



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Amendments to the eANP

TABLE ATM II-CARSAM-1- CAR/SAM REGIONS ATS ROUTES

Eddian Méndez

ICAO NACC ATM/SAR Regional Officer

Mexico City/April 2019





ICAO SAFETY

NO COUNTRY LEFT BEHIND



CAR/SAM AIR NAVIGATION PLAN

- ✈ On 18 June 2014, the ICAO Council decided that the regional air navigation plans (ANPs) should be published in three volumes.
- ✈ ANP Volume I contains stable plan elements whose amendment necessitates approval by the Council such as the assignment of responsibilities to States for the provision of aerodrome and air navigation facilities and services in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300); and the current to medium term mandatory regional requirements related to aerodrome and air navigation facilities and services to be implemented by States in accordance with regional air navigation agreements and requirements specific to the region which are not covered in the ICAO Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS). The material to be included in Volume I should minimise the requirement for frequent amendment. The following is a non-exhaustive list of such elements:
 - Flight Information Regions (FIR) boundaries (Table and Charts);
 - Search and Rescue Regions (SRR) boundaries (Table and Charts);
 - Volcanic Ash Advisory Centres (VAAC);
 - Tropical Cyclone Advisory Centres (TCAC); and
 - Volcano Observatories (VO).



ICAO SAFETY

NO COUNTRY LEFT BEHIND



CAR/SAM AIR NAVIGATION PLAN

✈ ANP Volume II contains dynamic plan elements material related to the assignment of responsibilities to States for the provision of aerodrome and air navigation facilities and services and the current to medium term mandatory regional requirements related to aerodrome and air navigation facilities and services to be implemented by States in accordance with regional air navigation agreements involving the relevant PIRG. The amendment of these elements does not require approval by the Council. The following is a non-exhaustive list of such elements:

- Major traffic flows;
- ATS route network;
- Meteorological Watch Offices (MWO);
- Secondary Surveillance Radar (SSR) codes;
- Five-letter name-codes; and
- VOLMET Broadcasts.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Procedure for amendment of Volume II

- ✈ Amendments of Volume II of the regional plan should be effected on the basis of an adequately documented proposal submitted by a State (or a group of States) or the relevant PIRG to the Secretary General, through the Regional Office accredited to that State.
- ✈ The proposal should include the facts that lead to the conclusion that the amendment is necessary.
- ✈ Such amendments may include additions, modifications or deletions to Volume II of the regional plan. (This procedure does not preclude a State having previous consultation with other States before submitting an amendment proposal to the Regional Office.)



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Information requirements for amendment proposals for Regional Plans

- ✈ The following minimum information should be given to States in respect of each proposal that is circulated to them for comments:
 - a) Plan (a reference to the air navigation plan document should be given);
 - b) Proposed amendment;
 - c) Originated by;
 - d) Originator's reason for amendment;
 - e) Intended date of implementation;
 - f) Proposal circulated to the following States and organizations; and
 - g) Secretariat comments.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



CAR/SAM AIR NAVIGATION PLAN VOLUME II

- ✈ **PART IV — Air Traffic Management (ATM) IV-1 -**
 - General Regional Requirements
 - Specific Regional Requirements
- ✈ **Table ATM II-CARSAM-1- CAR/SAM Regions ATS Routes**



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



CAR/SAM AIR NAVIGATION PLAN VOLUME II

Page IV-4

TABLE ATM II-CARSAM-1- CAR/SAM REGIONS ATS ROUTES

EXPLANATION OF THE TABLE

Column	
1	Designator of ATS route. Left-hand side of page lists lower ATS routes, right-hand side of page lists upper ATS routes.
2	Significant points defining the ATS routes. Each significant point is identified by a navigation facility name or a five-letter name-code. The significant points of each ATS route are those which identify route ends, FIR boundaries or an equivalent point, are 300 NM or more from another significant point, indicate a heading change of 30° or more, and other points considered necessary to identify the route. Locations shown in parentheses indicate significant points outside the CAR/SAM regions.

