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AIRAC AIP  
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**MALACCA / MALACCA AIRPORT (WMKM)  
REVISED OF INSTRUMENT FLIGHT PROCEDURES  
FOR RUNWAY 03 AND RUNWAY 21**

**1 INTRODUCTION**

- 1.1 The Instrument Flight Procedures for Malacca Airport were reviewed to the latest obstacle based on Electronic Terrain and Obstacle Data (ETOD)
- 1.2 The purpose of this AIP Supplement is to notify the aviation industry of the introduction of new Instrument Flight Procedures for Malacca / Malacca Airport.

**2 INSTRUMENT FLIGHT PROCEDURES**

- 2.1 The new Standard Instrument Departure Procedures (SID) charts are as follows:

APPENDIX A-1	STANDARD DEPARTURE CHART INSTRUMENT – RADAR DEPARTURE RWY 03 AND RWY 21
APPENDIX A-2	STANDARD DEPARTURE CHART INSTRUMENT – ICAO – RNAV (GNSS) RWY 03 RUSBU 1Q OGAKO 1Q DOSIK 3Q SAPAT 3Q IRMIB 1Q
APPENDIX A-3	STANDARD DEPARTURE CHART INSTRUMENT – ICAO – RWY 03 RUSBU 4Q OGAKO 4Q DOSIK 4Q SAPAT 4Q IRMIB 4Q
APPENDIX A-4	STANDARD DEPARTURE CHART INSTRUMENT – ICAO – RNAV (GNSS) SID RWY 21 RUSBU 1R OGAKO 1R DOSIK 1R SAPAT 3R IRMIB 3R
APPENDIX A-5	STANDARD DEPARTURE CHART INSTRUMENT – ICAO – RWY 21 RUSBU 4R OGAKO 4R DOSIK 4R SAPAT 4R IRMIB 4R

- 2.2 The new Standard Instrument Arrival Procedures (STARs) charts are as follows:

APPENDIX B-1	STANDARD ARRIVAL CHART INSTRUMENT – ICAO – RNAV (GNSS) RWY 03 AKRUL 1S GUPTA 1S DOSIK 1S VELTU 1S DUMOK 1S INTUR 1S
APPENDIX B-2	STANDARD ARRIVAL CHART INSTRUMENT – ICAO – ARRIVAL (13 DME ARC) RWY 03 AKRUL 2S GUPTA 2S DOSIK 2S VELTU 2S DUMOK 2S INTUR 2S
APPENDIX B-3	STANDARD ARRIVAL CHART INSTRUMENT – ICAO – RNAV (GNSS) RWY 21 AKRUL 1T GUPTA 1T DOSIK 1T VELTU 1T DUMOK 1T INTUR 1T
APPENDIX B-4	STANDARD ARRIVAL CHART INSTRUMENT – ICAO – ARRIVAL (15 DME ARC) RWY 21 AKRUL 3T GUPTA 3T DOSIK 3T VELTU 3T DUMOK 3T INTUR 3T

2.3 The new Instrument Approach Procedures charts are as follows:

- APPENDIX C-1 INSTRUMENT APPROACH CHART - ICAO – ILS Z or LOC Z RWY 03
- APPENDIX C-2 INSTRUMENT APPROACH CHART - ICAO – ILS Y or LOC Y RWY 03
- APPENDIX C-3 INSTRUMENT APPROACH CHART - ICAO – RNP Y RWY 03
- APPENDIX C-4 INSTRUMENT APPROACH CHART - ICAO – VOR Z (13 DME ARC) RWY 03
- APPENDIX C-5 INSTRUMENT APPROACH CHART - ICAO – VOR Y RWY 03
- APPENDIX C-6 INSTRUMENT APPROACH CHART - ICAO – RNP Y RWY 21
- APPENDIX C-7 INSTRUMENT APPROACH CHART - ICAO – VOR Z (15 DME ARC) RWY 21
- APPENDIX C-8 INSTRUMENT APPROACH CHART - ICAO – VOR Y RWY 21
- APPENDIX C-9 INSTRUMENT APPROACH CHART - ICAO – VOR X RWY 21 (CAT A & B)

2.4 The following charts pertaining to Malacca / Malacca Airport are superseded or withdrawn:

- AD 2-WMKG-6-1 STANDARD DEPARTURE CHART – RADAR
- AD 2-WMKG-6-3 STANDARD DEPARTURE CHART – ICAO – RWY 03 RUSBU 2Q OGAKO 2Q DOSIK 2Q SAPAT 2Q IRMIB 2Q
- AD 2-WMKG-6-5 STANDARD DEPARTURE CHART – ICAO – RWY 03 RNAV (GNSS) RUSBU 1Q DOSIK 1Q IRMIB 1Q OGAKO 1Q SAPAT 1Q
- AD 2-WMKG-6-9 STANDARD DEPARTURE CHART – ICAO – RWY 21 RUSBU 2R OGAKO 2R DOSIK 2R SAPAT 2R IRMIB 2R
- AD 2-WMKG-6-11 STANDARD DEPARTURE CHART – ICAO – RWY 21 RNAV (GNSS) RUSBU 1R DOSIK 1R IRMIB 1R OGAKO 1R SAPAT 1R
- AD 2-WMKG-7-1 STANDARD ARRIVAL CHART – ICAO – RWY 03 ARRIVAL (13 DME ARC) AKRUL 2S GUPTA 2S DOSIK 2S VELTU 2S DUMOK 2S INTUR 2S
- AD 2-WMKG-7-3 STANDARD ARRIVAL CHART – ICAO – RWY 03 RNAV (GNSS) AKRUL 1S GUPTA 1S DOSIK 1S VELTU 1S DUMOK 1S INTUR 1S
- AD 2-WMKG-7-7 STANDARD ARRIVAL CHART – ICAO – RWY 21 ARRIVAL (15 DME ARC) AKRUL 2T GUPTA 2T DOSIK 2T VELTU 2T DUMOK 2T DUMOK 2T INTUR 2T
- AD 2-WMKG-7-9 STANDARD ARRIVAL CHART – ICAO – RWY 21 RNAV (GNSS) AKRUL 1T GUPTA 1T DOSIK 1T VELTU 1T DUMOK 1T INTUR 1T
- AD 2-WMKG-8-1 INSTRUMENT APPROACH CHART – ICAO – RWY 03 ILS Z OR LOC Z
- AD 2-WMKG-8-3 INSTRUMENT APPROACH CHART – ICAO – RWY 03 ILS Y OR LOC Y (FROM OVERHEAD VMK VOR)
- AD 2-WMKG-8-5 INSTRUMENT APPROACH CHART – ICAO – RWY 03 VOR Z (13 DME ARC) FROM STAR
- AD 2-WMKG-8-7 INSTRUMENT APPROACH CHART – ICAO – RWY 03 VOR Y (FROM OVERHEAD VMR VOR)
- AD 2-WMKG-8-9 INSTRUMENT APPROACH CHART – ICAO – RWY 03 RNP Y
- AD 2-WMKG-8-13 INSTRUMENT APPROACH CHART – ICAO – RWY 21 VOR Z (FROM STAR)
- AD 2-WMKG-8-15 INSTRUMENT APPROACH CHART – ICAO – RWY 21 VOR Y (CAT C) (FROM STAR)

