
AIP SUPPLEMENT MALAYSIA

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06/2016
17 MAR
AIRAC

KOTA KINABALU FLIGHT INFORMATION REGION KOTA KINABALU AIRPORT

THE INTRODUCTION OF NEW AND REVISED INSTRUMENT FLIGHT PROCEDURES FOR RWY 02 AND RWY 20 KOTA KINABALU INTERNATIONAL AIRPORT

1 INTRODUCTION

- 1.1 The existing Kota Kinabalu Terminal area airspace routes are revised to provide for a more flexible and expeditious arrival and departure routes.
- 1.2 The purpose of this AIP Supplement is to notify the aviation industry of the modification to existing terminal air routes and establishment of new RNAV and VOR/DME air routes for both arrivals and departures.
- 1.3 The information provided in this AIP Supplement is presented in similar ICAO format applicable for the Aeronautical Information Publication.

2 AERODROME CHART and AWOS

- 2.1 The aerodrome chart is updated with taxiway F centerline marking. The aerodrome chart published under AIP Supplement 20 / 2014 dated 02 October 2014 APPENDIX B is superseded by the revised chart shown in APPENDIX B.
- 2.2 An automated weather observation system (AWOS) is installed and provides real time weather information to MET and ATC. Detailed information is provided in APPENDIX I and APPENDIX J.

3 THE INTRODUCTION OF NEW AND REVISED SID AND STAR PROCEDURES RWY 02 AND RWY 20

- 3.1 The new and revised SID Procedures are as follows:

APPENDIX E - 1	DEPARTURES RWY 02 (RNAV 1)
APPENDIX E - 2	DEPARTURES RWY 02 (RNAV 1)
APPENDIX E - 3	DEPARTURES RWY 20 (RNAV 1)
APPENDIX E - 4	DEPARTURES RWY 20 (RNAV 1)
APPENDIX E - 5	DEPARTURES RWY 02 (VOR/DME)
APPENDIX E - 6	DEPARTURES RWY 02 (VOR/DME)
APPENDIX E - 7	DEPARTURES RWY 20 (VOR/DME)
APPENDIX E - 8	DEPARTURES RWY 20 (VOR/DME)

7 ESTABLISHMENT OF RESTRICTED AREA WBR 527

- 7.1 A restricted area WBR 527 is established over the Sepanggar area. All unauthorized aircraft are not allowed to enter this airspace. Details of the area are shown in table ENR 5.1 – 15 in APPENDIX H.

8 TYPE A CHARTS AND CHARTS RELATED TO KOTA KINABALU

- 8.1 Consistent with the new runway length and elevation of the departure end of both runways new ICAO Type A charts are produced and these are shown in APPENDIX D.

The new chart supersede the existing chart in AIP Malaysia WBKK AD 2- 31 AERODROME OBSTACLE CHART.

- 8.2 Charts related to Kota Kinabalu International Airport that are still current in AIP Malaysia and subsequent AIP Supplement are shown in APPENDIX A-1 to A-2.

9 WAYPOINTS

- 9.1 Waypoints ANLEN, ELSAR, RUREN, PEXIT, LAMEN, NUSKO, GAYAN, ALBIT, IBOKA, SAPAK, AVDUL, UBMIK, KAPRI, GUMEK, APEDA, GUKLI, NOMIN, IDMAM, AKABA and OLPAN are deleted.

- 9.2 New waypoints and existing waypoints that are still current with radials / distances from VJN VOR and coordinates are republished.

These are shown in APPENDIX A.

10 IMPLEMENTATION

- 10.1 This AIP Supplement and relevant Charts will become effective on 26 MAY 2016.

11 CANCELLATION

- 11.1 This AIP Supplement will remain current until the information is published in AIP Malaysia.

**DATO' SRI AZHARUDDIN BIN ABDUL RAHMAN
DIRECTOR GENERAL
DEPARTMENT OF CIVIL AVIATION
MALAYSIA**

1. LIST OF WAYPOINTS

The following list contains the existing and new waypoints related to SID, STAR and IAP procedures at Kota Kinabalu International airport:-

No.	ID WAYPOINTS	REFERENCE RADIAL/DME FROM VJN DVOR/DME	LATITUDE (N)	LONGITUDE (E)	REMARKS
1	ANL0D	090° / 40	055355.82N	116 42 11.00E	
2	TUSVU	110° / 40	054011.13N	1163944.83E	
3	MAKSU	127° / 40	052944.92N	1163404.62E	
4	ELADO	188° / 40	051408.92N	1155627.48E	
5	PIMEP	218° / 40	052216.22N	1153720.74E	
6	OREKO	223° / 40	052432.74N	1153441.00E	
7	DULIM	228° / 40	052700N	1153212E	
8	SUKUS	232° / 40	052911.55N	1153025.62E	
9	EGENU	257° / 40	054500N	1152306E	
10	ADLEX	272° / 47	055531.65N	1151512.46E	
11	ENBAX	004° / 50	064402.57N	1160532.21E	
12	RUMEG	035° / 40	062652.37N	1162505.29E	
13	KABDU	038° / 50	063322N	1163312E	
14	BITON	331.2° / 10.2	060254.27N	1155709.01E	
15	UKALO	291° / 17.8	060021.38N	1154520.97E	
16	UKBON	236.3° / 16.4	054448.25N	1154822.60E	
17	KILOB	223.4° / 27.4	053352.84N	1154312.26E	
18	DOVID	206.9° / 23.2	053309.49N	1155129.97E	
19	TOMEL	110.3° / 10	055027.58N	1161126.87E	
20	LEPNA	022.4° / 18.3	061058.11N	1160902.06E	
21	AKNIR	031° / 40	062824.14N	1162244.20E	
22	VETAG	035° / 50	063505.97N	1163051.48E	
23	KIGIS	049° / 18.3	060558.05N	1161554.92E	
24	TIBNI	090° / 21.3	055355.42N	1162326.03E	
25	EKIGO	171.7° / 18.2	053550.54N	1160440.87E	
26	UGUKI	228.6° / 18.6	054125.18N	1154751.05E	
27	APEBU	258.7° / 17	055036.04N	1154517.49E	
28	POLEB	292.5° / 10.1	055750.48N	1155238.51E	
29	PEDSI	339.2° / 10	060322.97N	1155827.57E	
30	EMTEN	027.6° / 31.4	062154.13N	1161639.03E	

31	SATKO	081° / 10.2	055532.41N	1161209.95E	
32	DAGIR	202° / 02	055203.11N	1160116.26E	
33	ELBAR	044° / 30.8	061610.47N	1162331.88E	
34	AKSAP	157.7° / 10.4	054419.15N	1160559.52E	
35	AROKI	176.3° / 17.7	053612.84N	1160310.39E	
36	UPKEX	202° / 13.8	054105.22N	1155656.24E	
37	RUMAL	358° / 16.4	061027.14N	1160126.65E	
38	SABNU	320.6° / 16.5	060646.88N	1155131.34E	
39	POPAT	293° / 9.2	055735.96N	1155330.02E	
40	RUMPA	239° / 19.9	054339.43N	1154453.41E	
41	DUMUB	115.8° / 10.1	054931.38N	1161111.45E	
42	GORKA	090° / 20.1	055355.46N	1162214.61E	
43	DOMBU	050° / 21.9	060804.10N	1161855.71E	
44	NULTO	023° / 19.5	061154.36N	1160953.24E	
45	LANEK	023° / 15	060748.99N	1160757.65E	
46	LUKVA	217.3° / 26.8	053241.46N	1154535.92E	
47	BIMUM	202.4° / 16	053906.31N	1155553.15E	
48	OSRAM	192.3° / 27.4	052702.90N	1155609.71E	
49	DOGVU	165.7° / 20	053425.86N	1160658.90E	
50	SAPTU	137° / 30.3	053142.06N	1162247.79E	
51	EMRUS	129° / 26.8	053655.24N	1162250.24E	
52	EKUBU	121.7° / 22.2	054212.83N	1162101.60E	
53	OKVUG	005.5° / 23	061659.35N	1160415.59E	
54	SUSGA	053° / 19.7	060550.71N	1161750.26E	
55	LULPO	232.7° / 14	054526.47N	1155052.37E	
56	ADMUS	202° / 12	054248.7N	1155726.4E	
57	LANEK HOLD	023° / 15	060748.99N	1160757.65E	

**WBKK AD 2.24 CHARTS RELATED TO KOTA KINABALU
INTERNATIONAL AIRPORT**

CHART NAME	PAGE
AERODROME CHART - ICAO	APPENDIX B
IFR HOLDING AREAS	APPENDIX C
AIRCRAFT PARKING / DOCKING CHART	WBKK AD 2-25-1
AERODROME OBSTACLE CHART - ICAO - TYPE A	APPENDIX D
KOTA KINABALU CONTROL ZONE CHART	WBKK AD 2-47
ATC SURVEILLANCE MINIMUM ALTITUDE CHART	WBKK AD 2-40
STANDARD RADAR DEPARTURE	WBKK AD 2-50
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO - DEPARTURES (LEFT TURN) RWY 02 (RNAV 1)	APPENDIX E-1
STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO - DEPARTURES (RIGHT/ LEFT TURN) RWY 02 (RNAV 1)	APPENDIX E-2
STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO - DEPARTURES (RIGHT TURN) RWY 20 (RNAV 1)	APPENDIX E-3
STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO - DEPARTURES (LEFT TURN) RWY 20 (RNAV 1)	APPENDIX E -4
STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO - RWY 02 VOR/DME	APPENDIX E -5
STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO - RWY 02 VOR/DME	APPENDIX E -6
STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO - RWY 20 VOR/DME	APPENDIX E -7
STANDARD DEPARTURE CHART-INSTRUMENT (SID) - ICAO - RWY 20 VOR/DME	APPENDIX E -8
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - ARRIVALS (WEST) RWY 20 (RNAV 1)	APPENDIX E-9
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - ARRIVALS (EAST) RWY 20 (RNAV 1)	APPENDIX E-10
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - ARRIVALS (WEST) RWY 02 (RNAV 1)	APPENDIX E-11
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - ARRIVALS (EAST) RWY 02 (RNAV 1)	APPENDIX E-12
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - RWY 02 VOR/DME	APPENDIX E-13
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - RWY 02 VOR/DME	APPENDIX E-14
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - RWY 20 VOR/DME	APPENDIX E-15
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO - RWY 20 VOR/DME	APPENDIX E-16
INSTRUMENT APPROACH CHART - ICAO - RWY 02 ILS z or LOC z	APPENDIX F-1
INSTRUMENT APPROACH CHART - ICAO - RWY 02 ILS y	AIP Supp 20/2014 APPENDIX D-2
INSTRUMENT APPROACH CHART - ICAO - RWY 02 ILS x	AIP Supp 20/2014 APPENDIX D-3
INSTRUMENT APPROACH CHART - ICAO - RWY 02 VOR z	APPENDIX F-2
INSTRUMENT APPROACH CHART – ICAO – RWY 02 VOR y	AIP Supp 20/2014 APPENDIX D-5
INSTRUMENT APPROACH CHART – ICAO – RWY 02 LOC z	AIP Supp 20/2014 APPENDIX D-6

INSTRUMENT APPROACH CHART – ICAO – RWY 20 ILS z or LOC z	APPENDIX F-5
INSTRUMENT APPROACH CHART – ICAO – RWY 20 ILS y or LOC y	AIP Supp 20/2014 APPENDIX D-8
INSTRUMENT APPROACH CHART – ICAO – RWY 20 ILS x	AIP Supp 20/2014 APPENDIX D-9
INSTRUMENT APPROACH CHART – ICAO – RWY 20 VOR z	APPENDIX F-3
INSTRUMENT APPROACH CHART – ICAO – RWY 20 VOR y	APPENDIX F-4
INSTRUMENT APPROACH CHART – ICAO – RWY 20 LOCATOR z	AIP Supp 20/2014 APPENDIX D-12
VFR ROUTES CHART.	APPENDIX G – 1 to APPENDIX G-3

AERODROME CHART - ICAO

ARP 05° 56' 41" N
116° 03' 11" E

ELEV. 18 FT

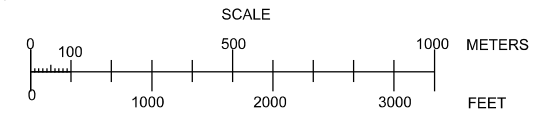
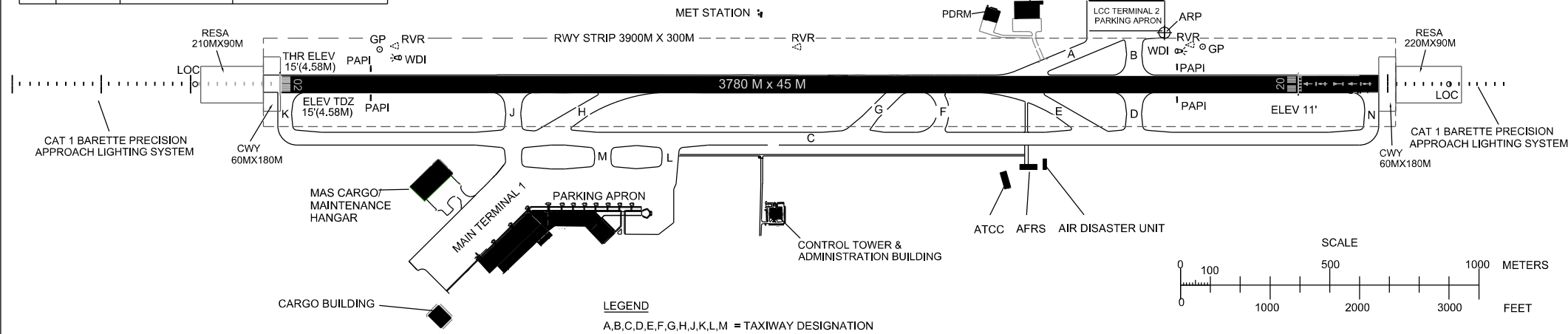
TWR - 118.30
SMC - 121.6
ATIS - 127.4

KOTA KINABALU / KOTA KINABALU
INTERNATIONAL AIRPORT

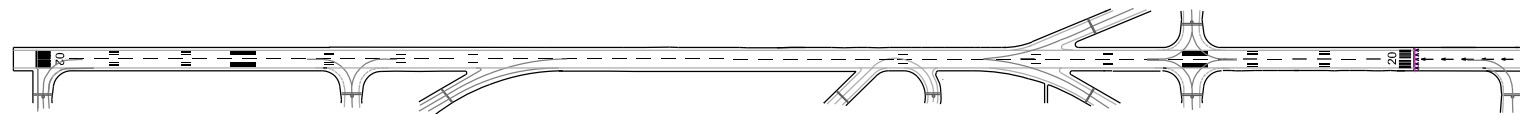
RWY	DIRECTION	THR COORDS	BEARING STRENGTH
02	022.49° M	05° 55' 05.37" N 116° 02' 35.36" E	<u>RWY & TWY</u> PCN : 82/F/C/X/T
			<u>APRON PARKING BAYS</u> PCN : 82/F/C/X/T (FP) PCN : 77/R/C/W/T (RP)
20	202.49° M	05° 56' 50.64" N 116° 03' 19.80" E	<u>LCC TERMINAL 2</u> PCN : 51/F/C/X/T (FP) PCN : 47/R/C/W/T (RP)
			TAXIWAYS 23 M WIDE

TERMINAL 1			LCC TERMINAL 2		
BAY 1 05 55 14.06N 116 03 02.79E	BAY 5 05 55 23.92N 116 02 58.79E	BAY 11 05 55 33.44N 116 03 01.60E	BAY 26 05 56 33.18N 116 03 02.95E	BAY 12 05 55 34.66N 116 03 02.11E	BAY 27 05 56 34.42N 116 03 03.48E
BAY 2 05 55 16.72N 116 03 01.76E	BAY 5A 05 55 23.41N 116 02 59.22E	BAY 12 05 55 34.66N 116 03 02.11E	BAY 28 05 56 35.66N 116 03 04.00E	BAY 13 05 55 35.87N 116 03 02.62E	BAY 28 05 56 35.66N 116 03 04.00E
BAY 2A 05 55 16.25N 116 03 02.16E	BAY 5B 05 55 24.39N 116 02 58.17E	BAY 13 05 55 35.87N 116 03 02.62E	BAY 29 05 56 36.90N 116 03 04.52E	BAY 14 05 55 37.60N 116 03 03.64E	BAY 29 05 56 36.90N 116 03 04.52E
BAY 2B 05 55 17.23N 116 03 01.07E	BAY 6 05 55 26.68N 116 02 58.89E	BAY 14 05 55 37.60N 116 03 03.64E	BAY 30 05 56 38.13N 116 03 05.05E	BAY 6A 05 55 26.33N 116 02 58.89E	BAY 30 05 56 38.13N 116 03 05.05E
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BAY 4A 05 55 21.07N 116 03 00.17E		BAY 18 05 55 36.52N 116 03 05.36E		BAY 19 05 55 35.49N 116 03 04.93E	
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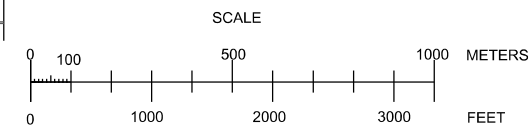
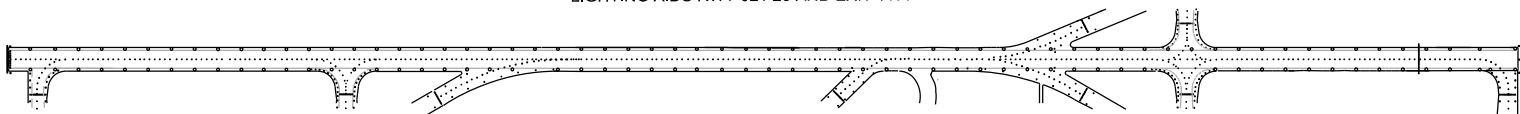
VAR. 0°E
(2016)
ANNUAL RATE OF CHANGE :
2 MIN DECREASING
BEARINGS ARE MAGNETIC
ELEVATIONS IN FEET
DISTANCES IN METRES