Note 1 – Indicates route or route-segment not implemented.

Note 2 – Indicates route or route-segment published by the State with a designator that does not comply with Annex 11



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



CAR/SAM AIR NAVIGATION PLAN VOLUME II

Page IV-4

TABLE ATM II-CARSAM-1- CAR/SAM REGIONS ATS ROUTES

EXPLANATION OF THE TABLE

Column	
1	Designator of ATS route. Left-hand side of page lists lower ATS routes, right-hand side of page lists upper ATS routes.
2	Significant points defining the ATS routes. Each significant point is identified by a navigation facility name or a five-letter name-code. The significant points of each ATS route are those which identify route ends, FIR boundaries or an equivalent point, are 300 NM or more from another significant point, indicate a heading change of 30° or more, and other points considered necessary to identify the route. Locations shown in parentheses indicate significant points outside the CAR/SAM regions.

Note 1 – Indicates route or route-segment not implemented.

Note 2 – Indicates route or route-segment published by the State with a designator that does not comply with Annex 11



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



ATS routes — Lower airspace Routes ATS — Espace aérien inférieur Rutas ATS — Espacio aéreo inferior	ATS routes — Upper airspace Routes ATS — Espace aérien supérieur Rutas ATS — Espacio aéreo superior
A300 HAVANA 053514.00N 0614507.20W GUAYANA 081735.80N 0624510.80W MATURIN 094436.40N 0630911.40W MARGARITA 105449.40N 0635718.40W KIKER 150550.00N 0651745.00W DORADO LENNT A301 VIRU VIRU 173745 — 063082W TRINIDAD 144757S — 0645617W VILUX 102825 — 067322W RIO BRANCO 09 52 56S 067 54.32W LETICIA 04 11 42 S 069 56 26 W S. JOSE DE GUAVARE 02 31 54 N 072 38 25 W BARRANCA BERMELJA 07 01 43 N 073 48 20 W DAGAN 07 59 09 N 074 04 11 W BARRANQUILLA 10 47 43 N 074 51 37 W OTAMO 15 00 00 N 075 59 00 W MANLEY TOTON AVILA URSUS BIMINI ANAME A304 JULIACA 152805S 0700904W ELAKO 155538S 0691618W	UA300 See Note/Voir Note/Véase Nota 2* GUAYANA 081735.80N 0624510.80W MATURIN 094436.40N 0630911.40W MARGARITA 105449.40N 0635718.40W KIKER 150550.00N 0651745.00W DORADO LENNT *From/A partir de /A partir de KIKER UA301 See Note/Voir Note/Véase Nota 2* OTAMO 15 00 00 N 075 59 00 W MANLEY TOTON AVILA URSUS BIMINI ANAME *Between/Entre URSUS/BIMINI UA304 LIMA 120015 0770722W ASIA 124038S 0763623W

