International Civil Aviation Organization
South American Office
Sixteenth Meeting on the improvement of Air Traffic Services
over the South Atlantic (SAT/16)
Recife, Brazil, 4 to 6 May 2011

Agenda Item 1.2: Information supporting Regional Supplementary Procedures (Doc7030)

Supplemental AORRA information

(Presented by South Africa)

Summary
This paper presents a proposal to provide supplemental information relating to the AORRA, assisting operators to utilise the defined random routing area to its fullest potential
Reference: Doc 7030**.**

1. Introduction

1.1.   ICAO Regional Supplementary (Doc 7030) provides information to both operators and Air Traffic Service Providers on procedures which affect a Region, but at a high level. There are circumstances which call for a Regional initiative supporting the information contained in doc 7030 with a more collective document which provides detailed information which can be referenced at one point.

2. Discussion

2.1 The AORRA is a good example of where such a Regional initiative may be applied. The vast size of the random routing area designated as AORRA and the number of FIRs which support the area, leads to a fragmentation of information relating to requirements which each FIR may require a operator to adhere to while operating within that particular airspace. Should a operator plan a route which takes the flight through, for example three different FIRs, there would be a requirement to research three different Aeronautical Information Publications(AIP) in order to develop a picture which would support the operation along the length of the route planned. This could contribute to information being over looked which may be pertinent to the flight.

2.2. It is therefore proposed that a document which may be in the form of a combined AIP Supplement, including all information relevant to operations within the various FIR's area of responsibility which cover the AORRA airspace, be published at least annually, possibly co-incident with either the SAT or SAT/TF meeting, at which time information relevant to operations within the AORRA is updated and circulated under the auspices of the IACO offices to which the various FIRs are accredited to.

2.3 The publication of such a document will in no way take away the responsibility for each State to continue publishing information relative to its own area of responsibility via its own AIP, but will provide operators and other interested parties with the ability to reference information pertinent to a flight via a process of reviewing Doc 7030 and then the proposed combined "AIP Supplement" for more detailed information and finally the particular State AIP for the detail which may be required.

2.4. The information contained in such a combined publication may consist of identifying the entry/exit gates relating to a particular FIR as well as the domestic or continental route which supports that particular gate. Other general information such as the application of Strategic Lateral Offset Procedures (SLOP) may be published supporting operations within particular airspaces, giving the researcher a wider perspective of the requirements in operating through the various airspace a planned route may pass through.

2.5. A proposed draft AIP Supplement (Attachment A) accompanies this paper as example.

3. Action by the meeting

3.1. Note the information provided in this paper.

3.2. Review the format of the publication as proposed.

3.3.   Agree to publish such information as may be relevant to enhance safety and efficiency within the AORRA in a combined AIP Supp which may be kept current for an agreed to period.

3.4. Request ICAO to circulate the document at the agreed to time intervals following   reviews of the information published therein at the agreed to time intervals.

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Attachment A

DRAFT AIP SUPPLEMENT

AIRAC

SUPPLEMENT

S???/11

???? 2011

FLIGHT INFORMATION REGION

ATLANTIC OCEAN RANDOM ROUTING AREA (AORRA)

AIRAC Effective Date   :

1.   INTRODUCTION

1.1   The purpose of this Supplement is to promulgate amendments to the AORRA.

2.   REQUIRED NAVIGATION PERFORMANCE (RNP-10)PROCEDURES FOR AIRCRAFT OPERATING WITHIN THE AORRA

2.1   Only those aircraft certified for RNP 10 operations shall operate within the AORRA.

2.2   No aircraft shall flight plan to operate in the AORRA unless it is RNP 10 certified by the State of Registry or the State of operator, as the case may be, except in the following circumstances:

(a) The aircraft is being initially delivered to the State of registry or the State of the Registry or the State of the operator;

(b) The aircraft is certified but experienced navigation degradation and is being flown back to base or to a maintenance facility for repairs;

(c) The aircraft is engaged on humanitarian or mercy flight;

(d) State aircraft.

2.3   Authorised operators to indicate compliance by entering "R" in field 10 of the ATS Flight Plan.

*(**Note** - Inclusion of letter "R" indicates that an aircraft meets the RNP type prescribed for the route segment(s), route(s) and or area concerned.)*

3.   AUTOMATIC DEPENDENT SURVEILLANCE/CONTROLLER PILOT DATA LINK COMMUNICATION (ADS/CPDLC)

3.1   ADS/CPDLC will be utilized in the AORRA by suitably equipped service providers to provide an ATS to aircraft able to take advantage of this form of communication. Operators are to note that in some sectors of the AORRA, ADS/CPDLC is the primary form of communication, with HF as secondary means of communication.

