIS CLRD	3 (3) 2 (2) 2 (2) 1 (1) 1 (1)	1 (06/01)						
<b>COSTA RICA</b>									
MROC ALAJUELA/ Juan Santamaría Intl.	APP-SR-I TWR SMC D-ATIS GP	2 (1) 1 (1) 1 (1) 1 (1) 1 (1)							
MRLB LIBERIA/Tomás Guardia Intl.	APP-I TWR SMC	1 (1) 1 (1) 1 (1)							
MRLM LIMON/Limón Intl.	AFIS	1 (1)							
MRPV PAVAS/Tobías Bolaños Intl.	TWR SMC	1 (1) 1 (1)							

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1	2	3	4	5	6	7	8	9	10
<b>CUBA</b>									
MUCM CAMAGUEY/ Ignacio Agramonte	APP-SR-L TWR	1 1 (1)							
MUCL CAYO LARGO DEL SUR/Viño Acuña	APP-L TWR	1 (1) 1 (1)							
MUCA CIEGO DE AVILA/ Máximo Gómez	APP-L TWR	1 1 (1)							
MUHA HABANA	ACC-SR-U ACC-SR-I GP-U	5 (4)-ER 3 (1)-ER 2 (1)	2 (06/06)	CAR-A (6)	X (06/06)				
MUHA HABANA/José Martí	APP-SR-L APP-SR-I TWR SMC <u>D-ATIS</u>	1 1 (1) 1 (1) 1 (1) 1 (1)							<u>2008</u>
MUHG HOLGUIN/Frank País	APP-SR-L TWR	1 1(1)							
MUCU SANTIAGO DE CUBA/ Antonio Maceo	APP-SR-I TWR SMC	1 (1) 1 (1) 1							
MUVR VARADERO/Juan Gualberto Gomez	APP-SR-L TWR SMC <u>D-ATIS</u>	1 1 (1) 1 <u>1</u>							<u>2008</u>
<b>DOMINICA</b>									
TDPB MELVILLE HALL/ Dominica	TWR	1 (1)							
TDPR ROSEAU/Canefield	TWR	1 (1)							
<b>DOMINICAN REPUBLIC</b>									
MDBH BARAHONA/ Maria Montes Intl.	TWR	1 (1)							
<u>MDCY EL CATEY/ El Catey Intl.</u>	<u>TWR</u> <u>APP</u> <u>SMC</u> <u>D-ATIS</u>	<u>2</u> <u>1</u> <u>1</u> <u>1</u>							
<u>MDHE HERRERA/ Herrera Intl.</u>	<u>TWR</u>	<u>1 (1)</u>							
<u>MDEH EL HIGUERO/ Dr. Joaquín Balaguer Intl.</u>	<u>TWR</u> <u>APP</u> <u>SMC</u>	<u>2</u> <u>1</u> <u>1</u>							
MDLR LA ROMANA/ La Romana Intl.	APP-L TWR	1 (1) 1 (1)							

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1	2	3	4	5	6	7	8	9	10
MDPP PUERTO PLATA/ Gregorio Luperon	APP-SR-I TWR SMC	1 (1) 1 (1) 1 (1)							
MDPC PUNTA CANA/Punta Cana Intl.	APP-L TWR	1 1 (1)							
MDST SANTIAGO/Cibao Santiago Intl.	APP-L TWR	1 1 (1)							
MDCS SANTO DOMINGO	ACC-U ACC-SR-U GP	4 1 (1) 1	1 (06/08)						
MDSD SANTO DOMINGO/ De las Américas Intl.	APP-SR-I TWR SMC D-ATIS CLRD	2 (1) 1 (1) 1 (1) 1 (1) 1							
<b>ECUADOR</b>									
SEGU GUAYAQUIL	ACC-U ACC-U GP	2 (2) 1-ER 1 (1)	<del>1 (06/08)</del>	SAM-1 (4)	<del>X (06/06)</del>	<del>X (06/06)</del>	<del>X (06/06)</del>		
SEGU GUAYAQUIL/ Simón Bolívar	APP-SR-I APP-I TWR SMC ATIS	1 (1) 2 (1) 1 (1) 1 (1) 1							
SELT LATACUNGA/Cotopaxi	APP-I TWR	1 (1) 1 (1)							
SEMT MANTA/Eloy Alfaro	APP-I TWR	1 (1) 1 (1)							
SEQU QUITO/Mcal. Sucre	APP-SR-I TWR SMC ATIS	1 (1) 1 (1) 1 (1) 1 (1)							
<b>EL SALVADOR</b>									
MSLP SAN SALVADOR/ El Salvador Intl.	APP-I APP-I APP-SR-I TWR SMC GP D-ATIS	1 1 1 (1) 1 (1) 1 (1) 1 (1) 1 (1)							
MSSS SAN SALVADOR/ Ilopango Intl.	APP-I TWR TWR SMC	1 (1) 1 (1) 1 (1) 1 (1)							
<b>FRENCH ANTILLES (France)</b>									