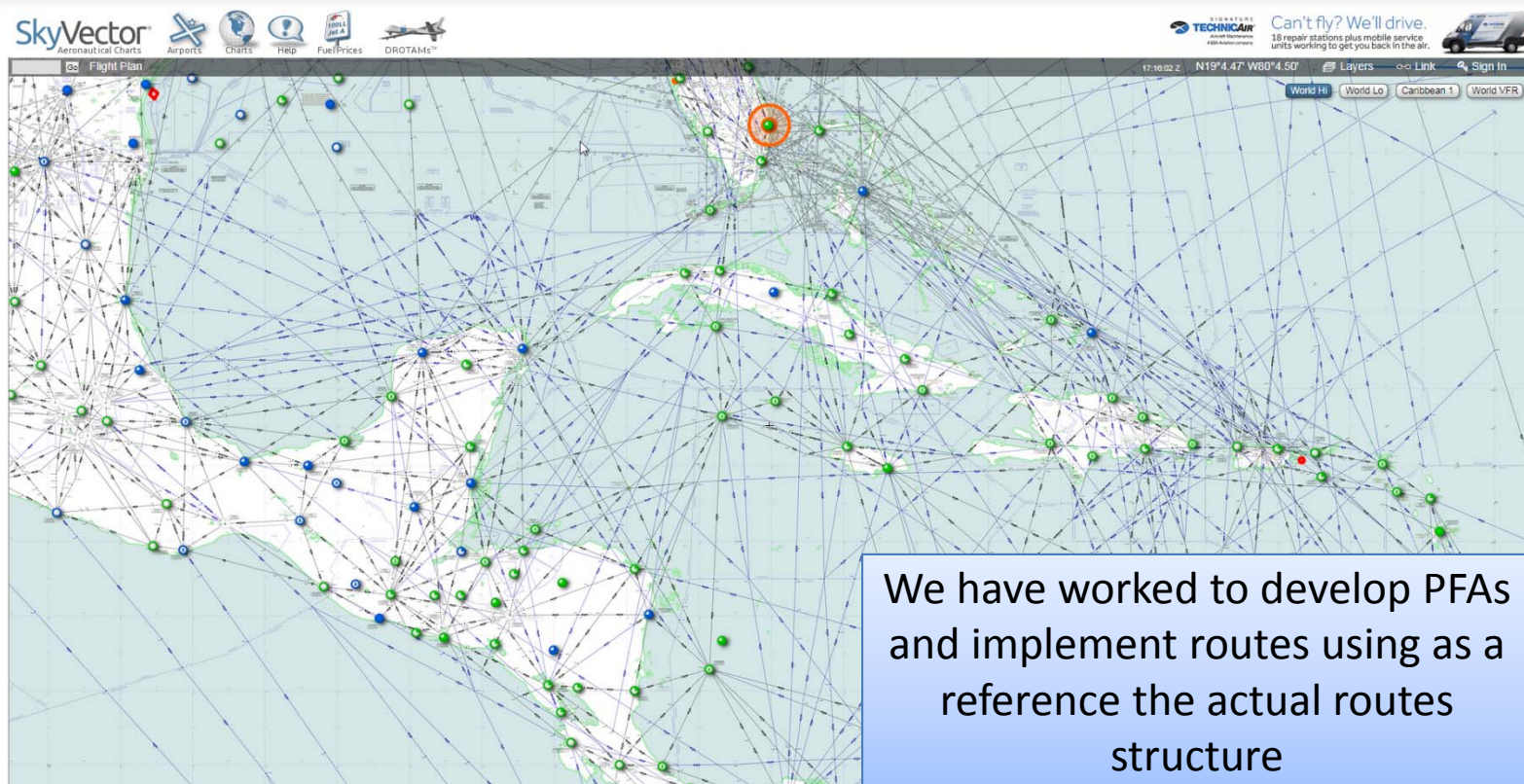
ATS routes — Lower airspace Routes ATS — Espace aérien inférieur Rutas ATS — Espacio aéreo inferior	ATS routes — Upper airspace Routes ATS — Espace aérien supérieur Rutas ATS — Espacio aéreo superior
L341 TANA GONS SANGSTER	UL337 PARCO (POC) VORDME VUDAL 122112.00N 0632428.00W ATMAJUR 153232.00N 0663006.00W NEBON OSDU BOOLO GREAT INAGUA (ZIN) NOB BIMINI (ZBV) VORDME (MAMI) UL340 SOUR 22 45.27S 044 13.08W ALDEA 22 48.77S 042 08.72W LODOK 22 46.19S 041 35.45W EKALO 22 26.03S 038 08.88W (LUNGA) UL341 TANA GONS SANGSTER UL344 LIMA 120015 0770722W SALINAS 115115S 073345W AMERO 03400S 064600W ARTON 012500N 067280W VODR

ATS routes — Lower airspace Routes ATS — Espace aérien inférieur Rutas ATS — Espacio aéreo inferior	ATS routes — Upper airspace Routes ATS — Espace aérien supérieur Rutas ATS — Espacio aéreo superior
JEFFO GTK SEKAR KOLSU KIBAL MOGAM SUTEM VITOB BEROK L451 OLDEY JANS LI DO LETON JORO SKYLE CEPGA DUNED LERUG MYSTR ELMUC FRATT SLUJO PAM BLOPO ANU L452 OWWA	



