STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

TRANSITION ALTITUDE
6000

APP   121.300
      120.100
TWR 118.100
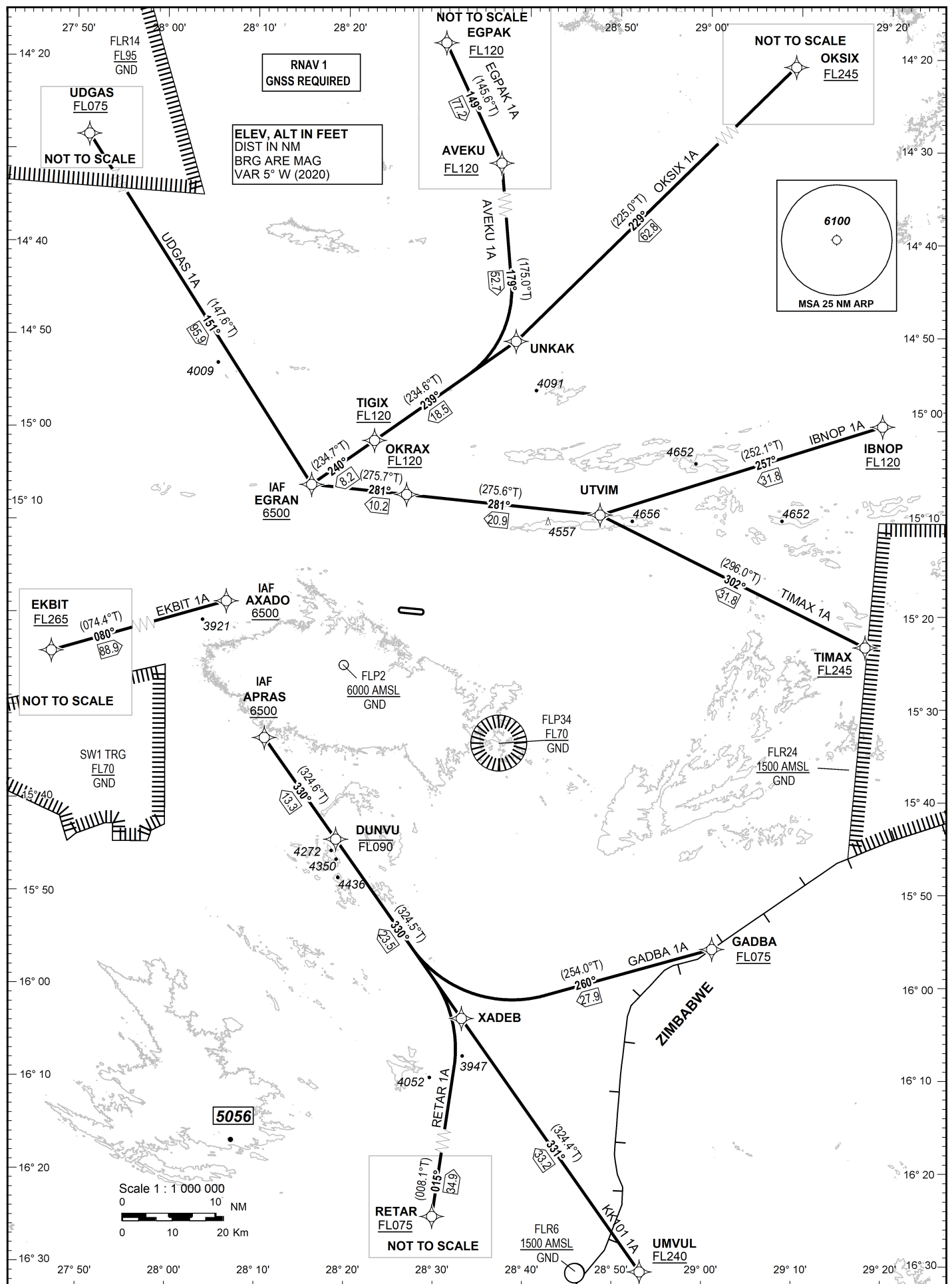
KENNETH KAUNDA INTL/Lusaka
(FLKK)
RNAV STAR RWY 10

AVEKU 1A, EGPAK 1A, EKBIT 1A, GADBA 1A, IBNOP 1A, OKSIX 1A, RETAR 1A, TIMAX 1A, UDGAS 1A, UMVUL 1A

RNAV 1
GNSS REQUIRED

ELEV, ALT IN FEET
DIST IN NM
BRG ARE MAG
VAR 5° W (2020)