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1	2	3	4	5	6	7	8	9	10
TFFF FORT-DE-FRANCE Le Lamentin, Martinique	APP-U APP-I TWR APP-SR-I D-ATIS SMC	1 1 1 (1) 1 (1) 1 (1) 1 (1)							
TFFR POINTE-A-PITRE/ Le Raizet, Guadeloupe	APP-U APP-I TWR APP-SR-I D-ATIS SMC	1 2 1 (1) 1 (1) 1 (1) 1							
TFFJ SAINT-BARTHELEMY/ Saint-Barthelemy	AFIS	1							
TFFG SAINT MARTIN/ Grand Case, Guadeloupe	AFIS	1							
<b>FRENCH GUIANA (France)</b>									
SOOO CAYENNE	ACC-U GP	2 (1) 1		CAR-A (1) SAM-2 (1) SAT-2 (1)					
SOCA CAYENNE/ Rochambeau	APP-SR-I TWR SMC ATIS	1 (1) 1 (1) 1 1							
<b>GRENADA</b>									
TGPZ LAURISTON/ Carriacou	TWR	1							
TGPY SAINT GEORGES/ Point Salines	APP-L TWR SMC	1 (1) 1 (1) 1 (1)							
<b>GUATEMALA</b>									
MGFL FLORES/Flores	APP-L TWR	1 1							
MGGT GUATEMALA/ La Aurora	APP-SR-I TWR SMC D-ATIS GP	1 1 1 1 1							
MGPB PUERTO BARRIOS/ Puerto Barrios	TWR	1 (1)							
MGSJ SAN JOSE/San José	TWR	1 (1)							
<b>GUYANA</b>									
SYGC GEORGETOWN	ACC-U ACC-U	1(1) 1-ER	1 (06/08)	CAR-A SAM-2	X (06/08)				

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1	2	3	4	5	6	7	8	9	10
SYCJ TIMEHRI/ Cheddi Jagan Intl.	GPS ACC-L	1 (1) 1							
<b>HAITI</b>									
MTCH CAP HAITIEN/Intl.	APP-L TWR SMC	1 1 (1) 1 (1)							
MTEG PORT-AU-PRINCE	ACC-SR-U GP	<del>4</del> 2(1) 1	1 (06/08)						
MTPP PORT-AU-PRINCE/Intl.	APP-SR-I APP-I TWR SMC <u>D-ATIS</u>	1 1 (1) 1 (1) 1 <u>1</u>							
<b>HONDURAS</b>									
MHLC LA CEIBA/ Golosón Intl.	APP-L TWR SMC	1 1 (1) 1							
MHRO COXEN HOLE/Juan Manuel Gálvez Intl.	TWR SMC	1 (1) 1 (1)							
MHLM SAN PEDRO SULA/ La Mesa Intl.	APP-I TWR SMC GP <u>D-ATIS</u>	1 (1) 1 (1) 1 (1) 1 (1) 1 (1)							
MHTG TEGUCIGALPA (CENAMER)	ACC-SR-U GP	7 (4) 1	3 (06/08)	CAR-A (6) SAM-1 (2)	X (06/08)	X (06/08)	X (06/08)		
MHTG TEGUCIGALPA/ Toncontin	APP-I TWR SMC GP <u>D-ATIS</u>	1 (1) 1 (1) 1 (1) 1 (1) 1 (1)							
<b>JAMAICA</b>									
MKJK KINGSTON	ACC-SR-U ACC-U GP	1 5 (2) 1	2 (06/068)		X (06/068)	X (06/068)	X (06/068)		
MKJP KINGSTON/Norman Manley Intl.	APP-SR-1 APP-I TWR SMC <u>D-ATIS</u>	1 1 (1) 1 1 (1) <u>1</u>							
MKJS MONTEGO BAY/ Sangster Intl.	APP-SR-I APP-I	1 1							