ICAO SAFETY

NO COUNTRY LEFT BEHIND





ICAO

SAFETY

NO COUNTRY LEFT BEHIND





PROPOSAL FOR AMENDMENT OF THE CARIBBEAN AND SOUTH AMERICAN REGIONS – AIR
NAVIGATION PLAN, VOLUME II, E-ANP (DOC 8733)
(SERIAL No. NACC 17/01- ATM)

APPENDIX B – AMEND ATS ROUTES

UL212		
SIGNIFICANT POINT PUNTO SIGNIFICATIVO	LATITUDE LATITUD	LONGITUDE LONGITUD
NOSAT ^[odfm1]	21° 57' 50 ⁴⁹ N	085° 58' 54 ⁵² W
LIBAS	21° 52' 02" N	084° 59' 32" W
NUKEG	21° 51' 33" N	084° 30' 01" W
UNGNDB	21° 45' 31" N	082° 52' 41" W
MINELA ^[odfm2]	21° 42' 50" N	082° 54' 44" W
TANDE ^[odfm3]	21° 41' 03" N	082° 05' 57" W
SOSINANTAB	21° 38' 10" N	081° 56' 53" W
UCL/VOR ^[odfm4]	21° 36' 18" N	081° 31' 58" W
PERLA	21° 34' 50" N	080° 49' 50" W
KOTAX ^[odfm5]	21° 30' 20" N	080° 54' 23" W
UCMVOR	21° 26' 15" N	077° 48' 03" W
YOYIS OYISA ^[odfm6]	21° 16' 06" N	079° 10' 23" W
CHUTO ^[odfm7]	21° 12' 00" N	078° 54' 30" W
UNIKU ^[odfm8]	21° 07' 57" N	078° 28' 15" W
DAFER DAXES ^[odfm9]	20° 55' 26" N	077° 07' 05" W
UHG/VOR ^[odfm10]	20° 47' 53" N	076° 18' 11" W
MIUS ^[odfm11]	20° 46' 22" N	076° 12' 50" W
TADAS ^[odfm12]	20° 23' 58" N	074° 53' 50" W
URLAM	19° 57' 55" N 073° 22' 18" W	073° 22' 18" W

L212

NOSAT 215749N 0855852W

UL212

NOSAT 215749N 0855852W

CAR/SAM ANP, Volume II Part IV (ATM)

June 2017

Page IV-47

ATS routes — Lower airspace	ATS routes — Upper airspace
Routes ATS — Espace aérien inférieur	Routes ATS — Espace aérien supérieur
Rutas ATS — Espacio aéreo inferior	Rutas ATS — Espacio aéreo superior
LITGU 215356N 0845449W	LITGU 215356N 0845449W
UNGNDB 214521N 0825241W	UNGNDB 214521N 0825241W
UCL/VOR 213618N 0813158W	UCL/VOR 213618N 0813158W
PERLA 213450N 0804959W	PERLA 213450N 0804959W
UCMVOR 212615N 0774803W	UCMVOR 212615N 0774803W
UHG/VOR 204753N 0761811W	UHG/VOR 204753N 0761811W
HOLGUIN	HOLGUIN
URLAM	URLAM
SINGA	SINGA
ONPAD	ONPAD
KODIX	KODIX



UM328		
SIGNIFICANT POINT PUNTO SIGNIFICATIVO	LATITUDE LATITUD	LONGITUDE LONGITUD
SELEK	20° 05' 41" N	082° 24' 55" W
UCLVOR	21° 36' 18" N	081° 31' 58" W
SOLOS [odfm16]	22° 16' 00" N	081° 16' 13" W
LUIISO [odfm17]	22° 33' 20" N	081° 00' 18" W
ALILU	23° 00' 47" N	080° 58' 44" W
ORNEG [odfm18]	24° 00' 00" N	080° 58' 43" W

