

STANDARD DEPARTURE CHART -
INSTRUMENT (SID) - ICAO

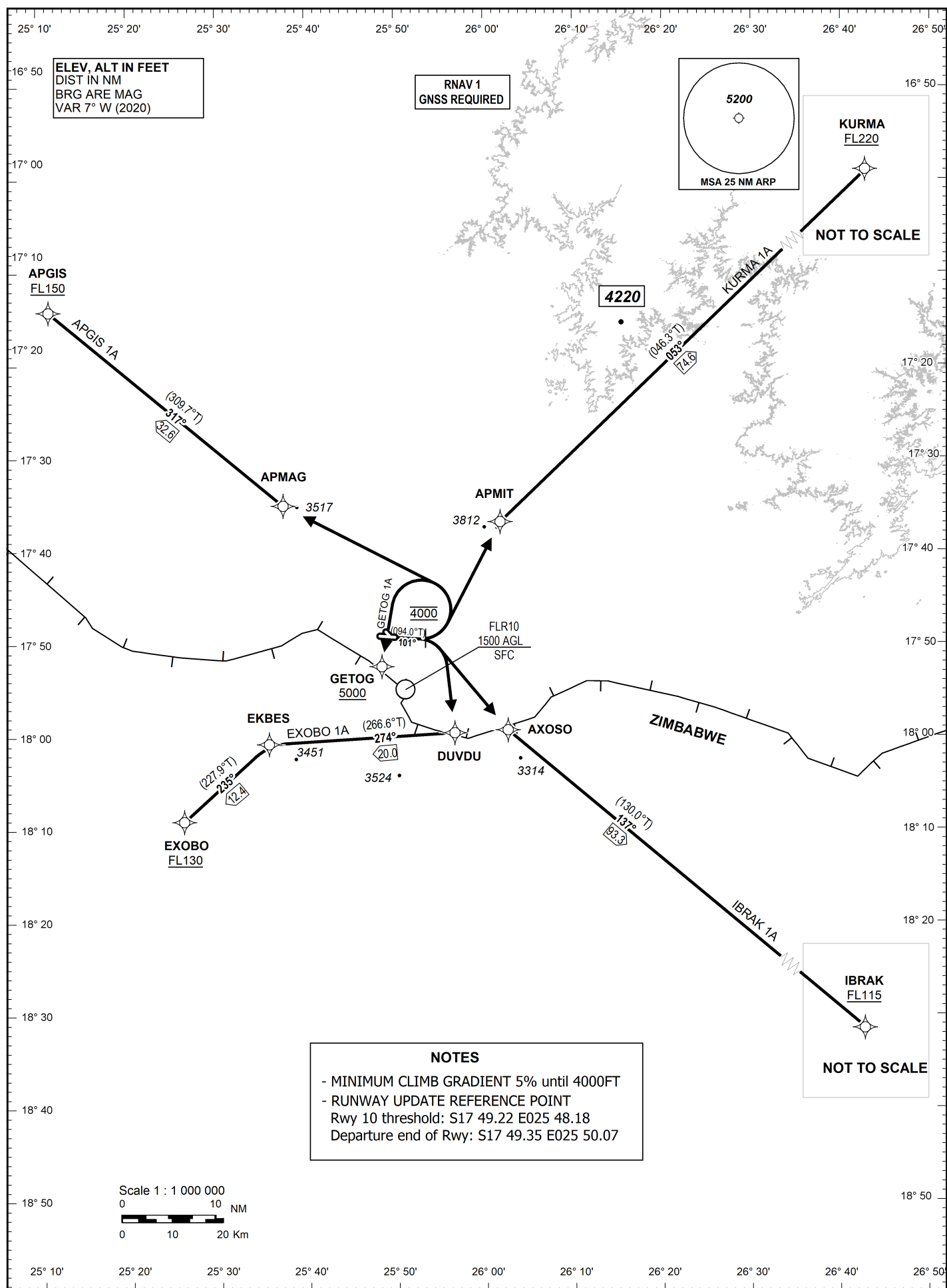
HARRY MWAANGA NKUMBULA INTL/Livingstone
(FLHN)

RNAV SID RWY 10

TRANSITION ALTITUDE
5000

APP 124.300
TWR 118.100

APGIS 1A, EXOBO 1A, GETOG 1A, IBRAK 1A, KURMA 1A



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(FLHN)
RNAV SID RWY 10
APGIS 1A, EXOBO 1A, GETOG 1A, IBRAK 1A, KURMA 1A