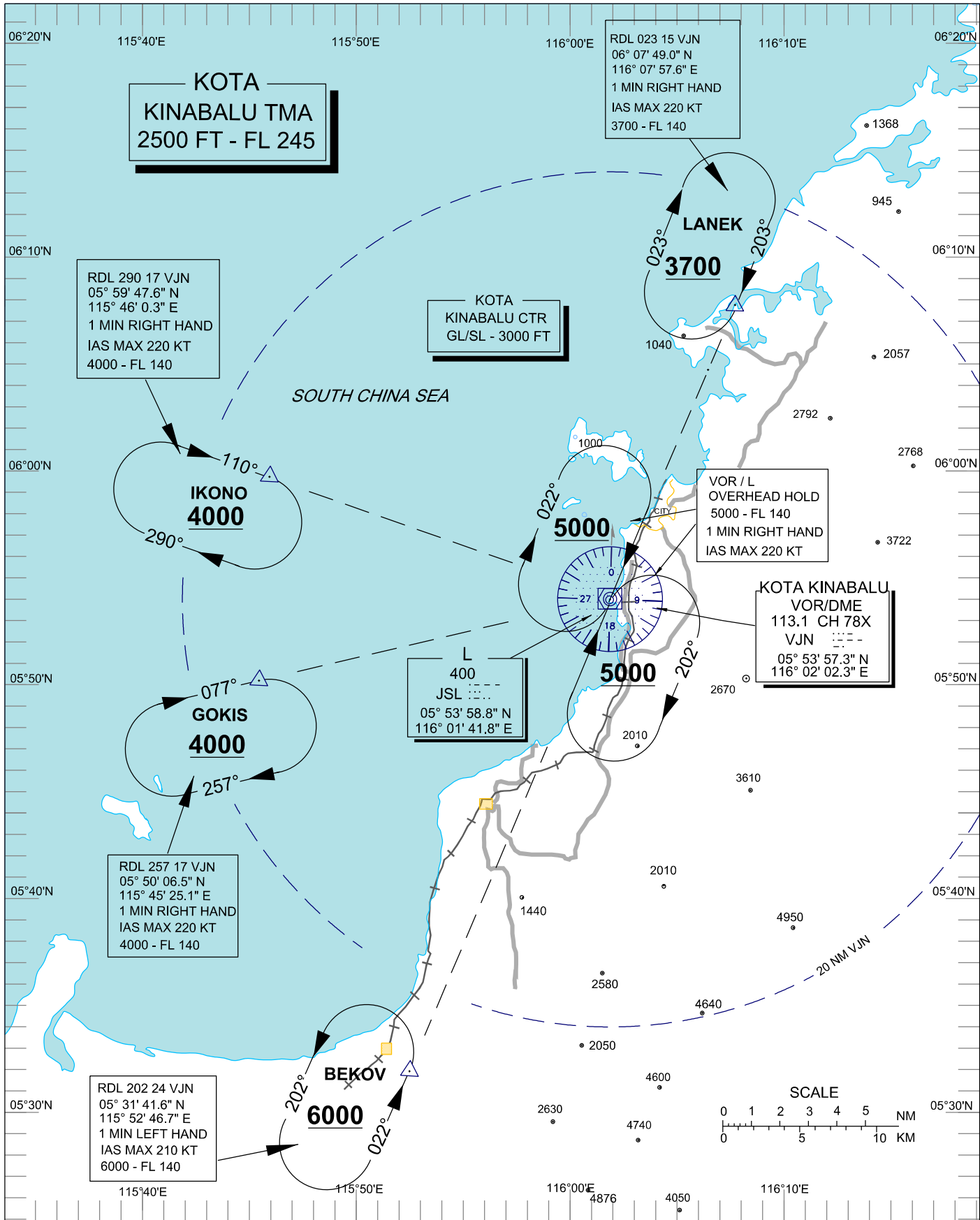
MARKING AIDS RWY 02 / 20 AND EXIT TWY

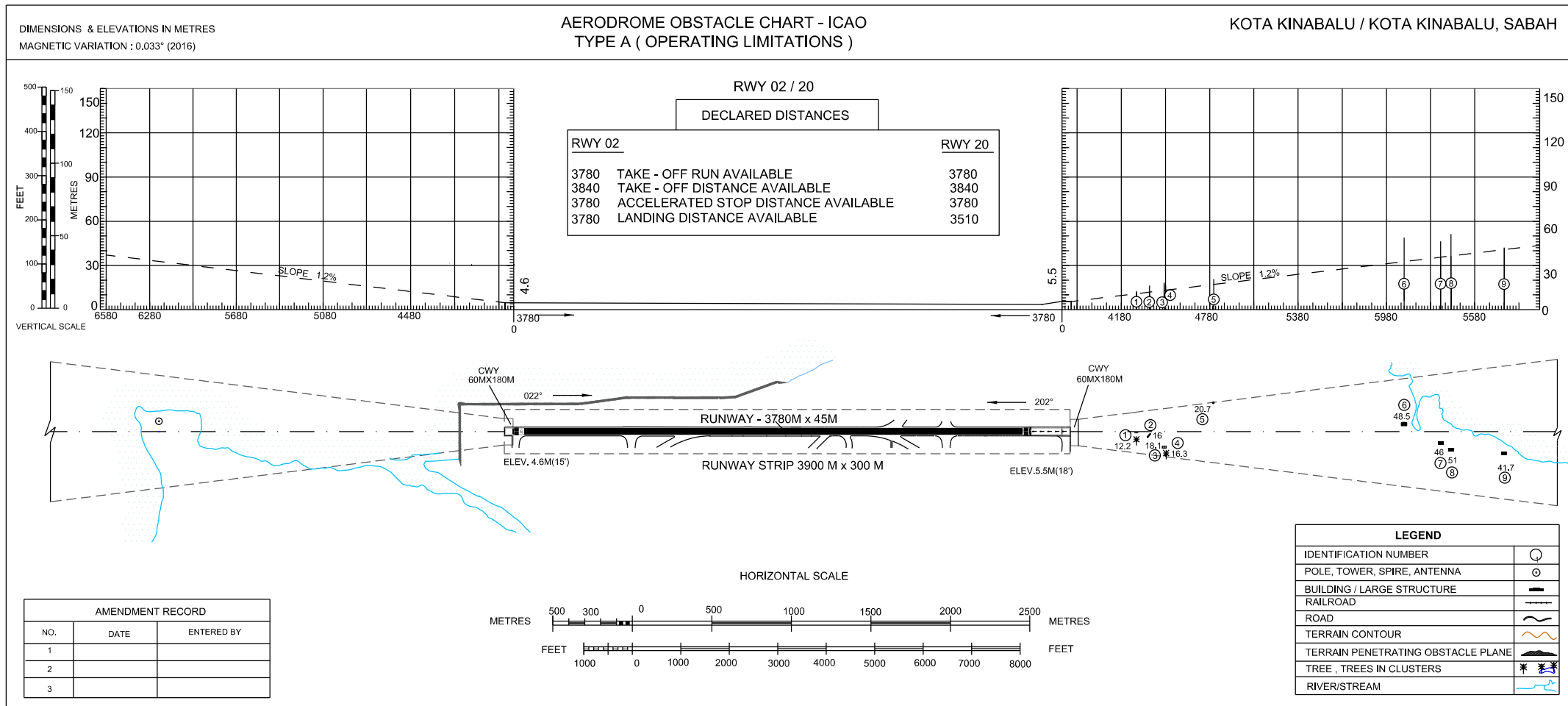


LIGHTING AIDS RWY 02 / 20 AND EXIT TWY



OVERHEAD HOLDING AREAS (VOR & LOCATOR)
& VOR/DME HOLDING AREAS





STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
DEPARTURES (LEFT TURN) RWY 02
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / *M (*T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ADLEX 1F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	UKALO	-	258°	-	12	R	-	250	-	RNAV 1
	040	TF	ADLEX	-	261°	-	30.7	R	-	-	-	RNAV 1
EGENU 2F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	UKALO	-	258°	-	12	-	-	250	-	RNAV 1
	040	TF	EGENU	-	236°	-	27	L	-	-	-	RNAV 1
SUKUS 1F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	UKBON	-	206°	-	20	L	-	250	-	RNAV 1
	040	TF	KILOB	-	206°	-	12	-	-	-	-	RNAV 1
	050	TF	SUKUS	-	249°	-	13	R	-	-	-	RNAV 1
DULIM 2F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	UKBON	-	206°	-	20	L	-	250	-	RNAV 1
	040	TF	KILOB	-	206°	-	12	-	-	-	-	RNAV 1
	050	TF	DULIM	-	237°	-	13	R	-	-	-	RNAV 1
OREKO 1F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	UKBON	-	206°	-	20	L	-	250	-	RNAV 1
	040	TF	KILOB	-	206°	-	12	-	-	-	-	RNAV 1
	050	TF	OREKO	-	222°	-	12.5	R	-	-	-	RNAV 1
PIMEP 2F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	UKBON	-	206°	-	20	L	-	250	-	RNAV 1
	040	TF	KILOB	-	206°	-	12	-	-	-	-	RNAV 1
	050	TF	PIMEP	-	205°	-	13	-	-	-	-	RNAV 1
ELADO 2F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	UKBON	-	206°	-	20	-	-	250	-	RNAV 1
	040	TF	DOVID	-	165°	-	12	L	-	-	-	RNAV 1
	050	TF	ELADO	-	165°	-	19.6	-	-	-	-	RNAV 1

NOTE: Initial climb at 5% MNM Gr. on RWY HDG till 1500 ft; Turn Left continue at 5% MNM PDG until BITON. Resume normal climb thereafter

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
DEPARTURES (LEFT TURN) RWY 02
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ANL0D 2F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	VJN	-	151°	-	10.2	L	+7000	250	-	RNAV 1
	040	TF	TOMEL	-	110°	-	10	L	+9000	250	-	RNAV 1
	050	TF	ANL0D	-	084°	-	30.8	L	+FL150	-	-	RNAV 1
TUSVU 1F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	VJN	-	151°	-	10.2	L	+7000	250	-	RNAV 1
	040	TF	TOMEL	-	110°	-	10	L	+9000	250	-	RNAV 1
	050	TF	TUSVU	-	110°	-	30	-	+11000	-	-	RNAV 1
MAKSU 2F	010	CA	-	-	022°	-	-	-	+1500	205	VJN VOR/DME	RNAV 1
	020	DF	BITON	-	-	-	-	L	+4000	250	-	RNAV 1
	030	TF	VJN	-	151°	-	10.2	L	+7000	250	-	RNAV 1
	040	TF	TOMEL	-	110°	-	10	L	+9000	250	-	RNAV 1
	050	TF	MAKSU	-	132°	-	30.6	R	+11000	-	-	RNAV 1

NOTE: Initial climb at MNM Gr. 5% on RWY HDG till 1500 ft; Turn Left continue at 5% MNM PDG until 7000 ft .Resume normal climb thereafter.

WAYPOINT CO-ORDINATES

Waypoint	Latitude	Longitude
BITON	060254.27N	1155709.01E
UKALO	060021.38N	1154520.97E
ADLEX	055531.65N	1151512.46E
EGENU	054500.00N	1152306.00E
KILOB	053352.84N	1154312.26E
SUKUS	052911.55N	1153025.62E
UKBON	054448.25N	1154822.60E
DULIM	052700.00N	1153212.00E
OREKO	052432.74N	1153441.00E
PIMEP	052216.22N	1153720.74E
DOVID	053309.49N	1155129.97E
ELADO	051408.92N	1155627.48E
VJN	055357.27N	1160202.32E
TOMEL	055027.58N	1161126.87E
ANL0D	055355.82N	1164211.00E
TUSVU	054011.13N	1163944.83E
MAKSU	052944.92N	1163404.62E

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

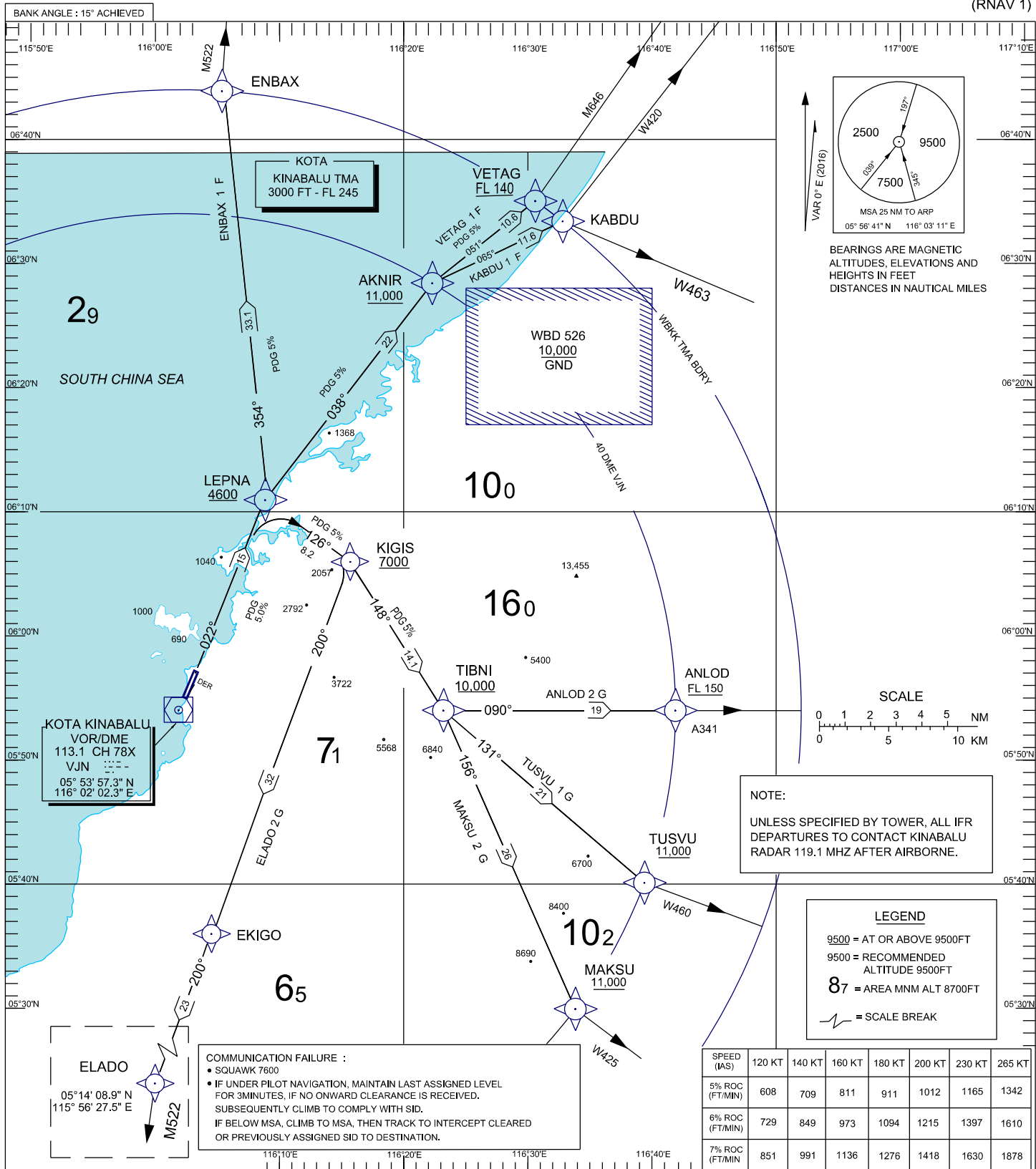
KOTA KINABALU / KOTA KINABALU

TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

VETAG 1 F MAKSU 2 G)
KABDU 1 F TUSVU 1 G)
ANLOD 2 G ELADO 2 G)
ENBAX 1 F)

DEPARTURES (RIGHT/LEFT TURN) RWY 02
(RNAV 1)



**STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO**

AERODROME ELEV 18 FT

**KOTA KINABALU (WBKK)
DEPARTURES (RIGHT/LEFT TURN) RWY 02
(RNAV 1)**

TABULAR DESCRIPTION

DEPARTURE RWY 02 (LEFT TURN) RNAV

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ENBAX 1F	010	CF	LEPNA	-	022°	-	15	-	+4600	205	VJN VOR/DME	RNAV 1
	020	TF	ENBAX	-	354°	-	33.1	L	-	-	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG, turn LEFT at WP LEPNA, continue at MNM 5% PDG until 11000 ft. Resume normal climb thereafter.

DEPARTURE RWY 02 (RIGHT TURN) RNAV

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
VETAG 1F	010	CF	LEPNA	-	022°	-	15	-	+4600	205	VJN VOR/DME	RNAV 1
	020	TF	AKNIR	-	038°	-	22	R	+11000	250	-	RNAV 1
	030	TF	VETAG	-	051°	-	10.6	R	+FL140	-	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG, turn Right at LEPNA continue at MNM 5% PDG until FL140. Resume normal climb thereafter.

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
KABDU 1F	010	CF	LEPNA	-	022°	-	15	-	+4600	205	VJN VOR/DME	RNAV 1
	020	TF	AKNIR	-	038°	-	22	R	+11000	250	-	RNAV 1
	030	TF	KABDU	-	065°	-	11.6	R	-	250	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG, turn Right at LEPNA continue at 5% MNM PDG until 11000 ft. Resume normal climb thereafter.

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ANL0D 2G	010	CF	LEPNA	-	022°	-	15	-	+4600	205	VJN VOR/DME	RNAV 1
	020	TF	KIGIS	-	126°	-	8.2	R	+7000	250	-	RNAV 1
	030	TF	TIBNI	-	148°	-	14.1	R	+10000	250	-	RNAV 1
	040	TF	ANL0D	-	090°	-	19	L	+FL150	-	-	RNAV 1

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
TUSVU 1G	010	CF	LEPNA	-	022°	-	15	-	+4600	205	VJN VOR/DME	RNAV 1
	020	TF	KIGIS	-	126°	-	8.2	R	+7000	250	-	RNAV 1
	030	TF	TIBNI	-	148°	-	14.1	R	+10000	250	-	RNAV 1
	040	TF	TUSVU	-	131°	-	21	L	+11000	-	-	RNAV 1

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
MAKSU 2G	010	CF	LEPNA	-	022°	-	15	-	+4600	205	VJN VOR/DME	RNAV 1
	020	TF	KIGIS	-	126°	-	8.2	R	+7000	250	-	RNAV 1
	030	TF	TIBNI	-	148°	-	14.1	R	+10000	250	-	RNAV 1
	040	TF	MAKSU	-	156°	-	26	R	+11000	-	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG, turn Right at LEPNA continue at 5% MNM PDG until 10,000 ft. Resume normal climb thereafter.

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ELADO 2G	010	CF	LEPNA	-	022°	-	15	-	+4600	205	VJN VOR/DME	RNAV 1
	020	TF	KIGIS	-	126°	-	8.2	R	+7000	250	-	RNAV 1
	030	TF	EKIGO	-	200°	-	32	R	-	-	-	RNAV 1
	040	TF	ELADO	-	200°	-	23	-	-	-	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG, turn Right at LEPNA continue at 5% MNM PDG until 7000 ft. Resume normal climb thereafter.

WAYPOINT CO-ORDINATES

Waypoint	Latitude	Longitude
LEPNA	061058.11N	1160902.06E
ENBAX	064402.57N	1160532.21E
AKNIR	062824.14N	1162244.20E
VETAG	063505.97N	1163051.48E
KABDU	063322.00N	1163312.00E
KIGIS	060558.05N	1161554.92E
TIBNI	055355.42N	1162326.03E
ANL0D	055355.82N	1164211.00E
TUSVU	054011.13N	1163944.83E
MAKSU	052944.92N	1163404.62E
EKIGO	053550.54N	1160440.87E
ELADO	051408.92N	1155627.48E

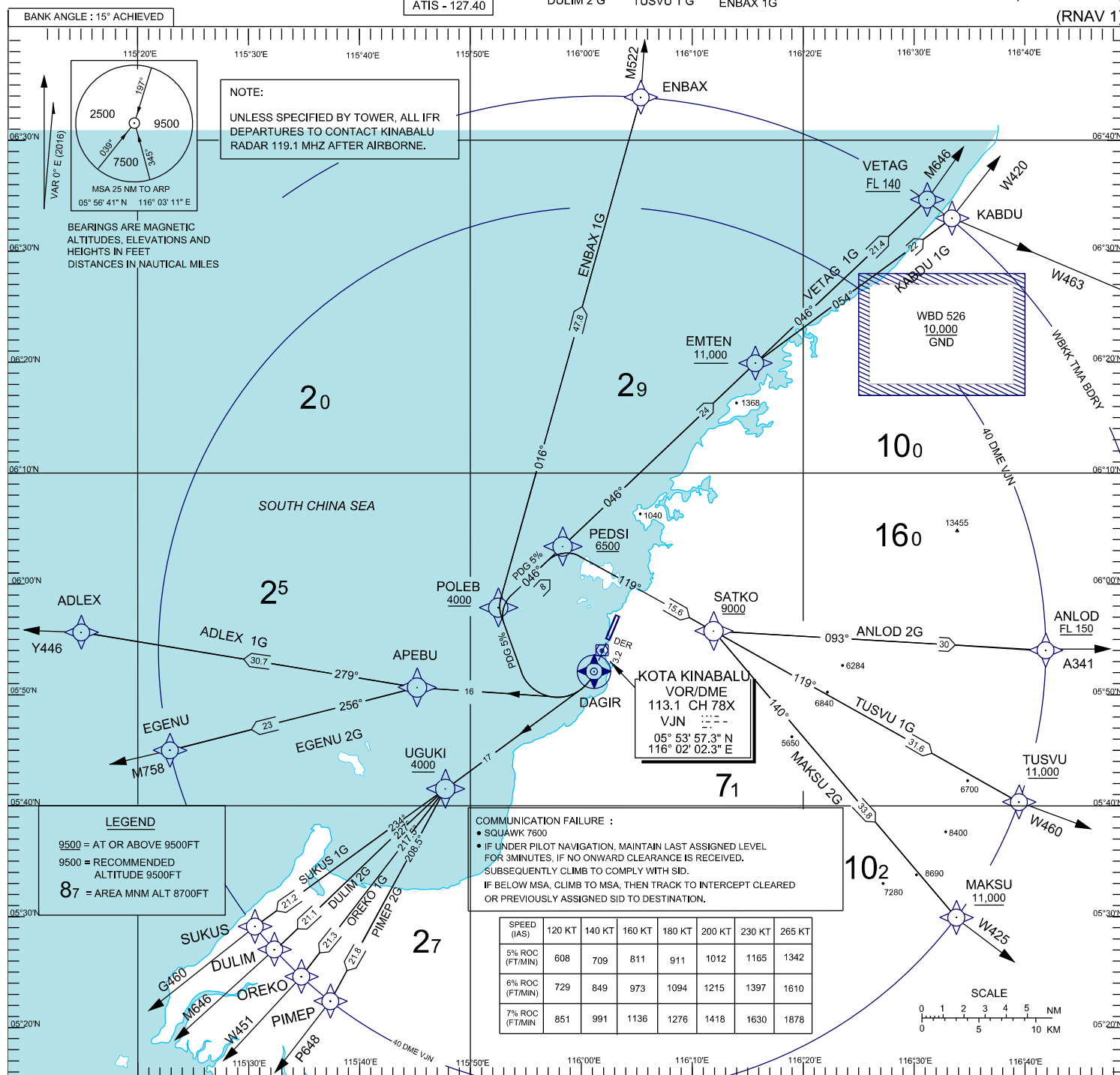
STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ADLEX 1 G OREKO 1 G ANLOD 2 G
EGENU 2 G PIMEP 2 G KABDU 1 G
SUKUS 1 G MAKSU 2 G VETAG 1 G
DULIM 2 G TUSVU 1 G ENBAX 1 G

KOTA KINABALU / KOTA KINABALU
RWY 20
DEPARTURES (RIGHT TURN)
(RNAV 1)



STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
DEPARTURES (RIGHT TURN) RWY 20
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ENBAX 1G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	POLEB	-	-	-	-	R	+4000	250	-	RNAV 1
	030	TF	ENBAX	-	016°	-	47.8	R	-	-	-	RNAV 1
VETAG 1G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	POLEB	-	-	-	-	R	+4000	250	-	RNAV 1
	030	TF	PEDSI	-	046°	-	8	R	+6500	250	-	RNAV 1
	040	TF	EMTEN	-	046°	-	24	-	+11000	250	-	RNAV 1
	050	TF	VETAG	-	046°	-	21.4	-	+FL140	-	-	RNAV 1
KABDU 1G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	POLEB	-	-	-	-	R	+4000	250	-	RNAV 1
	030	TF	PEDSI	-	046°	-	8	R	+6500	250	-	RNAV 1
	040	TF	EMTEN	-	046°	-	24	-	+11000	250	-	RNAV 1
	050	TF	KABDU	-	054°	-	22	R	-	-	-	RNAV 1
ANL0D 2G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	POLEB	-	-	-	-	R	+4000	250	-	RNAV 1
	030	TF	PEDSI	-	046°	-	8	R	+6500	250	-	RNAV 1
	040	TF	SATKO	-	119°	-	15.6	R	+9000	250	-	RNAV 1
	050	TF	ANL0D	-	093°	-	30	L	+FL150	-	-	RNAV 1
TUSVU 1G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	POLEB	-	-	-	-	R	+4000	250	-	RNAV 1
	030	TF	PEDSI	-	046°	-	8	R	+6500	250	-	RNAV 1
	040	TF	SATKO	-	119°	-	15.6	R	+9000	250	-	RNAV 1
	050	TF	TUSVU	-	119°	-	31.6	-	+11000	-	-	RNAV 1
MAKSU 2G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	POLEB	-	-	-	-	R	+4000	250	-	RNAV 1
	030	TF	PEDSI	-	046°	-	8	R	+6500	250	-	RNAV 1
	040	TF	SATKO	-	119°	-	15.6	R	+9000	250	-	RNAV 1
	050	TF	MAKSU	-	140°	-	33.8	R	+11000	-	-	RNAV 1

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
DEPARTURES (RIGHT TURN) RWY 20
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
PIMEP 2G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	UGUKI	-	-	-	17	R	-	250	-	RNAV 1
	030	TF	PIMEP	-	208°	-	21.8	L	-	-	-	RNAV 1
OREKO 1G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	UGUKI	-	-	-	17	R	-	250	-	RNAV 1
	030	TF	OREKO	-	217°	-	21.3	L	-	-	-	RNAV 1
DULIM 2G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	UGUKI	-	-	-	17	R	-	250	-	RNAV 1
	030	TF	DULIM	-	227°	-	21.1	-	-	-	-	RNAV 1
SUKUS 1G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	UGUKI	-	-	-	17	R	-	250	-	RNAV 1
	030	TF	SUKUS	-	234°	-	21.2	-	-	-	-	RNAV 1
EGENU 2G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	APEBU	-	-	-	16	R	-	250	-	RNAV 1
	030	TF	EGENU	-	256°	-	23	L	-	-	-	RNAV 1
ADLEX 1G	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	DF	APEBU	-	-	-	16	R	-	250	-	RNAV 1
	030	TF	ADLEX	-	279°	-	30.7	-	-	-	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG. Turn Right at DAGIR continue at 5% MNM PDG until 5000 ft. Resume normal climb thereafter.

