GENERAL

ATS Hours

H24

Airport Information

RFF: CAT 9
Fuel: O/R
PCN: RWY 05/23: 71/F/B/X/T
Customs: AVBL

Operation

Standard Taxi Routes

LDG RWY 05

Exit Gate	LDG routing number	Taxi routing
C	Follow V1	Exit via TWY C - B - T - U into APN V/W
C	Follow Y1	Exit via TWY C - B - T - U - S - Z into APN Y/W
D	Follow V2	Exit via TWY D - A1 - T - U into APN V/W
D	Follow Y2	Exit via TWY D - A1 -T - U - S - Z into APN Y/W
E	Follow V3	Exit via TWY E - A - A1- T - U into APN V/W
E	Follow Y3	Exit via TWY E - A - A1- T - U - S - Z into APN Y/W

LDG RWY 23

Exit Gate	LDG routing number	Taxi routing
G	Follow V4	Exit via TWY G - A - A2 - S - U into APN V/W
G	Follow Y4	Exit via TWY G - A - A2 - S - Z into APN Y/W
H	Follow V5	Exit via TWY H - A - A2 - S - U into APN V/W
H	Follow Y5	Exit via TWY H - A - A2 - S - Z into APN Y/W

TKOF RWY 05

Gate	TKOF routing number	Taxi routing
U	U1	From APN V/W exit via TWY U - S - B - A5 - A to HLDG TWY H
Z	Z1	From APN Y/W exit via TWY Z - S - B - A5 - A to HLDG TWY H

TKOF RWY 23

Gate	TKOF routing number	Taxi routing
U	U2	From APN V/W exit via TWY U - T - B to HLDG TWY C
Z	Z2	From APN Y/W exit via TWY Z - S - U - T - B to HLDG TWY C

Taxi

ACFT with wheelbase B747 note that oversteering may be required when manoeuvring round TWY turns.

Code letter E ACFT:
- Judgemental oversteering is required when manoeuvering round TWY turns.
- Use MNM thrust when turning from APN W to APN V or APN Y.

GENERAL

Fuel Dumping Area

AMASE holding area at R340 D40 from DES VOR/DME.
Procedure holding: Right-hand circuit with 1min leg at 6000ft with 220KT, entry HDG 180°.
Inform ATC if fuel dumping is required. After fuel dumping request to return to AD.

ARRIVAL

Communication

COM Failure

If unable to land within 30min of the time descent should have started (i.e. EAT or ETA if no EAT has been acknowledged), proceed to cross fix holding area at 4000ft, then via R461 at FL170 if Kuala Lumpur is the nominated alternate or via W12 at FL210 if Pekanabaru is the nominated alternate or via G468 at FL150 if Penang is the nominated alternate or via N563 at FL230 if Singapore is the nominated alternate otherwise proceed at the planned FL to other nominated alternate.

DEPARTURE

Take-off Minima

RWY		05/23	
All ACFT	ft - m/km	0 - 400V	-

Communication

COM Failure for Medium and Heavy ACFT

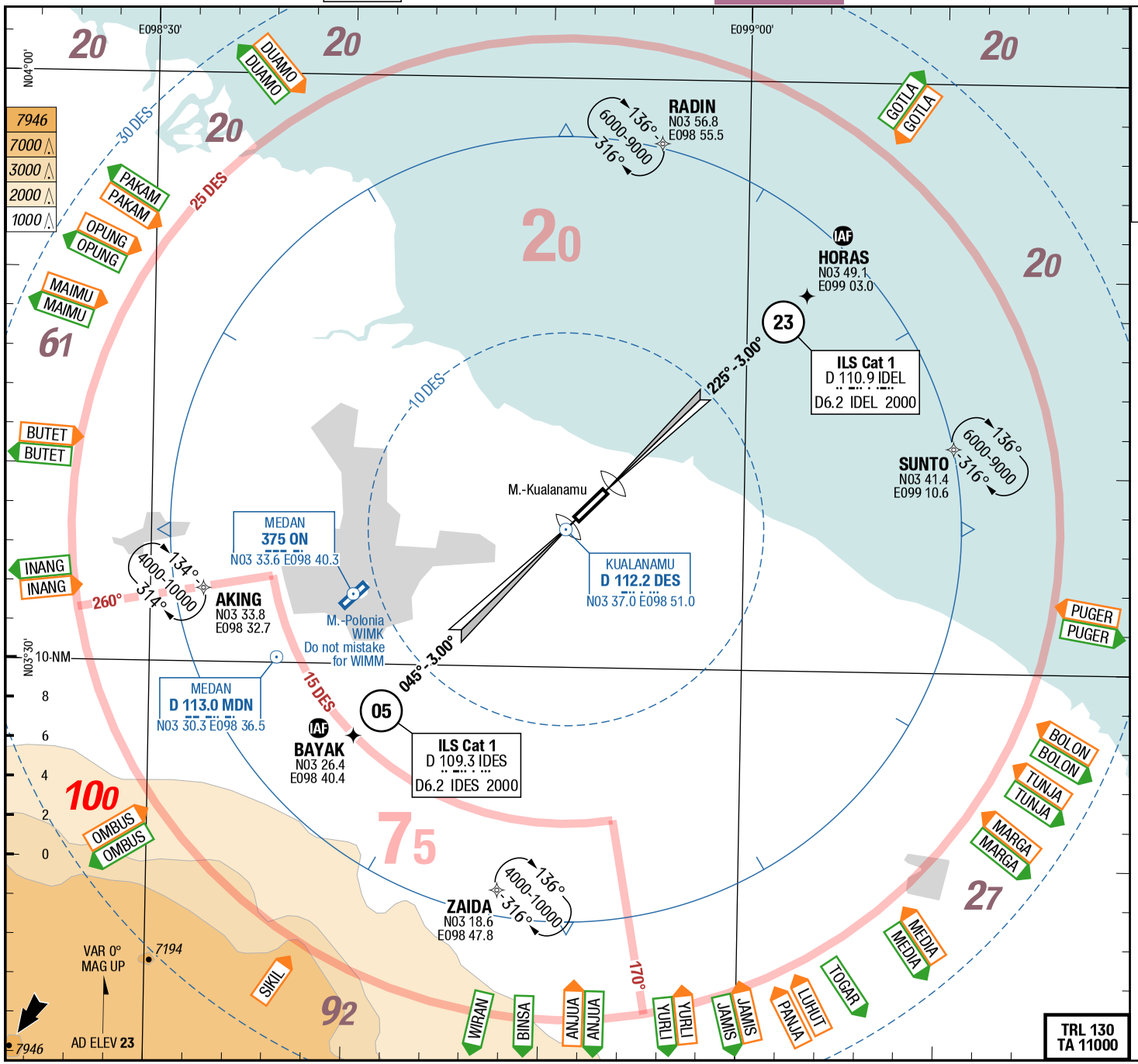
RWY 05

Proceed to BONAR holding area, climb to the last assigned ALT. At BONAR, climb/descend to 7000ft. Hold at BONAR for 4min. Leave BONAR and proceed to AMASE holding are for fuel dumping and maintain 7000ft. After fuel dumping proceed to DES VOR/DME and maintain 7000ft. At D17 DES VOR/DME follow arc to BONAR and descend for IAP.

RWY 23

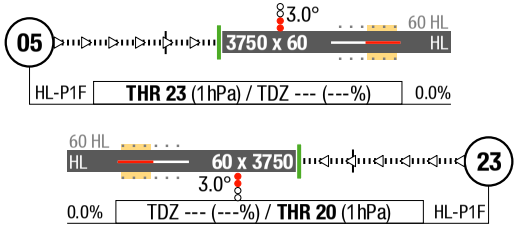
Proceed to NAGAH holding point and climb to the last assigned ALT. At NAGAH climb/descend to 7000ft. Hold at NAGAH for 4min, then proceed to AMASE holding area for fuel dumping and maintain 7000ft. After fuel dumping proceed to DES VOR/DME. At D20 DES VOR/DME follow arc to NAGAH holding and maintain 7000ft. At NAGAH descend for IAP.

ATC action is based on the assumption that the ACFT will take a MNM of 10min to dump fuel. An ACFT therefore should not leave earlier than 10min after arrival at AMASE holding area even if fuel dump is completed at a shorter time or if dumping is not necessary or possible unless circumstances require an immediate return.