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1	2	3	4	5	6	7	8	9	10
	TWR	1 (1)							
	SMC	1 (1)							
	<u>D-ATIS</u>	1							
<b>MEXICO</b>									
MMAA ACAPULCO/Gral. Juan Alvarez Intl.	APP-SR-I	1 (1)							
	APP-SR-L	1 (1)							
	<u>D-ATIS</u>	1							
	SMC	1							
	TWR	1 (1)							
	GP	1							
MMBT BAHIAS DE HUATULCO/ Bahías de Huatulco	TWR	1 (1)							
MMCP CAMPECHE/Ignacio Alberto Acuña Ongay Intl.	TWR	1 (1)							
MMUN CANCUN/Cancún Intl.	APP-L	1 (1)							
	APP-I	1 (1)							
	SMC	1							
	TWR	1 (1)							
	<u>D-ATIS</u>	1							
	CLRD	1							
	GP	1							
MMCM CHETUMAL/ Chetumal Intl.	TWR	1 (1)							
MMCU CHIHUAHUA/Gral. Roberto Fierro Villalobos Intl.	APP-I	1 (1)							
	TWR	1 (1)							
	<u>D-ATIS</u>	1							
	GP	1							
MMMC CIUDAD ACUÑA/Intl.	AFIS	1 (1)							
MMCS CIUDAD JUAREZ/ Abraham González Intl.	APP-I	1							
	TWR	1 (1)							
MMCZ COZUMEL/Cozumel/ Intl.	TWR	1 (1)							
MMCL CULIACAN/Fidel Bachigualato	APP-I	1 (1)							
	TWR	1 (1)							
	GP	1							
MMDO DURANGO/Pte. Guadalupe Victoria, Intl.	TWR	1 (1)							
MMGL GUADALAJARA/ Don Miguel Hidalgo y Costilla Intl.	APP-SR-I	1 (1)							
	APP-SR-L	1 (1)							
	<u>D-ATIS</u>	1 (1)							
	SMC	1 (1)							
	TWR	1 (1)							
	CLRD	1							
	GP	1							
MMGM GUAYMAS/Gral. José	TWR	1 (1)							

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1	2	3	4	5	6	7	8	9	10
María Yáñez Intl.									
MMHO HERMOSILLO/Gral. Ignacio Pesqueira García Intl.	APP-I D-ATIS TWR SMC	1 (1) 1 (1) 1 (1) 1							
MMZH IXTAPA- ZIHUATANEJO/ Ixtapa-Zihuatanejo Intl.	APP-I TWR	1 (1) 1 (1)							
MMLP LA PAZ/Gral. Manuel Márquez de León Intl.	APP-I TWR	1 (1) 1 (1)							
MMLO LEON/Guanajuato	APP-L TWR	1 1 (1)							
MMLT LORETO/Loreto Intl.	TWR	1 (1)							
MMZO MANZANILLO/Playa de Oro Intl.	APP-L TWR	1 1 (1)							
MMMA MATAMOROS/Gral. Servando Canales	APP-L TWR	1 1 (1)							
MMMZ MAZATLAN/Gral. Rafael Buelna Intl.	ACC-SR-L ACC-SR-U APP-I SMC TWR D-ATIS GP	4 4 (5) 1 (1) 1 1 (1) 1 (1) 1	5 (06/08)		X (06/08)	X (06/08)	X (06/08)		
MMMO MERIDA/Lic. Manuel Crescencio Rejón Intl.	ACC-SR-L ACC-SR-U APP-I D-ATIS GP TWR	3 4 (4) 1 (1) 1 1 (1) 1 (1)	3 (06/08)	CAR-A (5)	X (06/08)	X (06/08)	X (06/08)		
MMML MEXICALI/Gral. Rodolfo Sánchez Taboada Intl.	APP-I TWR	1 1 (1)							
MMM X MEXICO/Lic. Benito Juárez Intl.	ACC-SR-L ACC-SR-U APP-SR-I APP-SR-L D-ATIS GP SMC TWR CLRD	5 5 (7) 1 (1) 1 (1) 1 (1) 1 (1) 1 (1) 1 (1) 1 (1)	3 (06/08)		X (06/08)	X (06/08)	X (06/08)		
MMAN MONTERREY/ Aeropuerto Del Norte Intl.	TWR	1 (1)							
MMMY MONTERREY/Gral. Mariano Escobedo Intl.	ACC-SR-L ACC-SR-U APP-SR-I	2 2 (3) 1 (1)	3 (06/08)		X (06/08)	X (06/08)	X (06/08)		