WAYPOINT CO-ORDINATES

Waypoint	Latitude	Longitude
DAGIR	055203.11N	1160116.26E
POLEB	055750.48N	1155238.51E
ENBAX	064402.57N	1160532.21E
PEDSI	060322.97N	1155827.57E
EMTEN	062154.13N	1161639.03E
VETAG	063505.97N	1163051.48E
KABDU	063322.00N	1163312.00E
SATKO	055532.41N	1161209.95E
ANL0D	055355.82N	1164211.00E
TUSVU	054011.13N	1163944.83E
MAKSU	052944.92N	1163404.62E
UGUKI	054125.18N	1154751.05E
PIMEP	052216.22N	1153720.74E
OREKO	052432.74N	1153441.00E
DULIM	052700.00N	1153212.00E
SUKUS	052911.55N	1153025.62E
APEBU	055036.04N	1154517.49E
EGENU	054500.00N	1152306.00E
ADLEX	055531.65N	1151512.46E

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

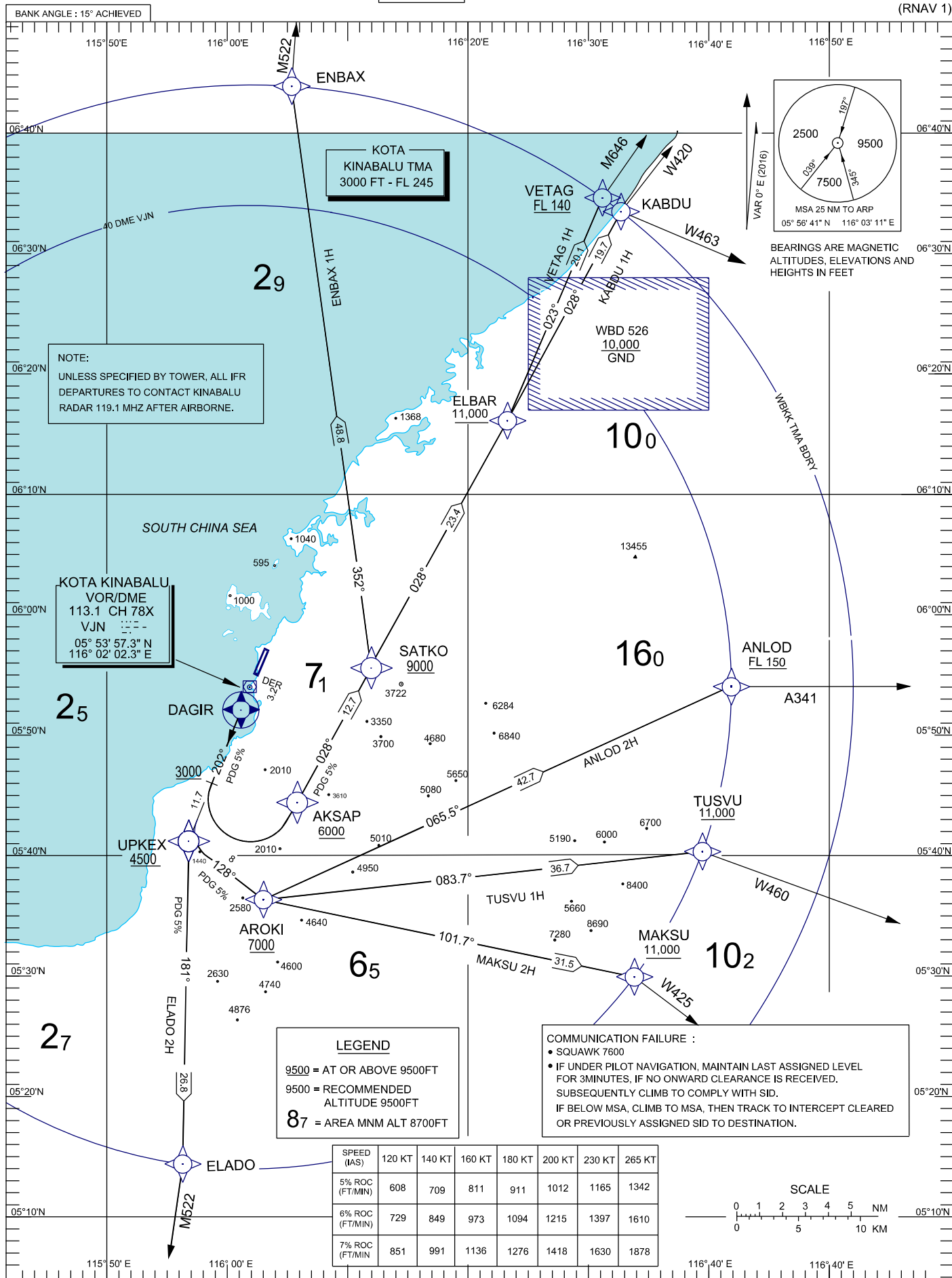
TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
GND - 121.60
ATIS - 127.40

ENBAX 1 H ANLOD 2 H
VETAG 1 H TUSVU 1 H
KABDU 1 H MAKSU 2 H
ELADO 2 H

KOTA KINABALU / KOTA KINABALU
RWY 20
DEPARTURES (LEFT TURN)

(RNAV 1)



STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
DEPARTURES (LEFT TURN) RWY 20
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ENBAX 1H	010	CA	-	-	202°	-	-	-	+3000	205	VJN VOR/DME	RNAV 1
	020	DF	AKSAP	-	-	-	-	L	+6000	250	-	RNAV 1
	030	TF	SATKO	-	028°	-	12.7	-	+9000	250	-	RNAV 1
	040	TF	ENBAX	-	352°	-	48.8	L	-	-	-	RNAV 1
VETAG 1H	010	CA	-	-	202°	-	-	-	+3000	205	VJN VOR/DME	RNAV 1
	020	DF	AKSAP	-	-	-	-	L	+6000	250	-	RNAV 1
	030	TF	SATKO	-	028°	-	12.7	-	+9000	250	-	RNAV 1
	040	TF	ELBAR	-	028°	-	23.4	-	+11000	-	-	RNAV 1
	050	TF	VETAG	-	023°	-	20.1	L	+FL140	-	-	RNAV 1
KABDU 1H	010	CA	-	-	202°	-	-	-	+3000	205	VJN VOR/DME	RNAV 1
	020	DF	AKSAP	-	-	-	-	L	+6000	250	-	RNAV 1
	030	TF	SATKO	-	028°	-	12.7	-	+9000	250	-	RNAV 1
	040	TF	ELBAR	-	028°	-	23.4	-	+11000	-	-	RNAV 1
	050	TF	KABDU	-	028°	-	19.7	-	-	-	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG. Turn Left passing 3000 ft, continue at 5% MNM PDG until 7000 ft. Resume normal climb thereafter.

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Recommended Navaid	Navigation Specification
ANL0D 2H	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	TF	UPKEX	-	202°	-	11.7	-	+4500	250	-	RNAV 1
	030	TF	AROKI	-	128°	-	8	L	+7000	250	-	RNAV 1
	040	TF	ANL0D	-	065°	-	42.7	L	+FL150	-	-	RNAV 1
TUSVU 1H	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	TF	UPKEX	-	202°	-	11.7	-	+4500	250	-	RNAV 1
	030	TF	AROKI	-	128°	-	8	L	+7000	250	-	RNAV 1
	040	TF	TUSVU	-	084°	-	36.7	L	+11000	-	-	RNAV 1
MAKSU 2H	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	TF	UPKEX	-	202°	-	11.7	-	+4500	250	-	RNAV 1
	030	TF	AROKI	-	128°	-	8	L	+7000	250	-	RNAV 1
	040	TF	MAKSU	-	102°	-	31.5	L	+11000	-	-	RNAV 1
ELADO 2H	010	CF	DAGIR	Y	202°	-	3.2	-	-	205	VJN VOR/DME	RNAV 1
	020	TF	UPKEX	-	202°	-	11.7	-	+4500	250	-	RNAV 1
	030	TF	ELADO	-	181°	-	26.8	L	-	-	-	RNAV 1

NOTE: Initial climb at MNM Gr 5% on RWY HDG. Turn Left at UPKEX continue at 5% MNM PDG until 7000 ft. Resume normal climb thereafter.

WAYPOINT CO-ORDINATES

Waypoint	Latitude	Longitude
DAGIR	055203.11N	1160116.26E
AKSAP	054419.15N	1160559.52E
SATKO	055532.41N	1161209.95E
ENBAX	064402.57N	1160532.21E
ELBAR	061610.47N	1162331.88E
VETAG	063505.97N	1163051.48E
KABDU	063322.00N	1163312.00E
UPKEX	054105.22N	1155656.24E
AROKI	053612.84N	1160310.39E
ANL0D	055355.82N	1164211.00E
TUSVU	054011.13N	1163944.83E
MAKSU	052944.92N	1163404.62E
ELADO	051408.92N	1155627.48E

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

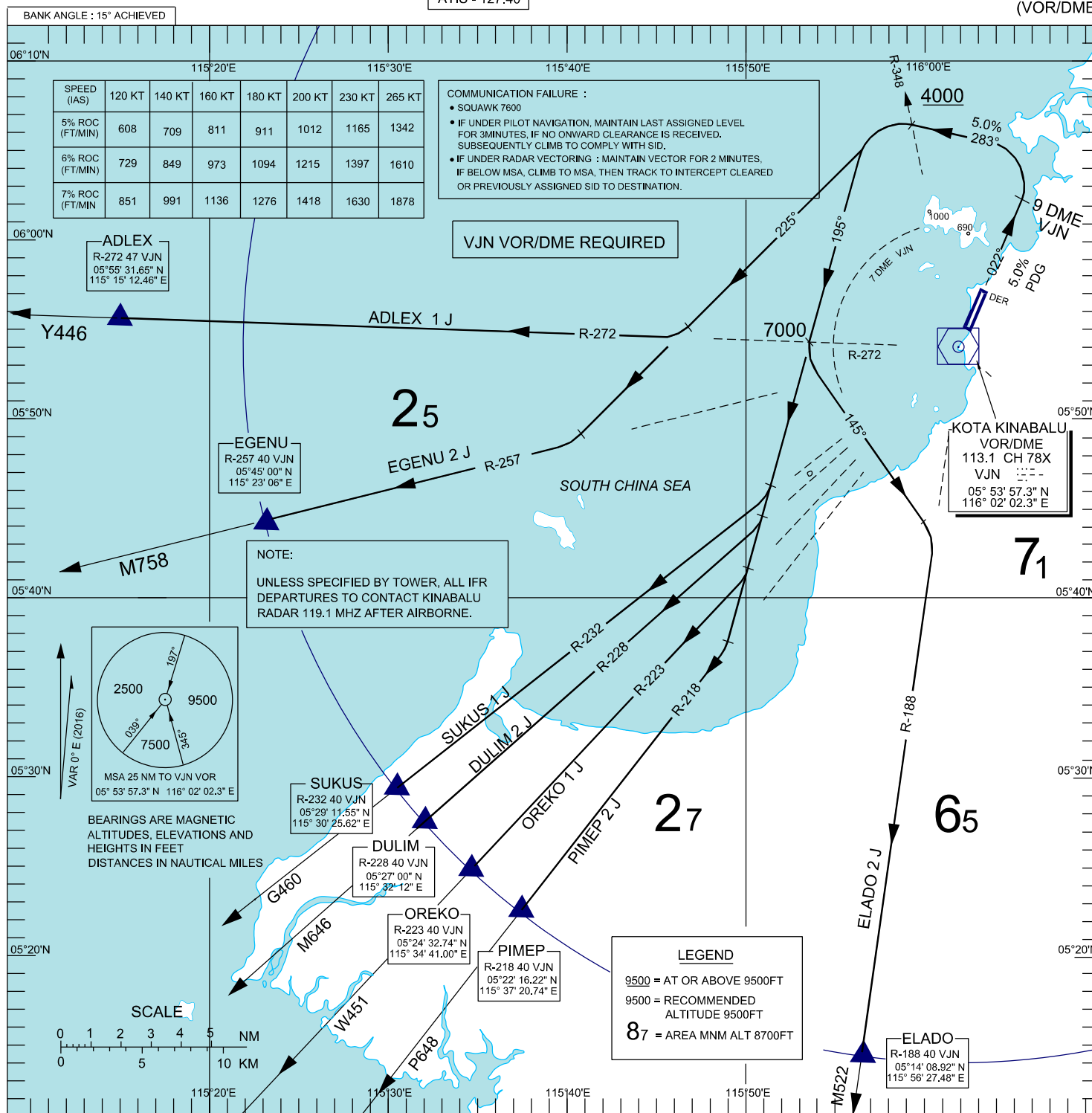
KOTA KINABALU / KOTA KINABALU

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ADLEX 1 J OREKO 1 J
EGENU 2 J PIMEP 2 J
SUKUS 1 J ELADO 2 J
DULIM 2 J

RWY 02
(VOR/DME)

TRANSITION ALTITUDE
11,000 FT



DEPARTURE RWY 02 VOR/DME (LEFT TURN DEPARTURES TO WEST & SOUTH ROUTES)

INITIAL CLIMB PROCEDURE	ROUTE DESIGNATOR	SID DESCRIPTION
Climb on HDG 022° at 5% Minimum Gradient.	ADLEX 1J / (Y446)	On crossing RDL 348 VJN VOR turn LEFT track 225° and intercept RDL 272 VJN VOR to ADLEX.
At 9 DME VJN VOR, turn LEFT, track 283° and follow assigned SID.	EGENU 2J / (M758)	On crossing RDL 348 VJN VOR turn LEFT track 225° and intercept RDL 257 VJN VOR to EGENU.
Resume normal climb gradient on passing RDL 348 VJN VOR.	SUKUS 1J / (G460)	On crossing RDL 348 VJN VOR turn LEFT track 195° and intercept RDL 232 VJN VOR to SUKUS.
Note: <i>Unless specified by Tower, all IFR departures to contact Kinabalu Radar 119.1 MHZ after airborne.</i>	DULIM 2J / (M646)	On crossing RDL 348 VJN VOR turn LEFT track 195° and intercept RDL 228 VJN VOR to DULIM.
	OREKO 1J / (W451)	On crossing RDL 348 VJN VOR turn LEFT track 195° and intercept RDL 223 VJN VOR to OREKO.
	PIMEP 2J / (P648)	On crossing RDL 348 VJN VOR turn LEFT track 195.° and intercept RDL 218 VJN VOR to PIMEP.
	ELADO 2J / (M522)	On crossing RDL 348 VJN VOR turn LEFT track 195°. On crossing RDL 272 VJN VOR turn LEFT and intercept RDL 188 VJN VOR to ELADO.

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

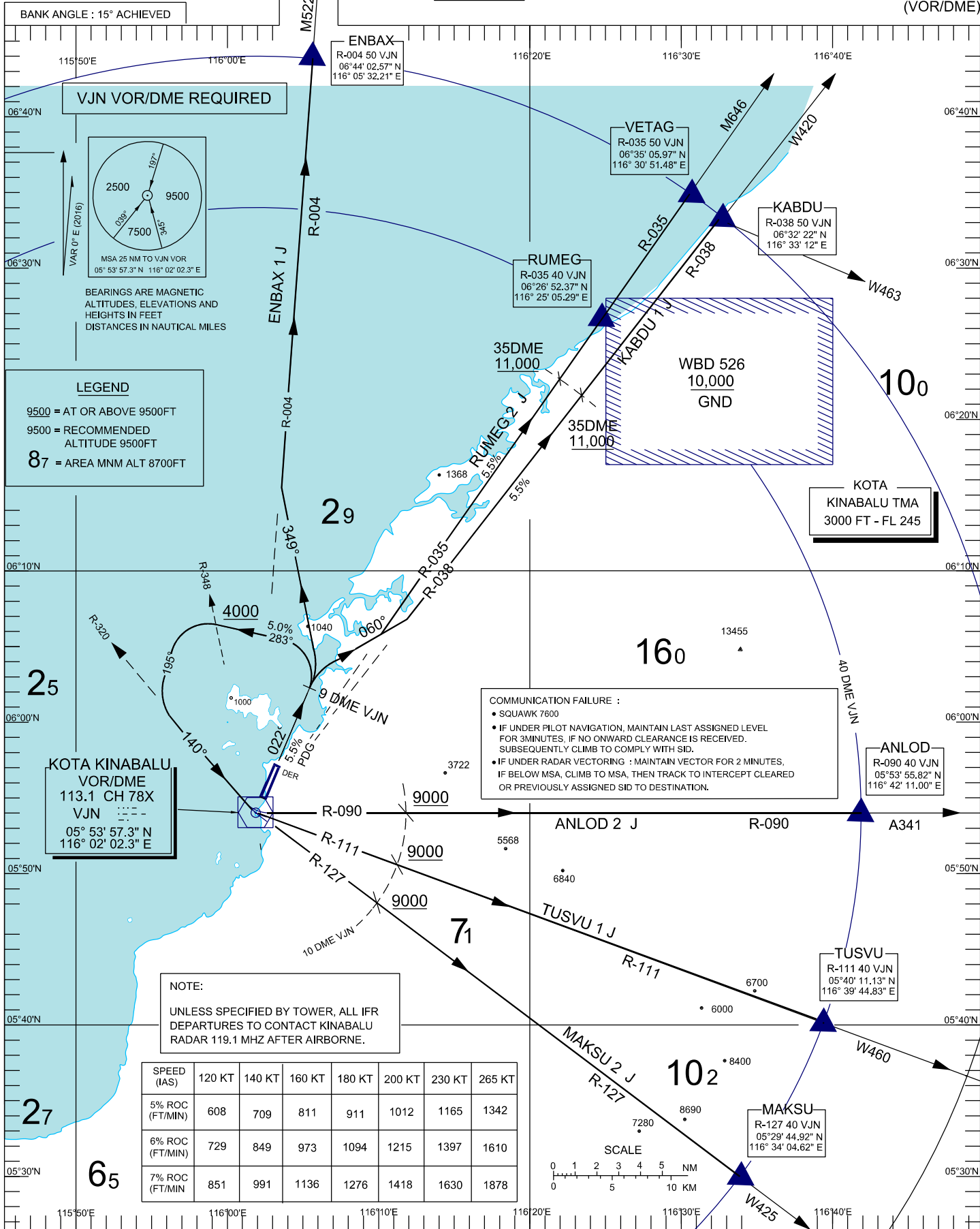
KOTA KINABALU / KOTA KINABALU

TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ENBAX 1 J ANL0D 2 J
RUMEG 2 J TUSVU 1 J
KABDU 1 J MAKSU 2 J

RWY 02
(VOR/DME)



DEPARTURE RWY 02 VOF/DME (DEPARTURES TO NORTH & EAST ROUTES)

INITIAL CLIMB PROCEDURE	ROUTE DESIGNATOR	SID DESCRIPTION
<p>Climb on HDG 022° at 5.5% Minimum Gradient.</p> <p>At 9 DME VJN VOR, execute specified turn to follow assigned SID.</p> <p>Note: Unless specified by Tower, all IFR departures to contact Kinabalu Radar 119.1 MHZ after airborne.</p>	<p>ENBAX 1J / (M522)</p>	<p>At 9 DME turn LEFT track 349° and intercept RDL 004 VJN VOR to ENBAX.</p> <p>(Normal climb gradient on passing 9 DME)</p>
	<p>RUMEG 2J / (M646)</p>	<p>At 9 DME turn RIGHT track 060° and intercept RDL 035 VJN VOR to RUMEG.</p> <p>(Maintain minimum climb gradient 5.5% until passing 11,000 feet by 35 DME VJN)</p>
	<p>KABDU 1J / (W420 / W463)</p>	<p>At 9 DME turn RIGHT track 060° and intercept RDL 038 VJN VOR to KABDU.</p> <p>(Maintain minimum climb gradient 5.5% until passing 11,000 feet by 35 DME VJN)</p>
	<p>ANLOD 2J / (A341)</p>	<p>At 9 DME turn LEFT track 283°. On crossing RDL 348 VJN VOR turn LEFT track 195° to intercept RDL 320 to VJN. Then track on RDL 090 VJN VOR to ANLOD.</p> <p>(Maintain minimum climb gradient 5% until passing 4000 feet, normal climb thereafter)</p>
	<p>TUSVU 1J / (W460)</p>	<p>At 9 DME turn LEFT track 283°. On crossing RDL 348 VJN VOR turn LEFT track 195° to intercept RDL 320 to VJN. Then track on RDL 111 VJN VOR to TUSVU.</p> <p>(Maintain minimum climb gradient 5% until passing 4000 feet, normal climb thereafter)</p>
	<p>MAKSU 2J / (W425)</p>	<p>At 9 DME turn LEFT track 283°. On crossing RDL 348 turn LEFT track 195° to intercept RDL 320 to VJN. Then track on RDL 127 to MAKSU for W 425</p> <p>(Maintain minimum climb gradient 5% until passing 4000 feet, normal climb thereafter)</p>