Scale 1 : 1 000 000

6100
MSA 25 NM ARP

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TABULAR DESCRIPTION

RNAV STAR RWY 10

AVEKU 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 Navaids	Navigation Specification
010	IF	AVEKU	-	-	-	-	-	+FL120	-	-	-	RNAV 1
020	TF	UNKAK	-	179 (175.0)	-	52.7	-	-	-	-	-	RNAV 1
030	TF	TIGIX	-	239 (234.6)	-	18.5	-	+FL120	-	-	-	RNAV 1
040	TF	EGRAN	-	240 (234.7)	-	8.2	-	+6500	-	-	-	RNAV 1

EGPAK 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 Navaids	Navigation Specification
10	IF	EGPAK	-	-	-	-	-	+FL120	-	-	-	RNAV 1
20	TF	AVEKU	-	149 (145.6)	-	77.2	-	-	-	-	-	RNAV 1
30	TF	UNKAK	-	179 (175.0)	-	51.9	-	-	-	-	-	RNAV 1
40	TF	TIGIX	-	239 (234.6)	-	18.0	-	+FL120	-	-	-	RNAV 1
50	TF	EGRAN	-	240 (234.7)	-	8.2	-	+6500	-	-	-	RNAV 1

EKBIT 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 Navaids	Navigation Specification
010	IF	EKBIT	-	-	-	-	-	+FL265	-	-	-	RNAV 1
020	TF	AXADO	-	080 (074.4)	-	88.9	-	+6500	-	-	-	RNAV 1

GADBA 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 Navaids	Navigation Specification
010	IF	GADBA	-	-	-	-	-	+FL075	-	-	-	RNAV 1
020	TF	XADEB	-	260 (254.0)	-	27.9	-	-	-	-	-	RNAV 1
030	TF	DUNVU	-	330 (324.5)	-	23.5	-	-FL090	-	-	-	RNAV 1
040	TF	APRAS	-	330 (324.6)	-	13.3	-	+6500	-	-	-	RNAV 1

IBNOP 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 Navaids	Navigation Specification
010	IF	IBNOP	-	-	-	-	-	+FL120	-	-	-	RNAV 1
020	TF	UTVIM	-	257 (252.1)	-	31.8	-	-	-	-	-	RNAV 1
030	TF	OKRAX	-	281 (275.6)	-	20.9	-	+FL120	-	-	-	RNAV 1
040	TF	EGRAN	-	281 (275.7)	-	10.2	-	+6500	-	-	-	RNAV 1

OKSIX 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 Navaids	Navigation Specification
010	IF	OKSIX	-	-	-	-	-	+FL245	-	-	-	RNAV 1
020	TF	UNKAK	-	229 (225.0)	-	62.8	-	-	-	-	-	RNAV 1
030	TF	TIGIX	-	239 (234.6)	-	18.5	-	+FL120	-	-	-	RNAV 1
040	TF	EGRAN	-	240 (234.7)	-	8.2	-	+6500	-	-	-	RNAV 1

RETAR 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 Navaids	Navigation Specification
010	IF	RETAR	-	-	-	-	-	+FL075	-	-	-	RNAV 1
020	TF	XADEB	-	015 (008.1)	-	34.9	-	-	-	-	-	RNAV 1
030	TF	DUNVU	-	330 (324.5)	-	23.2	-	-FL090	-	-	-	RNAV 1
040	TF	APRAS	-	330 (324.6)	-	13.3	-	+6500	-	-	-	RNAV 1

TIMAX 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 Navaids	Navigation Specification
010	IF	TIMAX	-	-	-	-	-	+FL245	-	-	-	RNAV 1
020	TF	UTVIM	-	302 (296.0)	-	31.8	-	-	-	-	-	RNAV 1
030	TF	OKRAX	-	281 (275.6)	-	20.9	-	+FL120	-	-	-	RNAV 1
040	TF	EGRAN	-	281 (275.7)	-	10.2	-	+6500	-	-	-	RNAV 1

UDGAS 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 Navaids	Navigation Specification
010	IF	UDGAS	-	-	-	-	-	+FL075	-	-	-	RNAV 1
020	TF	EGRAN	-	151 (147.6)	-	95.9	-	+6500	-	-	-	RNAV 1

UMVUL 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 Navaids	Navigation Specification
010	IF	UMVUL	-	-	-	-	-	+FL240	-	-	-	RNAV 1
020	TF	XADEB	-	331 (324.4)	-	33.2	-	-	-	-	-	RNAV 1
030	TF	DUNVU	-	330 (324.5)	-	23.5	-	-FL090	-	-	-	RNAV 1
040	TF	APRAS	-	330 (324.6)	-	13.3	-	+6500	-	-	-	RNAV 1