AD 2-WMKG-8-17 INSTRUMENT APPROACH CHART – ICAO – RWY 21 VOR X (CAT A & B) (FROM OVERHEAD VMK VOR)

AD 2-WMKG-8-19 INSTRUMENT APPROACH CHART – ICAO – RWY 21 RNP Y

### 3 NEW WAYPOINTS

3.1 The following new Waypoints are established:

No.	Waypoint	Latitude	Longitude	Phase of Flight
1	KM510	02° 25' 38.44" N	102° 13' 50.02" E	SID
2	KM511	02° 12' 07.23" N	102° 12' 58.14" E	Approach
3	KM512	02° 10' 57.02" N	102° 12' 17.68" E	Approach
4	KM513	02° 09' 02.67" N	102° 11' 12.18" E	Approach
5	KM514	02° 21' 43.78" N	102° 18' 30.58" E	Approach

3.2 The following waypoint will be removed:

No.	Waypoint	Latitude	Longitude	Phase of Flight
1	PUDOB	02° 09' 02.84" N	102° 11' 11.89" E	SID

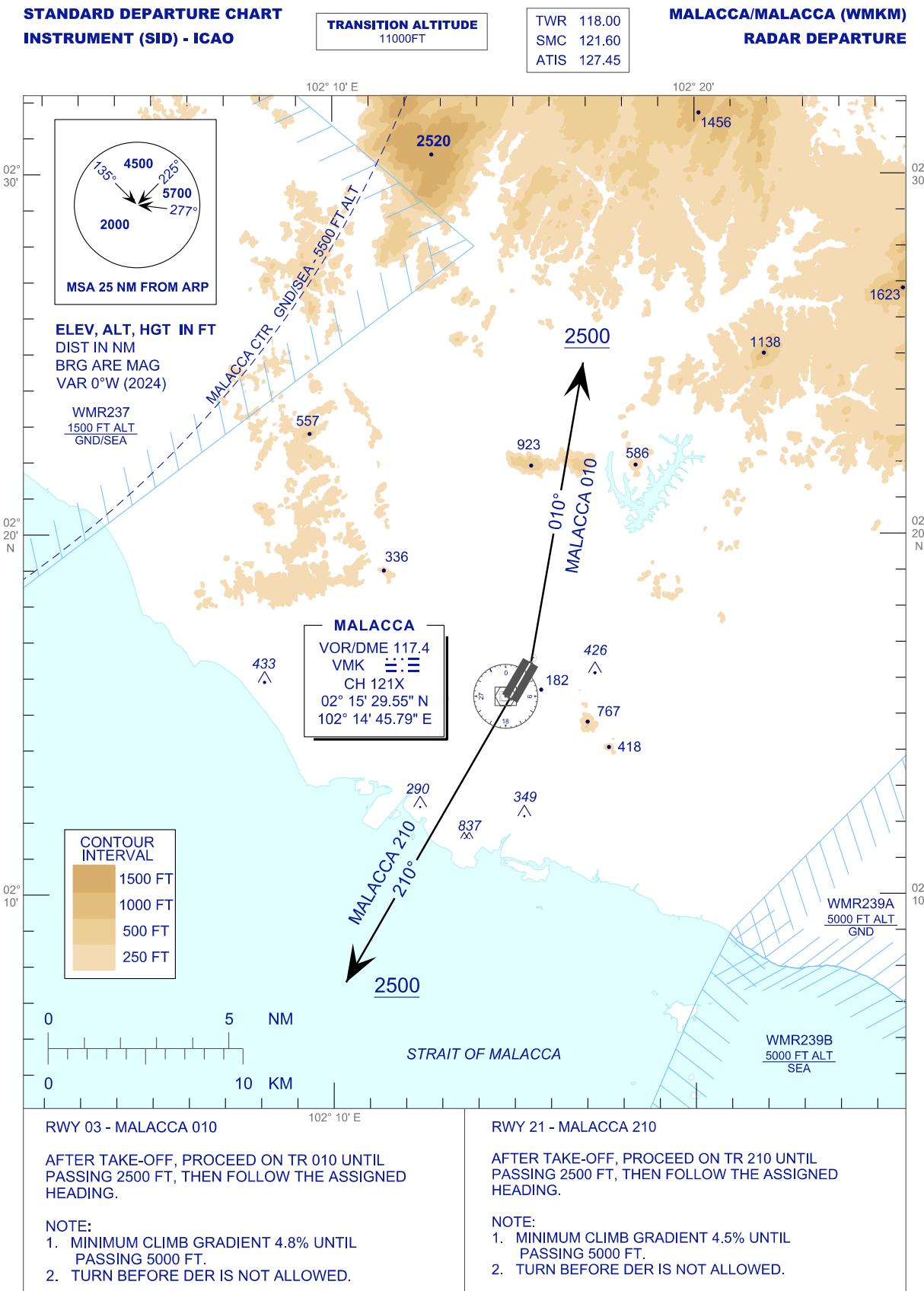
### 4 IMPLEMENTATION

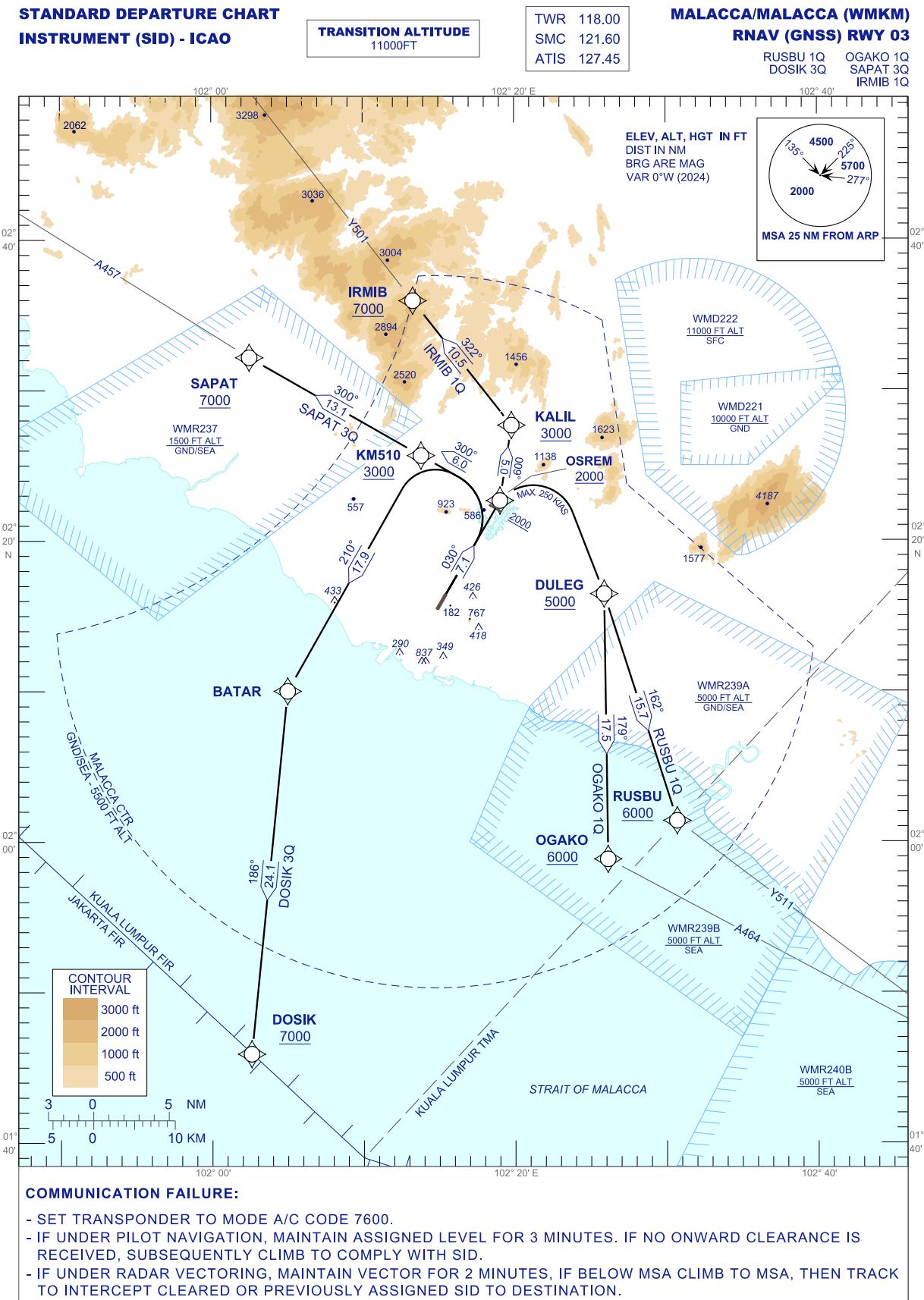
4.1 This AIRAC AIP Supplement and relevant charts will become effective at 0000 UTC on 11<sup>th</sup> July 2024.

### 5 CANCELLATION

5.1 This AIRAC AIP Supplement will remain until the information is published in AIP Malaysia.

- END -





**STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 03**  
 RUSBU 1Q OGAKO 1Q  
 DOSIK 3Q SAPAT 3Q  
 IRMIB 1Q

**TABULAR DESCRIPTION**
**RUSBU ONE QUEBEC DEPARTURE (RUSBU 1Q)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CA	-	-	030	-	-	+2000	-	-
DF	DULEG	-	-	-	R	+5000	-250	RNAV 1