ATIS	126.300
RAD	121.200 E 134.100 E 135.900 W
DIR	119.700 120.650
Kualanamu TWR	118.600 120.850
Kualanamu GND	130.300 129.850

Landing RWY system:



Changes: FREQ, PROC, TDZE, IAF, VAR, HLDG, APCH boxes

Changes: FREQ, QFU, VAR, Declared distances

E098°52' E098°53'

N03°39'

N03°38'

N03°37'

ATIS	126.300
Kualanamu TWR	118.600
	120.850
Kualanamu GND	130.300
	129.850

RWY	TORA	ASDA	TODA
05	3750	3810	4050
23	3750	3810	4050

ARP
N 03 38.5
E 098 53.1

23
225°
20

05
045°
23

3750 x 60

60

APRON V

APRON W

APRON Y

TERMINAL

FIRE STATION

COORDINATES

1-3	N03 38.4 E098 52.9
4	N03 38.4 E098 52.8
5	N03 38.3 E098 52.8
6,7	N03 38.5 E098 52.8
8-10	N03 38.4 E098 52.8
11	N03 38.2 E098 52.8
12	N03 38.3 E098 52.8
13-15	N03 38.3 E098 52.7
16,17	N03 38.3 E098 53.0
18,19	N03 38.2 E098 53.0
20	N03 38.2 E098 52.9
21,22	N03 38.2 E098 53.1
23,24	N03 38.2 E098 53.0
25	N03 38.1 E098 53.0
26-29	N03 38.1 E098 52.9
30,31	N03 38.2 E098 52.9
32	N03 38.2 E098 52.8

VAR 0°
MAG UP

AD ELEV **23**

m 0 500 1000

ft 0 1000 2000 3000

Not to scale

Changes: FREQ, VAR, QFU, Declared distances

E098°52' E098°53' N03°39' N03°38' N03°37'

ATIS	126.300
Kualanamu TWR	118.600
	120.850
Kualanamu GND	130.300
	129.850

RWY	TORA	ASDA	TODA
05	3750	3810	4050
23	3750	3810	4050

ARP
N 03 38.5
E 098 53.1

COORDINATES

1-3	N03 38.4 E098 52.9
4	N03 38.4 E098 52.8
5	N03 38.3 E098 52.8
6,7	N03 38.5 E098 52.8
8-10	N03 38.4 E098 52.8
11	N03 38.2 E098 52.8
12	N03 38.3 E098 52.8
13-15	N03 38.3 E098 52.7
16,17	N03 38.3 E098 53.0
18,19	N03 38.2 E098 53.0
20	N03 38.2 E098 52.9
21,22	N03 38.2 E098 53.1
23,24	N03 38.2 E098 53.0
25	N03 38.1 E098 53.0
26-29	N03 38.1 E098 52.9
30,31	N03 38.2 E098 52.9
32	N03 38.2 E098 52.8

Legend:
Taxi routes ARR
Taxi routes DEP

VAR 0°
MAG UP

AD ELEV **23**

m 0 500 1000
ft 0 1000 2000 3000

Not to scale

Changes: FREQ, QFU, VAR, Declared distances

E098°52' E098°53' N03°39' N03°38' N03°37'

ATIS	126.300
Kualanamu TWR	118.600 120.850
Kualanamu GND	130.300 129.850

RWY	TORA	ASDA	TODA
05	3750	3810	4050
23	3750	3810	4050

ARP
N 03 38.5
E 098 53.1

COORDINATES

1-3	N03 38.4 E098 52.9
4	N03 38.4 E098 52.8
5	N03 38.3 E098 52.8
6,7	N03 38.5 E098 52.8
8-10	N03 38.4 E098 52.8
11	N03 38.2 E098 52.8
12	N03 38.3 E098 52.8
13-15	N03 38.3 E098 52.7
16,17	N03 38.3 E098 53.0
18,19	N03 38.2 E098 53.0
20	N03 38.2 E098 52.9
21,22	N03 38.2 E098 53.1
23,24	N03 38.2 E098 53.0
25	N03 38.1 E098 53.0
26-29	N03 38.1 E098 52.9
30,31	N03 38.2 E098 52.9
32	N03 38.2 E098 52.8