UM330		
SIGNIFICANT POINT PUNTO SIGNIFICATIVO	LATITUDE LATITUD	LONGITUDE LONGITUD
KEFER [odfm19]	23 46.2' N	077 02.6' W
ENAMO	23°34'14"N	077°22'14"W
BOCHO [odfm20]	22 26' 17" N	077 12' 20" W
YAPOB [odfm21]	22 26' 54" N	078 01' 00" W
UCLVOR	22°26'02"N	078°48'42"W
UCLVOR	22°00'54"N	078°48'52"W
REGLANELD [odfm22]	21 58' 45" N	078 38' 55" W
ELUTAS [odfm23]	212048N	0700730W
YOVIS OYISA [odfm24]	21 16' 06" N	079 21' 03" W
ENAMO	23°34'14"N	077°22'14"W
ELUSI [LASI] [odfm25]	19 59' 57" N	080 36' 21" W
GCMVOR		
UMAKA [odfm26]	18° 03.3' N	82° 07.4' W
BONOS [odfm27]	16 03' 43" N	83 19' 36" W

ATS routes — Lower airspace	ATS routes — Upper airspace
Routes ATS — Espace aérien inférieur	Routes ATS — Espace aérien supérieur
Rutas ATS — Espacio aéreo inferior	Rutas ATS — Espacio aéreo superior
UM328	UM328
TANIA	SELEK
	BIRLO
	MANAGUA (MSA)
	LIBERIA
	PAPIN
	IRASO 04° 31' 02"N 081° 36' 25" W
	AKTAB 01° 25' 00" N 079° 29' 32" W
	CONDORCOCHA (QIT) 00° 02' 18" S 078° 30' 41" W
JERRE	
RAJAY	
BARTS	
NATHY	
BAGR	
SLEMA	
DURAN	
CNNOR	
ILIDO	
GRAMN	
TASNI	
EMAKO	
ANTIS	



UM328		
SIGNIFICANT POINT PUNTO SIGNIFICATIVO	LATITUDE LATITUD	LONGITUDE LONGITUD
SELEK	20° 05' 41" N	082° 24' 55" W
UCLVOR	21° 36' 18" N	081° 31' 58" W
SOLOS [odfm16]	22° 16' 00" N	081° 16' 13" W
LUIISO [odfm17]	22° 33' 20" N	081° 00' 18" W
ALILU	23° 00' 47" N	080° 58' 44" W
ORNEG [odfm18]	24° 00' 00" N	080° 58' 43" W

UM330		
SIGNIFICANT POINT PUNTO SIGNIFICATIVO	LATITUDE LATITUD	LONGITUDE LONGITUD
KEFER [odfm19]	23 46.2' N	077 02.6' W
ENAMO	23°34'14"N	077°22'14"W
BOCHO [odfm20]	22 26' 17" N	077 12' 20" W
YAPOB [odfm21]	22 26' 54" N	078 01' 00" W
UCLVOR	22°26'02"N	078°48'42"W
UCLVOR	22°00'54"N	078°48'52"W
REGLANELD [odfm22]	21 58' 45" N	078 38' 55" W
ELUTAS [odfm23]	212048N	0700730W
YOVIS OYISA [odfm24]	21 16' 06" N	079 21' 03" W
ENAMO	23°34'14"N	077°22'14"W
ELUSI [LASI] [odfm25]	19 59' 57" N	080 36' 21" W
GCMVOR		
UMAKA [odfm26]	18° 03.3' N	82° 07.4' W
BONOS [odfm27]	16 03' 43" N	83 19' 36" W