TF	RUSBU	-	162	15.7	-	+6000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.8% UNTIL PASSING 5000 FT DUE TO OBSTACLE & RESTRICTED AREA UPPER LIMIT.*
**OGAKO ONE QUEBEC DEPARTURE (OGAKO 1Q)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CA	-	-	030	-	-	+2000	-	-
DF	DULEG	-	-	-	R	+5000	-250	RNAV 1
TF	OGAKO	-	179	17.5	R	+6000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.8% UNTIL PASSING 5000 FT DUE TO OBSTACLE & RESTRICTED AREA UPPER LIMIT.*
**DOSIK THREE QUEBEC DEPARTURE (DOSIK 3Q)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CF	OSREM	-	030	7.1	-	+2000	-	-
TF	KM510	-	300	6.0	L	+3000	-	RNAV 1
TF	BATAR	-	210	17.9	L	-	-	RNAV 1
TF	DOSIK	-	186	24.1	L	+7000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.8% UNTIL PASSING 2000 FT DUE TO OBSTACLE.*
**SAPAT THREE QUEBEC DEPARTURE (SAPAT 3Q)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CF	OSREM	-	030	7.1	-	+2000	-	-
TF	KM510	-	300	6.0	L	+3000	-	RNAV 1
TF	SAPAT	-	300	13.1	-	+7000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.8% UNTIL PASSING 7000 FT DUE TO OBSTACLE & AIRWAYS LOWER LIMIT.*
**IRMIB ONE QUEBEC DEPARTURE (IRMIB 1Q)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CF	OSREM	-	030	7.1	-	+2000	-	-
TF	KALIL	-	009	5.0	L	+3000	-	RNAV 1
TF	IRMIB	-	322	10.5	L	+7000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.8% UNTIL PASSING 7000 FT DUE TO OBSTACLE & AIRWAYS LOWER LIMIT.*

