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AIR NAVIGATION SERVICES

GENERAL

IMPLEMENTATION OF RNAV ROUTES COMMENCING AT THE JOHANNESBURG/GABORONE FIR BOUNDARY

While it is accepted practice that Air Traffic routes commence and terminate at specific points of departure (departure aerodromes) and at specific destinations, this AIC serves as Notice of implementation of a set of RNAV routes identified as RED CARPET II (RC II), commencing at significant points on the Johannesburg / Gaborone FIR boundary and terminating at facilities within the Tunisian FIR. The implementation of these routes will allow greater flexibility in operator flight planning, by offering alternate routing into North Africa, before utilizing routes specific to destination.

The APIRG is on record as endorsing the phased implementation of RNAV/RNP routes in the African Region. As a result, a pair of North-South RNP-10 (Red Carpet I, RC I) routes was implemented in June 2006, in African airspace serving traffic operating between European destinations, South Africa and other points in between in the African continent.

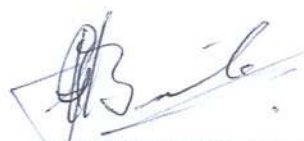
The RC I routes, denominated UM 998 and UM 731, have served to provide carriers with an additional option to the previous single route scenario. The success in the implementation of the RC I routes prompted the request by the users to create a second pair of RNP routes to east of the previous pair through the central part of Africa. In order to differentiate these routes from the RC I routes, these routes are known as the Red Carpet II (RC II).

The RC II routes overlay existing routes, namely UB540 and UG655. The RNAV routes have been designated as UM214 and UM215. The RC II routes have been structured to remove, as far as possible doglegs and deviations in the routes in order to reduce track distance, between the start and termination of the routes. The routes will allow the current traffic primarily operating between Europe and South Africa, through the central part of Africa currently using one airway, to be split into two streams of traffic, flying at or closer to their optimum levels, for a greater percentage of flight time and closer to their optimal cruising speeds.

Operators are to note that while the navigation requirement to utilize the routes is RNP 10, an anomaly exists on the sectors between ETMIT / FTV (UM214) and TAVLA / DANAM (UM215), where the navigation criteria is RNP 5. Although the routes, will be charted as RNP 10 (which requires a minimum 50 NM separation centerline to centerline), they are separated by as little as 38 miles at their southern end, between TAVLA / DANAM and ETMIT / FTV. As a result, these two sectors of the routes are designated as RNP 5. The two sectors mentioned, presently exist as sectors of UB540 and UG655, which in this airspace are not procedurally separated from each other due to the spacing of the terrestrial aids supporting them and thus are operated as dependant routes at present. The implementation of RNP 5 will allow independent operations on the RC II routes.

While not originating within South African airspace, operators are to flight plan according to requirements, via the existing route network within South African airspace, in order to utilize the routes, but will however be tactically positioned by ATC to intercept the routes as required, dependant on traffic flow within the Johannesburg airspace.

Route description for UM214 contained in Appendix A to this AIC.
Route description for UM215 contained in Appendix B to this AIC.



COMMISSIONER FOR CIVIL AVIATION

RED CARPET II – UM214

POSITION	DESCRIPTION OF ROUTE/WAYPOINT	LATITUDE	LONGITUDE	STATUS	COMMENTS
ETMIT	ETMIT	S 23° 12' 48.49	E 027° 37' 42.69	▲	JNB/Gaborone FIR
FTV	FTV VOR	S 21° 09' 45.54	E 027° 28' 25.98	▲	Gaborone FIR
UDKOL	NEW WPT (FIR)	S 20° 04' 48.64	E 027° 11' 10.60	▲	Gaborone/Harare FIR
UDBAR	X UA409	S 19° 59' 00.73	E 027° 09' 39.16	△	Harare FIR
UTROV	X UA404	S 19° 05' 09.61	E 026° 55' 32.60	△	
XOTON	X UB528	S 18° 35' 26.79	E 026° 47' 49.52	△	
XOSIV	NEW WPT (FIR)	S 18° 02' 49.94	E 026° 39' 24.28	▲	Harare/Lusaka FIR
AVOMU	AVOMU (X UR779)	S 17° 14' 00.00	E 026° 26' 54.00	▲	Lusaka FIR
IXATA	X UA400/UR525	S 15° 22' 24.06	E 025° 56' 49.79	△	
ITLOR	X UG652	S 12° 10' 00.16	E 025° 06' 13.43	△	
ETOXO	NEW WPT (FIR)	S 11° 31' 36.35	E 024° 56' 16.95	▲	Lusaka/Kinshasa FIR
AKMEX	XUA406	S 10° 00' 59.41	E 024° 33' 00.48	△	Kinshasa FIR
AMROV	XUJ5	S 09° 11' 51.16	E 024° 20' 29.00	△	
ANOTO	X ATS KKW-KMB	S 07° 57' 18.67	E 024° 01' 35.73	△	
APOSO	X UH325	S 07° 15' 20.96	E 023° 51' 00.91	△	
MBY	MBY VOR	S 06° 06' 48.00	E 023° 33' 48.00	▲	
BIMAP	X UG450	S 05° 32' 56.11	E 023° 28' 00.38	△	
NEGTO	X ATS KNG-KIN	S 05° 07' 18.13	E 023° 23' 37.66	△	
RAPOL	RAPOL (X UA607)	S 04° 02' 36.00	E 023° 12' 36.00	▲	
BIKIP	X A613	S 03° 19' 47.73	E 023° 04' 19.75	△	
LINUT	X UB535	S 00° 51' 46.03	E 022° 35' 48.23	△	
KELAB	X UH10	N 00° 01' 38.83	E 022° 25' 31.52	△	
IVDIG	X ATS MBA-KGI	N 00° 18' 21.77	E 022° 22' 18.56	△	
GUROT	X UR984	N 00° 38' 38.37	E 022° 18' 24.62	△	
ERKAR	X UA610	N 01° 16' 10.28	E 022° 11' 11.02	△	
DEPAK	X ATS GEM-KGI	N 02° 07' 23.95	E 022° 01' 19.08	△	
MOSOS	X UH1	N 02° 10' 51.60	E 022° 00' 39.04	△	
KEDOT	KEDOT	N 03° 35' 06.00	E 021° 44' 24.00	▲	
LURDI	NEW WPT (FIR)	N 04° 15' 26.93	E 021° 34' 22.34	▲	Kinshasa/Brazza FIR
IPANI	IPANI	N 06° 33' 08.00	E 021° 00' 00.00	▲	Brazza FIR
MISRU	NEW WPT (FIR)	N 08° 00' 00.00	E 020° 39' 21.70	▲	Brazza/N'Djamena FIR
OVMEG	X UB736	N 09° 30' 59.16	E 020° 17' 34.87	△	N'Djamena FIR
ERESA	ERESA	N 11° 38' 21.00	E 019° 46' 45.00	▲	
NAPEN	X UG660	N 12° 58' 46.27	E 019° 30' 43.33	△	
PODGA	X UG622	N 14° 51' 11.44	E 019° 08' 01.51	△	
ILDOR	ILDOR	N 20° 09' 37.00	E 018° 01' 19.00	▲	No changes are expected in the Tripoli, Malta and Rome FIR's.
GARIN	GARIN	N 22° 00' 00.00	E 017° 06' 36.00	▲	
SEB	SEB VOR	N 26° 59' 44.21	E 014° 27' 35.05	▲	