TABULAR DESCRIPTION												
RNAV SID RWY 10												
APGIS 1A												
Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	101 (094.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	APMAG	-	-	-	-	-	-	-	-	-	RNAV 1
030	TF	APGIS	-	317 (309.7)	-	32.6	-	+FL150	-	-	-	RNAV 1
EXOBO 1A												
Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	101 (094.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	DUVDU	-	-	-	-	-	-	-	-	-	RNAV 1
030	TF	EKBES	-	274 (266.6)	-	20.0	-	-	-	-	-	RNAV 1
040	TF	EXOBO	-	235 (227.9)	-	12.4	-	+FL130	-	-	-	RNAV 1
GETOG 1A												
Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	101 (094.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	GETOG	-	-	-	-	L	+5000	-	-	-	RNAV 1
IBRAK 1A												
Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	101 (094.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	AXOSO	-	-	-	-	-	-	-	-	-	RNAV 1
030	TF	IBRAK	-	137 (130.0)	-	93.3	-	+FL115	-	-	-	RNAV 1
KURMA 1A												
Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	101 (094.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	APMIT	-	-	-	-	-	-	-	-	-	RNAV 1
030	TF	KURMA	-	053 (046.3)	-	74.6	-	+FL220	-	-	-	RNAV 1

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WAYPOINT LIST
RNAV SID RWY 10

WaypointIdentifier	Coordinates	
APGIS	S 17 14 13.0	E 025 11 11.6
APMAG	S 17 35 09.6	E 025 37 23.7
APMIT	S 17 36 56.4	E 026 01 45.9
AXOSO	S 17 59 22.1	E 026 02 33.8
EKBES	S 18 00 50.3	E 025 35 40.0
EXOBO	S 18 09 09.0	E 025 26 02.7
GETOG	S 17 52 30.0	E 025 48 24.0
DUVDU	S 17 59 39.6	E 025 56 34.0
IBRAK	S 18 59 15.8	E 027 17 59.3
KURMA	S 16 45 04.0	E 026 57 59.0

ROUTING

NAME	TEXT
APGIS 1A	Minimum climb gradient 5.0% to 4000 FT. After take-off climb on course 101° to 4000 FT, turn LEFT direct to APMAG, then track 317° to APGIS. MCA/MCL: APGIS AT or ABOVE FL150.
EXOBO 1A	Minimum climb gradient 5.0% to 4000 FT. After take-off climb on course 101° to 4000 FT, turn RIGHT direct to DUVDU, track 274° to EKBES, then track 235° to EXOBO. MCA/MCL: EXOBO AT or ABOVE FL130.
GETOG 1A	Minimum climb gradient 5.0% to 4000 FT. After take-off climb on course 101° to 4000 FT, turn LEFT direct to GETOG. MCA/MCL: GETOG AT or ABOVE 5000'.
IBRAK 1A	Minimum climb gradient 5.0% to 4000 FT. After take-off climb on course 101° to 4000 FT, turn RIGHT direct to AXOSO, then track 137° to IBRAK. MCA/MCL: IBRAK AT or ABOVE FL115.
KURMA 1A	Minimum climb gradient 5.0% to 4000 FT. After take-off climb on course 101° to 4000 FT, turn LEFT direct to APMIT, then track 053° to KURMA. MCA/MCL: KURMA AT or ABOVE FL220.

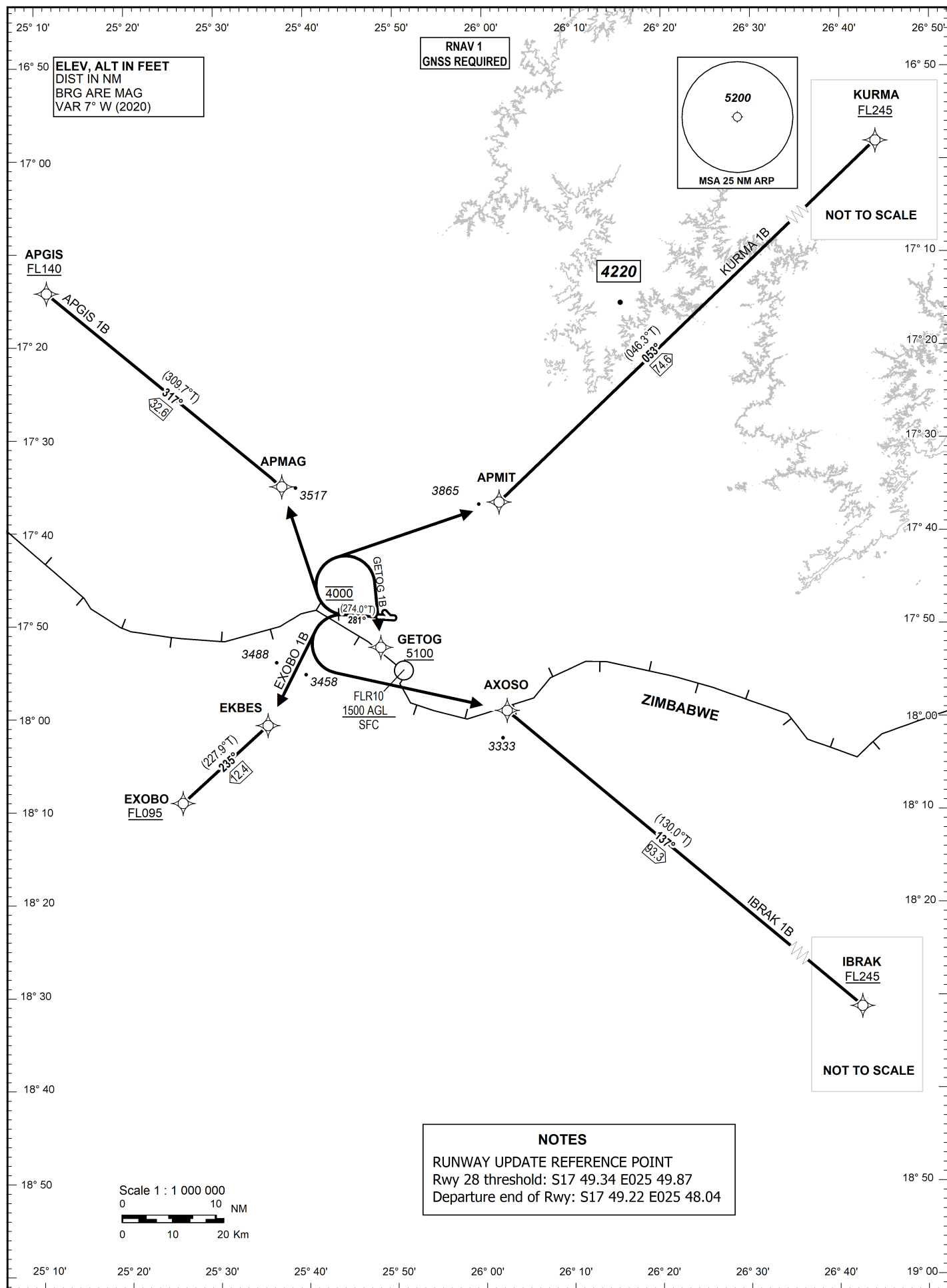
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TRANSITION ALTITUDE
5000