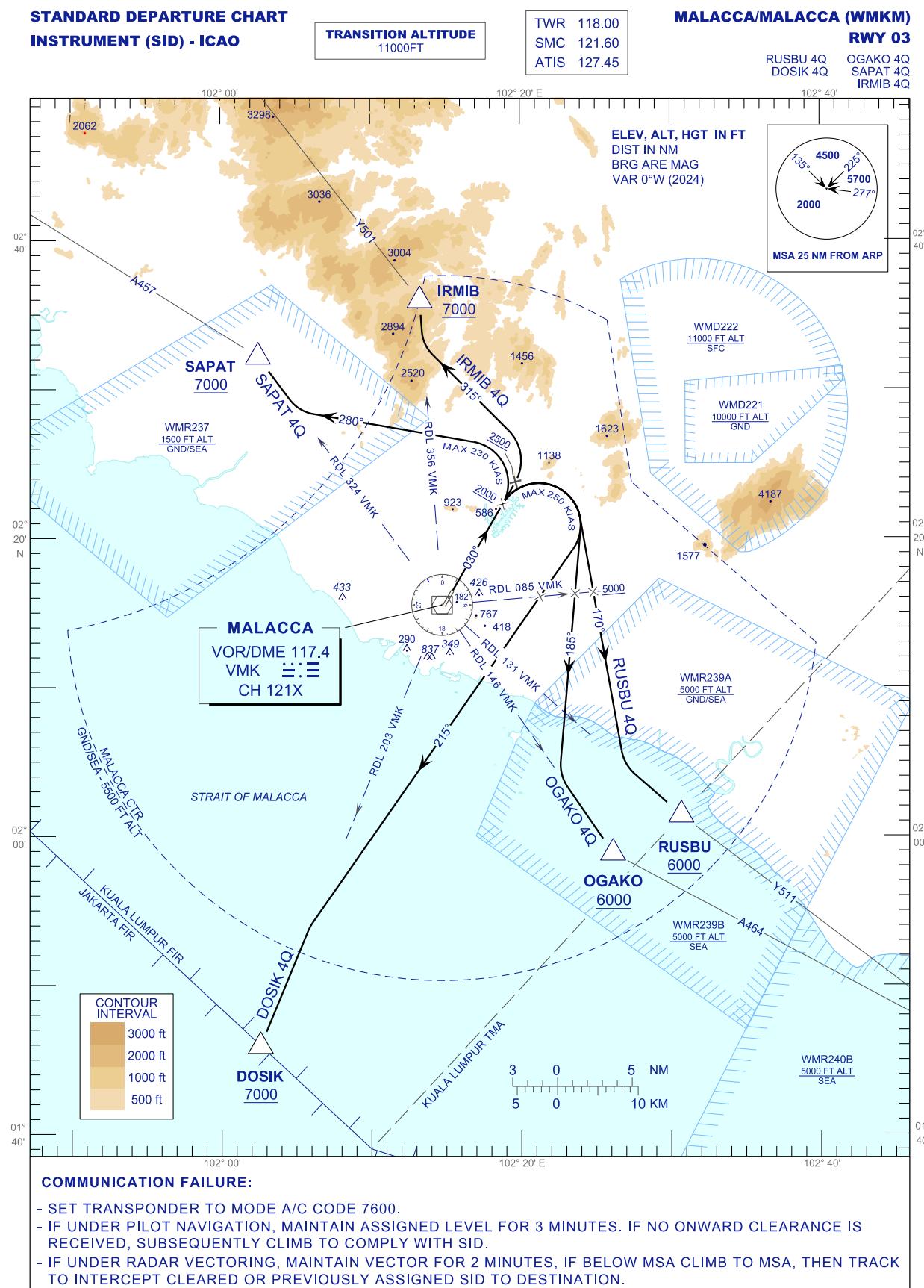
**STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO**

**TRANSITION ALTITUDE**  
11000FT

**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 03**  
RUSBU 1Q OGAKO 1Q  
DOSIK 3Q SAPAT 3Q  
IRMIB 1Q

**AERONAUTICAL DATA TABULATION**

WAYPOINT IDENTIFIER	COORDINATES (WGS84)	
BATAR	02° 10' 00.12" N	102° 04' 59.88" E
DOSIK	01° 45' 54.00" N	102° 02' 35.88" E
DULEG	02° 16' 27.07" N	102° 25' 54.31" E
IRMIB	02° 35' 55.94" N	102° 13' 18.07" E
KALIL	02° 27' 39.00" N	102° 19' 48.00" E
OGAKO	01° 58' 50.16" N	102° 26' 08.16" E
OSREM	02° 22' 38.67" N	102° 19' 02.14" E
RUSBU	02° 01' 22.72" N	102° 30' 42.11" E
SAPAT	02° 32' 09.96" N	102° 02' 30.12" E
KM510	02° 25' 38.44" N	102° 13' 50.02" E



**STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)**
**RWY 03**

RUSBU 4Q  
DOSIK 4Q  
SAPAT 4Q  
IRMIB 4Q

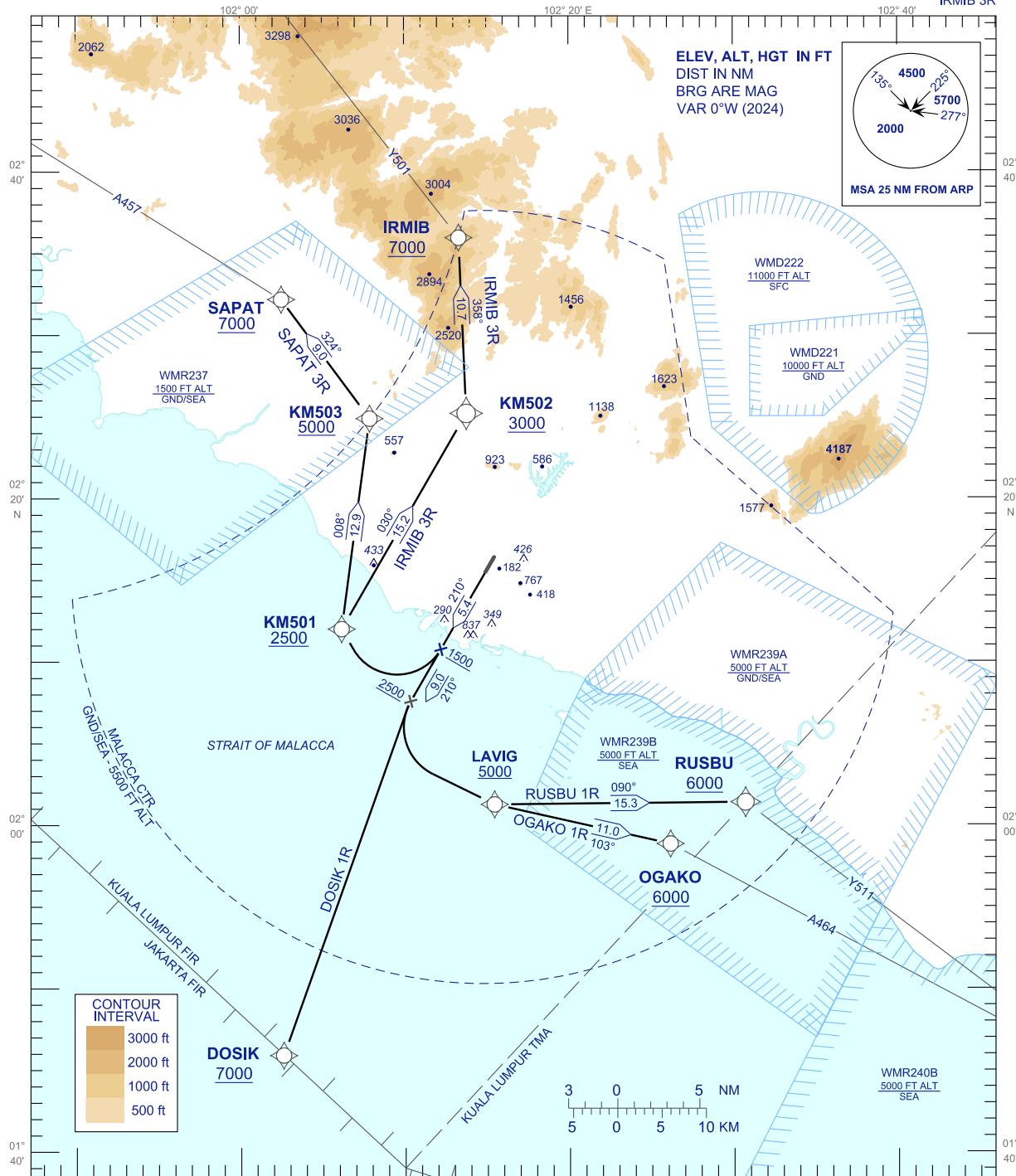
OGAKO 4Q  
SAPAT 4Q  
IRMIB 4Q

**TABULAR DESCRIPTION**

<b>INITIAL CLIMB PROCEDURE</b>	<b>SID DESIGNATOR</b>	<b>SID DESCRIPTION</b>
<p>AFTER TAKE-OFF PROCEED ON TR 030°, ON PASSING 2000 FT TURN RIGHT.</p> <p>NOTE :  1. MINIMUM CLIMB GRADIENT (PDG) 4.8% UNTIL PASSING 5000FT.  2. CROSS RDL 085 VMK AT 5000 FT OR ABOVE.  3. MAX 250 KIAS UNTIL PASSING RDL 085 VMK.</p>	RUSBU FOUR QUEBEC DEPARTURE (RUSBU 4Q)	TRACK 170° TO INTERCEPT RADIAL 131 VMK VOR/DME, OUTBOUND TO RUSBU THEN JOINING Y511.
	OGAKO FOUR QUEBEC DEPARTURE (OGAKO 4Q)	TRACK 185° TO INTERCEPT RADIAL 146 VMK VOR/DME, OUTBOUND TO OGAKO THEN JOINING A464.
	DOSIK FOUR QUEBEC DEPARTURE (DOSIK 4Q)	TRACK 215° TO INTERCEPT RADIAL 203 VMK VOR/DME, OUTBOUND TO DOSIK.
AFTER TAKE-OFF PROCEED ON TR 030°, ON PASSING 2500 FT TURN LEFT.	IRMIB FOUR QUEBEC DEPARTURE (IRMIB 4Q)	TRACK 315° TO INTERCEPT RADIAL 356 VMK VOR/DME, OUTBOUND TO IRMIB THEN JOINING Y501.
AFTER TAKE-OFF PROCEED ON TR 030°, ON PASSING 2000 FT TURN LEFT.	SAPAT FOUR QUEBEC DEPARTURE (SAPAT 4Q)	TRACK 280° TO INTERCEPT RADIAL 324 VMK VOR/DME, OUTBOUND TO SAPAT THEN JOINING A457.

**AERONAUTICAL DATA TABULATION**

<b>WAYPOINT / NAVAID/ FIX</b>	<b>NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID</b>	<b>COORDINATES (WGS84)</b>	
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E
DOSIK	RDL 203 VMK / D 31.9 VMK	01° 45' 54.00" N	102° 02' 35.88" E
IRMIB	RDL 356 VMK / D 20.4 VMK	02° 35' 55.94" N	102° 13' 18.07" E
OGAKO	RDL 146 VMK / D 20.1 VMK	01° 58' 50.16" N	102° 26' 08.16" E
RUSBU	RDL 131 VMK / D 21.3 VMK	02° 01' 22.72" N	102° 30' 42.11" E
SAPAT	RDL 324 VMK / D 20.6 VMK	02° 32' 09.96" N	102° 02' 30.12" E

**STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**TWR 118.00  
SMC 121.60  
ATIS 127.45**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 21**
**RUSBU 1R  
DOSIK 1R  
OGAKO 1R  
SAPAT 3R  
IRMIB 3R**

**COMMUNICATION FAILURE:**

- SET TRANSPONDER TO MODE A/C CODE 7600.
- IF UNDER PILOT NAVIGATION, MAINTAIN ASSIGNED LEVEL FOR 3 MINUTES. IF NO ONWARD CLEARANCE IS RECEIVED, SUBSEQUENTLY CLIMB TO COMPLY WITH SID.
- IF UNDER RADAR VECTORING, MAINTAIN VECTOR FOR 2 MINUTES, IF BELOW MSA CLIMB TO MSA, THEN TRACK TO INTERCEPT CLEARED OR PREVIOUSLY ASSIGNED SID TO DESTINATION.

**STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 21**  
 RUSBU 1R OGAKO 1R  
 DOSIK 1R SAPAT 3R  
 IRMIB 3R

**TABULAR DESCRIPTION**
**RUSBU ONE ROMEO DEPARTURE (RUSBU 1R)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CA	-	-	210	-	-	+2500	-	-
DF	LAVIG	-	-	-	L	+5000	-	RNAV 1
TF	RUSBU	-	090	15.3	L	+6000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.5% UNTIL PASSING 5000 FT DUE TO OBSTACLE & RESTRICTED AREA UPPER LIMIT.*
**OGAKO ONE ROMEO DEPARTURE (OGAKO 1R)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CA	-	-	210	-	-	+2500	-	-
DF	LAVIG	-	-	-	L	+5000	-	RNAV 1
TF	OGAKO	-	103	11.0	L	+6000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.5% UNTIL PASSING 5000 FT DUE TO OBSTACLE & RESTRICTED AREA UPPER LIMIT.*
**DOSIK ONE ROMEO DEPARTURE (DOSIK 1R)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CA	-	-	210	-	-	+2500	-	-
DF	DOSIK	-	-	-	-	+7000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.5% UNTIL PASSING 2500 FT DUE TO OBSTACLE.*
**SAPAT THREE ROMEO DEPARTURE (SAPAT 3R)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CA	-	-	210	-	-	+1500	-	-
DF	KM501	-	-	-	R	+2500	-	RNAV 1
TF	KM503	-	008	12.9	-	+5000	-	RNAV 1
TF	SAPAT	-	324	9.0	L	+7000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.5% UNTIL PASSING 1500 FT DUE TO OBSTACLE.*

**STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 21**

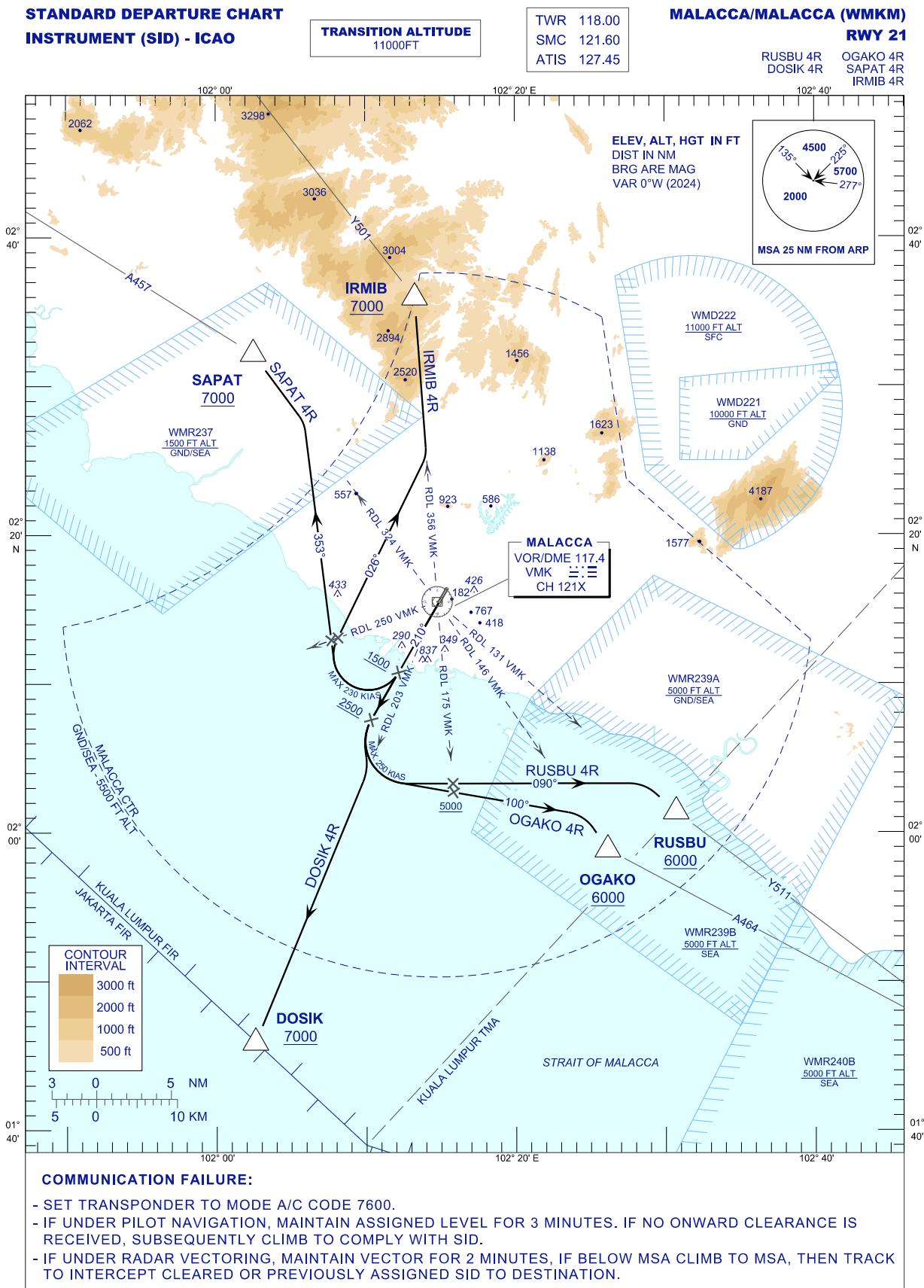
 RUSBU 1R OGAKO 1R  
 DOSIK 1R SAPAT 3R  
 IRMIB 3R

**TABULAR DESCRIPTION**
**IRMIB THREE ROMEO DEPARTURE (IRMIB 3R)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	NAVIGATION SPECIFICATION
CA	-	-	210	-	-	+1500	-	-
DF	KM501	-	-	-	R	+2500	-	RNAV 1
TF	KM502	-	030	15.2	R	+3000	-	RNAV 1
TF	IRMIB	-	358	10.7	L	+7000	-	RNAV 1

*MINIMUM CLIMB GRADIENT (PDG) 4.5% UNTIL PASSING 1500 FT DUE TO OBSTACLE.*
**AERONAUTICAL DATA TABULATION**

WAYPOINT IDENTIFIER	COORDINATES (WGS84)	
DOSIK	01° 45' 54.00" N	102° 02' 35.88" E
IRMIB	02° 35' 55.94" N	102° 13' 18.07" E
LAVIG	02° 01' 14.98" N	102° 15' 26.13" E
OGAKO	01° 58' 50.16" N	102° 26' 08.16" E
RUSBU	02° 01' 22.72" N	102° 30' 42.11" E
SAPAT	02° 32' 09.96" N	102° 02' 30.12" E
KM501	02° 11' 59.55" N	102° 06' 08.91" E
KM502	02° 25' 10.73" N	102° 13' 45.03" E
KM503	02° 24' 52.27" N	102° 07' 51.98" E