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1	2	3	4	5	6	7	8	9	10
	APP-SR-L <u>D</u> -ATIS GP SMC TWR	1 (1) 1 (1) 1 1 (1) 1 (1)							
MMMM MORELIA/ Gral. Francisco Mujica Intl.	APP-L TWR	1 1 (1)							
MMNG NOGALES/Nogales Intl.	AFIS	1							
MMNL NUEVO LAREDO/ Quetzalcoatl Intl.	APP-L TWR	1 1 (1)							
MMPG PIEDRAS NEGRAS/Intl.	<u>D</u> -ATIS	1 (1)							
MMPR PUERTO VALLARTA/ Lic. Gustavo Díaz Ordaz Intl.	APP-SR-I APP-SR-L <u>D</u> -ATIS SMC TWR	1 (1) 1 (1) 1 1 1 (1)							
MMRX REYNOSA/Gral. Lucio Blanco Intl.	APP-L TWR	1 1 (1)							
MMSF SAN FELIPE/ San Felipe Intl.	AFIS	1 (1)							
MMSD SAN JOSE DEL CABO/San José del Cabo Intl.	APP-I TWR GP	1 1 (1) 1							
MMTM TAMPICO/Gral. Francisco Javier Mina Intl.	APP-I TWR GP	1 (1) 1 (1) 1							
MMTP TAPACHULA/ Tapachula Intl.	TWR	1 (1)							
MMTJ TIJUANA/ Gral. Abelardo L. Rodríguez Intl.	APP-SR-I APP-SR-L <u>D</u> -ATIS GP TWR SMC	1 (1) 1 (1) 1 (1) 1 (1) 1 (1) 1							
MMTO/TOLUCA/Lic. Adolfo Lopez Mateos	TWR GP	1 (1) 1							
MMTC TORREON/Torreón Intl.	APP-L TWR	1 (1) 1 (1)							
MMVR VERACRUZ/Gral. Heriberto Jara Intl.	APP-L TWR	1 (1) 1 (1)							
MMVA VILLAHERMOSA/ C.P.A. Carlos Roviroza	APP-L TWR	1 1 (1)							
MMZC ZACATECAS/Gral. Leobardo Ruíz Intl.	APP-I TWR	1 1 (1)							

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1	2	3	4	5	6	7	8	9	10
<b>MONTSERAT (United Kingdom)</b>									
TRPM PLYMOUTH/ Blackburne, Montserrat I.	APP-L TWR	1 1							
<b>NETHERLANDS ANTILLES (Netherlands)</b>									
TNCF CURACAO	ACC-U GP	3 (2)-ER 1 (1)	2 (06/08)		X (06/08)	X (06/08)	X (06/08)		
TNCB KRALENDIJK/ Flamingo, Bonaire I.	APP-I TWR	1 1 (1)							
TNCE ORANJESTAD/ F.D. Rossevelt, St. Eustacius I.	TWR	1							
TNCM PHILIPSBURG/Prinses Juliana, St. Maarten I.	APP-I TWR SMC	1 1 1							
TNCC WILLEMSTAD/Hato, Curacao I.	APP-I TWR SMC APP-SR-I <b>D-ATIS</b>	1 1 (1) 1 1 (1) <b>1</b>							
<b>NICARAGUA</b>									
MNMG MANAGUA/Augusto César Sandino Intl.	APP-I TWR SMC GP <b>D-ATIS</b>	1 (1) 1 (1) 1 (1) 1 (1) <b>1</b>							
MNPC PUERTO CABEZAS/ Puerto Cabezas	TWR	1							
<b>PANAMA</b>									
MPBO BOCAS DEL TORO/ Bocas del Toro	AFIS	1 (1)							
MMPCH CHANGUINOLA/ Cap. Manuel Niño	TWR	1 (1)							
MPDA DAVID/Enrique Malek	TWR SMC	1 (1) 1 (1)							
MPMG PANAMA/Marcos A. Gelabert	TWR SMC CLRD	1 (1) 1 (1) 1 (1)							
MPZL PANAMA	ACC-U ACC-SR-U APP-SR-I GP	2 (1) 1 (1) 3 (3) 1 (1)	1 (06/08)	CAR-A (3) SAM-1 (2)	X (06/08)	X (06/08)	X (06/08)		
MPTO PANAMA/Tocumen	TWR	1 (1)							