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RNAV SID RWY 28

APGIS 1B, EXOBO 1B, GETOG 1B, IBRAK 1B, KURMA 1B



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APGIS 1B, EXOBO 1B, GETOG 1B, IBRAK 1B, KURMA 1B

TABULAR DESCRIPTION

RNAV SID RWY 28
APGIS 1B

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	281 (274.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	APMAG	-	-	-	-	-	-	-	-	-	RNAV 1
030	TF	APGIS	-	317 (309.7)	-	32.6	-	+FL140	-	-	-	RNAV 1

EXOBO 1B

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	281 (274.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	EKBES	-	-	-	-	-	-	-	-	-	RNAV 1
030	TF	EXOBO	-	235 (227.9)	-	12.4	-	+FL095	-	-	-	RNAV 1

GETOG 1B

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	281 (274.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	GETOG	-	-	-	-	R	+5100	-	-	-	RNAV 1

IBRAK 1B

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	281 (274.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	AXOSO	-	-	-	-	L	-	-	-	-	RNAV 1
030	TF	IBRAK	-	137 (130.0)	-	93.3	-	+FL245	-	-	-	RNAV 1

KURMA 1B

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course M°(T°)	Magnetic Variation (°)	Distance (NM) / Duration	Turn Direction	Altitude (FT)	Speed Limit (KT)	VPA (%)	Rec Nav aids	Navigation Specification
010	CA	-	-	281 (274.0)	-7.2	-	-	@4000	-	-	-	RNAV 1
020	DF	APMIT	-	-	-	-	R	-	-	-	-	RNAV 1
030	TF	KURMA	-	053 (046.3)	-	74.6	-	+FL245	-	-	-	RNAV 1

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WAYPOINT LIST
RNAV SID RWY 28

WaypointIdentifier	Coordinates	
APGIS	S 17 14 13.0	E 025 11 11.6
APMAG	S 17 35 09.6	E 025 37 23.7
APMIT	S 17 36 56.4	E 026 01 45.9
AXOSO	S 17 59 22.1	E 026 02 33.8
EKBES	S 18 00 50.3	E 025 35 40.0
EXOBO	S 18 09 09.0	E 025 26 02.7
GETOG	S 17 52 30.0	E 025 48 24.0
IBRAK	S 18 59 15.8	E 027 17 59.3
KURMA	S 16 45 04.0	E 026 57 59.0

ROUTING

NAME	TEXT
APGIS 1B	After take-off climb on course 281° to 4000 FT, turn RIGHT direct to APMAG, then track 317° to APGIS . MCA/MCL: APGIS AT or ABOVE FL140.
EXOBO 1B	After take-off climb on course 281° to 4000 FT, turn LEFT direct to EKBES, then track 235° to EKBES. MCA/MCL: EXOBO AT or ABOVE FL095.
GETOG 1B	After take-off climb on course 281° to 4000 FT, turn RIGHT direct to GETOG. MCA/MCL: GETOG AT or ABOVE 5100'.
IBRAK 1B	After take-off climb on course 281° to 4000 FT, turn LEFT direct to AXOSO, then track 137° to IBRAK. MCA/MCL: IBRAK AT or ABOVE FL245.
KURMA 1B	After take-off climb on course 281° to 4000 FT, turn RIGHT direct to APMIT, then track 53° to KURMA. MCA/MCL: KURMA AT or ABOVE FL245.

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