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11,000 FT

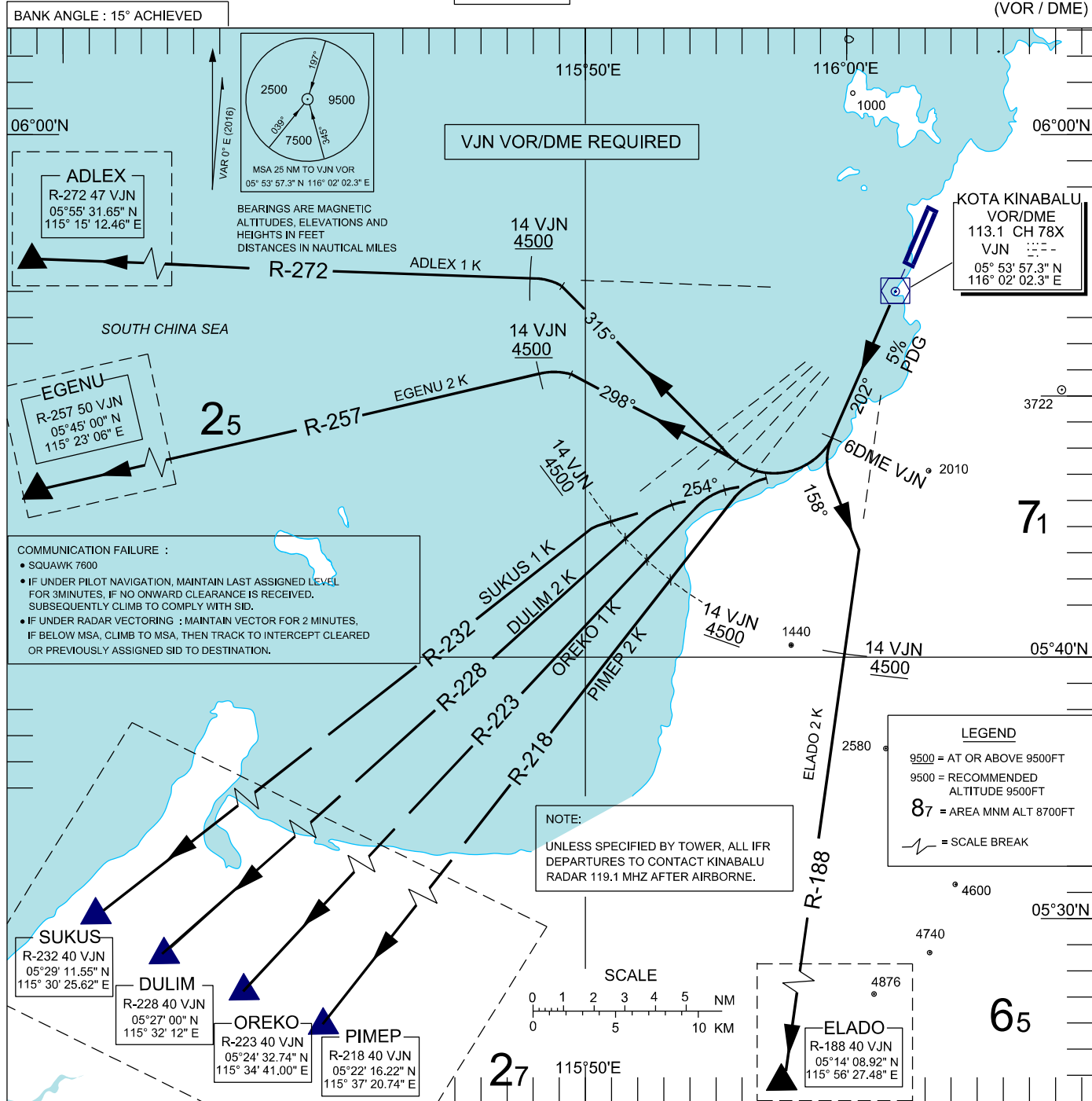
TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ADLEX 1K
EGENU 2K
SUKUS 1K
DULIM 2K

OREKO 1K
PIMEP 2K
ELADO 2K

KOTA KINABALU / KOTA KINABALU

RWY 20
(VOR / DME)



DEPARTURE RWY 20 VOR/DME (RIGHT TURN DEPARTURES TO WEST & SOUTH ROUTES)

INITIAL CLIMB PROCEDURE	ROUTE DESIGNATOR	SID DESCRIPTION
<p>Climb on HDG 202° at 5% Minimum Gradient.</p> <p>At 6 DME VJN VOR, execute specified turn to follow assigned SID.</p> <p>Cross 4500 feet by 14 DME VJN</p> <p>Resume normal climb gradient on passing 4500 feet.</p> <p>Note: <i>Unless specified by Tower, all IFR departures to contact Kinabalu Radar 119.1 MHZ after airborne.</i></p>	ADLEX 1K / (Y446)	At 6 DME turn RIGHT track 315° and intercept RDL 272 VJN VOR to ADLEX.
	EGENU 2K / (M758)	At 6 DME turn RIGHT track 298° and intercept RDL 257 VJN VOR to EGENU.
	SUKUS 1K / (G460)	At 6 DME turn RIGHT track 254° and intercept RDL 232 VJN VOR to SUKUS.
	DULIM 2K / (M646)	At 6 DME turn RIGHT track 254° and intercept RDL 228 VJN VOR to DULIM.
	OREKO 1K / (W451)	At 6 DME turn RIGHT track 254° and intercept RDL 223 VJN VOR to OREKO.
	PIMEP 2K / (P648)	At 6 DME turn RIGHT track 254° and intercept RDL 218 VJN VOR to PIMEP.
	ELADO 2K / (M522)	At 6 DME turn LEFT track 158° and intercept RDL 188 VJN VOR to ELADO.

STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11,000 FT

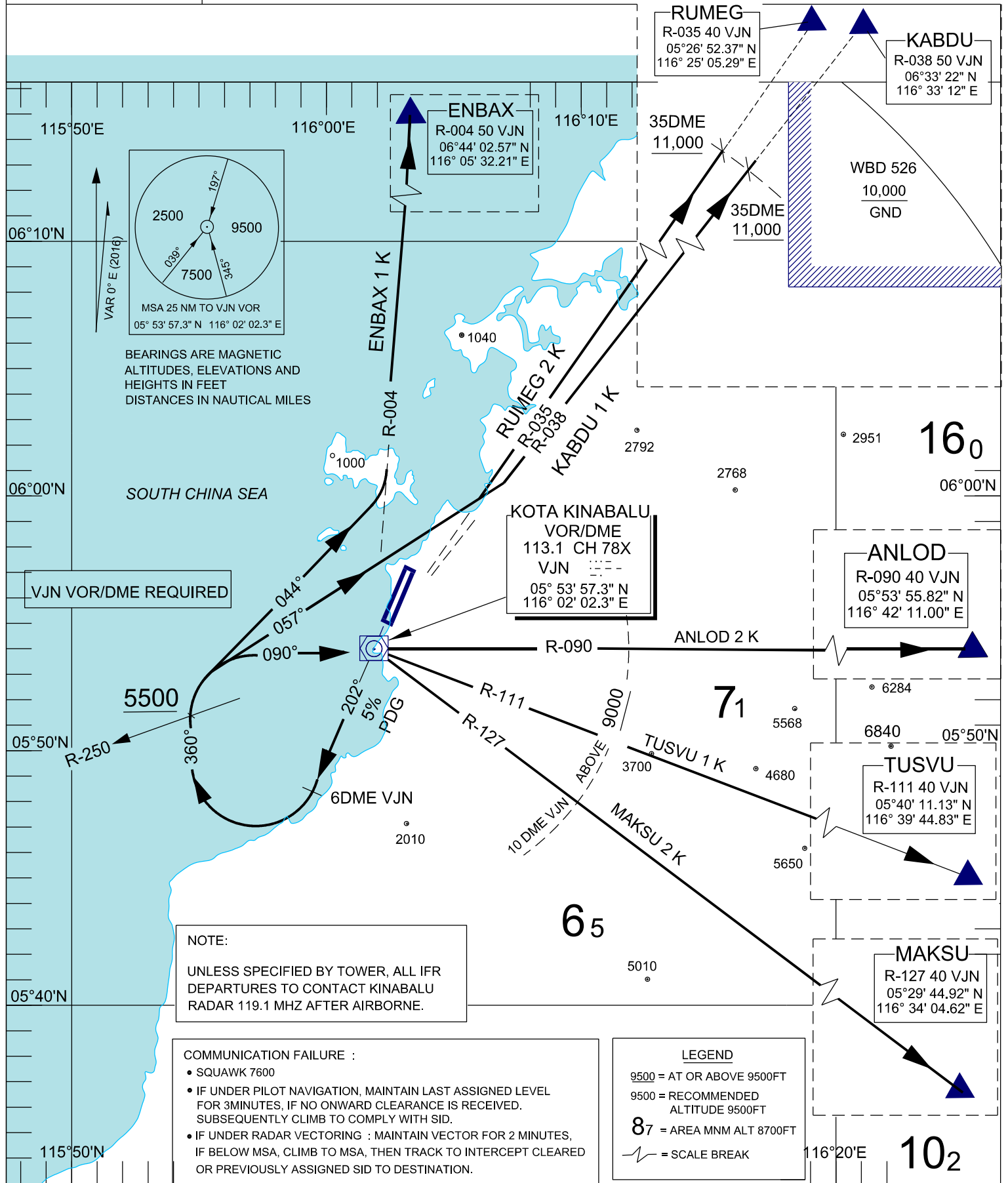
TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

KOTA KINABALU / KOTA KINABALU

ENBAX 1K ANLOD 2K
RUMEG 2K TUSVU 1K
KABDU 1K MAKSU 2K

RWY 20
(VOR/DME)

BANK ANGLE : 15° ACHIEVED



NOTE:
UNLESS SPECIFIED BY TOWER, ALL IFR DEPARTURES TO CONTACT KINABALU RADAR 119.1 MHZ AFTER AIRBORNE.

COMMUNICATION FAILURE :

- SQUAWK 7600
- IF UNDER PILOT NAVIGATION, MAINTAIN LAST ASSIGNED LEVEL FOR 3MINUTES, IF NO ONWARD CLEARANCE IS RECEIVED. SUBSEQUENTLY CLIMB TO COMPLY WITH SID.
- IF UNDER RADAR VECTORED : MAINTAIN VECTOR FOR 2 MINUTES, IF BELOW MSA, CLIMB TO MSA, THEN TRACK TO INTERCEPT CLEARED OR PREVIOUSLY ASSIGNED SID TO DESTINATION.

LEGEND

- 9500 = AT OR ABOVE 9500FT
- 9500 = RECOMMENDED ALTITUDE 9500FT
- 87 = AREA MNM ALT 8700FT
- = SCALE BREAK

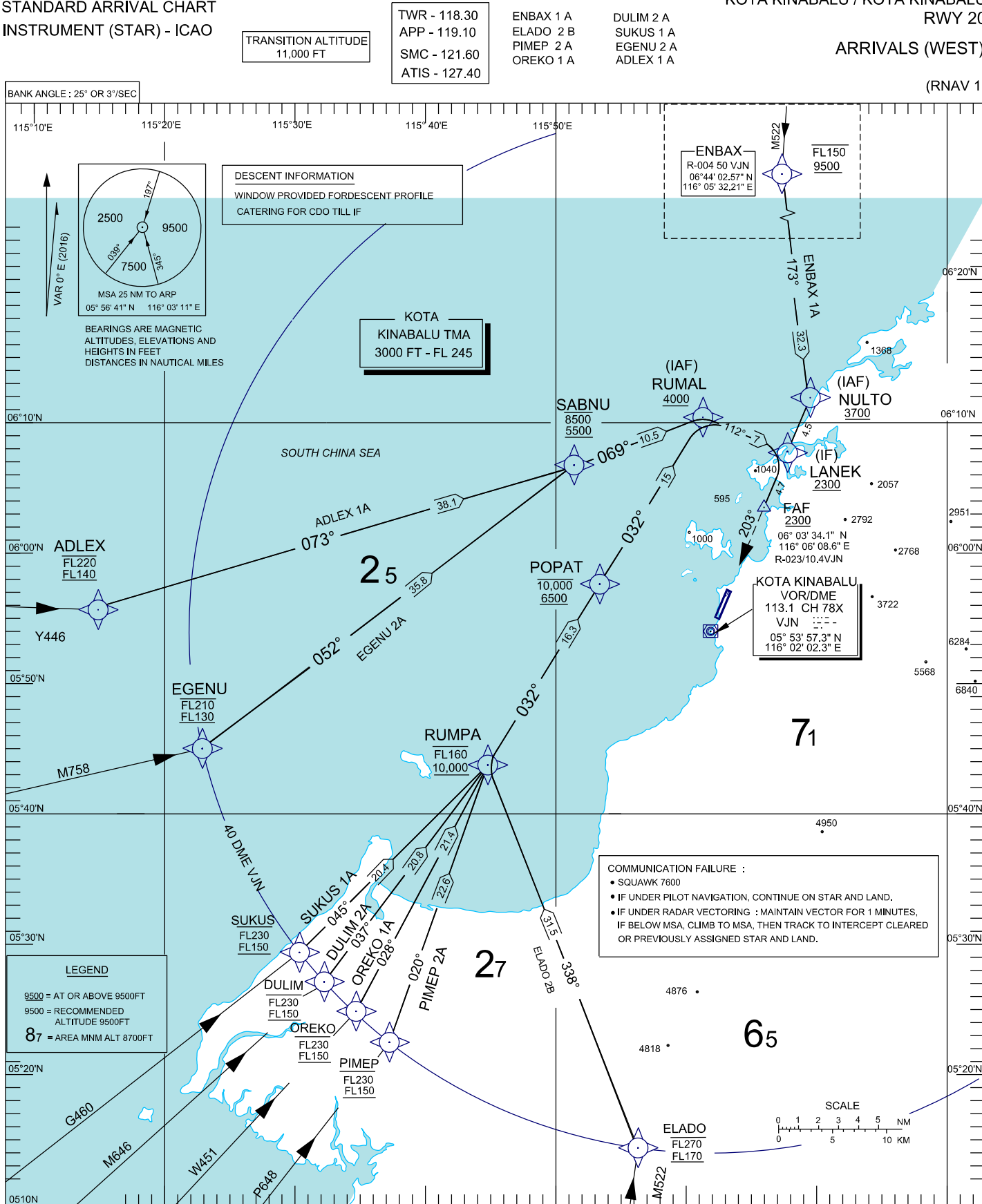
DEPARTURE RWY 20 VOR/DME (RIGHT TURN DEPARTURES TO NORTH & EAST ROUTES)

INITIAL CLIMB PROCEDURE	ROUTE DESIGNATOR	SID DESCRIPTION
<p>Climb on HDG 202° at 5% Minimum Gradient.</p> <p>At 6 DME VJN VOR, turn RIGHT track 360° to follow assigned SID.</p> <p>Note: Unless specified by Tower, all IFR departures to contact Kinabalu Radar 119.1 MHZ after airborne.</p>	ENBAX 1K / (M522)	<p>On crossing RDL 250 VJN VOR turn RIGHT track 044° and intercept RDL 004 VJN VOR to ENBAX.</p> <p>(Maintain minimum climb gradient 5% until passing 11,000 feet. Resume normal climb thereafter)</p>
	RUMEG 2K / (M646)	<p>On crossing RDL 250 VJN VOR turn RIGHT track 057° and intercept RDL 035 VJN VOR to RUMEG.</p> <p>(Maintain minimum climb gradient 5% until passing 11,000 feet by 35 DME VJN. Resume normal climb thereafter)</p>
	KABDU 1K / (W420, W463)	<p>On crossing RDL 250 VJN VOR turn RIGHT track 057° and intercept RDL 038 VJN VOR to KABDU.</p> <p>(Maintain minimum climb gradient 5% until passing 11,000 feet by 35 DME VJN. Resume normal climb thereafter)</p>
	ANLOD 2K / (A341)	<p>On crossing RDL 250 VJN VOR turn RIGHT track to VJN / RDL 090 to ANLOD.</p> <p>(Maintain minimum climb gradient 5% until passing 9000 feet by 10 DME VJN outbound)</p>
	TUSVU 1K / (W460)	<p>On crossing RDL 250 VJN VOR turn RIGHT track to VJN / RDL 111 to TUSVU.</p> <p>(Maintain minimum climb gradient 5% until passing 9000 feet by 10 DME VJN outbound)</p>
	MAKSU 2K / (W425)	<p>On crossing RDL 250 VJN VOR turn RIGHT track to VJN / RDL 127 to MAKSU.</p> <p>(Maintain minimum climb gradient 5% until passing 9000 feet by 10 DME VJN outbound)</p>

STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

KOTA KINABALU / KOTA KINABALU
RWY 20
ARRIVALS (WEST)

(RNAV 1)



STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
ARRIVALS (WEST) RWY 20
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Navigation Specification
ADLEX 1A	010	IF	ADLEX	-	-	-	-	-	- FL220 + FL140	250	RNAV 1
	020	TF	SABNU	-	073°	-	38.1	-	- 8500 + 5500	210	RNAV 1
	030	TF	RUMAL	-	069°	-	10.5	L	+ 4000	185	RNAV 1
	040	TF	LANEK	-	112°	-	7	R	2300	185	RNAV 1
EGENU 2A	010	IF	EGENU	-	-	-	-	-	- FL210 + FL130	250	RNAV 1
	020	TF	SABNU	-	052°	-	35.8	-	- 8500 + 5500	210	RNAV 1
	030	TF	RUMAL	-	069°	-	10.5	R	+ 4000	185	RNAV 1
	040	TF	LANEK	-	112°	-	7	R	2300	185	RNAV 1
SUKUS 1A	010	IF	SUKUS	-	-	-	-	-	- FL230 + FL150	250	RNAV 1
	020	TF	RUMPA	-	045°	-	20.4	L	- FL160 + 10000	210	RNAV 1
	030	TF	POPAT	-	032°	-	16.3	L	- 10000 + 6500	185	RNAV 1
	040	TF	RUMAL	-	032°	-	15	-	+ 4000	185	RNAV 1
	050	TF	LANEK	-	112°	-	7	R	2300	185	RNAV 1
DULIM 2A	010	IF	DULIM	-	-	-	-	-	- FL230 + FL150	250	RNAV 1
	020	TF	RUMPA	-	037°	-	20.8	L	- FL160 + 10000	210	RNAV 1
	030	TF	POPAT	-	032°	-	16.3	L	- 10000 + 6500	185	RNAV 1
	040	TF	RUMAL	-	032°	-	15	-	+ 4000	185	RNAV 1
	050	TF	LANEK	-	112°	-	7	R	2300	185	RNAV 1
OREKO 1A	010	IF	OREKO	-	-	-	-	-	- FL230 + FL150	250	RNAV 1
	020	TF	RUMPA	-	028°	-	21.4	L	- FL160 + 10000	210	RNAV 1
	030	TF	POPAT	-	032°	-	16.3	R	- 10000 + 6500	185	RNAV 1
	040	TF	RUMAL	-	032°	-	15	-	+ 4000	185	RNAV 1
	050	TF	LANEK	-	112°	-	7	R	2300	185	RNAV 1
PIMEP 2A	010	IF	OREKO	-	-	-	-	-	- FL230 + FL150	250	RNAV 1
	020	TF	RUMPA	-	020°	-	22.6	L	- FL160 + 10000	210	RNAV 1
	030	TF	POPAT	-	032°	-	16.3	R	- 10000 + 6500	185	RNAV 1
	040	TF	RUMAL	-	032°	-	15	-	+ 4000	185	RNAV 1
	050	TF	LANEK	-	112°	-	7	R	2300	185	RNAV 1

STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
ARRIVALS (WEST) RWY 20
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Navigation Specification
ELADO 2B	010	IF	ELADO	-	-	-	-	-	- FL270 + FL170	250	RNAV 1
	020	TF	RUMPA	-	338°	-	31.5	L	- FL160 + 10000	210	RNAV 1
	030	TF	POPAT	-	032°	-	16.3	R	- 10000 + 6500	185	RNAV 1
	040	TF	RUMAL	-	032°	-	15	-	+ 4000	185	RNAV 1
	050	TF	LANEK	-	112°	-	7	R	2300	185	RNAV 1
ENBAX 1A	010	IF	ENBAX	-	-	-	-	-	- FL150 + 9500	250	RNAV 1
	020	TF	NULTO	-	173°	-	32.3	L	+ 3700	185	RNAV 1
	030	TF	LANEK	-	203°	-	4.5	R	2300	185	RNAV 1

WAYPOINT CO-ORDINATES

Waypoint	Latitude	Longitude
ADLEX	055531.65N	1151512.46E
SABNU	060646.88N	1155131.34E
RUMAL	061027.14N	1160126.65E
LANEK	060748.99N	1160757.65E
EGENU	054500.00N	1152306.00E
SUKUS	052911.55N	1153025.62E
RUMPA	054339.43N	1154453.41E
POPAT	055735.96N	1155330.02E
DULIM	052700.00N	1153212.00E
OREKO	052432.74N	1153441.00E
PIMEP	052216.22N	1153720.74E
ELADO	051408.92N	1155627.48E
ENBAX	064402.57N	1160532.21E
NULTO	061154.36N	1160953.24E
FAF	060334.10N	1160608.65E

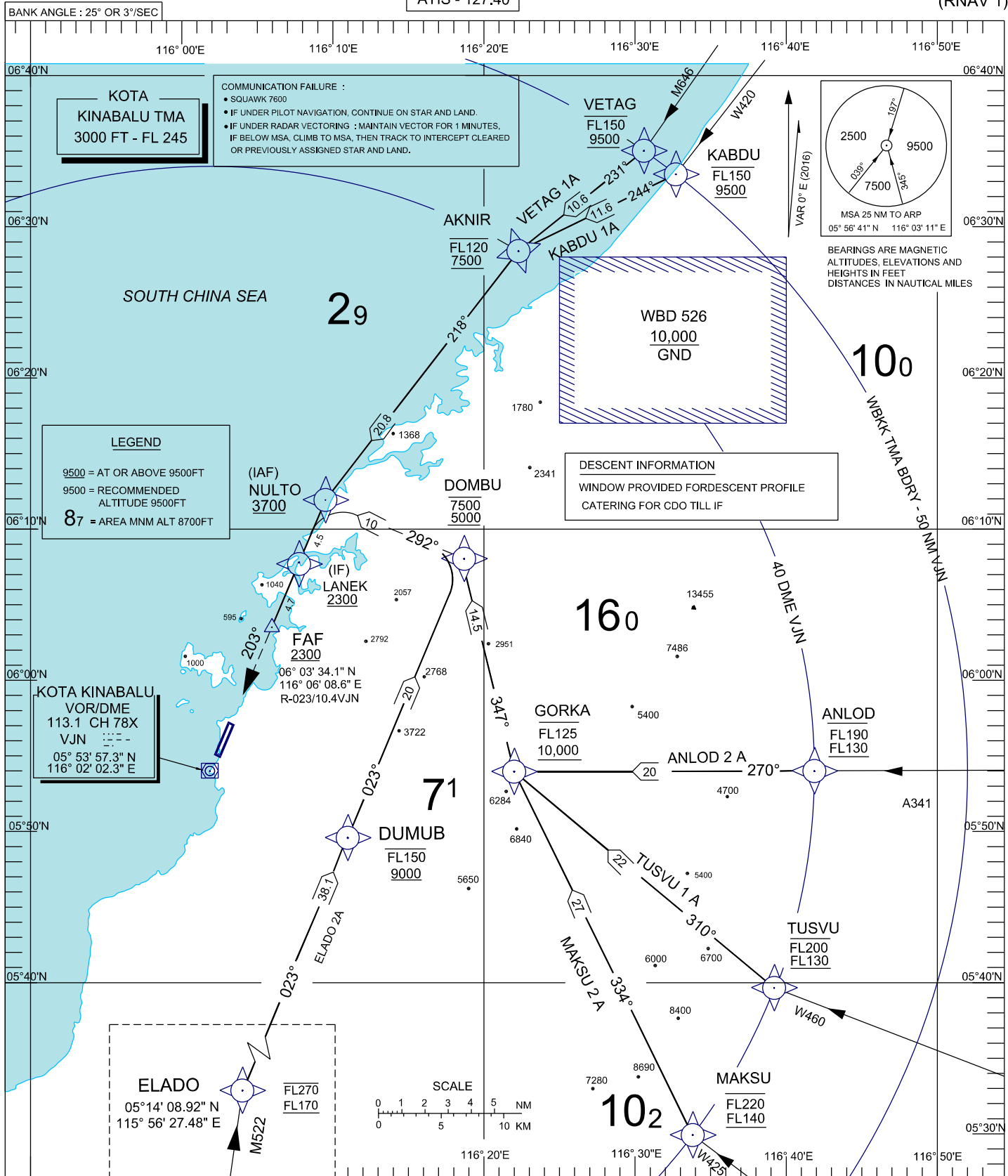
STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