**STANDARD DEPARTURE CHART  
INSTRUMENT (SID) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)**
**RWY 21**

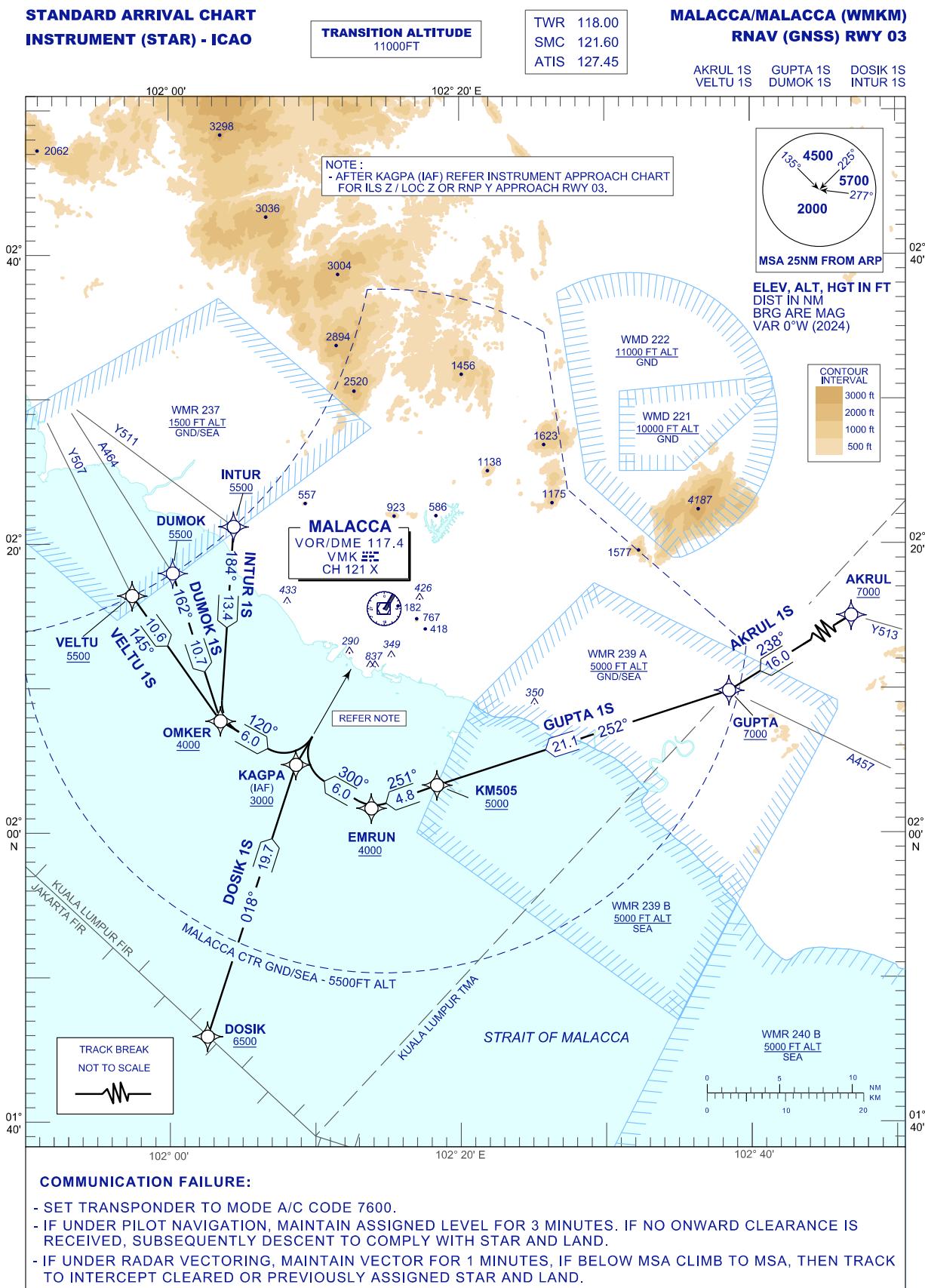
RUSBU 4R      OGAKO 4R  
DOSIK 4R      SAPAT 4R  
IRMIB 4R

**TABULAR DESCRIPTION**

<b>INITIAL CLIMB PROCEDURE</b>	<b>SID DESIGNATOR</b>	<b>SID DESCRIPTION</b>
<p>AFTER TAKE-OFF PROCEED ON TR 210°, ON PASSING 2500 FT TURN LEFT.</p> <p>NOTE :  1. MINIMUM CLIMB GRADIENT (PDG) 4.5% UNTIL PASSING 5000FT.  2. CROSS RDL 175 VMK AT 5000FT OR ABOVE.  3. MAX. 250 KIAS UNTIL PASSING RDL 175 VMK.</p>	RUSBU FOUR ROMEO DEPARTURE (RUSBU 4R)	TRACK 090° TO INTERCEPT RADIAL 131 VMK VOR/DME, OUTBOUND TO RUSBU THEN JOINING Y511.
	OGAKO FOUR ROMEO DEPARTURE (OGAKO 4R)	TRACK 100° TO INTERCEPT RADIAL 146 VMK VOR/DME, OUTBOUND TO OGAKO THEN JOINING A464.
AFTER TAKE-OFF PROCEED ON TR 210°, ON PASSING 2500 FT TURN LEFT.	DOSIK FOUR ROMEO DEPARTURE (DOSIK 4R)	INTERCEPT RADIAL 203 VMK VOR/DME, THEN OUTBOUND TO DOSIK.
<p>AFTER TAKE-OFF PROCEED ON TR 210°, ON PASSING 1500 FT TURN RIGHT.</p> <p>NOTE :  1. MAX. 230 KIAS UNTIL PASSING RDL 250 VMK.  2. MINIMUM CLIMB GRADIENT (PDG) 4.5% UNTIL PASSING 1500FT.</p>	SAPAT FOUR ROMEO DEPARTURE (SAPAT 4R)	TRACK 353° TO INTERCEPT RADIAL 324 VMK VOR/DME, OUTBOUND TO SAPAT THEN JOINING A457.
	IRMIB FOUR ROMEO DEPARTURE (IRMIB 4R)	TRACK 026° TO INTERCEPT RADIAL 356 VMK VOR/DME, OUTBOUND TO IRMIB THEN JOINING Y501.