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1	2	3	4	5	6	7	8	9	10
	SMC ATIS-D CLRD	1 (1) 1 1							
<b>PARAGUAY</b>									
SGFA ASUNCION	ACC-U ACC-U GP	1 (1) 1 (1)-ER 1 (1)	1 (06/08)	SAM-1 (3) SAM-2 (3)	X (06/08)				
SGAS ASUNCION/ Sívio Pettrossi	APP-SR-I APP-I TWR SMC	1 (1) 2 (2) 1 (1) 1 (1)							
SGES CIUDAD DEL ESTE/ Guarani	APP-SR-I TWR	1 (1) 1 (1)							
<b>PERU</b>									
SPQU AREQUIPA/ Rodríguez Ballón Intl.	APP-SR-U TWR	1 (1) 1 (1)							
SPHI CHICLAYO/ Cap. José Quíñones Gonzáles	APP-SR-I TWR	1 (1) 1 (1)							
SPZO CUZCO/Velazco Astete	APP-SR-U TWR ATIS	1 1 (1) 1 (1)							
SPQT IQUITOS/Cnel. FAP Francisco Secada Vignetta	APP-SR-I TWR	1 (1) 1 (1)							
SPIM LIMA	ACC-SR-U GP	3 (3)-ER 1 (1)	2 (06/06)	SAM-1 (2)	X (06/06)	X (06/06)	X (06/06)		
SPIM LIMA-CALLAO/Jorge Chávez Intl.	APP-SR-I APP-SR-U TWR SMC CLRD ATIS	1 (1) 2 1 (1) 1 (1) 1 (1) 1 (1)	1 (06/01)						
SPSO PISCO/Pisco	APP-I TWR SMC	1 1 (1) 1 (1)							
SPTN TACNA/Cnel. FAP Carlos Ciriani Santa Rosa	APP-I TWR	1 1 (1)							
SPRU TRUJILLO/Cap. Carlos Martínez de Pinillos	APP-I TWR	1 (1) 1 (1)							
<b>PUERTO RICO (United States)</b>									
TJBQ AGUADILLA/Rafael Hernández Intl.	TWR	1 (1)							
TJFA FAJARDO/Diego Jiménez Torres	TWR	1 (1)							

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1	2	3	4	5	6	7	8	9	10
TJMZ MAYAGUEZ/Mayaguez	SMC TWR	1 1							
TJPS PONCE/Mercedita	TWR SMC APP-L	1 1							
TJZS SAN JUAN	ACC-U GP-U	11	4 (06/08)	CAR-A (6) CAR-B (1) NAT-A (5)	X (06/08)	X (06/08)	X (06/08)		
TJSJ SAN JUAN, PUERTO RICO/Luis Muñoz Marin Intl.	D-ATIS TWR SMC APP-SR-I	1 (1) 2 (1) 1 (1) 2 (2)							
TJVQ VIEQUES/Antonio Rivera	TWR	1 (1)							
<b>SAINT KITTS AND NEVIS</b>									
TKPK BASSETERRE/Golden Rock, Saint Kitts I.	APP-L TWR	1 (1) 1 (1)							
TKPN CHARLESTOWN/Newcastle, Nevis I.	TWR	1							
<b>SAINT LUCIA</b>									
TLPC CASTRIES/Vigie	TWR SMC	1 (1) 1 (1)							
TLPL VIEUX-FORT/Hewanorra Intl.	APP-L TWR SMC	1 (1) 1 (1) 1 (1)							
<b>SAINT VINCENT AND THE GRENADINES</b>									
TVSV BEQUIA/J. F. Mitchel	TWR	1 (1)							
TVSC CANOUAN/Canouan	TWR	1 (1)							
TVSV KINGSTOWNE/E.T. Joshua	APP-L TWR	1 (1) 1 (1)							
TVSM MUSTIQUE/Mustique	TWR	1 (1)							
TVSU UNION ISLAND/Union Island	TWR	1							
<b>SENEGAL</b>									
GOOO DAKAR	ACC-U	1 (1)-ER		SAT-1 SAT-2	X (06/08)	X (06/08)	X (06/08)		
<b>SURINAME</b>									
SMNI NEW NICKERIE/	TWR	1 (1)							