KOTA KINABALU / KOTA KINABALU
RWY 20
ARRIVALS (EAST)
(RNAV 1)

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

VETAG 1 A
KABDU 1 A
ELADO 2 A
ANLOD 2 A
TUSVU 1 A
MAKSU 2 A

TRANSITION ALTITUDE
11,000 FT



STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
ARRIVALS (EAST) RWY 20
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Navigation Specification
ELADO 2A	010	IF	ELADO	-	-	-	-	-	- FL270 + FL170	250	RNAV 1
	020	TF	DUMUB	-	023°	-	38.1	R	- FL150 + 9000	210	RNAV 1
	030	TF	DOMBU	-	023°	-	20	-	- 7500 + 5000	185	RNAV 1
	040	TF	NULTO	-	292°	-	10	L	+ 3700	185	RNAV 1
	050	TF	LANEK	-	203°	-	4.5	L	2300	185	RNAV 1
VETAG 1A	010	IF	VETAG	-	-	-	-	-	- FL150 + 9500	250	RNAV 1
	020	TF	AKNIR	-	231°	-	10.6	R	- FL120 + 7500	250	RNAV 1
	030	TF	NULTO	-	218°	-	20.8	L	+ 3700	185	RNAV 1
	040	TF	LANEK	-	203°	-	4.5	L	2300	185	RNAV 1
KABDU 1A	010	IF	KABDU	-	-	-	-	-	- FL150 + 9500	250	RNAV 1
	020	TF	AKNIR	-	244°	-	11.6	R	- FL120 + 7500	250	RNAV 1
	030	TF	NULTO	-	218°	-	20.8	L	+ 3700	185	RNAV 1
	040	TF	LANEK	-	203°	-	4.5	L	2300	185	RNAV 1
ANLOD 2A	010	IF	ANLOD	-	-	-	-	-	- FL190 + FL130	250	RNAV 1
	020	TF	GORKA	-	270°	-	20	-	- FL125 + 10000	250	RNAV 1
	030	TF	DOMBU	-	347°	-	14.5	R	- 7500 + 5000	210	RNAV 1
	040	TF	NULTO	-	292°	-	10	L	+ 3700	185	RNAV 1
	050	TF	LANEK	-	203°	-	4.5	L	2300	185	RNAV 1
TUSVU 1A	010	IF	TUSVU	-	-	-	-	-	- FL200 + FL130	250	RNAV 1
	020	TF	GORKA	-	310°	-	22	R	- FL125 + 10000	250	RNAV 1
	030	TF	DOMBU	-	347°	-	14.5	R	- 7500 + 5000	210	RNAV 1
	040	TF	NULTO	-	292°	-	10	L	+ 3700	185	RNAV 1
	050	TF	LANEK	-	203°	-	4.5	L	2300	185	RNAV 1
MAKSU 2A	010	IF	MAKSU	-	-	-	-	-	- FL220 + FL140	250	RNAV 1
	020	TF	GORKA	-	334°	-	27	R	- FL125 + 10000	250	RNAV 1
	030	TF	DOMBU	-	347°	-	14.5	R	- 7500 + 5000	210	RNAV 1
	040	TF	NULTO	-	292°	-	10	L	+ 3700	185	RNAV 1
	050	TF	LANEK	-	203°	-	4.5	L	2300	185	RNAV 1

TABULAR DESCRIPTION**WAYPOINT CO-ORDINATES**

Waypoint	Latitude	Longitude
DUMUB	054931.38N	1161111.45E
NULTO	061154.36N	1160953.24E
LANEK	060748.99N	1160757.65E
VETAG	063505.97N	1163051.48E
AKNIR	062824.14N	1162244.20E
KABDU	063322.00N	1163312.00E
ANLOD	055355.82N	1164211.00E
GORKA	055355.46N	1162214.61E
DOMBU	060804.10N	1161855.71E
TUSVU	054011.13N	1163944.83E
MAKSU	052944.92N	1163404.62E
ELADO	051408.92N	1155627.48E
FAF	060334.10N	1160608.65E

STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

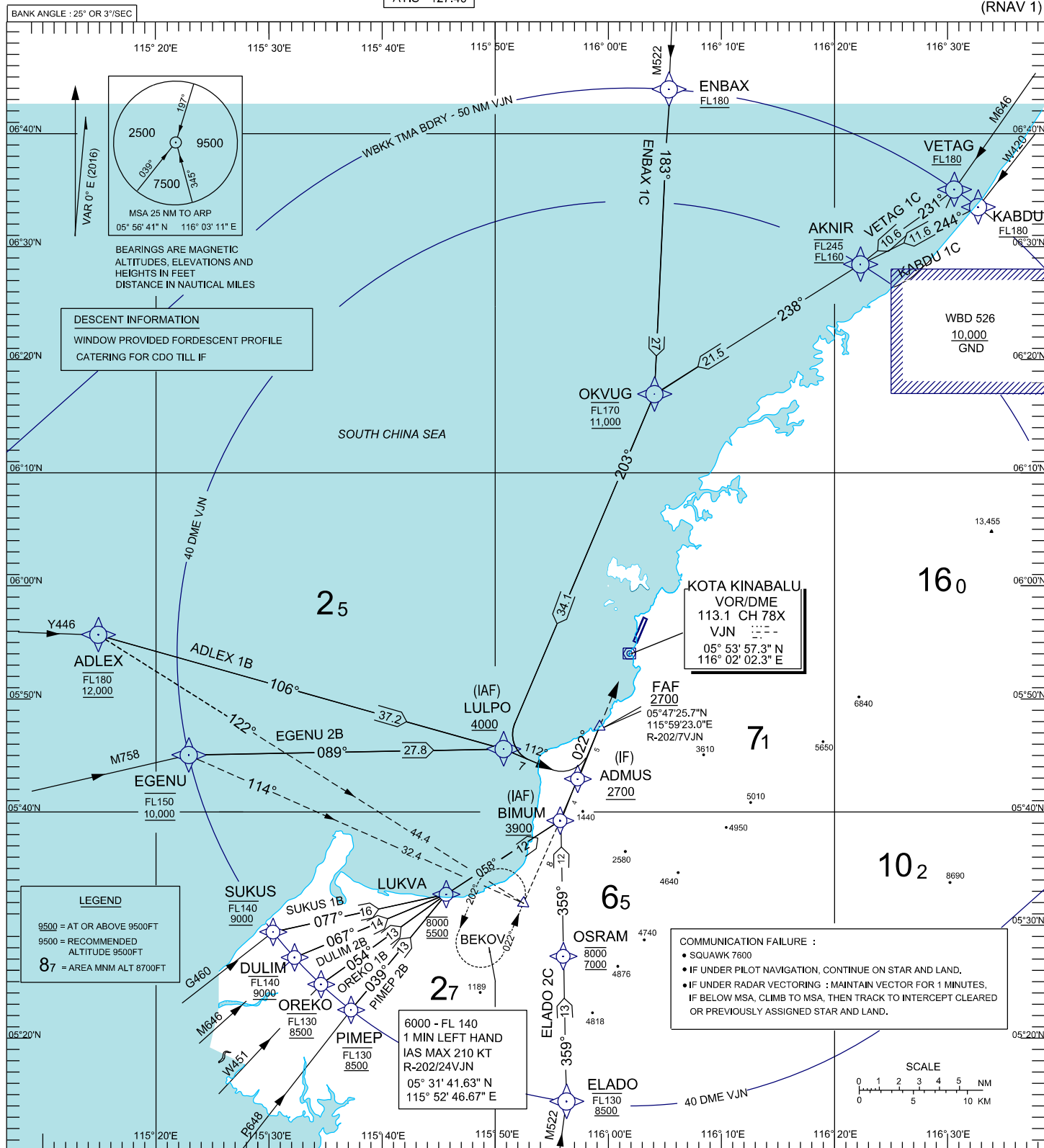
KOTA KINABALU / KOTA KINABALU
RWY 02
ARRIVALS (WEST)
(RNAV 1)

TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

SUKUS 1 B
DULIM 2 B
OREKO 1 B
PIMEP 2 B
ELADO 2 C

ENBAX 1C
ADLEX 1 B
EGENU 2 B
VETAG 1C
KABDU 1C



STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
ARRIVALS (WEST) RWY 02
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Navigation Specification
ELADO 2C	010	IF	ELADO	-	-	-	-	-	- FL130 + 8500	250	RNAV 1
	020	TF	OSRAM	-	359°	-	13	-	- 8000 +7000	250	RNAV 1
	030	TF	BIMUM	-	359°	-	12	-	+ 3900	210	RNAV 1
	040	TF	ADMUS	-	022°	-	4	R	2700	185	RNAV 1
KABDU 1C	010	IF	KABDU	-	-	-	-	-	+ FL180	250	RNAV 1
	020	TF	AKNIR	-	244°	-	11.6	-	- FL245 +FL160	250	RNAV 1
	030	TF	OKVUG	-	238°	-	21.5	L	- FL170 + 11000	250	RNAV 1
	040	TF	LULPO	-	203°	-	34.1	L	+ 4000	210	RNAV 1
	050	TF	ADMUS	-	112°	-	7	L	2700	185	RNAV 1
	060	TF	FAF	-	022°	-	5	L	2700	185	RNAV 1
VETAG 1C	010	IF	VETAG	-	-	-	-	-	+ FL180	250	RNAV 1
	020	TF	AKNIR	-	231°	-	10.6	-	- FL245 +FL160	250	RNAV 1
	030	TF	OKVUG	-	238°	-	21.5	R	- FL170 + 11000	250	RNAV 1
	040	TF	LULPO	-	203°	-	34.1	L	+ 4000	210	RNAV 1
	050	TF	ADMUS	-	112°	-	7	L	2700	185	RNAV 1
	060	TF	FAF	-	022°	-	5	L	2700	185	RNAV 1
ENBAX 1C	010	IF	ENBAX	-	-	-	-	-	+ FL180	250	RNAV 1
	020	TF	OKVUG	-	183°	-	27	-	- FL170 + 11000	250	RNAV 1
	030	TF	LULPO	-	203°	-	34.1	R	+4000	210	RNAV 1
	040	TF	ADMUS	-	112°	-	7	L	+2700	185	RNAV 1
	050	TF	FAF	-	022°	-	5	L	2700	185	RNAV 1
ADLEX 1B	010	IF	ADLEX	-	-	-	-	-	- FL180 + 12000	250	RNAV 1
	020	TF	LULPO	-	106°	-	37.2	-	+ 4000	210	RNAV 1
	030	TF	ADMUS	-	112°	-	7	R	2700	185	RNAV 1
	040	TF	FAF	-	022°	-	5	L	2700	185	RNAV 1
EGENU 2B	010	IF	EGENU	-	-	-	-	-	- FL150 + 10000	250	RNAV 1
	020	TF	LULPO	-	089°	-	27.8	-	+ 4000	210	RNAV 1
	030	TF	ADMUS	-	112°	-	7	R	2700	185	RNAV 1
	040	TF	FAF	-	022°	-	5	L	2700	185	RNAV 1

STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
ARRIVALS (WEST) RWY 02
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Navigation Specification
PIMEP 2B	010	IF	PIMEP	-	-	-	-	-	- FL130 + 8500	250	RNAV 1
	020	TF	LUKVA	-	039°	-	13	-	- 8000 +5500	250	RNAV 1
	030	TF	BIMUM	-	058°	-	12	R	+ 3900	210	RNAV 1
	040	TF	ADMUS	-	022°	-	4	L	2700	185	RNAV 1
OREKO 1B	010	IF	OREKO	-	-	-	-	-	- FL130 + 8500	250	RNAV 1
	020	TF	LUKVA	-	054°	-	13	-	- 8000 +5500	250	RNAV 1
	030	TF	BIMUM	-	058°	-	12	R	+ 3900	210	RNAV 1
	040	TF	ADMUS	-	022°	-	4	L	2700	185	RNAV 1
DULIM 2B	010	IF	DULIM	-	-	-	-	-	- FL140 + 9000	250	RNAV 1
	020	TF	LUKVA	-	067°	-	14	-	- 8000 +5500	250	RNAV 1
	030	TF	BIMUM	-	058°	-	12	L	+ 3900	210	RNAV 1
	040	TF	ADMUS	-	022°	-	4	L	2700	185	RNAV 1
SUKUS 1B	010	IF	SUKUS	-	-	-	-	-	- FL140 + 9000	250	RNAV 1
	020	TF	LUKVA	-	077°	-	16	-	- 8000 +5500	250	RNAV 1
	030	TF	BIMUM	-	058°	-	12	L	+ 3900	210	RNAV 1
	040	TF	ADMUS	-	022°	-	4	L	2700	185	RNAV 1

WAYPOINT CO-ORDINATES

Waypoint	Latitude	Longitude
KABDU	063322.00N	1163312.00E
VETAG	063505.97N	1163051.48E
ENBAX	064402.57N	1160532.21E
AKNIR	062824.14N	1162244.20E
OKVUG	061659.35N	1160415.59E
ADLEX	055531.65N	1151512.46E
EGENU	054500.00N	1152306.00E
ELADO	051408.92N	1155627.48E
OSRAM	052702.90N	1155609.71E
PIMEP	052216.22N	1153720.74E
OREKO	052432.74N	1153441.00E
DULIM	052700.00N	1153212.00E
SUKUS	052911.55N	1153025.62E
LULPO	054526.47N	1155052.37E
LUKVA	053241.46N	1154535.92E
BIMUM	053906.31N	1155553.15E
ADMUS	054248.65N	1155726.39E
FAF	054725.68N	1155922.98E

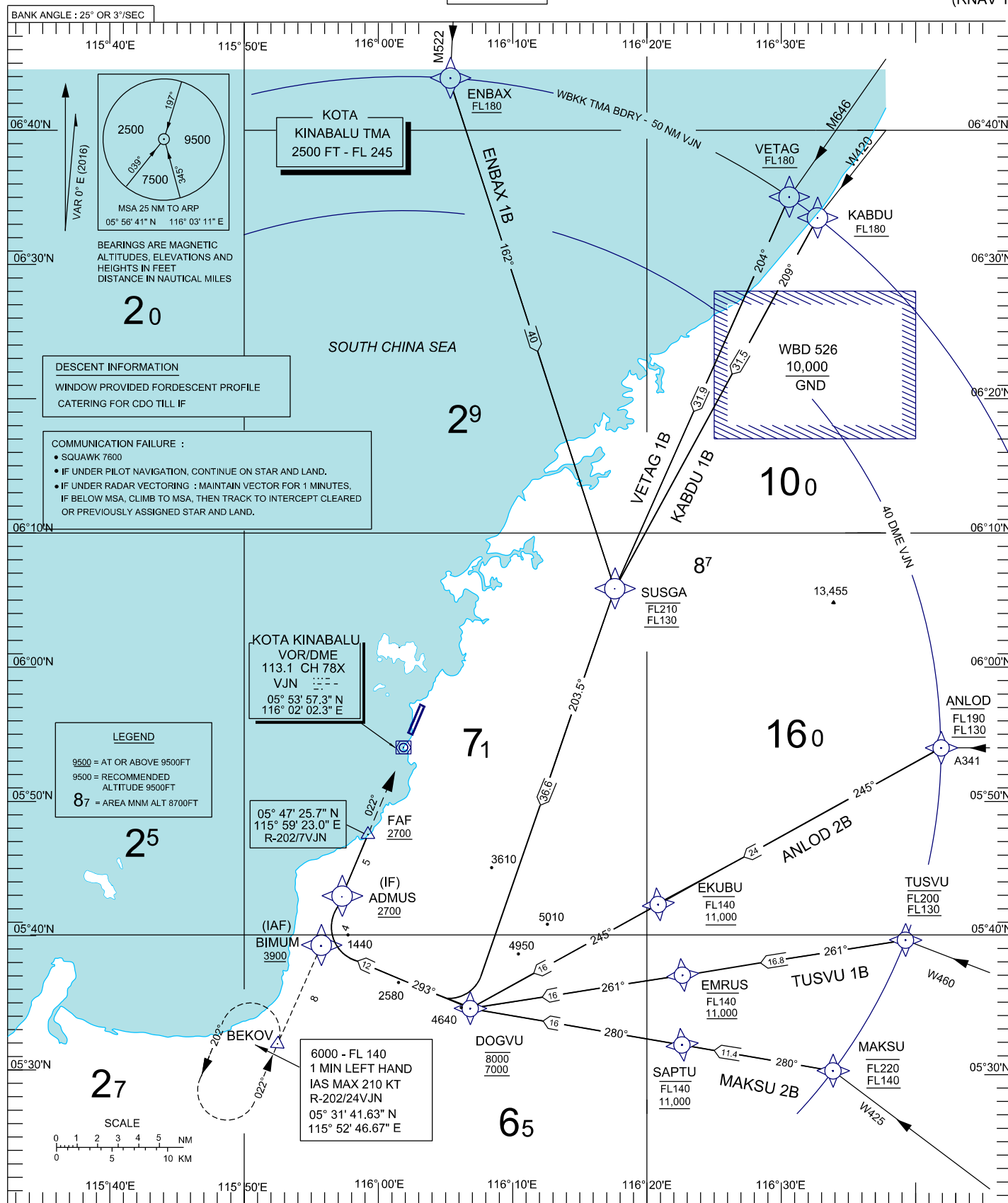
STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

KOTA KINABALU / KOTA KINABALU
RWY 02
ARRIVALS (EAST)
(RNAV 1)

TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ENBAX 1 B ANLOD 2B
VETAG 1B TUSVU 1B
KABDU 1B MAKSU 2B



STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

AERODROME ELEV 18 FT

KOTA KINABALU (WBKK)
ARRIVALS (EAST) RWY 02
(RNAV 1)**TABULAR DESCRIPTION**

Route Designator	Serial Number	Path Descriptor	WP Identifier	Fly Over	Course / °M (°T)	Magnetic Variation	Distance (nm)	Turn Direction	Altitude (FT)	Speed (KT) IAS MAX	Navigation Specification
ENBAX 1B	010	IF	ENBAX	-	-	-	-	-	+ FL180	250	RNAV 1
	020	TF	SUSGA	-	162°	-	40	-	- FL210 + 130	250	RNAV 1
	030	TF	DOGVU	-	203°	-	36.6	R	- 8000 + 7000	210	RNAV 1
	040	TF	BIMUM	-	293°	-	12	R	+3900	185	RNAV 1
	050	TF	ADMUS	-	022°	-	4	R	2700	185	RNAV 1
VETAG 1B	010	IF	VETAG	-	-	-	-	-	+ FL180	250	RNAV 1
	020	TF	SUSGA	-	204°	-	31.9	L	- FL210 + 130	250	RNAV 1
	030	TF	DO2VU	-	203°	-	36.6	R	- 8000 + 7000	210	RNAV 1
	040	TF	BIMUM	-	293°	-	12	R	+3900	185	RNAV 1
	050	TF	ADMUS	-	022°	-	4	R	2700	185	RNAV 1
KABDU 1B	010	IF	KABDU	-	-	-	-	-	+ FL180	250	RNAV 1
	020	TF	SUSGA	-	209°	-	31.5	L	- FL210 + 130	250	RNAV 1
	030	TF	DOGVU	-	203°	-	36.6	R	- 8000 + 7000	210	RNAV 1
	040	TF	BIMUM	-	293°	-	12	R	+3900	185	RNAV 1
	050	TF	ADMUS	-	022°	-	4	R	2700	185	RNAV 1
ANLOD 2B	010	IF	ANLOD	-	-	-	-	-	- FL220 + FL140	250	RNAV 1
	020	TF	EKUBU	-	245°	-	24	-	- FL140 +11000	250	RNAV 1
	030	TF	DOGVU	-	245°	-	16	-	- 8000 + 7000	210	RNAV 1
	040	TF	BIMUM	-	293°	-	12	R	+ 3900	185	RNAV 1
	050	TF	ADMUS	-	022°	-	4	R	2700	185	RNAV 1
TUSVU 1B	010	IF	TUSVU	-	-	-	-	-	- FL200 + FL130	250	RNAV 1
	020	TF	EMRUS	-	261°	-	16.8	-	- FL140 +11000	250	RNAV 1
	030	TF	DOGVU	-	261°	-	16	-	- 8000 + 7000	210	RNAV 1
	040	TF	BIMUM	-	293°	-	12	R	+ 3900	185	RNAV 1
	050	TF	ADMUS	-	022°	-	4	R	2700	185	RNAV 1
MAKSU 2B	010	IF	MAKSU	-	-	-	-	-	- FL180 + FL120	250	RNAV 1
	020	TF	SAPTU	-	280°	-	11.4	-	- FL140 +11000	250	RNAV 1
	030	TF	DOGVU	-	280°	-	16	-	- 8000 + 7000	210	RNAV 1
	040	TF	BIMUM	-	293°	-	12	R	+ 3900	185	RNAV 1
	050	TF	ADMUS	-	022°	-	4	R	2700	185	RNAV 1

TABULAR DESCRIPTION**WAYPOINT CO-ORDINATES**

Waypoint	Latitude	Longitude
ENBAX	064402.57N	1160532.21E
VETAG	063505.97N	1163051.48E
KABDU	063322.00N	1163312.00E
SUSGA	060550.71N	1161750.26E
ANL0D	055355.82N	1164211.00E
EKUBU	054212.83N	1162101.60E
TUSVU	054011.13N	1163944.83E
EMRUS	053655.24N	1162250.24E
MAKSU	052944.92N	1163404.62E
SAPTU	053142.06N	1162247.79E
DOGVU	053425.86N	1160658.90E
BIMUM	053906.31N	1155553.15E
ADMUS	054248.65N	1155726.39E
FAF	054725.68N	1155922.98E

STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

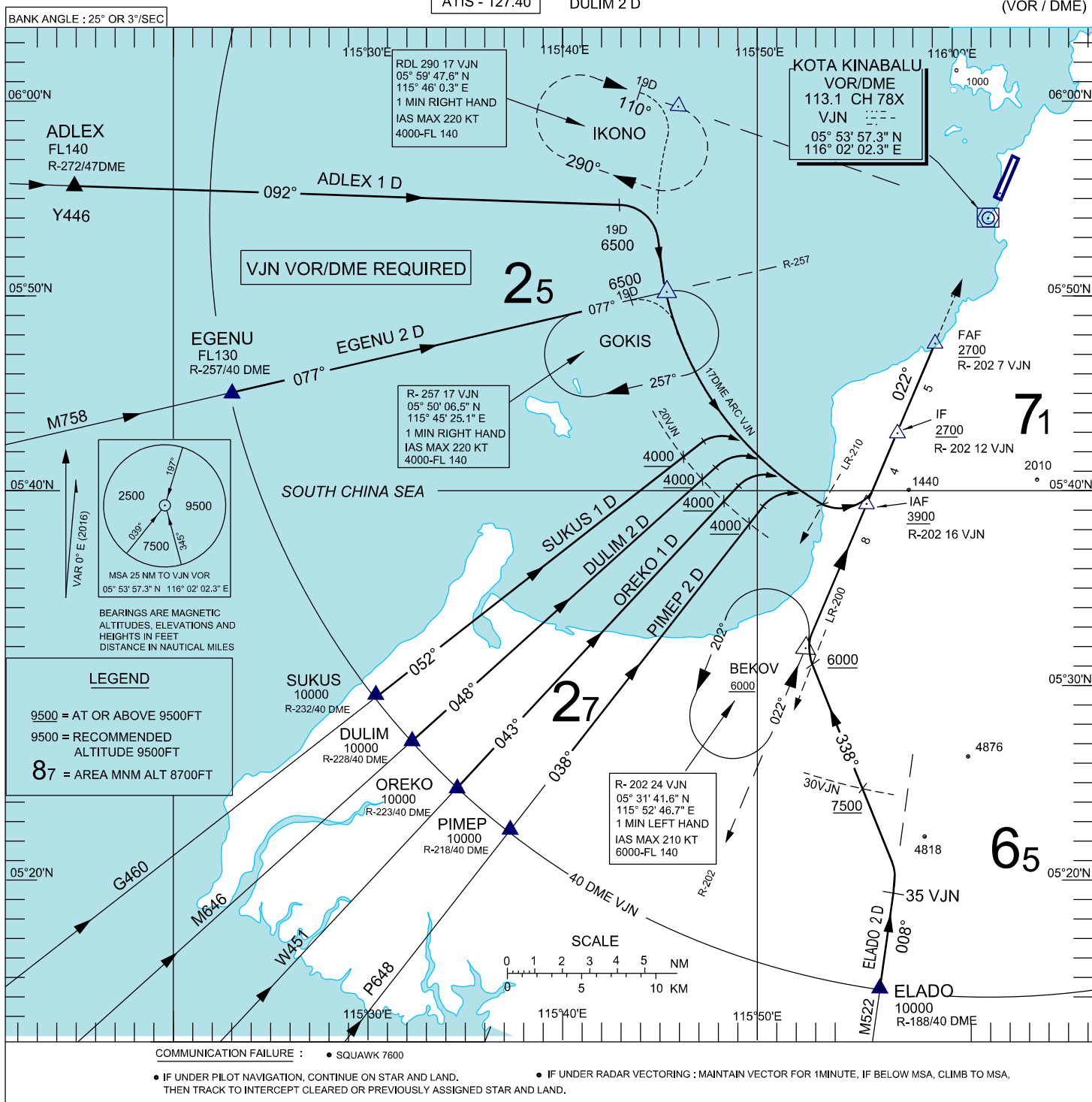
KOTA KINABALU / KOTA KINABALU

RWY 02
(VOR / DME)

TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ADLEX 1 D OREKO 1 D
EGENU 2 D PIMEP 2 D
SUKUS 1 D ELADO 2 D
DULIM 2 D



ARRIVALS RWY 02 VOR/DME

INITIAL FIX / RECOMMENDED ALTITUDE	ARRIVAL ROUTE DESIGNATOR	STAR DESCRIPTION
ADLEX / FL 140. RDL 272 47 DME VJN 055531.65N 1151512.46E	ADLEX 1D	From ADLEX Y446, track 092° VJN VOR inbound, Then turn RIGHT via 17 DME ARC VJN, On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202. (Recommended descent altitudes computed below 5% gradient).
EGENU / FL 130. RDL 257 40 DME VJN 0545005N 1152306E	EGENU 2D	From EGENU M 758, track 077° VJN VOR inbound, Then turn RIGHT via 17 DME ARC VJN. On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202. (Recommended descent altitudes computed below 5% gradient).
SUKUS / 10,000 RDL 272 40 DME VJN 052911.55N 1153025.62E	SUKUS 1D	From SUKUS G 460, track 052° VJN VOR inbound, Then turn RIGHT via 17 DME ARC VJN. On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202. (Recommended descent altitudes computed below 5% gradient).
DULIM / 10,000 RDL 228 40 DME VJN 052700N 1153212E	DULIM 2D	From DULIM M 646, track 048° VJN VOR inbound. Then turn RIGHT via 17 DME ARC VJN. On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202. (Recommended descent altitudes computed below 5% gradient).
OREKO / 10,000 RDL 223 40 DME VJN 052432.74N 1153441.00E	OREKO 1D	From OREKO W 451, track 043° VJN VOR inbound, Then turn RIGHT via 17 DME ARC VJN. On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202. (Recommended descent altitudes computed below 5% gradient).
PIMEP / 10,000 RDL 218 40 DME VJN 052216.22N 1153720.74E	PIMEP 2D	From PIMEP P 648, track 038° VJN VOR inbound, Then turn RIGHT via 17 DME ARC VJN. On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202. (Recommended descent altitudes computed below 5% gradient).
ELADO / 10,000 RDL 188 40 DME VJN 051408.92N 1155627.48E	ELADO 2D	From ELADO M 522, track 008° VJN VOR inbound, At 35 DME VJN, turn LEFT track 338°. On crossing L RDL 200 turn RIGHT, intercept LOC or RDL 202. (Recommended descent altitudes computed below 5% gradient).

STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

KOTA KINABALU / KOTA KINABALU

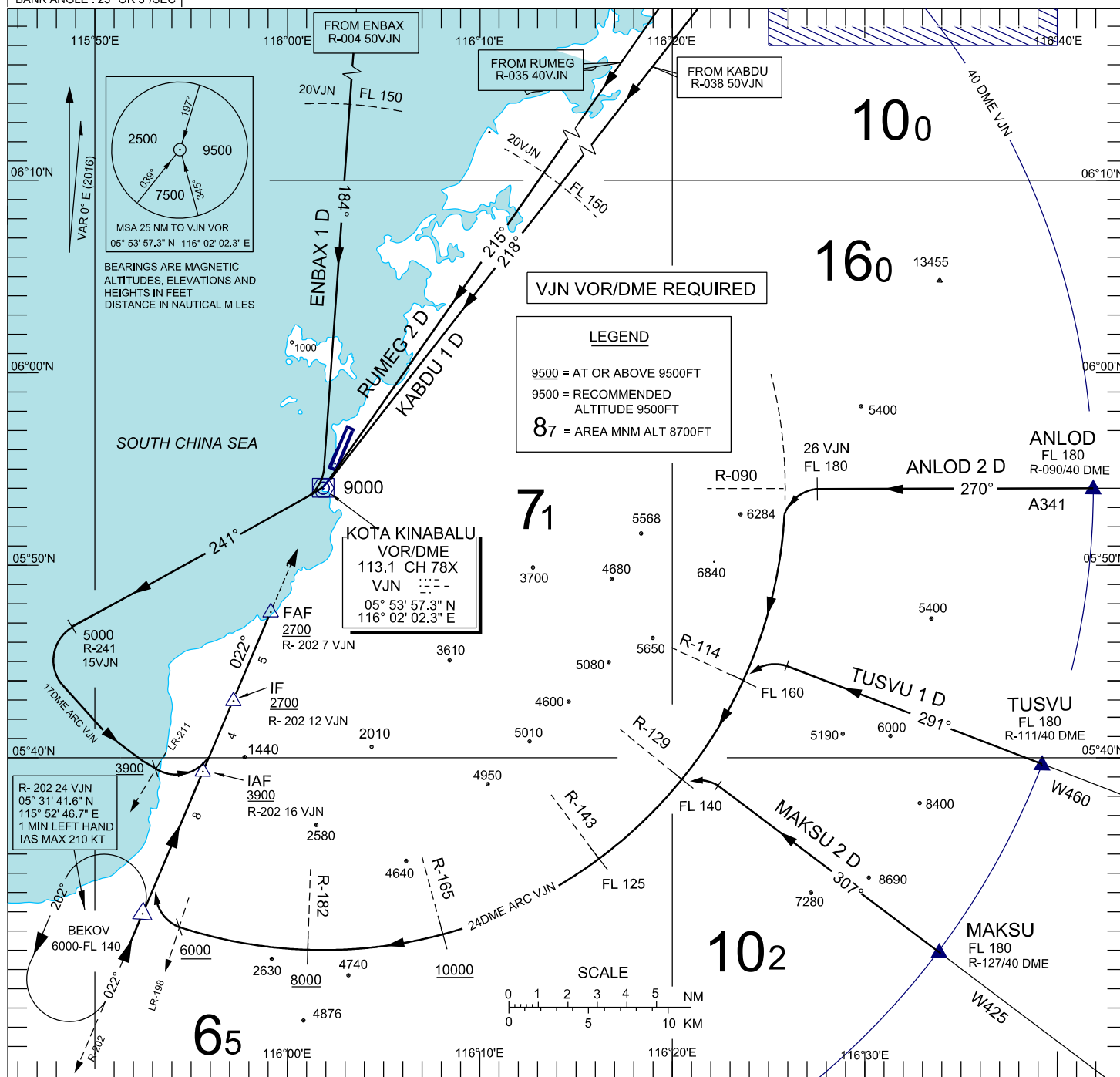
TRANSITION ALTITUDE
11,000 FT

TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ENBAX 1 D ANLOD 2 D
RUMEG 2 D TUSVU 1 D
KABDU 1 D MAKSU 2 D

RWY 02
(VOR / DME)

BANK ANGLE : 25° OR 3°/SEC



COMMUNICATION FAILURE :

- IF UNDER PILOT NAVIGATION, CONTINUE ON STAR AND LAND. THEN TRACK TO INTERCEPT CLEARED OR PREVIOUSLY ASSIGNED STAR AND LAND.

• SQUAWK 7600

- IF UNDER RADAR VECTERING : MAINTAIN VECTOR FOR 1MINUTE, IF BELOW MSA, CLIMB TO MSA.

ARRIVALS RWY 02 VOR/DME

INITIAL FIX / RECOMMENDED ALTITUDE	ARRIVAL ROUTE DESIGNATOR	STAR DESCRIPTION
<p>From ENBAX</p> <p>RDL 004 50 DME VJN 064402.57N 1160532.21E @ 20 DME VJN FL150</p>	<p>ENBAX 1D</p>	<p>From ENBAX M 522, track 184° to VJN VOR, then track 241°.</p> <p>At 15 DME VJN, turn LEFT to fly 17 DME ARC VJN,</p> <p>On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202.</p> <p>(Recommended descent altitudes computed below 5% gradient)</p>
<p>From RUMEG</p> <p>RDL 035 40 DME VJN 052652.37N 1162505.29E @ 20 DME VJN FL150</p>	<p>RUMEG 2D</p>	<p>From RUMEG P 648, track 215° to VJN VOR, then track 241°.</p> <p>At 15 DME VJN, turn LEFT to fly 17 DME ARC VJN,</p> <p>On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202.</p> <p>(Recommended descent altitudes computed below 5% gradient)</p>
<p>From KABDU</p> <p>RDL 038 50 DME VJN 063322N 1163312E @ 20 DME VJN FL150</p>	<p>KABDU 1D</p>	<p>From KABDU W 420/W 462, track 218° to VJN VOR, then track 241°.</p> <p>At 15 DME VJN, turn LEFT to fly 17 DME ARC VJN,</p> <p>On crossing L RDL 210 turn LEFT, intercept LOC or RDL 202.</p> <p>(Recommended descent altitudes computed below 5% gradient)</p>
<p>ANLOD / FL 180</p> <p>RDL 090 40 DME VJN 055355.82N 1164211.00E</p>	<p>ANLOD 2D</p>	<p>From ANLOD A 341, track 270° VJN VOR inbound,</p> <p>At 26 DME VJN, turn LEFT to fly 24 DME ARC VJN,</p> <p>On crossing L RDL 198 turn RIGHT, intercept LOC or RDL 202.</p> <p>(Recommended descent altitudes computed below 5% gradient)</p>
<p>TUSVU / FL 180</p> <p>RDL 111 40 DME VJN 054011.13N 1163944.83E</p>	<p>TUSVU 1D</p>	<p>From TUSVU W 460, track 291° VJN VOR inbound,</p> <p>At 26 DME VJN, turn LEFT to fly 24 DME ARC VJN,</p> <p>On crossing L RDL 198 turn RIGHT, intercept LOC or RDL 202.</p> <p>(Recommended descent altitudes computed below 5% gradient)</p>
<p>MAKSU / FL 180</p> <p>RDL 127 40 DME VJN 052944.92N 1163404.62E</p>	<p>MAKSU 2D</p>	<p>From MAKSU W 425, track 307° VJN VOR inbound,</p> <p>At 26 DME VJN, turn LEFT to fly 24 DME ARC VJN,</p> <p>On crossing L RDL 198 turn RIGHT, intercept LOC or RDL 202.</p> <p>(Recommended descent altitudes computed below 5% gradient)</p>

STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO

KOTA KINABALU / KOTA KINABALU

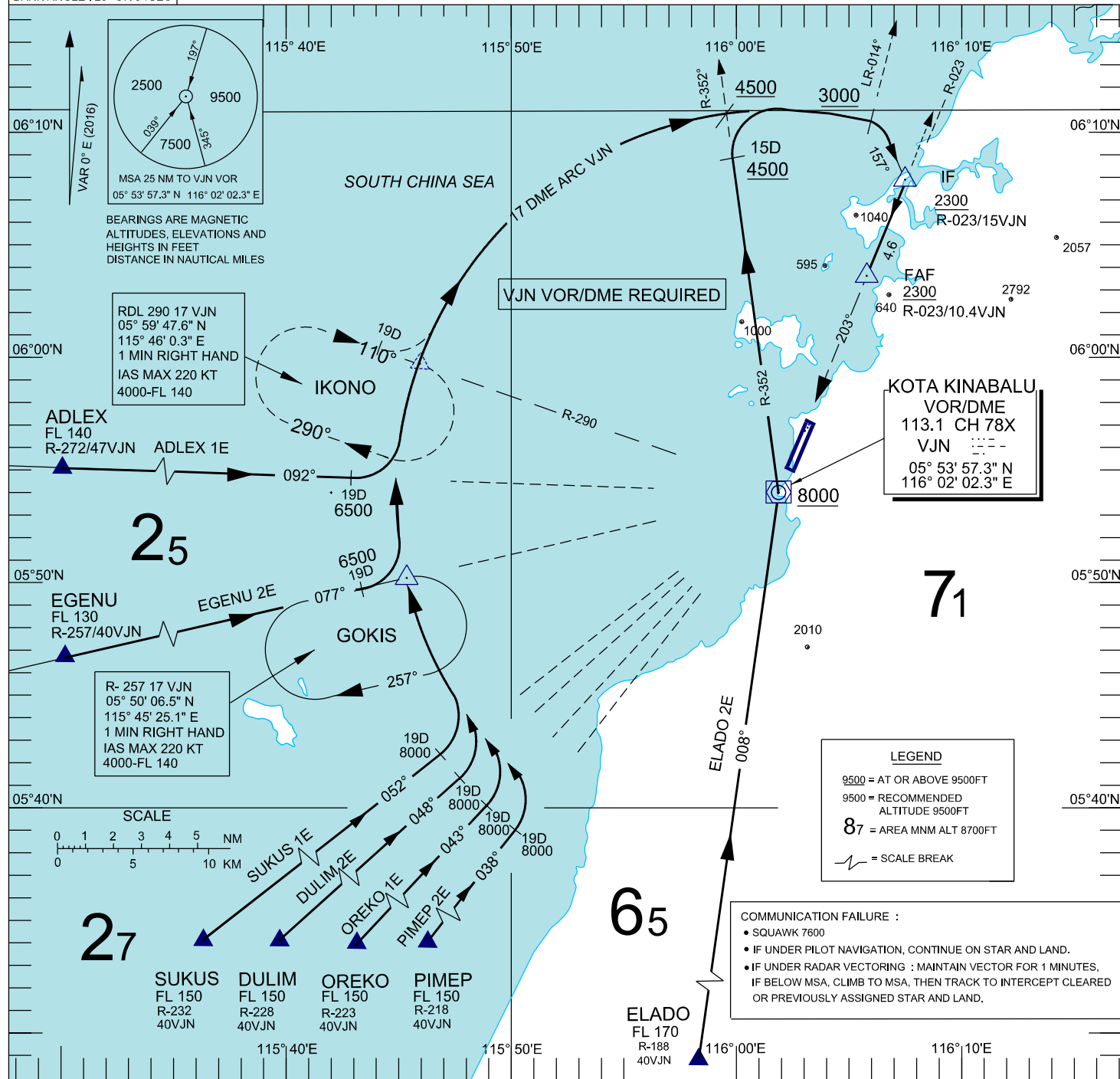
TWR - 118.30
APP - 119.10
SMC - 121.60
ATIS - 127.40

ADLEX 1 E
EGENU 2 E
SUKUS 1 E
DULIM 2 E
OREKO 1 E
PIMEP 2 E
ELADO 2 E

TRANSITION ALTITUDE
11,000 FT

RWY 20
(VOR / DME)

BANK ANGLE : 25° OR 3°/SEC



ARRIVALS RWY 20 VOR/DME

INITIAL FIX / RECOMMENDED ALTITUDE	ARRIVAL ROUTE DESIGNATOR	STAR DESCRIPTION
ADLEX / FL 140 RDL 272 47 DME VJN 055531.65N 1151512.46E	ADLEX 1E	From ADLEX Y446, track 092° VJN VOR inbound, At 19 DME VJN, turn LEFT to fly 17 DME ARC VJN, On crossing L RDL 014 turn RIGHT track 157° and intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
EGENU / FL 130 RDL 257 40 DME VJN 0545005N 1152306E	EGENU 2E	From EGENU M 758, track 077° VJN VOR inbound, At 19 DME VJN, turn LEFT to fly 17 DME ARC VJN, On crossing L RDL 014 turn RIGHT track 157° and intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
SUKUS / FL 150 RDL 272 40 DME VJN 052911.55N 1153025.62E	SUKUS 1E	From SUKUS G 460, track 052° VJN VOR inbound, At 19 DME VJN, turn LEFT to fly 17 DME ARC VJN, On crossing L RDL 014 turn RIGHT track 157° and intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
DULIM / FL 150 RDL 228 40 DME VJN 052700N 1153212E	DULIM 2E	From DULIM M 646, track 048° VJN VOR inbound. At 19 DME VJN, turn LEFT to fly 17 DME ARC VJN, On crossing L RDL 014 turn RIGHT track 157° and intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
OREKO / FL 150 RDL 223 40 DME VJN 052432.74N 1153441.00E	OREKO 1E	From OREKO W 451, track 043° VJN VOR inbound, At 19 DME VJN, turn LEFT to fly 17 DME ARC VJN, On crossing L RDL 014 turn RIGHT track 157° and intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
PIMEP / FL 150 RDL 218 40 DME VJN 052216.22N 1153720.74E	PIMEP 2E	From PIMEP P 648, track 038° VJN VOR inbound, At 19 DME VJN, turn LEFT to fly 17 DME ARC VJN, On crossing L RDL 014 turn RIGHT track 157° and intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
From ELADO / FL 170 RDL 188 40 DME VJN 051408.92N 1155627.48E	ELADO 2E	From ELADO M 522, track 008° to VJN VOR, then track on RDL 352 At 15 DME VJN turn RIGHT to fly 17 DME ARC. On crossing L RDL 014 turn RIGHT track 157° and intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)

ARRIVALS RWY 20 VOR/DME

INITIAL FIX / RECOMMENDED ALTITUDE	ARRIVAL ROUTE DESIGNATOR	STAR DESCRIPTION
ENBAX / FL 120 RDL 004 50 DME VJN 064402.57N 1160532.21E	ENBAX 1E	From ENBAX M 522, track 184° VJN VOR inbound, At 24 DME VJN, turn LEFT track 157° To intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
RUMEG / FL 120 RDL 035 40 DME VJN 052652.37N 1162505.29E	RUMEG 2E	From RUMEG P 648, track 215° VJN VOR inbound, At 23 DME VJN, turn RIGHT track 247°, To intercept LOC or RDL 023. (Recommended descent altitudes computed for approx. 6.2% gradient)
KABDU / FL 140 RDL 038 50 DME VJN 063322N 1163312E	KABDU 1E	From KABDU W 420/W 462, track 218° VJN VOR inbound, At 25.5 DME VJN, turn RIGHT track 247°, To intercept LOC or RDL 023. (Recommended descent altitudes computed for approx. 6.2% gradient)
ANLOD / FL 150 RDL 090 40 DME VJN 055355.82N 1164211.00E	ANLOD 2E	From ANLOD A 341, track 270° VJN VOR inbound, At 19 DME VJN, turn RIGHT to fly 17 DME ARC VJN, On crossing L RDL 030 turn LEFT, intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
TUSVU / FL 170 RDL 111 40 DME VJN 054011.13N 1163944.83E	TUSVU 1E	From TUSVU W 460, track 291° VJN VOR inbound, At 19 DME VJN, turn RIGHT to fly 17 DME ARC VJN, On crossing L RDL 030 turn LEFT, intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)
MAKSU / FL 180 RDL 127 40 DME VJN 052944.92N 1163404.62E	MAKSU 2E	From MAKSU W 425, track 307° VJN VOR inbound, At 19 DME VJN, turn RIGHT to fly 17 DME ARC VJN, On crossing L RDL 030 turn LEFT, intercept LOC or RDL 023. (Recommended descent altitudes computed below 5% gradient)