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INSTRUMENT (STAR) - ICAO**

**KENNETH KAUNDA INTL/Lusaka
(FLKK)
RNAV STAR RWY 10**

AVEKU 1A, EGPAK 1A, EKBIT 1A, GADBA 1A, IBNOP 1A, OKSIX 1A, RETAR 1A, TIMAX 1A, UDGAS 1A, UMVUL 1A

WAYPOINT LIST
RNAV STAR RWY 10

WaypointIdentifier	Coordinates		WaypointIdentifier	Coordinates	
APRAS	S 15 33 33.8	E 028 10 55.0	UNKAK	S 14 50 42.0	E 028 38 35.9
AVEKU	S 13 58 00.0	E 028 33 54.0	TIGIX	S 15 01 28.3	E 028 22 58.4
AXADO	S 15 18 50.6	E 028 06 36.8	OKSIX	S 14 06 12.0	E 029 24 30.0
DUNVU	S 14 44 29.1	E 028 18 55.4	RETAR	S 16 37 46.8	E 028 28 18.0
EGPAK	S 12 54 06.0	E 027 49 06.0	TIMAX	S 15 23 24.0	E 029 17 36.0
EGRAN	S 15 06 15.1	E 028 16 01.4	UDGAS	S 13 44 59.6	E 027 22 58.5
EKBIT	S 15 43 05.0	E 026 37 59.0	UMVUL	S 16 30 52.0	E 028 53 08.0
GADBA	S 15 56 03.2	E 029 00 53.2			
IBNOP	S 14 59 36.0	E 029 19 18.0			
XADEB	S 16 03 42.8	E 028 33 03.9			
OKRAK	S 15 07 16.7	E 028 26 33.9			
UNKAK	S 14 50 42.0	E 028 38 35.9			

ROUTING

NAME	TEXT
AVEKU 1A	From AVEKU track 179° to UNKAK, track 239° to TIGIX, track 240° to EGRAN. MEL/MEA: AVEKU AT or ABOVE FL120,TIGIX AT or ABOVE FL120, EGRAN AT or ABOVE UNKAK 6500'.
EGPAK 1A	From EGPAK track 149° to AVEKU, track 179° to UNKAK, track 239° to TIGIX, track 240° to EGRAN. MEL/MEA: EGPAK AT or ABOVE FL120, TIGIX AT or ABOVE FL120, EGRAN AT or ABOVE 6500'.
EKBIT 1A	From EKBIT track 080° to AXADO. MEL/MEA: EKBIT AT or ABOVE FL265, AXADO AT or ABOVE 6500'.
GADBA 1A	From GADBA track 260° to XADEB, track 330° to DUNVU, track 330° to APRAS. MEL/MEA: GADBA AT or ABOVE FL075, DUNVU AT or BELOW FL090, APRAS AT or ABOVE 6500'.
IBNOP 1A	From IBNOP track 257° to UTVIM, track 281° to OKRAX, track 281° to EGRAN. MEL/MEA: IBNOP AT or ABOVE FL120, OKRAX AT or ABOVE FL120, EGRAN AT or ABOVE 6500'.
OKSIX 1A	From OKSIX track 229° to UNKAK, track 239° to TIGIX, track 240° to EGRAN. MEL/MEA: OKSIX AT or ABOVE FL245, TIGIX AT or ABOVE FL120, EGRAN AT or ABOVE 6500'.
RETAR 1A	From RETAR track 015° to XADEB, track 330° to DUNVU, track 330° to APRAS. MEL/MEA: RETAR AT or ABOVE FL075, DUNVU AT or BELOW FL090, APRAS AT or ABOVE 6500'.
TIMAX 1A	From TIMAX track 302° to UTVIM, track 281° to OKRAX, track 281° to EGRAN. MEL/MEA: TIMAX AT or ABOVE FL245, OKRAX AT or ABOVE FL120, EGRAN AT or ABOVE 6500'.
UDGAS 1A	From UDGAS track 151° to EGRAN. MEL/MEA: UDGAS AT or ABOVE FL075, EGRAN AT or ABOVE 6500'.
UMVUL 1A	From UMVUL track 331° to XADEB, track 330° to DUNVU, track 330° to APRAS. MEL/MEA: UMVUL AT or ABOVE FL240, DUNVU AT or BELOW FL090, APRAS AT or ABOVE 6500'.