Legend:
Taxi routes ARR
Taxi routes DEP

VAR 0°
MAG UP

AD ELEV **23**

m 0 500 1000
ft 0 1000 2000 3000

Not to scale

KNO-WIMM

Indonesia **Medan** Kualanamu

RNAV SIDs RWY 23

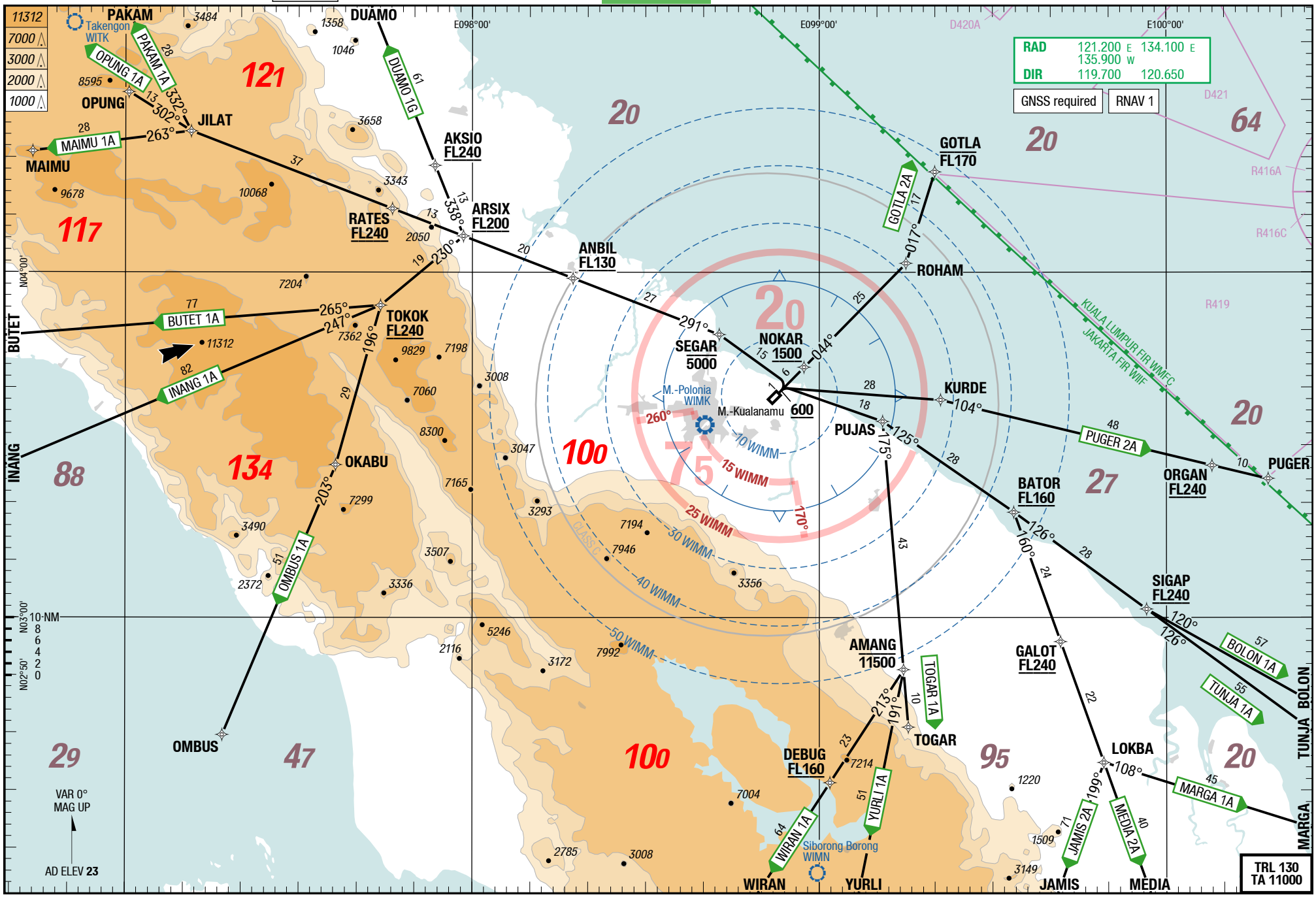
RNAV SIDs RWY 05

SID SID

Kualanamu **Medan** Indonesia

RNAV SIDs RWY 23

RNAV SIDs RWY 05



Changes: new

KNO-WIMM

4-20

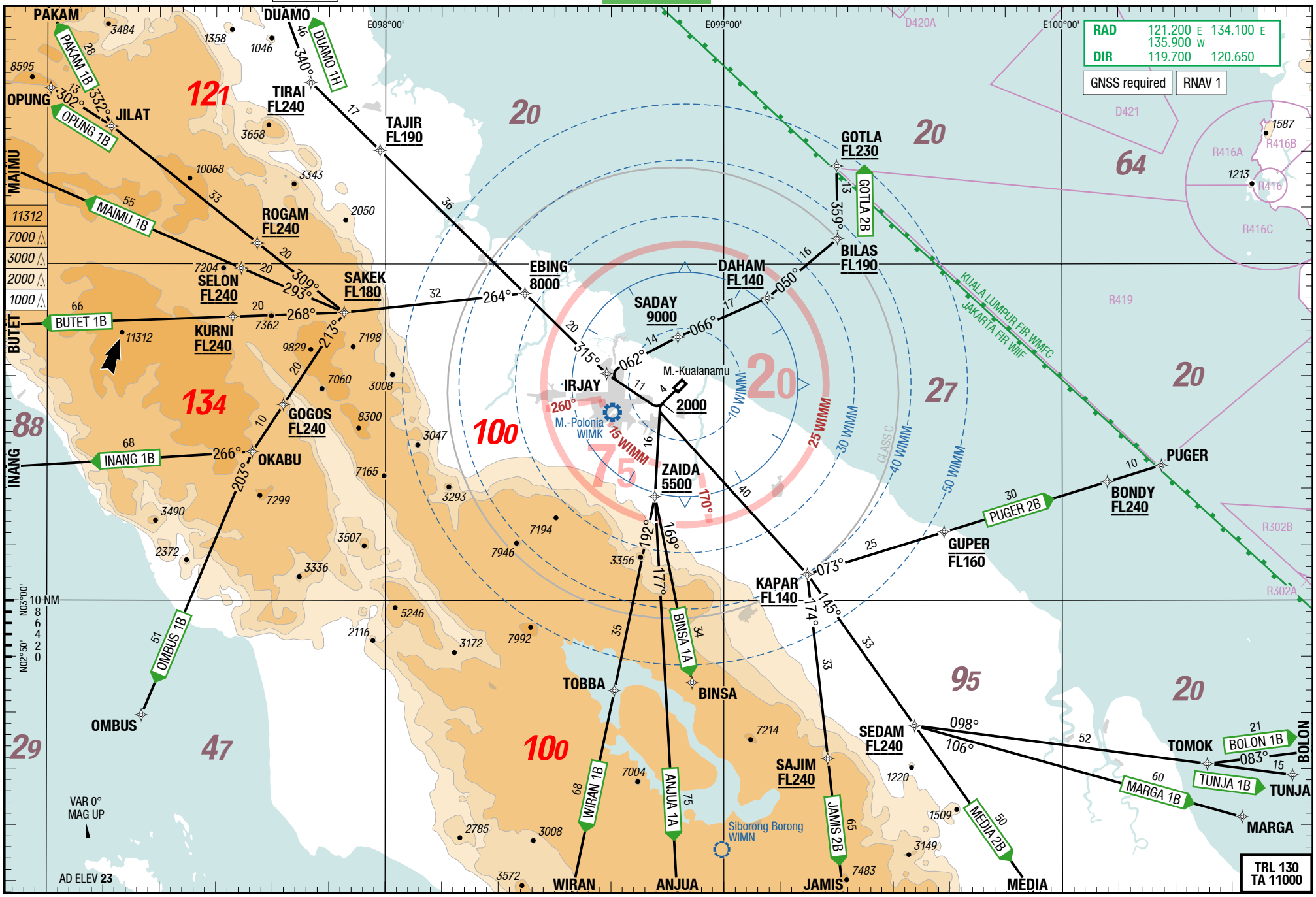
Indonesia **Medan** Kualanamu

RNAV SIDs RWY 23

SID SID

Kualanamu **Medan** Indonesia

RNAV SIDs RWY 23



Changes: new

BOLON 1A / BUTET 1A / DUAMO 1G / GOTLA 2A / INANG 1A / JAMIS 2A / MAIMU 1A / MARGA 1A / MEDIA 2A / OMBUS 1A / OPUNG 1A

RWY 05 (045°)

	GS	120	150	180	210	240	270
4.0%	ft/MIN	500	700	800	900	1000	1100

DESIGNATOR	ROUTING	ALTITUDES
	Runway 05	
BOLON 1A 4.0%	H045° [A600+ ;R] - DCT PUJAS - BATOR - SIGAP - BOLON	BATOR MNM **FL160** SIGAP MNM **FL240**
BUTET 1A 4.0%	H045° [A600+ ;L] - DCT SEGAR - ANBIL - ARSIX - TOKOK - BUTET	SEGAR MAX **5000** ANBIL MNM **FL130** ARSIX MNM **FL200** TOKOK MNM **FL240**
DUAMO 1G 4.0%	H045° [A600+ ;L] - DCT SEGAR - ANBIL - ARSIX - AKSIO - DUAMO	SEGAR MAX **5000** ANBIL MNM **FL130** ARSIX MNM **FL200** AKSIO MNM **FL240**
GOTLA 2A 4.0%	H045° [A600+] - DCT NOKAR - ROHAM - GOTLA	NOKAR MNM **1500** GOTLA MAX **FL170**
INANG 1A 4.0%	H045° [A600+ ;L] - DCT SEGAR - ANBIL - ARSIX - TOKOK - INANG	SEGAR MAX **5000** ANBIL MNM **FL130** ARSIX MNM **FL200** TOKOK MNM **FL240**
JAMIS 2A 4.0%	H045° [A600+ ;R] - DCT PUJAS - BATOR - GALOT - LOKBA - JAMIS	BATOR MNM **FL160** GALOT MNM **FL240**
MAIMU 1A 4.0%	H045° [A600+ ;L] - DCT SEGAR - ANBIL - ARSIX - RATES - JILAT - MAIMU	SEGAR MAX **5000** ANBIL MNM **FL130** ARSIX MNM **FL200** RATES MNM **FL240**
MARGA 1A 4.0%	H045° [A600+ ;R] - DCT PUJAS - BATOR - GALOT - LOKBA - MARGA	BATOR MNM **FL160** GALOT MNM **FL240**
MEDIA 2A 4.0%	H045° [A600+ ;R] - DCT PUJAS - BATOR - GALOT - LOKBA - MEDIA	BATOR MNM **FL160** GALOT MNM **FL240**
OMBUS 1A 4.0%	H045° [A600+ ;L] - DCT SEGAR - ANBIL - ARSIX - TOKOK - OKABU - OMBUS	SEGAR MAX **5000** ANBIL MNM **FL130** ARSIX MNM **FL200** TOKOK MNM **FL240**
OPUNG 1A 4.0%	H045° [A600+ ;L] - DCT SEGAR - ANBIL - ARSIX - RATES - JILAT - OPUNG	SEGAR MAX **5000** ANBIL MNM **FL130** ARSIX MNM **FL200** RATES MNM **FL240**

Changes: New

PAKAM 1A / PUGER 2A / TOGAR 1A / TUNJA 1A / WIRAN 1A / YURLI 1A

RWY 05 (045°)

	GS	120	150	180	210	240	270
4.0%	ft/MIN	500	700	800	900	1000	1100

DESIGNATOR	ROUTING	ALTITUDES
	Runway 05	
PAKAM 1A 4.0%	H045° [A600+ ;L] - DCT SEGAR - ANBIL - ARSIX - RATES - JILAT - PAKAM	SEGAR MAX **5000** ANBIL MNM **FL130** ARSIX MNM **FL200** RATES MNM **FL240**
PUGER 2A 4.0%	H045° [A600+ ;R] - DCT KURDE - ORGAN - PUGER	ORGAN MNM **FL240**
TOGAR 1A 4.0%	H045° [A600+ ;R] - DCT PUJAS - AMANG - TOGAR	AMANG MAX **11500**
TUNJA 1A 4.0%	H045° [A600+ ;R] - DCT PUJAS - BATOR - SIGAP - TUNJA	BATOR MNM **FL160** SIGAP MNM **FL240**
WIRAN 1A 4.0%	H045° [A600+ ;R] - DCT PUJAS - AMANG - DEBUG - WIRAN	AMANG MAX **11500** DEBUG MNM **FL160**
YURLI 1A 4.0%	H045° [A600+ ;R] - DCT PUJAS - AMANG - YURLI	AMANG MAX **11500**