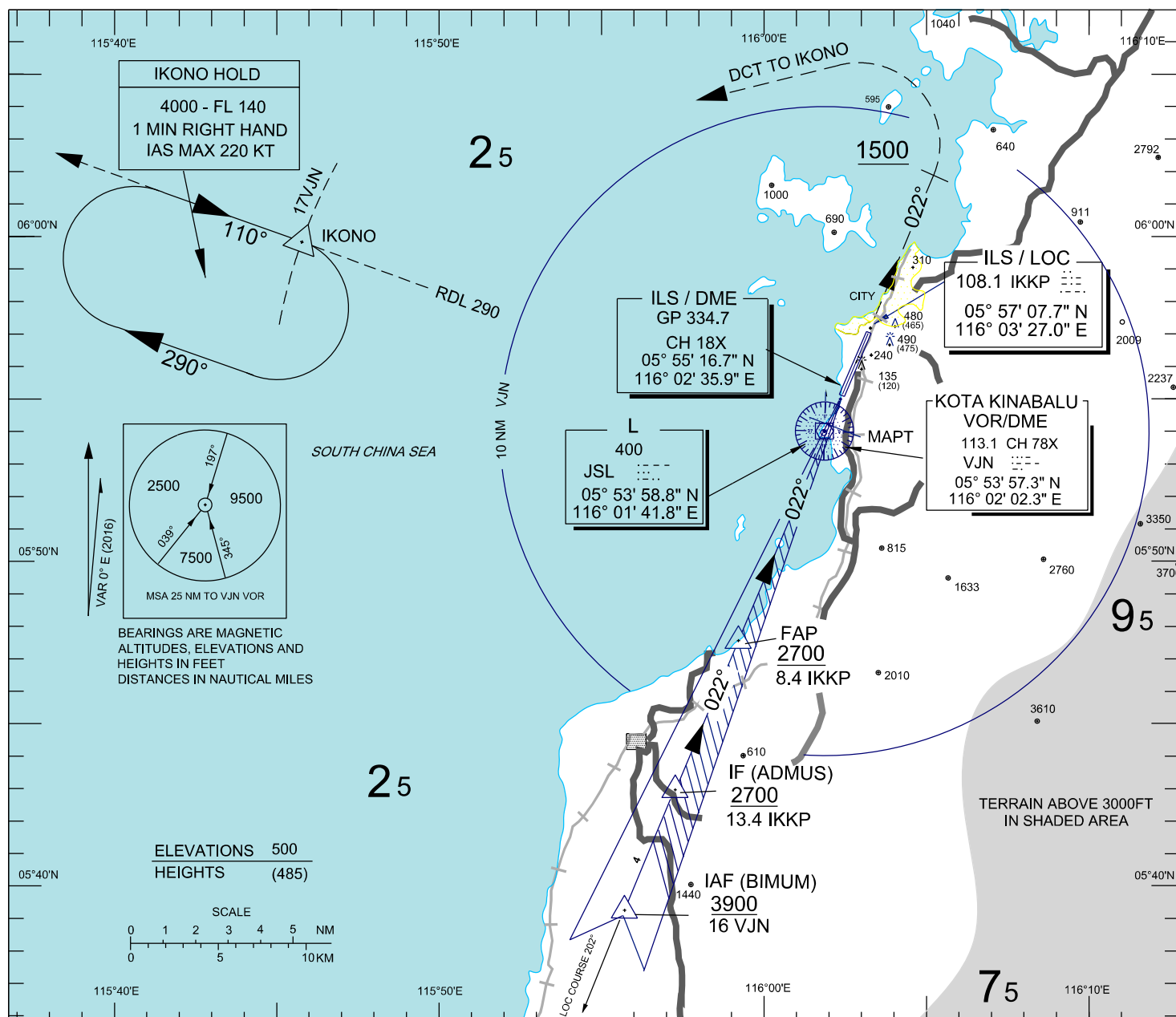
**INSTRUMENT
APPROACH
CHART - ICAO**

AERODROME ELEV 18 FT
HEIGHTS RELATED TO
THR RWY 02 ELEV 15 FT

TWR 118.30
APP 119.10

KOTA KINABALU / KOTA KINABALU

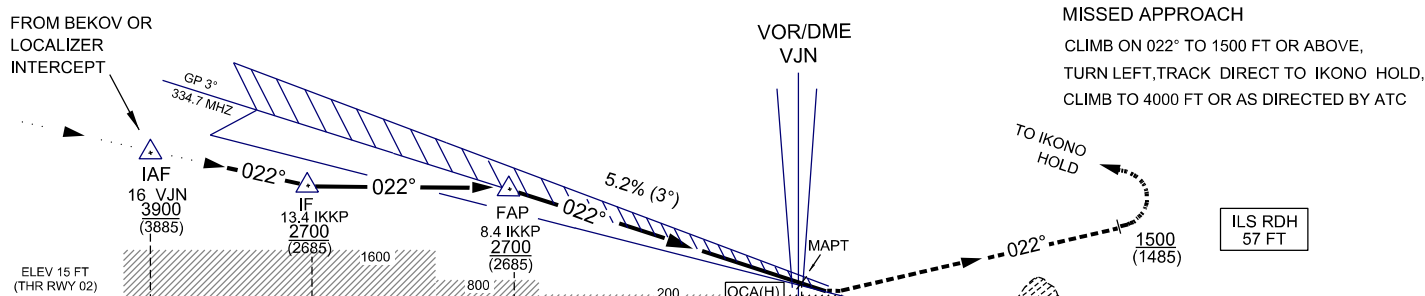
RWY 02
ILS Z OR LOC Z



USE QNH

TRANSITION LEVEL: FL 130
TRANSITION ALT : 11000 FT

DIST BY DME (NM)	8.4	7.4	6.4	5.4	4.4	3.4	2.4	1.4	MAPT / 1.2
ALT 3° APCH PATH (FT)	2700 (2685)	2382 (2367)	2064 (2049)	1746 (1731)	1428 (1413)	1110 (1095)	792 (777)	474 (459)	405 (390)



NM FROM DME IKKP	16	15	10	7	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	10	NM FROM DME VJN
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OCA (H) FT		A	B	C	D
STRAIGHT-IN	CAT 1	280 (265)	292 (277)	300 (285)	320 (305)
APPROACH	LOC / DME	405 (390) / 1.2 IKKP			
CIRCLING/MNM VIS(NM)		850 (840) / 1.0	850 (840) / 1.5	1300 (1290) / 2.0	1600 (1590) / 2.5

GROUND SPEED (KT)		70	90	120	150	180
FAP - MAPT = 7.2 NM	MIN : SEC	6:09	4:48	3:36	2:53	2:24
RATE OF DESCENT (3°)	FT / MIN	375	482	643	804	964

AERONAUTICAL DATA TABULATION

FIX / Point	Referenced Facility	Co-ordinates
BIMUM (IAF)	202°/16 DME VJN	053906.31N 1155553.15E
ADMUS (IF)	202°/12 DME VJN (13.4DME IKKP)	054248.65N 1155726.39E
FAP	202°/7 DME VJN (8.4DME IKKP)	054726.89N 1155922.20E
MAPT	LOC / DME (1.2 IKKP)	055409.15N 1160209.57E
IKONO (MAHF)	290°/17 DME VJN	055947.60N 1154600.30E

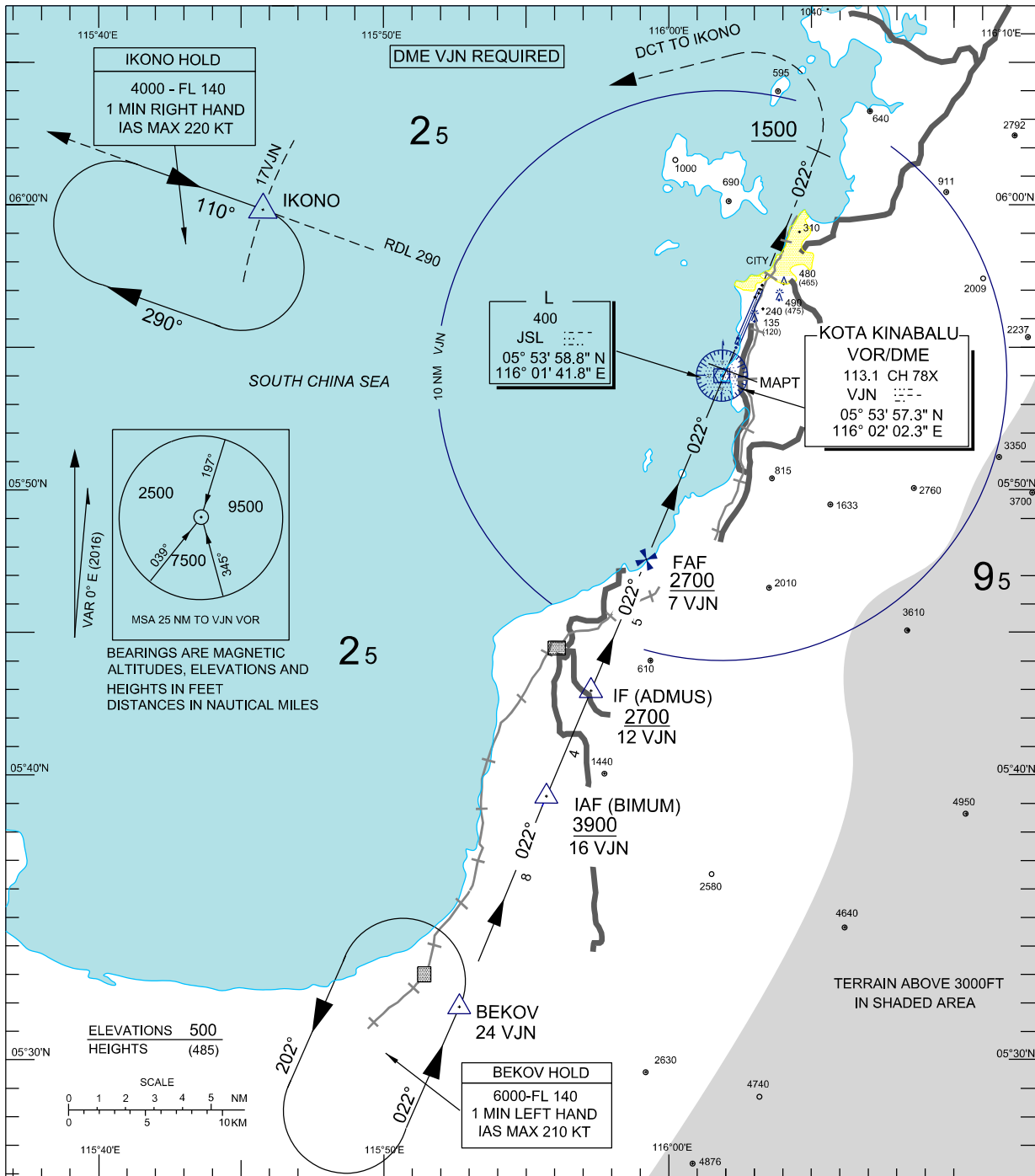
**INSTRUMENT
APPROACH
CHART - ICAO**

AERODROME ELEV 18 FT
HEIGHTS RELATED TO
THR RWY 02 ELEV 15 FT

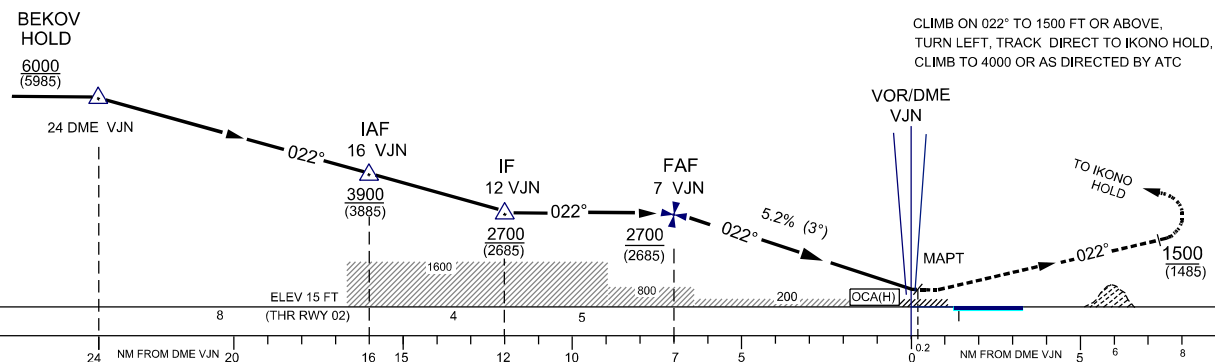
TWR 118.30
APP 119.10

KOTA KINABALU / KOTA KINABALU

RWY 02
VOR Z



DIST BY DME (NM)	7.0	6.0	5.0	4.0	3.0	2.0	1.0	VJN VOR	MAPT / -0.2	USE QNH
ALT 3° APCH PATH (FT)	2700 (2685)	2382 (2367)	2064 (2049)	1746 (1731)	1428 (1413)	1110 (1095)	792 (777)	474 (459)	405 (390)	



OCA (H) FT	A	B	C	D
STRAIGHT-IN APPROACH	405 (390) / - 0.2 VJN			
CIRCLING/MNM VIS(NM)	850 (835) /1.0	850 (835) /1.5	1300 (1285) /2.0	1600 (1585) /2.5

GROUND SPEED (KT)	70	90	120	150	180	
FAP - MAPT = 7.2NM	MIN : SEC	6:09	4:48	3:36	2:53	2:24
RATE OF DESCENT (3°)	FT/ MIN	375	482	643	804	964

AERONAUTICAL DATA TABULATION

FIX / Point	Referenced Facility	Co-ordinates
BEKOV	202°/24 DME VJN	053141.63N 1155246.67E
IAF (BIMUM)	202° / 16 DME VJN	053906. 31N 1155553.15E
IF (ADMUS)	202° / 12 DME VJN	054248.65N 1155726.39E
FAF	202° / 7 DME VJN	054726.89N 1155922.20E
MAPT	202° / - 0.23 DME VJN	055409.15N 1160209.57E
MAHF (IKONO)	290° / 17 DME VJN	055947.60N 1154600.30E

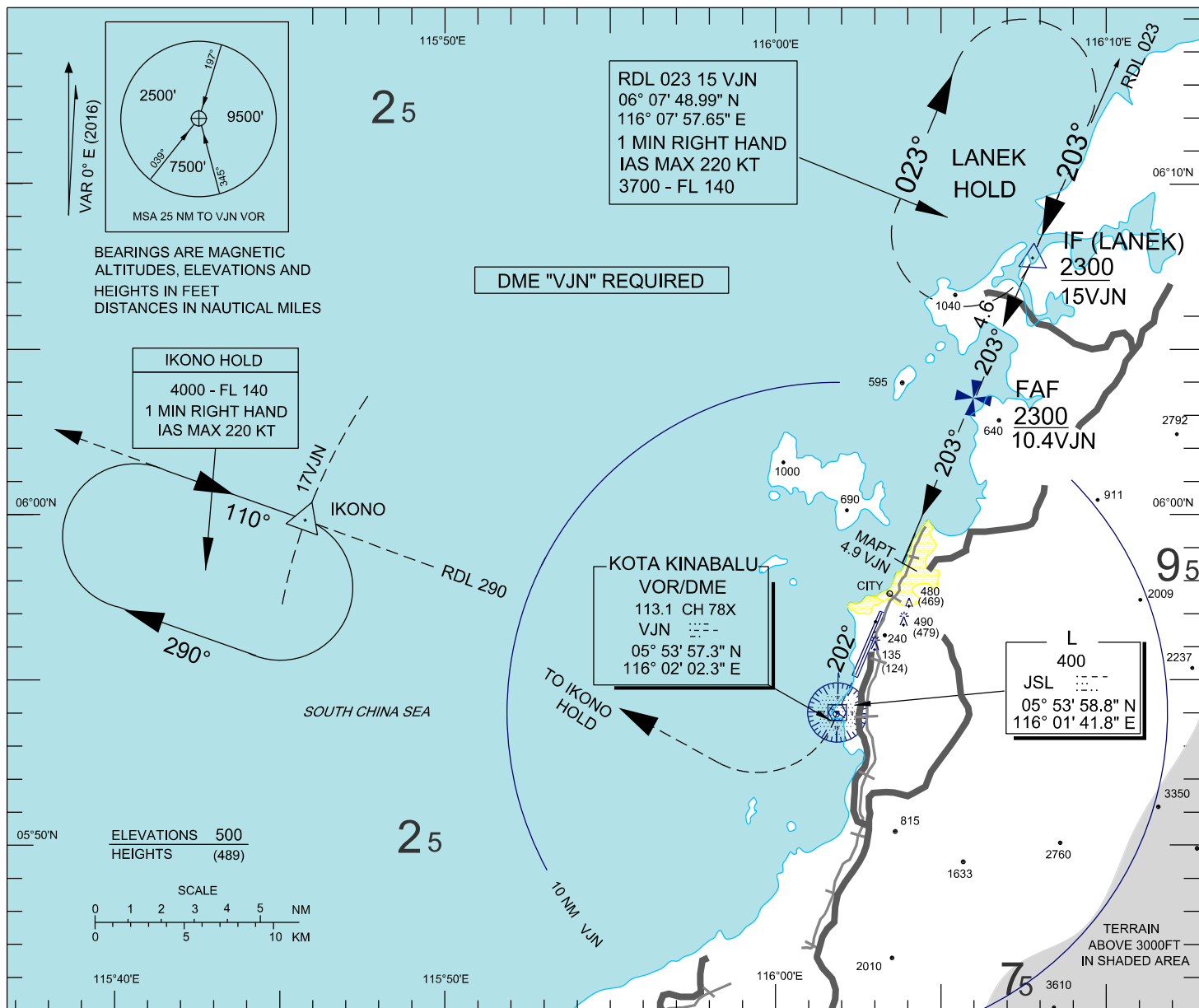
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 18 FT
 HEIGHTS RELATED TO THR RWY 20 ELEV 11 FT

TWR 118.30
 APP 119.10

KOTA KINABALU / KOTA KINABALU

RWY 20
 VOR Z

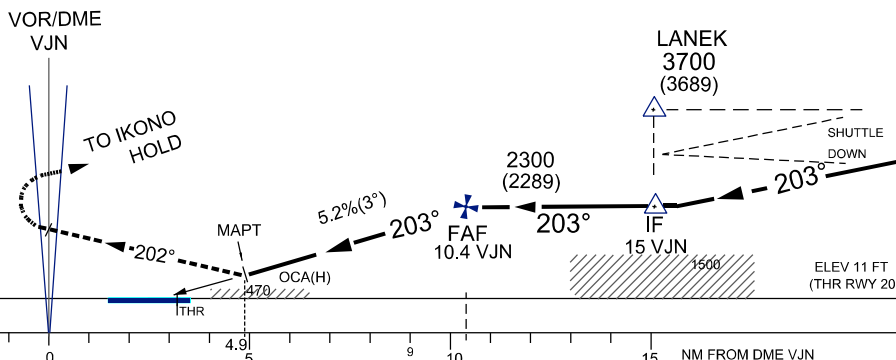


DIST BY DME (VJN)	10.4	9.4	8.4	7.4	6.4	5.4	MAPT / 4.9
ALT 3° APCH PATH (FT)	2300(2289)	1982(1971)	1664(1653)	1346(1335)	1028(1017)	710(699)	630(619)

TRANSITION ALTITUDE 11,000

MISSED APPROACH

CLIMB ON TRACK 202°, ON PASSING VJN VOR,
 TURN RIGHT, TRACK TO IKONO HOLD,
 CLIMB TO 4000 FT, OR AS DIRECTED BY ATC



OCA (H) FT	A	B	C	D
STRAIGHT-IN APPROACH	630 (619) / 4.9 VJN			
CIRCLING/MNM VIS(NM)	850(840) / 1.0	850(840) / 1.5	1300(1290) / 2.0	1600(1590) / 2.5

GROUND SPEED (KT)	70	90	120	150	180	
FAF - MAPT = 5.5 NM	MIN : SEC	4:42	3:39	2:45	2:12	1:50
RATE OF DESCENT (3°)	FT / MIN	371	476	634	793	951

AERONAUTICAL DATA TABULATION

FIX / Point	Referenced Facility	Co-ordinates
IF (LANEK)	023° / 15 DME VJN	060748.99N 1160757.65E
FAF	023° / 10.4 DME VJN	060334.10N 1160608.65E
MAPT	023° / 4.9 DME VJN	055826.57N 1160403.62E
VJN	VOR/DME	055357.30N 1160202.30E
IKONO (MAHF)	290° / 17 DME VJN	055947.60N 1154600.30E