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1	2	3	4	5	6	7	8	9	10
Maj. Fernandes	SMC	1							
SMPM PARAMARIBO	ACC-U GP	1 (1)-ER 1							
SMZO PARAMARIBO/ Zorg en Hoop	TWR SMC	1 (1) 1 (1)							
SMJP ZANDERY/Johan A. Pengel	APP-I TWR SMC	1 (1) 1 (1) 1 (1)							
<b>TRINIDAD AND TOBAGO</b>									
TTZP PIARCO	ACC-SR-U ACC-U GP	3 4 (2) 1 (1)	2 (06/08)	CAR-A (3) CAR-B (1) SAM-2 (2)	X (06/08)	X (06/08)	X (06/08)		
TTPP PORT OF SPAIN/ Piarco Intl., Trinidad I.	APP-I APP-SR-I TWR SMC D-ATIS	1 2 (1) 1 (1) 1 (1) 1 (1)							
TTCP SCARBOROUGH/ Crown Point, Tobago I.	APP-I TWR SMC	1 (1) 1 (1) 1 (1)							
<b>TURKS AND CAICOS ISLANDS (United Kingdom)</b>									
MBGT GRAND TURK/ Grand Turk Intl.	APP-L TWR	1 1 (1)							
MBPV PROVIDENCIALES/ Intl.	APP-L TWR	1 (1) 1 (1)							
MBSC SOUTH CAICOS/Intl.	APP-L TWR	1 1 (1)							
<b>UNITED STATES</b>									
KZNY NEW YORK	GP-U	1-ER	1 (06/08)	CAR-A CAR-B	X (06/08)	X (06/08)	X (06/08)		
<b>URUGUAY</b>									
SUCA COLONIA/ Departamental de Colonia	TWR	1 (1)							
SULS MALDONADO C/C Carlos A. Curbelo Intl Laguna del Sauce	TWR SMC ATIS	1 (1) 1 1							
SUAA MONTEVIDEO/Angel S. Adami Intl.	TWR	1 (1)							
SUEO MONTEVIDEO	ACC-U	3 (2)	1 (06/05)	SAM-1 (3) SAM-2 (5)	X (06/08)	X (06/08)	X (06/08)		

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1	2	3	4	5	6	7	8	9	10
				SAT-X*					*Frequency to be designated *Fréquence à déterminer *Frecuencia por designar
SUMU MONTEVIDEO/ Carrasco Intl. Gral. Cesareo Berisso	APP-SR-I APP-I  SMC TWR ATIS	1 (1) 1 (1)  1 (1) 1 (1) 1							
SURV RIVERA/Cerro Chapeau Intl.	TWR	1 (1)							
SUSO SALTO/Intl. Nueva Hesperides	TWR	1 (1)							
<b>VENEZUELA</b>									
SVBC BARCELONA/Gral. José Antonio Anzoátegui Intl.	APP-SR-I TWR SMC ATIS	2 (2) 1 (1) 1 (1) 1 (1)							
SVZM MAIQUETIA	ACC-SR-U GP	5 (6) 1 (2)	3 (06/08)	CAR-A (4) SAM-2 (3)	X (06/08)	X (06/08)	X (06/08)		
SVMI CARACAS/Maiquetia, Simón Bolívar	APP-SR-L TWR SMC ATIS CLRD	2 (2) 2 (2) 2 (2) 1 (1) 1	1 (06/01)						
SVMC MARACAIBO/ La Chinita Intl.	APP-SR-I TWR SMC ATIS GP	2 (2) 1 (1) 1 (1) 1 (1) 1 (1)							
SVMG MARGARITA/Intl. Del Caribe, General Santiago Marino	APP-SR-I TWR SMC ATIS	1 (1) 1 (1) 1 (1) 1 (1)							
SVJC PARAGUANA/Josefa Camejo	APP TWR (1)								
SVSA SAN ANTONIO DEL TACHIRA/San Antonio del Tachira	APP TWR (1)								
SVVA VALENCIA/Zim Valencia	APP TWR	1 (1)							
<b>VIRGIN ISLANDS (United Kingdom)</b>									

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1	2	3	4	5	6	7	8	9	10
TUPJ ROADTOWN/ Beef Island	APP-L TWR	1 1 (1)							
TUPW VIRGIN GORDA/ Virgin Gorda	TWR	1							
<b>VIRGIN ISLANDS (United States)</b>									
TISX SAINT CROIX/Henry E. Rohlsen, St. Croix	APP-I TWR SMC	1 (1) 1 (1) 1 (1)							
TIST SAINT THOMAS/ Cyril E. King	APP-I TWR SMC D-ATIS	1 (1) 1 (1) 1 (1) 1 (1)							