Changes: New

ANJUA 1A / BINSA 1A / BOLON 1B / BUTET 1B / DUAMO 1H / GOTLA 2B / INANG 1B / JAMIS 2B / MAIMU 1B / MARGA 1B / MEDIA 2B / OMBUS 1B / OPUNG 1B

RWY 23 (225°)

	GS	120	150	180	210	240	270
4.0%	ft/MIN	500	700	800	900	1000	1100

DESIGNATOR	ROUTING	ALTITUDES
	Runway 23	
ANJUA 1A 4.0%	H225° [A2000+ ;L] - DCT ZAIDA - ANJUA	ZAIDA MNM **5500**
BINSA 1A 4.0%	H225° [A2000+ ;L] - DCT ZAIDA - BINSA	ZAIDA MNM **5500**
BOLON 1B 4.0%	H225° [A2000+ ;L] - DCT KAPAR - SEDAM - TOMOK - BOLON	KAPAR MNM **FL140** SEDAM MNM **FL240**
BUTET 1B 4.0%	H225° [A2000+ ;R] - DCT IRJAY - EBING - SAKEK - KURNI - BUTET	EBING MAX **8000** SAKEK MNM **FL180** KURNI MNM **FL240**
DUAMO 1H 4.0%	H225° [A2000+ ;R] - DCT IRJAY - EBING - TAJIR - TIRAI - DUAMO	EBING MAX **8000** TAJIR MNM **FL190** TIRAI MNM **FL240**
GOTLA 2B 4.0%	H225° [A2000+ ;R] - DCT IRJAY - SADAY - DAHAM - BILAS - GOTLA	SADAY MNM **9000** DAHAM MNM **FL140** BILAS MNM **FL190** GOTLA MNM **FL230**
INANG 1B 4.0%	H225° [A2000+ ;R] - DCT IRJAY - EBING - SAKEK - GOGOS - OKABU - INANG	EBING MAX **8000** SAKEK MNM **FL180** GOGOS MNM **FL240**
JAMIS 2B 4.0%	H225° [A2000+ ;L] - DCT KAPAR - SAJIM - JAMIS	KAPAR MNM **FL140** SAJIM MNM **FL240**
MAIMU 1B 4.0%	H225° [A2000+ ;R] - DCT IRJAY - EBING - SAKEK - SELON - MAIMU	EBING MAX **8000** SAKEK MNM **FL180** SELON MNM **FL240**
MARGA 1B 4.0%	H225° [A2000+ ;L] - DCT KAPAR - SEDAM - MARGA	KAPAR MNM **FL140** SEDAM MNM **FL240**
MEDIA 2B 4.0%	H225° [A2000+ ;L] - DCT KAPAR - SEDAM - MEDIA	KAPAR MNM **FL140** SEDAM MNM **FL240**
OMBUS 1B 4.0%	H225° [A2000+ ;R] - DCT IRJAY - EBING - SAKEK - GOGOS - OKABU - OMBUS	EBING MAX **8000** SAKEK MNM **FL180** GOGOS MNM **FL240**
OPUNG 1B 4.0%	H225° [A2000+ ;R] - DCT IRJAY - EBING - SAKEK - ROGAM - JILAT - OPUNG	EBING MAX **8000** SAKEK MNM **FL180** ROGAM MNM **FL240**

Changes: New

PAKAM 1B / PUGER 2B / TUNJA 1B / WIRAN 1B

RWY 23 (225°)

	GS	120	150	180	210	240	270
4.0%	ft/MIN	500	700	800	900	1000	1100

DESIGNATOR	ROUTING	ALTITUDES
	Runway 23	
PAKAM 1B 4.0%	H225° [A2000+ ;R] - DCT IRJAY - EBING - SAKEK - ROGAM - JILAT - PAKAM	EBING MAX **8000** SAKEK MNM **FL180** ROGAM MNM **FL240**
PUGER 2B 4.0%	H225° [A2000+ ;L] - DCT KAPAR - GUPER - BONDY - PUGER	KAPAR MNM **FL140** GUPER MAX **FL160** BONDY MNM **FL240**
TUNJA 1B 4.0%	H225° [A2000+ ;L] - DCT KAPAR - SEDAM - TOMOK - TUNJA	KAPAR MNM **FL140** SEDAM MNM **FL240**
WIRAN 1B 4.0%	H225° [A2000+ ;L] - DCT ZAIDA - TOBBA - WIRAN	ZAIDA MNM **5500**