Total distance: 3791.7 NM Great circle distance: 3764.0 NM

NOTE: The X before some of the entries, indicates that the route to be implemented crosses an existing route at the LAT and LONG position indicated.

RED CARPET II – UM215

POSITION	DESCRIPTION OF ROUTE/WAYPOINT	LATITUDE	LONGITUDE	STATUS	COMMENTS
TAVLA	TAVLA	S 22° 37' 4	E 28° 17' 6	▲	Johannesburg/Gaborone FIR
DANAM	DANAM	S 21° 39' 03.08	E 28° 25' 58.98	▲	Gaborone/Harare FIR
VBU	VBU VOR	S 20° 01' 44.60	E 28° 38' 37.90	▲	
EXELO	X UA404	S 18° 38' 18.00	E 28° 33' 24.00	△	Harare FIR
IXEMI	X V56	S 18° 19' 53.33	E 28° 32' 36.88	△	
RETAR	RETAR	S 16° 37' 42.00	E 28° 28' 18.00	▲	Harare/Lusaka FIR
VLS	VLS VOR	S 15° 19' 36.00	E 28° 25' 12.00	▲	Lusaka FIR
MOTAM	MOTAM	S 12° 00' 00.00	E 27° 35' 48.00	▲	Lusaka/Kinshasa FIR
LUB	LUB VOR	S 11° 36' 07.98	E 27° 30' 19.98	▲	
TUNOD	X LUB TMA	S 10° 51' 20.50	E 27° 21' 52.17	△	
KIBRO	X UH4	S 05° 59' 42.00	E 26° 27' 42.00	△	
IKTAL	X UG 450	S 04° 31' 48.00	E 26° 11' 42.00	△	Kinshasa FIR
KIN	KIN VOR	S 02° 55' 00.00	E 25° 54' 00.00	▲	
KGI	KGI VOR	N 00° 29' 43.00	E 25° 18' 49.00	▲	
BUT	BUT VOR	N 02° 49' 06.00	E 24° 48' 36.00	▲	
MERON	MERON	N 04° 55' 00.00	E 24° 02' 42.00	▲	Kinshasa/Brazza FIR
ONUJA	ONUJA	N 08° 09' 41.00	E 22° 51' 09.00	▲	Brazza/N'Djamena FIR
IRAGA	X UB736	N 09° 32' 37.00	E 22° 20' 19.00	△	
XULAK	X UW605	N 12° 10' 30.00	E 21° 20' 51.00	△	
ARBEG	X UG660	N 13° 13' 55.00	E 20° 57' 40.00	△	N'Djamena FIR
NAMAD	X UG622	N 14° 58' 58.16	E 20° 44' 13.03	△	
TONBA	TONBA	N 21° 35' 18.00	E 19° 51' 12.00	▲	N'Djamena/Tripoli FIR
AKMID	X W858	N 25° 38' 01.56	E 18° 53' 55.97	△	
KEPOS	X UM999	N 27° 22' 05.50	E 18° 28' 10.90	△	
DHR	DHR VOR	N 29° 28' 02.74	E 17° 55' 53.77	▲	Tripoli FIR

Total distance: 3791 NM Great circle distance: 3764 NM

NOTE: The X before some of the entries, indicates that the route to be implemented crosses an existing route at the LAT and LONG position indicated.