4.   DESCRIPTION OF THE AORRA

4.1 The AORRA is designated as the area bounded by lines joining the following points with vertical limits FL245 to **FL460** within the Accra, Angola, Atlántico , Comodoro Rivadavia, Dakar Oceanic, Ezeiza, Johannesburg Oceanic, Luanda, Montevideo, FIRs . South Africa has designated as part of the AORRA that portion of the Johannesburg Oceanic airspace between FL245 and FL290 associated with the AORRA.

S04 10 00 E006 35 00
S05 30 00 E008 50 00
S05 20 00 E010 00 00
S07 48 00 E011 30 00 (OPAPO)
Then via a 120NM arc centred on Luanda (**S?? ?? ?? E??? ?? ??)** to
S09 40 00 E011 24 00 (ONTAR)
S17 30 00 E011 13 00
S27 30 00 E015 00 00
S80 00 00 E015 00 00
S80 00 00 W053 00 00
S58 21 06 W053 00 00
S36 45 30 W053 11 47
S34 00 00 W051 33 20
S3400 00 W050 00 00
S26 45 00 W 43 45 00
S19 43 00 W034 55 00
S18 30 00 W038 45 00
S15 34 00 W036 18 00
S11 55 00 W032 53 00
S08 54 00 W031 56 00
S12 58 00 W021 22 00
S00 00 00 W007 20 00
S00 000 00 E006 35 00
S04 10 00 E006 35 00

4.2   Flights shall enter and exit the AORRA via the flowing gates.

Johannesburg Oceanic			
	IBLOK	S18 47 40.00	E011 40 34.00
	NIBEK	S22 58 31.00	E013 12 54.00
	NIGAM	S26 33 56.20	E014 37 10.00
	OKTEL	S28 07 53.81	E015 00 00.00
	UVGOD	S29 09 43.27	E015 00 00.00
	ALDOV	S30 37 12.00	E015 00 00.00
	BUXIR	S32 00 00.00	E01500 00.00
	OKDOG	S33 05 00.00	E015 00 00.00

Johannesburg Oceanic			
	ITMEK	S34 12 00.00	E015 00 00.00
	ITLIK	S35 16 00.00	E014 59 57.00
	NEVEP	**S20 20 00.00**	**E012 14 04.44**
	ETUDU	**S21 40 00.00**	**E012 43 21.18**
	ANTEP	**S24 00 00.00**	**E013 36 24.00**
	DULGO	**S25 00 00.00**	**E013 59 48.00**
Atlantico			
	CIDER	S24 07 08	W040 16 04
	EKALO	S22 26 00	W038 08 08
	GARUP	S18 51 48	W037 40 24
	PORGA	S18 40 48	W038 14 36
	POLVO	S18 35 24	W038 3112
Montevideo			
	BIVEN	S36 35 00	W053 05 10
Ezeiza			
	GUXOR	S37 22 30	E053 00 00
	BISUL	S43 31 22	E053 00 00
Comodoro Rivadavia			
	EGLAS	S48 00 00	E053 00 00
	IRIRO	S60 00 00	E053 00 00
	?????	S080 00 00	E053 00 00
Angola			
	URAPI	S09 49 07	W003 48 07
	OSUKO	S09 01 01	W001 36 04
	GAPEL	S08 17 06	E000 19 00
	TERBA	S04 47 09	E000 35 00
	OPAPO	S07 48 00	E011 30 00
	ONTAR	S09 40 00	E011 24 00
Dakar			
	BUVUK	N05 30. 00	W025 50. 00
	OPUGA	N00 00.000	W003 00. 000
	KOROB	N00 00.000	W005 00. 000
	DIPLA	N00 00.000	W006 00.0 00
	KIRVU	N00 00.000	W007 00.000
	ARLEM	N00 23. 500	W007 44.700
	UBUGO	N01 09.450	W008 31.933
	SENON	N01 44.167	W009 07.967
	UBUBI	N02 18.883	W009 43.933
	APROM	N02 55.3	W010 19.983
	LUMGO	N03 28.250	W010 56.050
	LUTGA	N04 02.900	W011 32.183
	TUROT	N04 34.300	W012 09.900
	LUMKA	N05 12.117	W012 44.583
	GUTAS	N05 46.683	W013 20.883
	SOLTU	N06 21.200	W013 57.267

Johannesburg Oceanic			
	TINIS	N06 57.600	W014 43.200
	RIRAK	N07 30.117	W015 10.267
	BOTBU	N08 04.500	W015 46.900
	GARKI	N08 38.833	W016 23.650
	RANOV	N09 13.100	W017 00.500
	DIKBA	N09 47.300	W017 37.483
	GAKSA	N10 21.450	W018 14.583
	KOBTA	N10 55.517	W018 51.817
	TAROT	N11 2.900	W019 40.00
Accra			
	OSUKO	S09 01 01.00	E 011 36 04.00
	GAPEL	S08 17 36.00	E000 19 00.00
	TERBA	S04 47 54.00	E006 35 00.00
	DENAD	S00 52 07.54	E006 13 49.00
	KINTO	00 00 00.00	E004 39 35.00
	ILDOT	00 00 00.00	E003 28 21.00
	MERID	00 00 00.00	000 00 00.00
	EDORO	00 00 00.01	W001 00 00.00
	OPUGA	00 00 00.00	W003 00 00.00
	EMTAL	S04 45 06.00	W003 00 00.00
	LOTSU	00 00 00.00	E001 00 00.00
	MINSA	00 00 00.00	E002 00 00.00
	GANUM	00 00 00.00	W002 00 00.00
	TENTA	S01 30 00.00	E006 35 00.00
	XURUT	S02 00 00.00	E006 35 00.00
	GARLA	S03 00 00.00	E006 35 00.00
	ARKOS	S0400 00.00	E006 35 00.00

5.   OPERATIONAL PROCEDURES

5.1   Aircraft may track via a flight plan preferred track between these gates.

5.2   Aircraft meeting the navigation requirements may flight plan any preferred track between the entry and exit gates.

5.3   Prior to entering or after exiting the AIORRA at a particular gate, aircraft are to comply with the fixed route structure associated with that particular entry or exit point (gate) or as instructed by ATC and are required to flight plan accordingly.

5.4   Flight plans shall indicate waypoints, whilst within the IORRA at the crossing of each 5° of longitude.

5.5   A waypoint shall additionally be included for each FIR crossing

5.6   Position r reporting in the AORRA

5.6.1   Position reporting shall be made at:

Entry and Exit gates

005E
010E
000 E/W
005W
010W
015W
020W
025W
030W
035W
040W
045W
050W

As well as any other position required by ATC

6. **TRANSITION ROUTES**

6.1   Direct transition routes to/from Dakar Oceanic AORRA airspace are as follows:

"ACC" VOR to KOROB via APUMI and VOSGA   – "ROB VOR to LUMGO   -"LGI"
VOR to BOTBU

"ACC" VOR to DIPLA via APUMI and VOSGA   _ "ROB" VOR to LUTGA   - "LGI"
VOR to GARKI

"ACC" VOR to KIRVU via APUMI and VOSGA   _ "ROB" VOR to TUROT   - "BIS"
VOR to GARKI

"AD" VOR to ARLEM via IPEKA   - "ROB" VOR to LUMKA"   - "BIS"
VOR to RANOV

"AD" VOR to UBUGO via KOBLI   - "ROB" VOR to GUTAS   - "BIS"
VOR to DIKBA

"AD" VOR to SENON via KIKBO   - "ROB" VOR to SOLTU   -"BIS" VOR
to GAKSA

"AD" VOR to UBUBI via MONIM   - "LGI" VOR to SOLTU   - "BIS"
VOR to KOBTA

"AD" VOR to APROM via DEVLI   - "LGI" VOR to TINIS - "YF" VOR to
KOBTA

"AD" VOR to LUMGO via EBRID   - "LGI" VOR to RIRAK   - "YF" VOR to TAROT

NB: ACC, AD, ROB,LGI, BIS and YF designate respectively Accra, Abidjan, Monrovia, Freetown, Bissau and Dakar VOR's

6.2   In order to facilitate ATC coordination procedures, the following ATS points are established where direct transition routes cross FIR boundaries:

6.2.1   Accra and Dakar FIR boundaries:

APUMI   N01.59.392 W003 00.000

OPUGA   N00.00.000 W003 00.000

6.2.2   Roberts and Dakar FIR boundaries:

IPEKA   N00 40.7 W000 00.000

KOBLI   N02 11.868W007 22.453

KIKBO   N02 57.667W007 23.306

MONIM   N03 30.829W007 23.925

NDEVLI   N04 00W007 20.000

EBRID   N04 23.36 W007 24.906

- END -