Changes: New

KNO-WIMM

Indonesia **Medan** Kualanamu

RNAV STARs RWY 23

RNAV STARs RWY 05

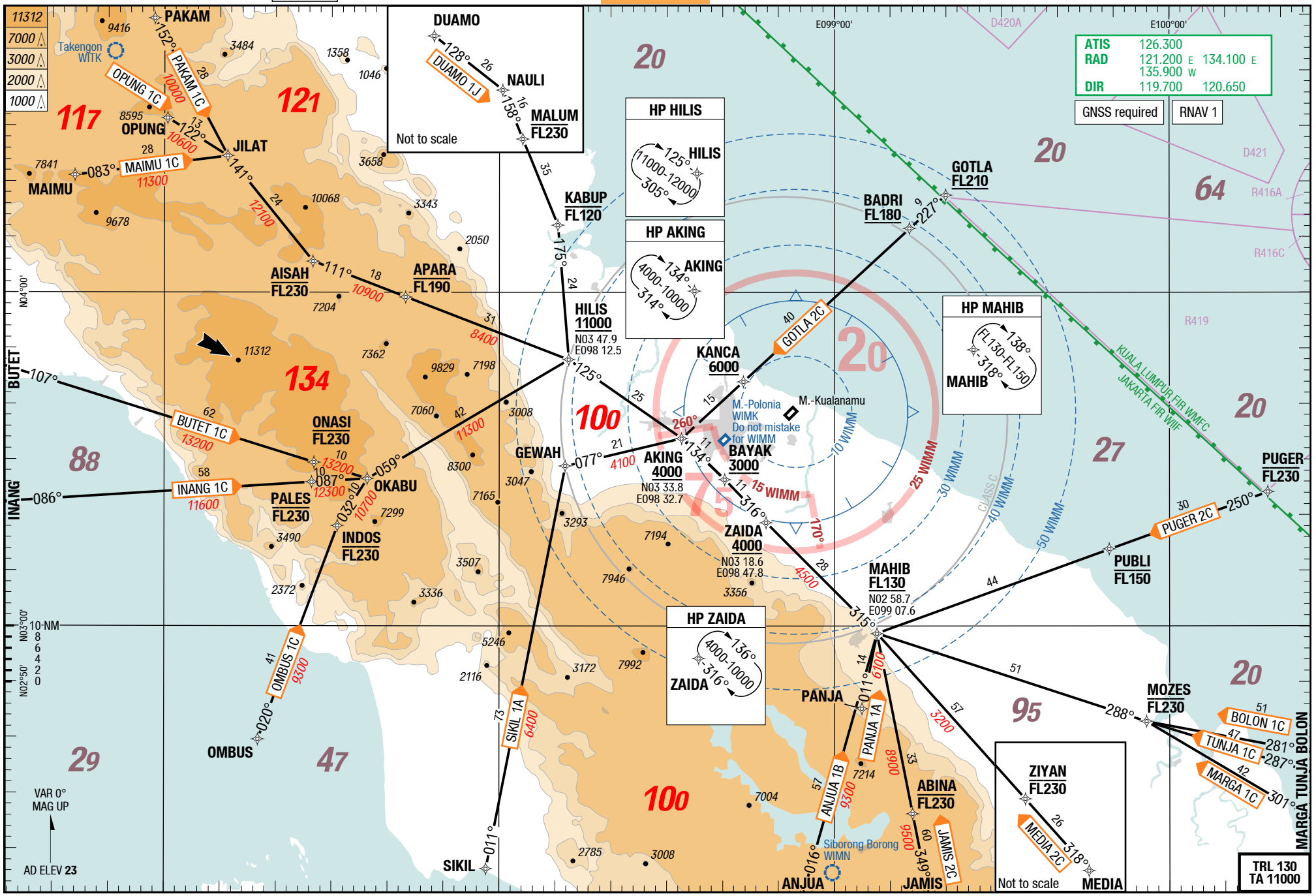
STAR

Kualanamu **Medan** Indonesia

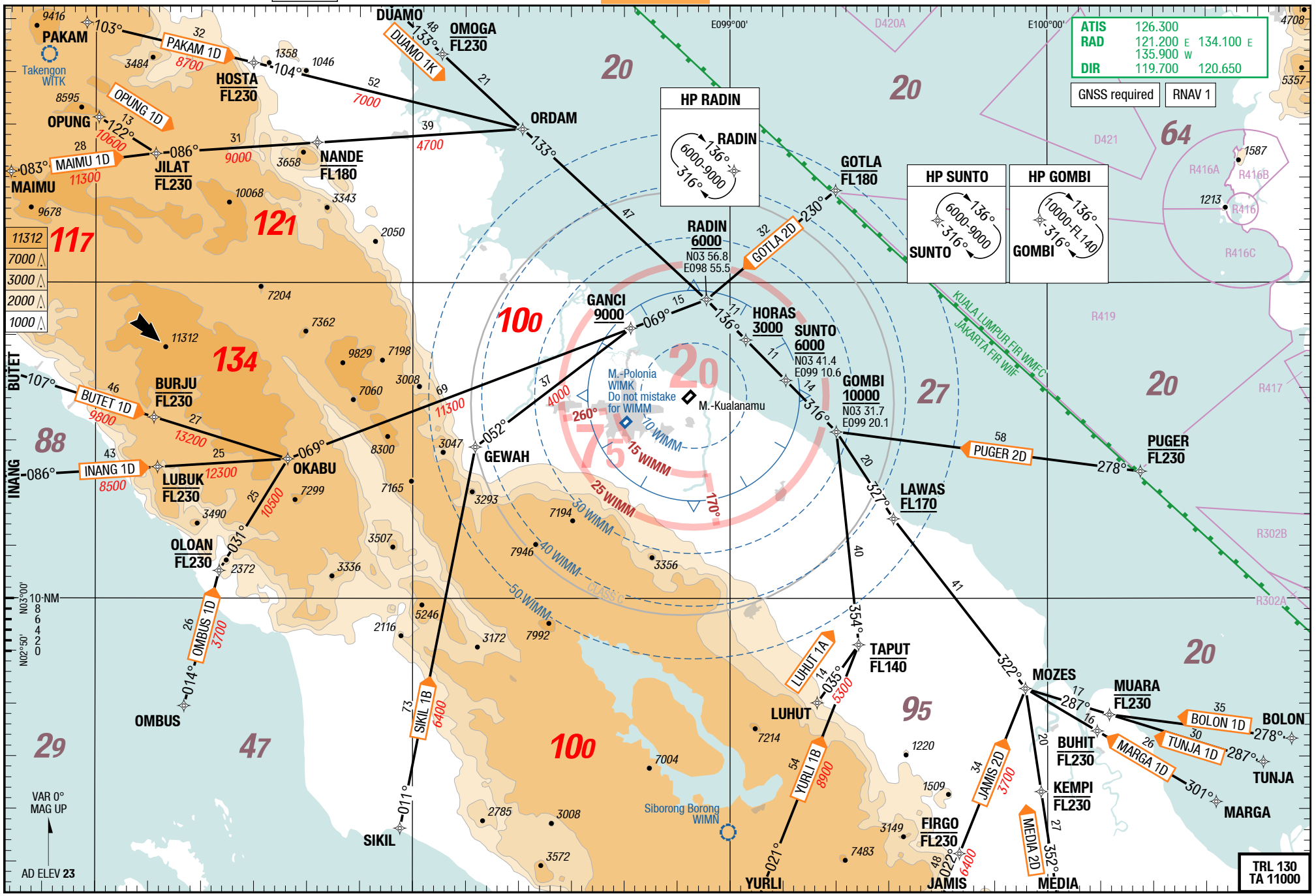
RNAV STARs RWY 23

RNAV STARs RWY 05

STAR



Changes: new

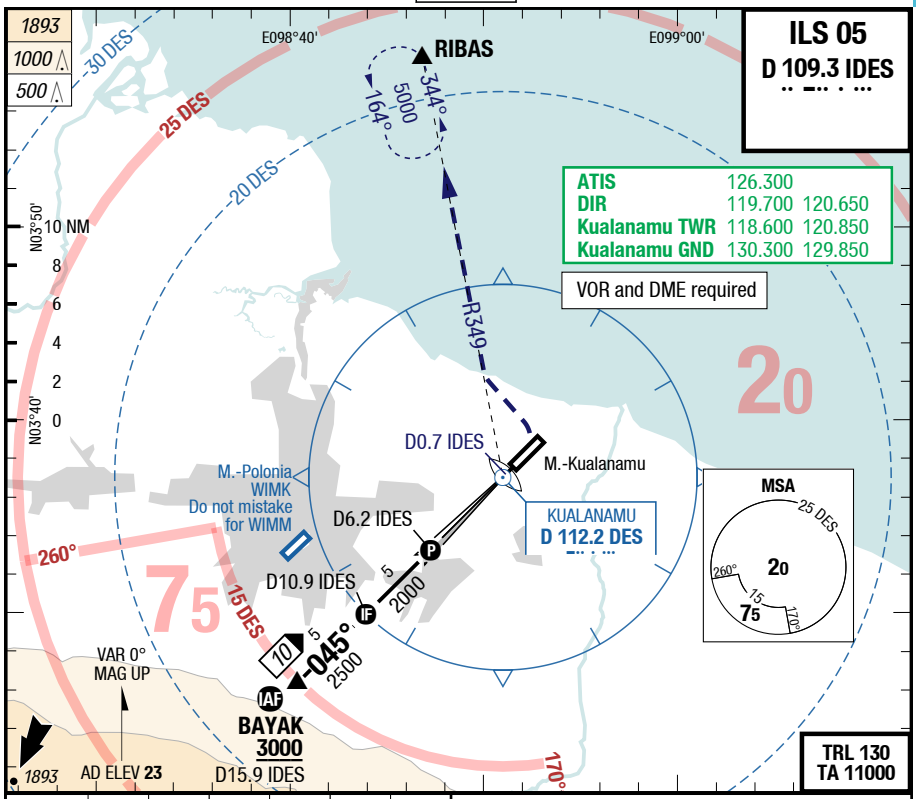

ATIS 126.300
RAD 121.200 E 134.100 E 135.900 W
DIR 119.700 120.650
GNSS required
RNAV 1
PAKAM
Takengon WITK
PAKAM 1D
HOSTA FL230
OPUNG
OPUNG 1D
MAIMU
MAIMU 1D
JILAT FL230
NANDE FL180
DUAMO
DUAMO 1K
OMOGA FL230
ORDAM
HP RADIN
RADIN
RADIN 6000
N03 56.8 E098 55.5
GOTLA FL180
GOTLA 2D
HP SUNTO
SUNTO
HP GOMBI
GOMBI
GANCI 9000
HORAS 3000
SUNTO 6000
N03 41.4 E099 10.6
GOMBI 10000
N03 31.7 E099 20.1
M.-Polonia WIMK
Do not mistake for WIMM
M.-Kualanamu
70 WIMM
15 WIMM
25 WIMM
30 WIMM
40 WIMM
50 WIMM
CLASS C
PUGER FL230
PUGER 2D
LAWAS FL170
TAPUT FL140
LUHUT 1A
LUHUT
YURLI 1B
YURLI
JAMIS 2D
JAMIS
MEDIA 2D
MEDIA
MOZES
MUARA FL230
BOLON 1D
BOLON
TUNJA 1D
TUNJA
MARGA 1D
MARGA
BUHIT FL230
KEMPI FL230
FIRGO FL230
BUTET
BUTET 1D
BURJU FL230
INANG
INANG 1D
LUBUK FL230
OKABU
OLOAN FL230
OMBUS
OMBUS 1D
SIKIL
SIKIL 1B
GEWAH
KUALA LUMPUR FIR WMFC
JAKARTA FIR WIIF
Siborong Borong WIMM
VAR 0° MAG UP
AD ELEV 23
TRL 130
TA 11000
© Lido 2018