ATS routes — Lower airspace	ATS routes — Upper airspace
Routes ATS — Espace aérien inférieur	Routes ATS — Espace aérien supérieur
Rutas ATS — Espacio aéreo inferior	Rutas ATS — Espacio aéreo superior
UM328	UM328
TANIA	SELEK
	BIRLO
	MANAGUA (MSA)
	LIBERIA
	PAPIN
	IRASO 04° 31' 02" N 081° 36' 25" W
	AKTAB 01° 25' 00" N 079° 29' 32" W
	CONDORCOCHA (QIT) 00° 02' 18" S 078° 30' 41" W
JERRE	
RAJAY	
BARTS	
NATHY	
BAGR	
SLEMA	
DURAN	
CNNOR	
ILIDO	
GRAMN	
TASNI	
EMAKO	
ANTIS	



UZ637		
SIGNIFICANT POINT PUNTO SIGNIFICATIVO	LATITUDE LATITUD	LONGITUDE LONGITUD
PABEL	20° 27' 12" N	083° 57' 06" W
POPAL [odfm52]	21° 00' 44" N	083° 18' 02" W
TANDL [odfm53]	21° 41' 03" N	082° 30' 57" W
NOXAL [odfm54]	22° 21' 58" N	081° 43' 13" W
ALILU	23° 00' 47" N	080° 58' 44" W

UL776 [RR55]		
SIGNIFICANT POINT PUNTO SIGNIFICATIVO	LATITUDE LATITUD	LONGITUDE LONGITUD
BSI/VOP [odfm56]	15° 52' 21" S	047° 32' 53" W [RR57]
MEVOS [odfm58]	10° 24' 10" S	050° 20' 08" W [RR59]
SIMUV	15° 33' 26" S	047° 20' 48" W [RR60]
VARSO	14° 19' 23" S	048° 06' 59" W [RR61]
OPTEN	10° 29' 39" S	049° 54' 07" W [RR62]
TIR/NDE [odfm63]	02° 13' 08.40" N	055° 56' 30.60" W [RR64]
NIDNA	05° 01' 21.35" N	057° 24' 00.07" W
KORTO	08° 55' 06" N	059° 26' 47" W [RR65]
PARSU [odfm66]	05° 01' 21.35" N	057° 24' 00.07" W [RR67]
KORTO	08° 55' 06" N	059° 26' 47" W
NEKOB		
KAISU		
ANUVOP		
VIBSI	13° 26' 07" N	062° 15' 22" W [RR68]

L775	
PUERTO MONTT MONJ 412545S 0730531W	
PABAL 423630S 0720618W	
ESQUEL 425314S 710601W	
	UL776
	BRASILIA 15 52.31S 048 01.32W
	MEVOS 10 24.10S 050 29.98W
	TIRIOS 02 13.14N 055 56.51W
	NEKOB
	KAISO
	ANU
L780	UL780
DONTI 32 57 00 S 71 11 24 W	DONTI 32 57 00 S 71 11 24 W
	DONTI 325700S 0711124W
SIKAB 283000S 0730312W	SIKAB 283000S 0730312W



Pending Approvals

- ✈ Issues with PFA1 approval.
- ✈ Pending PFA2.
- ✈ Missing segments for implementation.
 - ✈ UL216
 - ✈ RNAV routes to and from ANU VOR
 - ✈ MTEG
 - ✈ Lower routes / upper routes / lower routes



ICAO SAFETY

NO COUNTRY LEFT BEHIND



Routes Implementation Methodology

- ✈ Annual o bi-annual process.
- ✈ SAM Region interaction process.
- ✈ Discussion and dissemination with stakeholders.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Conclusions

- ✈ The identified issues required an in-depth analysis of the eANP Volume II TABLE ATM II-CARSAM-1- CAR/SAM REGIONS ATS ROUTES.
- ✈ The leadership and guidance of the PBN Task Force is vital to address this issue.
- ✈ It is required a well-thought project to address the issues described in this presentation.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Suggested Actions

1. Suggest the creation of an ad-hoc group or collaboration project to review and address the discrepancies related to the table of routes in the CAR/SAM eANP.
2. Develop and implement a bi-annual process to approve routes optimization initiatives.
3. Agree a process for collaboration with the SAM Region (ICAO Office) and with Stakeholders for routes implementation.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND