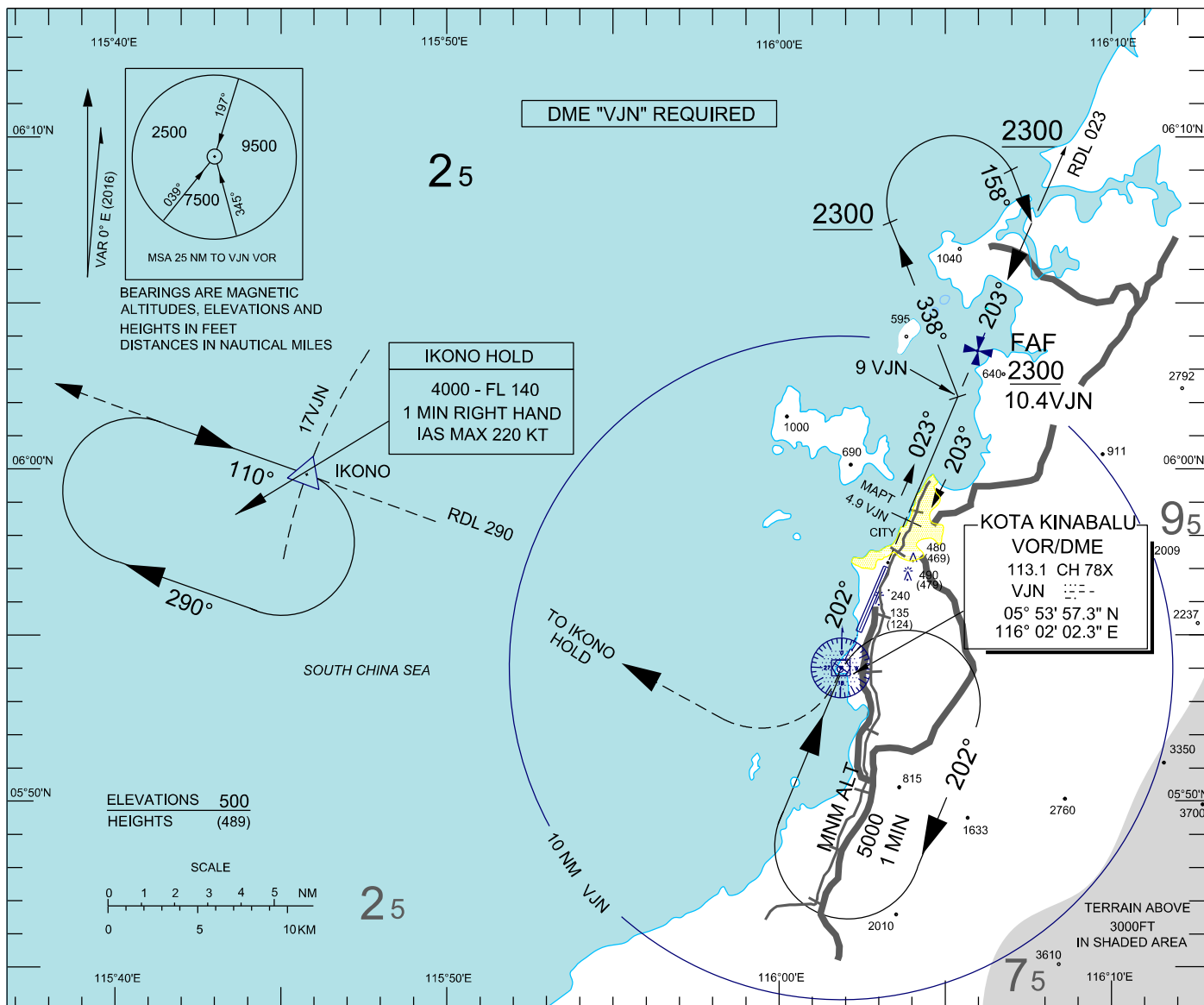
**INSTRUMENT
APPROACH
CHART - ICAO**

AERODROME ELEV 18 FT
HEIGHTS RELATED TO
THR RWY 20 ELEV 11 FT

TWR 118.30
APP 119.10

KOTA KINABALU / KOTA KINABALU

RWY 20
VOR Y

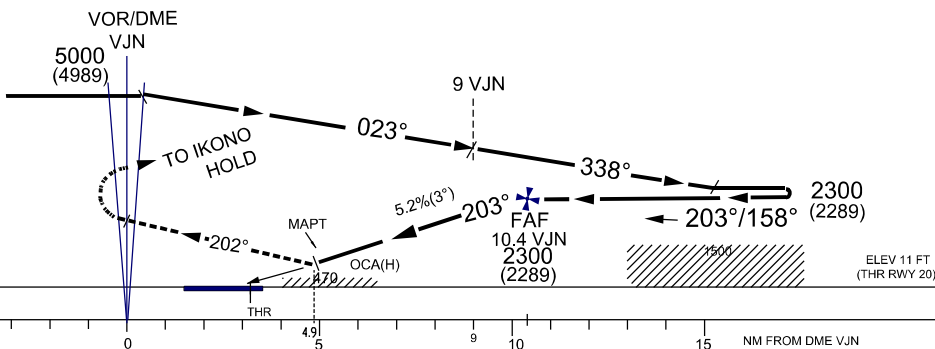


DIST BY DME (VJN)	10.4	9.4	8.4	7.4	6.4	5.4	MAPT / 4.9
ALT 3° APCH PATH (FT)	2300(2289)	1982(1971)	1664(1653)	1346(1335)	1028(1017)	710(699)	630(619)

TRANSITION
ALTITUDE 11,000

MISSED APPROACH

CLIMB ON TRACK 202°, ON PASSING VJN VOR,
TURN RIGHT, TRACK TO IKONO HOLD,
CLIMB TO 4000 FT, OR AS DIRECTED BY ATC



OCA (H) FT	A	B	C	D
STRAIGHT-IN APPROACH	630 (619) / 4.9 VJN			
CIRCLING/MNM VIS(NM)	850 (840) / 1.0	850 (840) / 1.5	1300 (1290) / 2.0	1600 (1590) / 2.5

GROUND SPEED(KT)	70	90	120	150	180	
FAF - MAPT = 5.5 NM	MIN : SEC	4:42	3:39	2:45	2:12	1:50
RATE OF DESCENT (3°)	FT/ MIN	371	476	634	793	951

AERONAUTICAL DATA TABULATION

FIX / Point	Referenced Facility	Co-ordinates
FAF	023°/10.4 DME VJN	060334.10N 1160608.65E
MAPT	023° / 4.9 DME VJN	055826.57N 1160403.62E
VJN	VOR/DME	055357.30N 1160202.30E
IKONO (MAHF)	290° / 17 DME VJN	055947.60N 1154600.30E

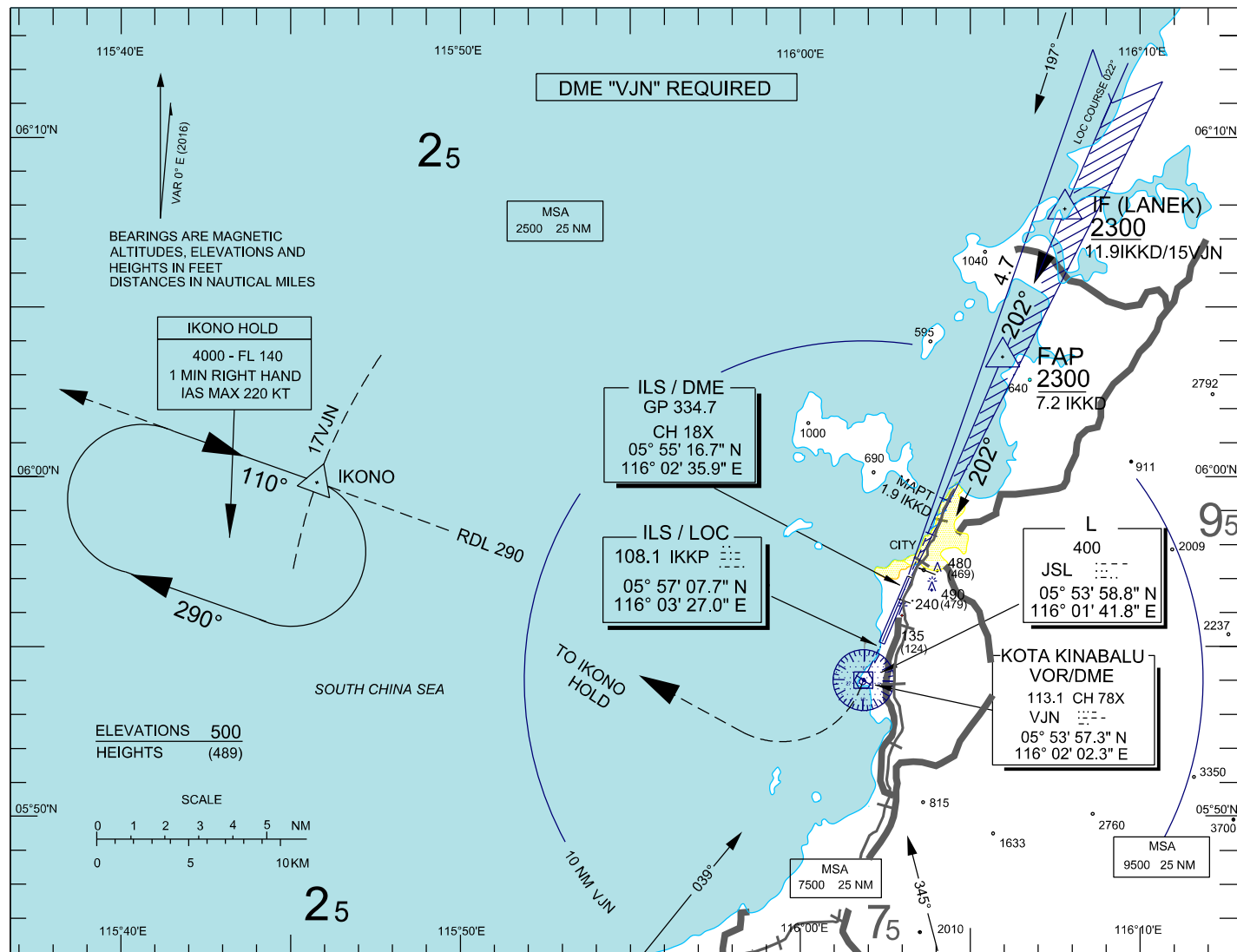
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 18 FT
 HEIGHTS RELATED TO THR RWY 20 ELEV 11 FT

GND 121.60
 TWR 118.30
 APP 119.10
 ATIS 127.40

KOTA KINABALU / KOTA KINABALU

RWY 20
 ILS Z OR LOC Z



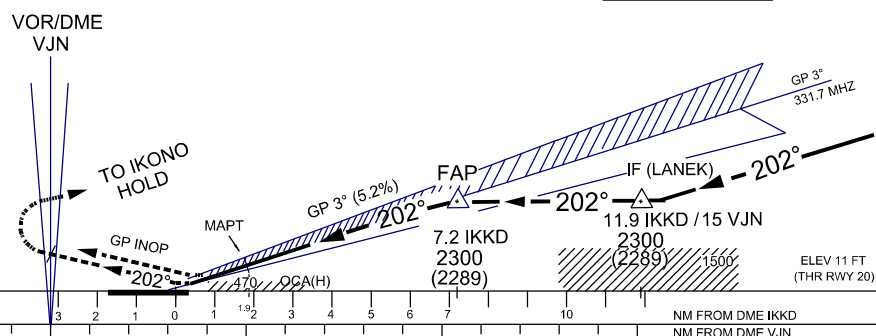
DIST BY DME (IKKD)	7.2	6.2	5.2	4.2	3.2	2.2	1.9 / MAPT
ALT 3° APCH PATH (FT)	2300 (2289)	1982 (1971)	1664 (1653)	1346 (1335)	1028 (1017)	710 (699)	630(619)

TRANSITION ALTITUDE 11,000

MISSED APPROACH

CLIMB ON TRACK 202°, ON PASSING VJN VOR,
 TURN RIGHT, TRACK TO IKONO HOLD,
 CLIMB TO 4000 FT, OR AS DIRECTED BY ATC

ILS RDH
 54 FT



NM FROM DME IKKD	5	0	5	10	15	NM FROM DME IKKD
NM FROM DME VJN						NM FROM DME VJN

OCA (H) FT	A	B	C	D	
STRAIGHT-IN APPROACH	CAT 1	563 (552)	575 (564)	583 (572)	594 (583)
	LOC / DME	630 (619) / 1.9 IKKD			
CIRCLING/MNM VIS(NM)		850 (839) / 1.0	850 (839) / 1.5	1300 (1289) / 2.0	1600 (1589) / 2.5

GROUND SPEED(KT)	70	90	120	150	180
FAP - MAPT = 5.3 NM	MIN : SEC				
	4:32	3:32	2:39	2:07	1:48
RATE OF DESCENT (3°)	FT/ MIN				
	366	470	627	784	942

AERONAUTICAL DATA TABULATION

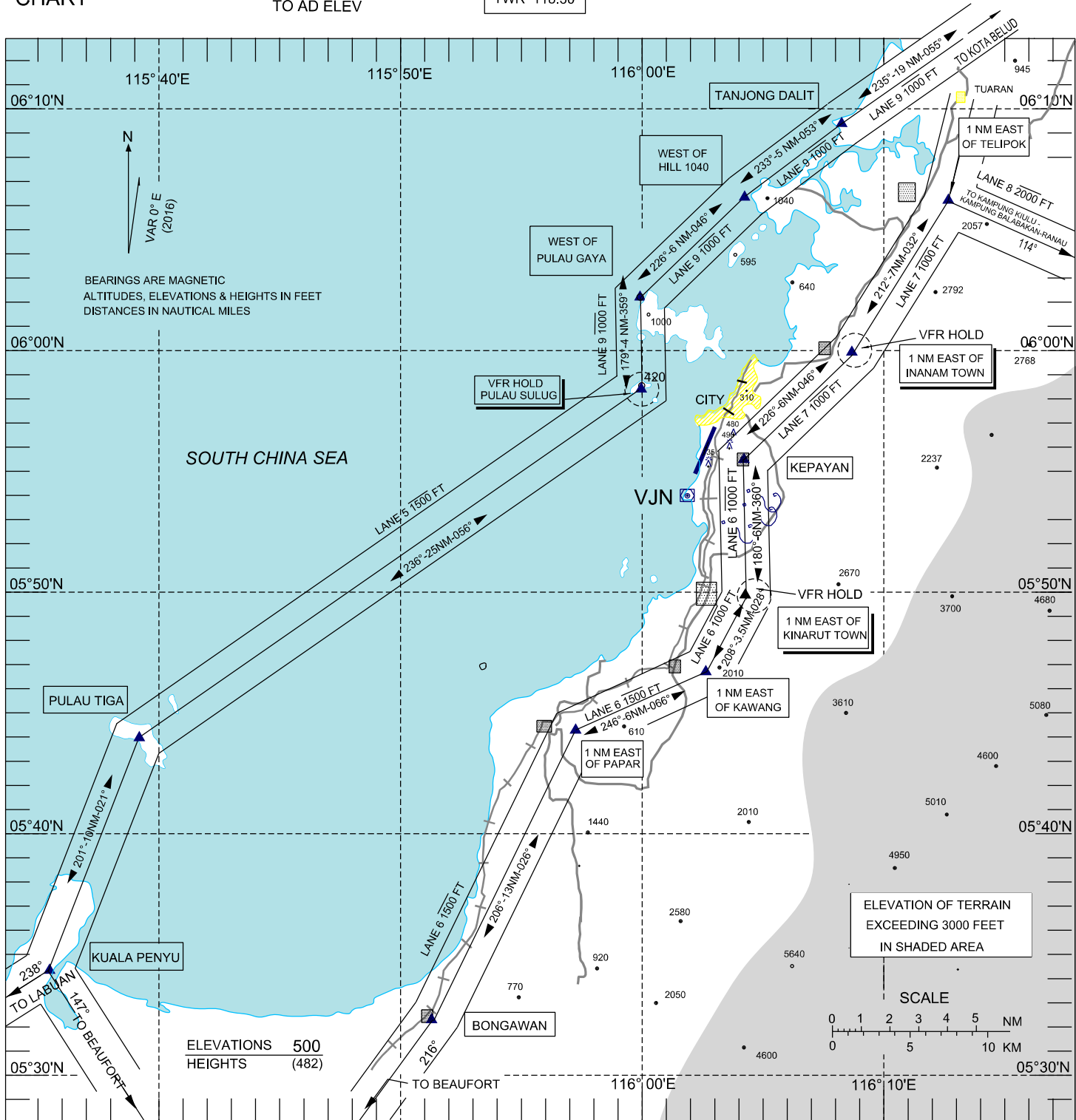
FIX / Point	Referenced Facility	Co-ordinates
IF (LANEK)	023° / 15 DME VJN	060748.99N 1160757.65E
FAF	023° / 10.4 DME VJN	060334.10N 1160608.65E
MAPT	LOC/DME (1.9 IKKD)	055826.57N 1160403.62E
VJN	VOR/DME	055357.30N 1160202.30E
IKONO (MAHF)	290° / 17 DME VJN	055947.60N 1154600.30E

VFR LANE CHART

AD ELEV 18 FT
HEIGHTS RELATED
TO AD ELEV

APP 119.10
TWR 118.30

KOTA KINABALU / KOTA KINABALU



KOTA KINABALU VFR LANE SYSTEM

1 VFR LANE SYSTEM - KOTA KINABALU CONTROL ZONE AND TMA

1.1 Lane Description

1.2 Five (5) lanes are introduced to accommodate VFR flight for light aircraft and helicopters to facilitate their movement into and out of Kota Kinabalu International airport as follows:-

VFR LANE 5 - Pulau Sulug – not above 1500 FT - Pulau Tiga – not above 1500 FT – Kuala Penyu

VFR LANE 6 - Kepayan - not above 1000 FT - 1 nm East of Kinarut Town - not above 1000 FT -
1 nm East of Kawang - not above 1500 FT - 1 nm East of Papar - not above 1500
FT - Bongawan.

VFR LANE 7 - Kepayan - not above 1000 FT - 1 nm East of Inanam Town - not above 1500 FT -
1 nm East of Telipok.

VFR LANE 8 - 1 nm East of Telipok - not above 2000 FT - Kampung Kiulu - not above 3000 FT -
Kampung Balabakan not above 6000 FT - Ranau.

VFR LANE 9 - Pulau Sulug - not above 1000 FT - West of Pulau Gaya – not above 1000FT – West
of Hill 1040 – not above 1000FT – Tanjung Dalit – not above 1000FT – Kota Belud.

2 VFR TRACKS (HEADING)

LANE 5 - PULAU SULUG ← 056° - 25NM - 236° → PULAU TIGA ← 021° - 10NM - 201°
→ KUALA PENYU

LANE 6 - KEPAYAN ← 360° - 6NM - 180° → EAST OF KINARUT ← 028° - 3.5NM -
208° → EAST OF KAWANG ← 066° - 6NM - 246° → EAST OF PAPAR ← 026° -
13NM - 206° → BONGAWAN.

LANE 7 - KEPAYAN ← 226° - 6NM - 046° → EAST OF INANAM ← 212° 7NM -- 032°
→ EAST OF TELIPOK.

LANE 8 - EAST OF TELIPOK ← 294° - 5NM - 114° → KAMPUNG KIULU ← 295° - 10NM - 115°
→ KAMPUNG BALABAKAN ← 295° - 14NM - 115° → RANAU

LANE 9 - PULAU SULUG ← 179° - 4NM - 359° → WEST OF PULAU GAYA ← 226° -
6 NM - 046° → WEST OF HILL 1040 ← 233° - 5NM - 053° → TANJONG DALIT ←
235° - 19NM - 055° → KOTA BELUD.

3 The geographical reporting points used for VFR Lanes are as follows:-

	Geographical Position	Coordinates Lat. / Long.
1	West of Pulau Gaya	055930N 1160030E
2	Pulau Sulug	055740N 1155930E
3	Pulau Tiga	054500N 1153930E
4	Kuala Penyu	053400N 1153600E
5	Bongawan	053220N 1155128E
6	1 nm East of Papar	054200N 1160100E
7	1 nm East of Kawang	054600N 1160300E
8	1 nm East of Kinarut Town	054906N 1160419E
9	Kepayan	055533N 1160330E
10	1 nm East of Inanam Town	055944N 1160905E
11	1 nm East of Telipok	060630N 1161230E
12	Kampung Kiulu	060342N 1161659E
13	Kampung Balabakan	060130N 1162714E
14	Ranau	055730N 1164030E
15	West of Hill 1040	060635N 1160437E
16	Tanjung Dalit	060936N 1160830E
17	Kota Belud	062048N 1162352E

Identification , Name and Lateral Limits	Upper Limits	Type of Restrictions	Remarks
	Lower Limits		
1	2	3	
WBR 527 2NM radius centered at 060450N 1160616E	<u>500 FT ALT</u> GND/SEA	Military Operatrion NO UNAUTHORISED FLIGHTS	Permanently active. Controlling authority: Kinabalu Tower -118.3MHz Remarks: All unauthorized aircraft must avoid this area

WBKK AD 2.10

AERODROME OBSTACLES

IN APCH / TKOF AREAS			IN CIRCLING AREA AND AT AD		RMK
1			2		3
RWY / AREA Affected	TYPE ELEV Markings / LGT	Coordinates WGS 84	TYPE ELEV Markings / LGT	Coordinates WGS 84	
a	b	c	a	b	
02 APCH 20 TKOF	Nil	–	WDI-lighted 11.59 m / 38 ft	055518.38 N 1160237.68E 400 m from threshold 02 90 m from Rwy C/L left side.	
20 APCH 02 TKOF	Nil	–	MET wind sensor - lighted 12.25m / 40.19 ft	055519.04 N 1160236.74 E	
			WDI-lighted 10.36 m / 34 ft	055640.30 N 1160312.40 E 400 m from threshold 20 90 m from Rwy C/L right side.	
			MET wind sensor - lighted 12.14m / 39.83 ft	055640.64 N 1160311.33 E	

Elevation of Obstacles above Transitional, Inner Horizontal and Conical Surface

Radar Antenna Mast erected on top of Kepayan Ridge . 490 FT AMSL. Painted red and white and lgted at night.	055638.7N 1160352.3E Inner Horizontal Surface
Aerial Mast, dist 1553 M , brg 062° fm Thr Rwy 20, hgt 480 FT AMSL. Painted red and white and not lgted.	055712.7N 1160402.3E Inner Horizontal Surface
Transmission Line Twr, hgt 84 FT (25.6 M) AGL erected on top of Kepayan Ridge, elevation 266.7 FT (81.3 M) AMSL. Not painted or lgted.	055706.7N 1160351.3E Inner Horizontal Surface
Elevated water tank , hgt 320 FT (97.5 M) AMSL. Painted red and white and not lgted.	055830.7N 1160434.3E Inner Horizontal Surface
Low range of hills to the East of airfield running North- South. Highest point 356 FT AMSL.	055700.0 N 1160330.0E Inner Horizontal Surface
Radar Antenna Mast on top of Kepayan Ridge, hgt 359 FT AMSL. Painted red and white and lighted.	055638.7N 1160352.3E Inner Horizontal Surface
Hill 330 FT AMSL	055708.0 N 1160346.0E Inner Horizontal Surface
Hill 240 FT AMSL	055632.0N 1160319.0E Inner Horizontal Surface
Hill 310FT AMSL	055900.0N 1160438.0E Conical Surface
Hill 283FT AMSL	055633.0N 1160534.0E Conical Surface
Hill 350FT AMSL	055225.0N 1160438.0E Conical Surface
Hill 450FT AMSL	055218.0N 1160411.0E Conical Surface

Changes : MET Wind Sensor obstacles provided

WBKK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	KOTA KINABALU / Kota Kinabalu International
2	Hours of service MET Office outside hours	H24
3	Office responsible for TAF preparation Periods of validity	Kota Kinabalu 0024, 0606, 1212, 1818 UTC
4	Trend forecast Interval of issuance	Trend - type: 1/2 hourly
5	Briefing/consultation provided	P, D
6	Flight documentation Language(s) used	CR, TB English
7	Charts and other information available for briefing or consultation	S, U
8	Supplementary equipment available for providing information	Weather radar, satellite pictures. AWOS provides real time surface wind QNGH, visibility and cloud ceiling to MET and Control Tower.
9	ATS units provided with information	ACC and Control Tower with half-hourly weather report
10	Additional information	Tel : 088 - 413690, 413691, 413340 Fax : 088 - 413696

Changes : AWOS information included