Changes: new

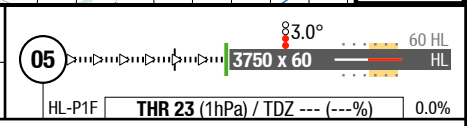
KNO-WIMM

7-10

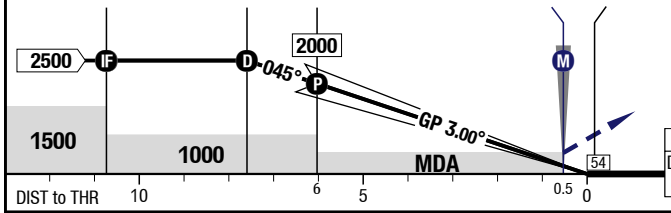
ILS 05



LOC 3.00° D IDES	7.8	6	5	4	3	2
	2500	1940	1620	1300	980	660



D10.9 IDES ***D7.8*** D6.2 D0.7 **IDES**



LT intercept R349 **DES**
to RIBAS
climb **5000**

GS	120	140	160
D6.2 IDES	*640*	*740*	*850*
-MAPt	*2:45*	*2:21*	*2:04*

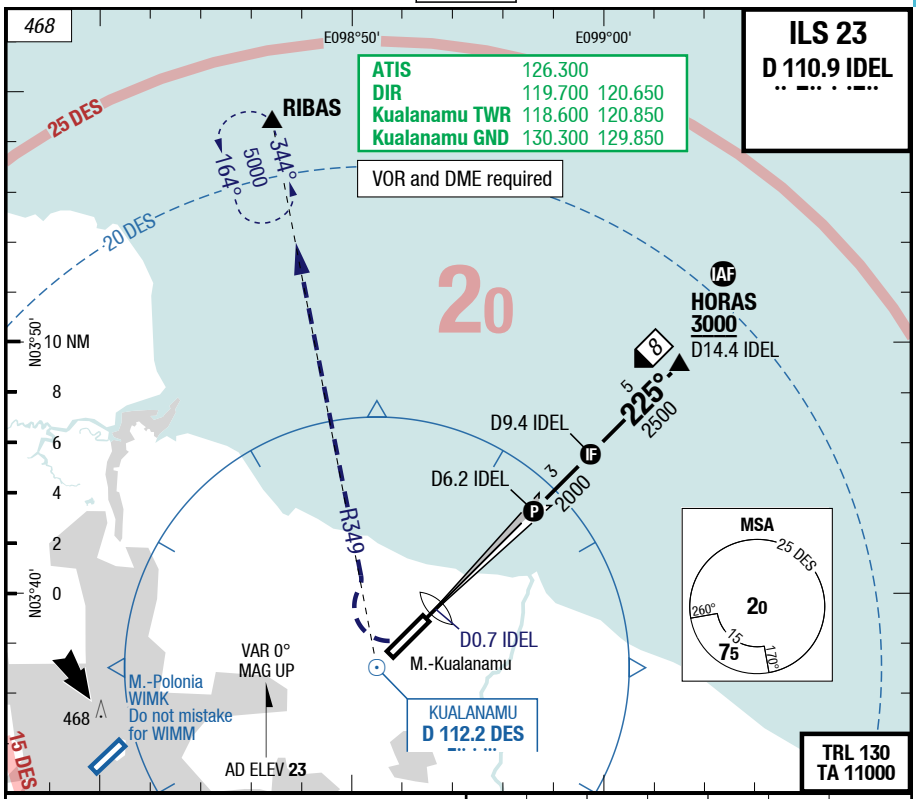
05		**Cat 1 DME**	**LOC DME**	**LOC DME** APL U/S			**Circling**
C	ft - m/km ft	210 - 800V **230**	340 - 1.0V **360**	340 - 1.9V **360**			710 - 3.5V **730**
D	ft - m/km ft	210 - 800V **230**	340 - 1.0V **360**	340 - 1.9V **360**			710 - 3.6V **730**

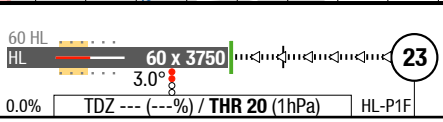
Changes: Completely revised

KNO-WIMM

7-20

ILS 23

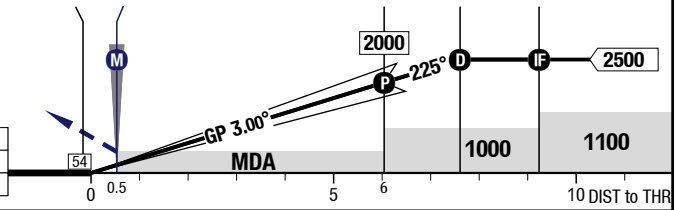




2	3	4	5	6	7.8	LOC 3.00° D IDEL
660	980	1300	1620	1940	2500	

IDEL D0.7 D6.2 ***D7.8*** D9.4 IDEL

RT intercept R349 **DES** to RIBAS climb **5000**



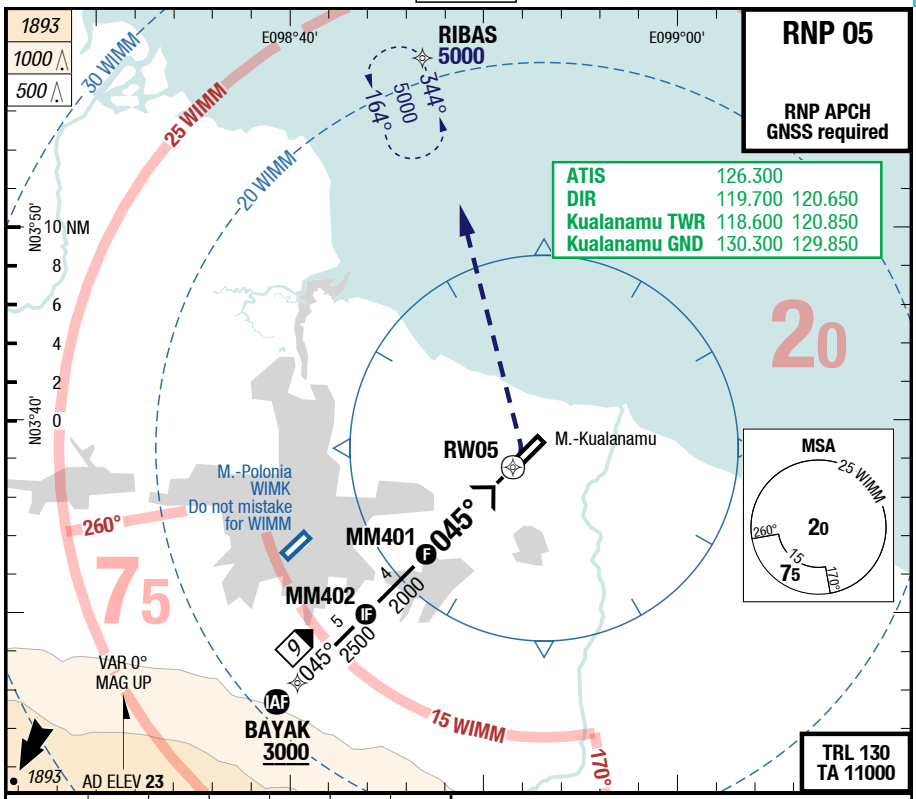
GS	120	140	160
D6.2 IDEL	*640*	*740*	*850*
-MAPt	*2:45*	*2:22*	*2:04*

23		**Cat 1 DME**	**LOC DME**	**LOC DME** APL U/S			**Circling**
C	ft - m/km ft	210 - 800V **230**	370 - 1.2V **390**	370 - 2.1V **390**			710 - 3.5V **730**
D	ft - m/km ft	210 - 800V **230**	370 - 1.2V **390**	370 - 2.1V **390**			710 - 3.6V **730**

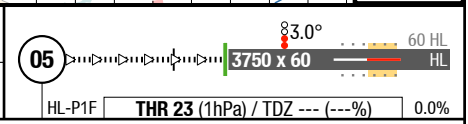
Changes: Completely revised

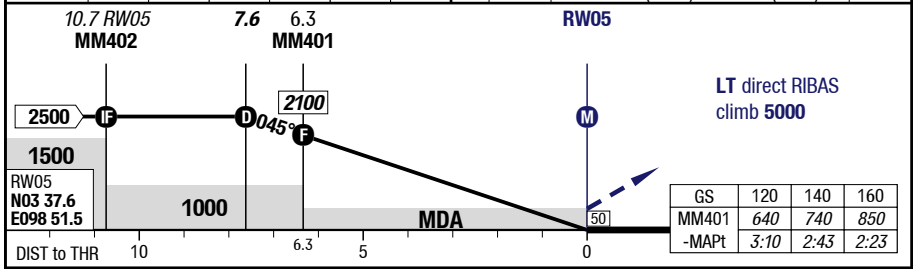
KNO-WIMM

RNP 05



3.00° RW05	7.6	6	5	4	3	2
	2500	1990	1670	1350	1030	710





GS	120	140	160
MM401	*640*	*740*	*850*
-MAPt	*3:10*	*2:43*	*2:23*

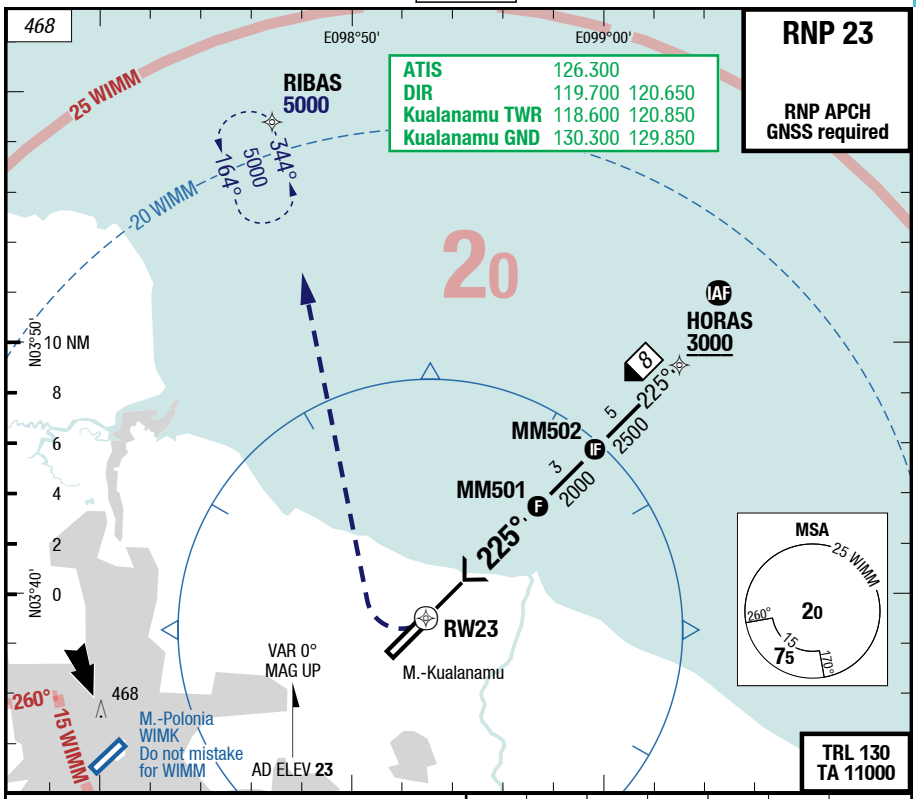
05		RNP VNAV 1) 2)	RNP VNAV APL U/S 2) 3)	RNP LNAV	RNP LNAV APL U/S		Circling
C	ft - m/km ft	380 - 1.3V **400**	380 - 2.2V **400**	380 - 1.3V **400**	380 - 2.2V **400**		710 - 3.5V **730**
D	ft - m/km ft	380 - 1.3V **400**	380 - 2.2V **400**	380 - 1.3V **400**	380 - 2.2V **400**		710 - 3.6V **730**

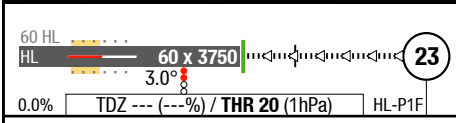
1) With EVS VIS 900m
2) Uncompensated BARO VNAV NA below +15°C (59°F)
3) With EVS VIS 1.5km

Changes: new

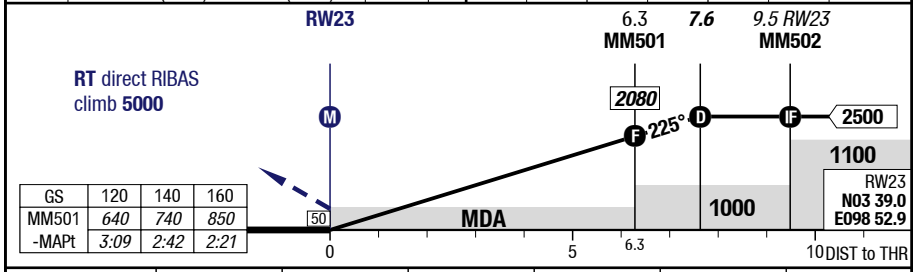
KNO-WIMM

RNP 23





2	3	4	5	6	7.6	3.00° RW23
710	*1030*	*1350*	*1670*	*1980*	2500	



23		RNP VNAV 1) 2)	RNP VNAV APL U/S 2) 3)	RNP LNAV	RNP LNAV APL U/S		Circling
C	ft - m/km ft	340 - 1.0V **360**	340 - 1.9V **360**	430 - 1.6V **450**	430 - 2.5V **450**		710 - 3.5V **730**
D	ft - m/km ft	340 - 1.0V **360**	340 - 1.9V **360**	430 - 1.6V **450**	430 - 2.5V **450**		710 - 3.6V **730**

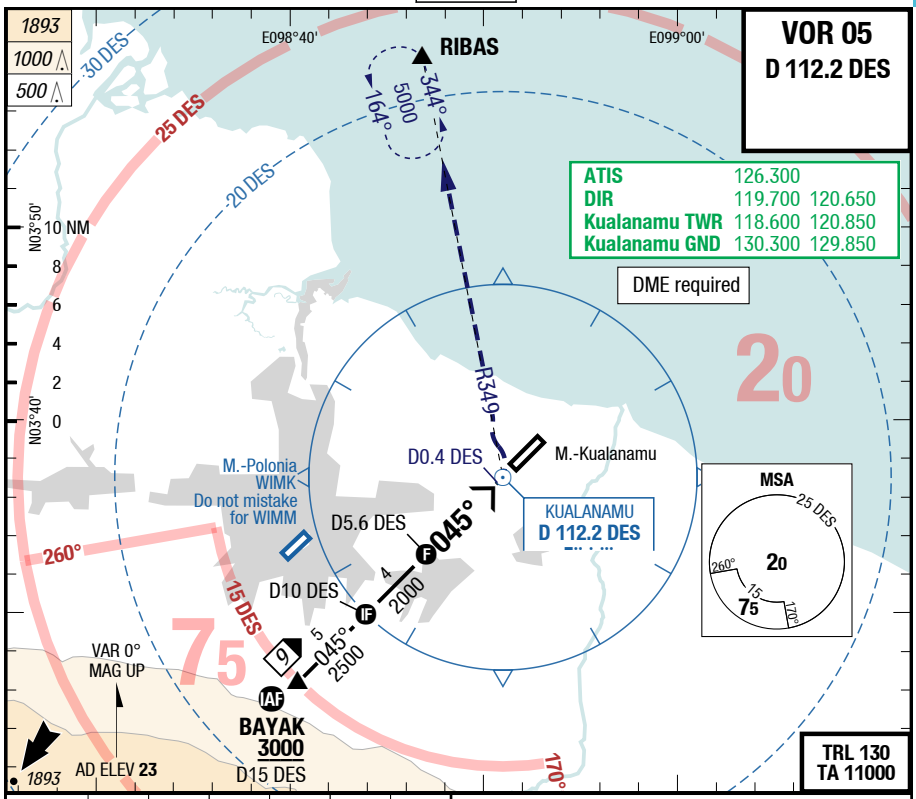
1) With EVS VIS 800m
2) Uncompensated BARO VNAV NA below +15°C (59°F)
3) With EVS VIS 1.3km

Changes: new

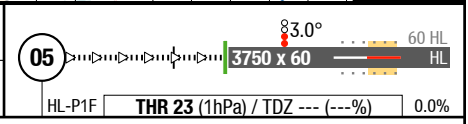
KNO-WIMM

7-50

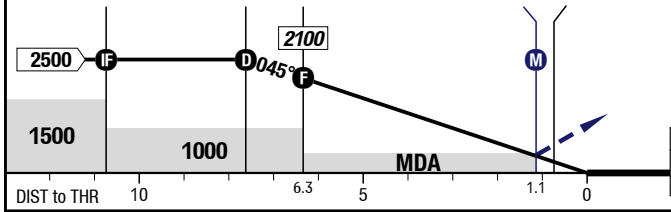
VOR 05



3.00° D DES	6.9	5	4	3	2	1
	2500	1900	1590	1270	950	630



D10 DES **D6.9** D5.6 D0.4 **DES**



LT intercept R349 **DES**
to RIBAS
climb **5000**

GS	120	140	160
D5.6 DES	*640*	*740*	*850*
-MAPt	*2:36*	*2:14*	*1:57*

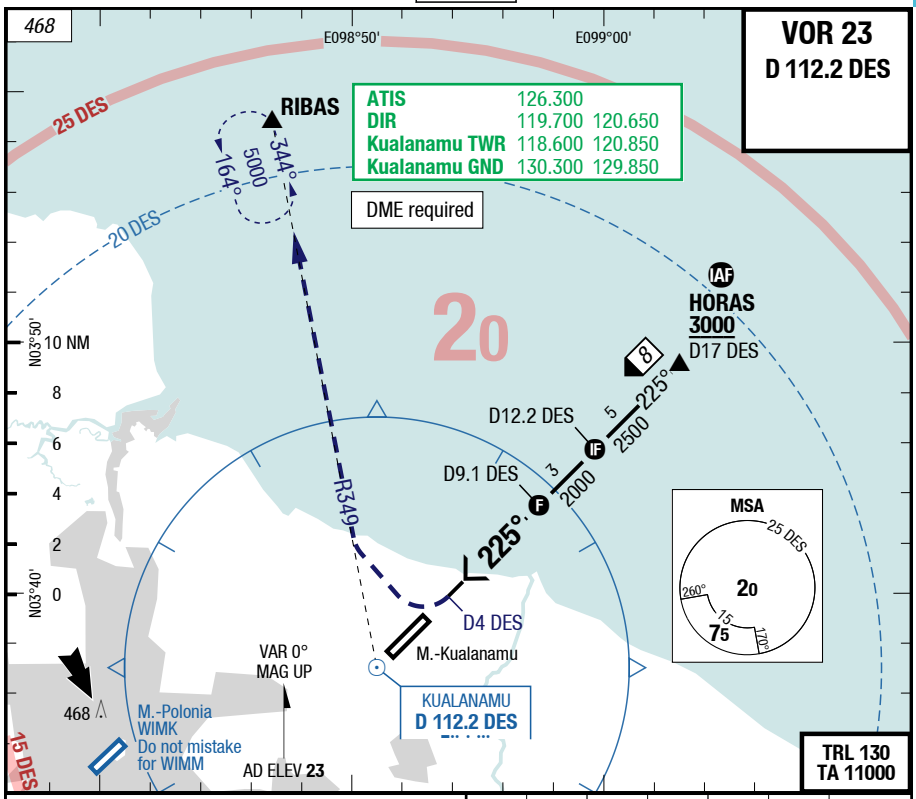
05		**VOR DME**	**VOR DME** APL U/S				**Circling**
C	ft - m/km ft	390 - 1.3V **410**	390 - 2.2V **410**				710 - 3.5V **730**
D	ft - m/km ft	390 - 1.3V **410**	390 - 2.2V **410**				710 - 3.6V **730**

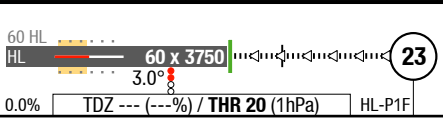
Changes: Completely revised

KNO-WIMM

7-60

VOR 23



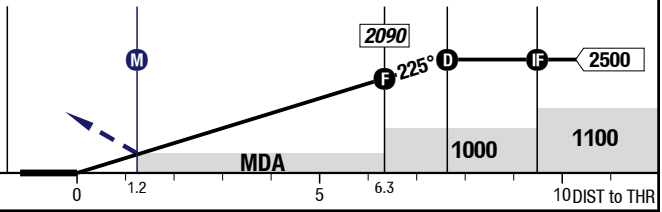


5	6	7	8	9	10.4	3.00°
790	1100	1420	1740	2060	2500	D DES

DES D4 D9.1 ***D10.4*** D12.2 DES

RT intercept R349 **DES**
to RIBAS
climb **5000**

GS	120	140	160
D9.1 DES	*640*	*740*	*850*
-MAPt	*2:33*	*2:11*	*1:55*



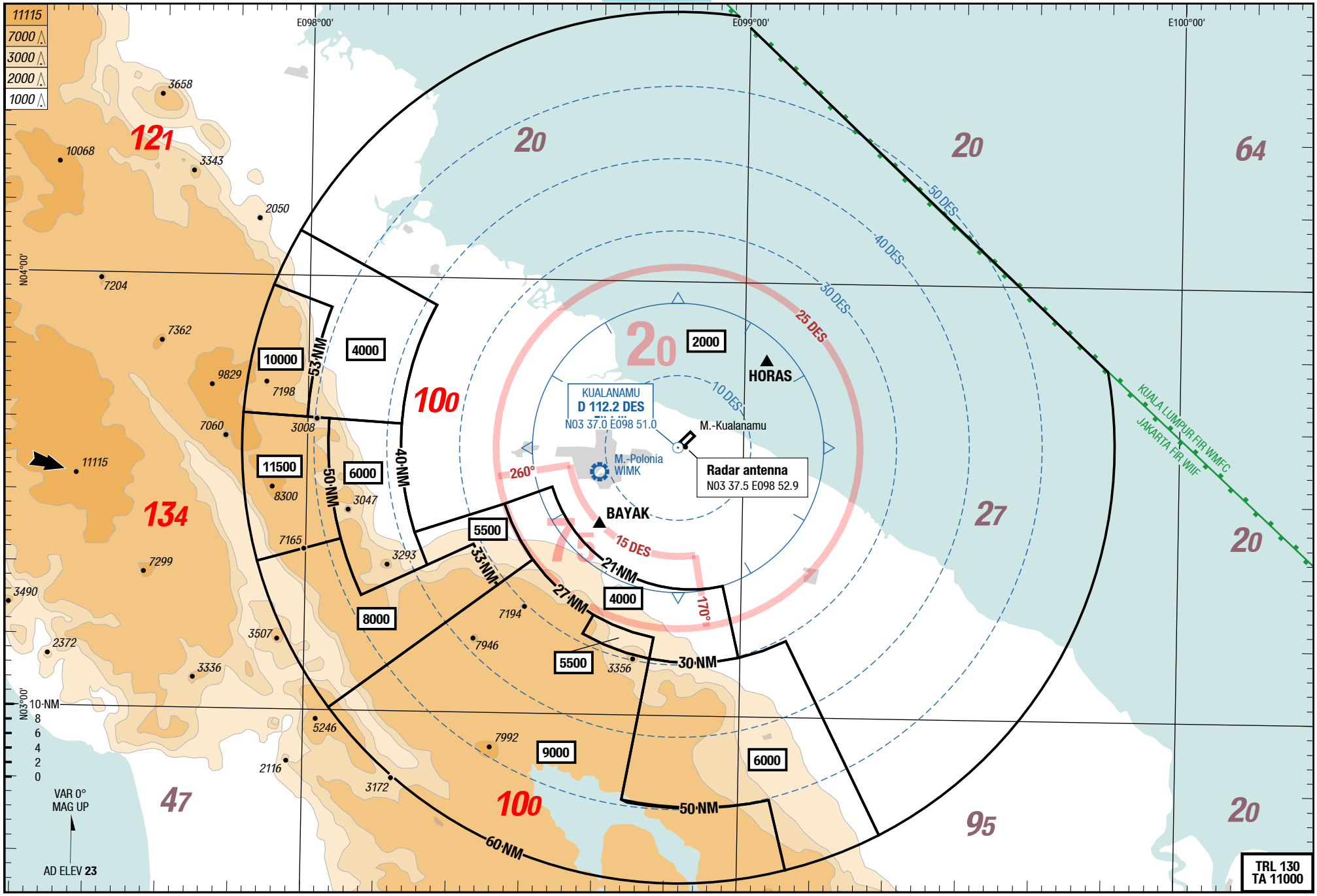
23		VOR DME	VOR DME APL U/S				Circling
C	ft - m/km ft	430 - 1.6V **450**	430 - 2.5V **450**				710 - 3.5V **730**
D	ft - m/km ft	430 - 1.6V **450**	430 - 2.5V **450**				710 - 3.6V **730**

Changes: Completely revised

Indonesia **Medan** Kualanamu
NIL
MRC

MRC MRC

Kualanamu **Medan** Indonesia
NIL
MRC



Changes: MSA, WPT , Navaid , OBST, VAR