**AERONAUTICAL DATA TABULATION**

<b>WAYPOINT / NAVAID/ FIX</b>	<b>NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID</b>	<b>COORDINATES (WGS84)</b>	
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E
DOSIK	RDL 203 VMK / D 31.9 VMK	01° 45' 54.00" N	102° 02' 35.88" E
IRMIB	RDL 356 VMK / D 20.4 VMK	02° 35' 55.94" N	102° 13' 18.07" E
OGAKO	RDL 146 VMK / D 20.1 VMK	01° 58' 50.16" N	102° 26' 08.16" E
RUSBU	RDL 131 VMK / D 21.3 VMK	02° 01' 22.72" N	102° 30' 42.11" E
SAPAT	RDL 324 VMK / D 20.6 VMK	02° 32' 09.96" N	102° 02' 30.12" E



**STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 03**

 AKRUL 1S    GUPTA 1S    DOSIK 1S  
 VELTU 1S    DUMOK 1S    INTUR 1S

**TABULAR DESCRIPTION**
**AKRUL ONE SIERRA ARRIVAL (AKRUL 1S)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	AKRUL	-	-	-	-	+7000	-	-	RNAV 1
TF	GUPTA	-	238°	16.0	-	+7000	-	-	RNAV 1
TF	KM505	-	252°	21.1	-	+5000	-	-	RNAV 1
TF	EMRUN	-	251°	4.8	-	+4000	-	-	RNAV 1
TF	KAGPA	-	300°	6.0	R	+3000	-	-	RNP APCH

**GUPTA ONE SIERRA ARRIVAL (GUPTA 1S)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
TF	GUPTA	-	-	-	-	+7000	-	-	RNAV 1
TF	KM505	-	252°	21.1	-	+5000	-	-	RNAV 1
TF	EMRUN	-	251°	4.8	-	+4000	-	-	RNAV 1
TF	KAGPA	-	300°	6.0	R	+3000	-	-	RNP APCH

**DOSIK ONE SIERRA ARRIVAL (DOSIK 1S)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	DOSIK	-	-	-	-	+6500	-	-	RNAV 1
TF	KAGPA	-	018°	19.7	-	+3000	-	-	RNP APCH

**VELTU ONE SIERRA ARRIVAL (VELTU 1S)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	VELTU	-	-	-	-	+5500	-	-	RNAV 1
TF	OMKER	-	145°	10.6	-	+4000	-	-	RNAV 1
TF	KAGPA	-	120°	6.0	L	+3000	-	-	RNP APCH

**STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 03**

 AKRUL 1S GUPTA 1S DOSIK 1S  
 VELTU 1S DUMOK 1S INTUR 1S

**DUMOK ONE SIERRA ARRIVAL (DUMOK 1S)**

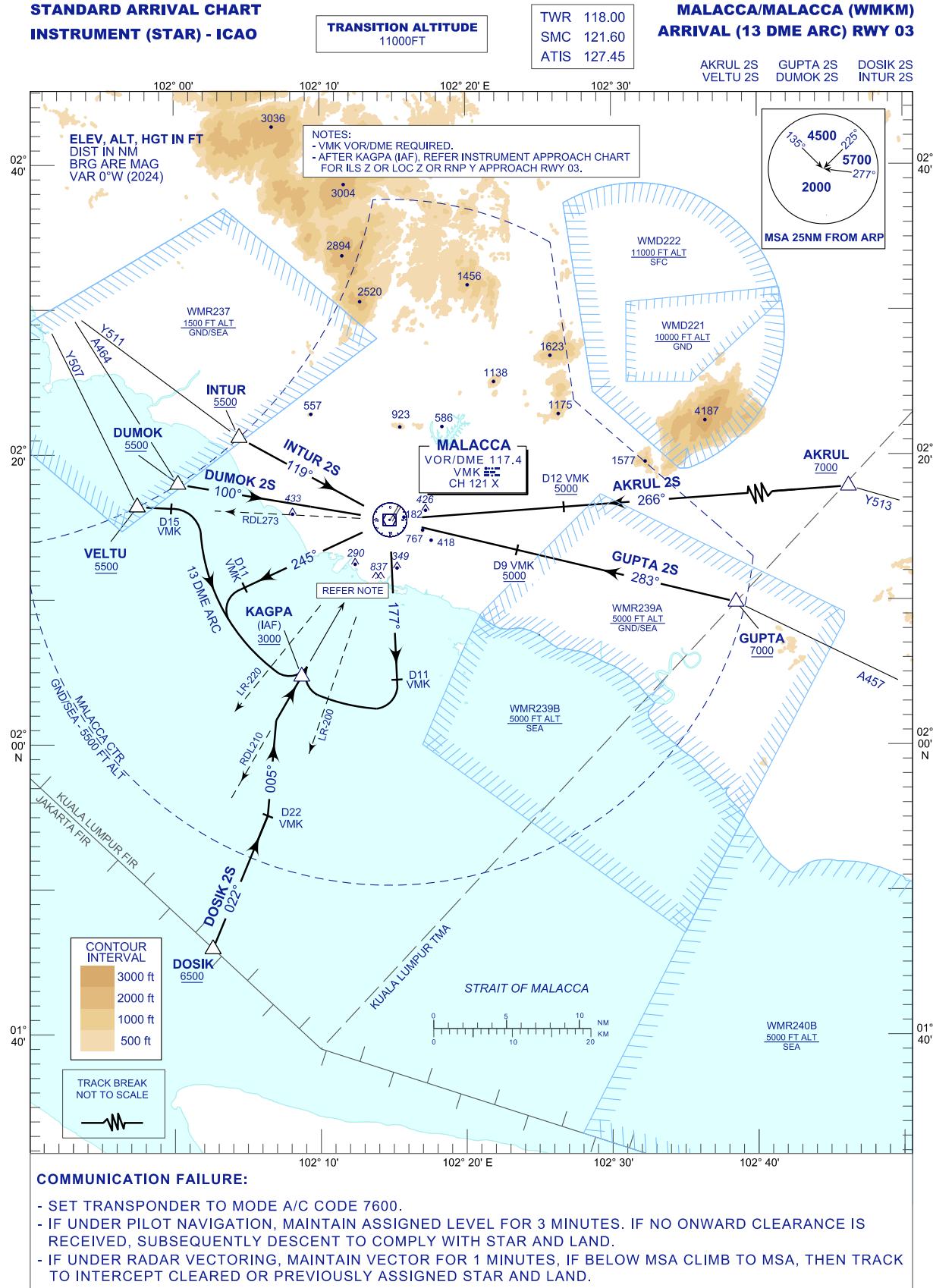
PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	DUMOK	-	-	-	-	+5500	-	-	RNAV 1
TF	OMKER	-	162°	10.7	-	+4000	-	-	RNAV 1
TF	KAGPA	-	120°	6.0	L	+3000	-	-	RNP APCH

**INTUR ONE SIERRA ARRIVAL (INTUR 1S)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	INTUR	-	-	-	-	+5500	-	-	RNAV 1
TF	OMKER	-	184°	13.4	-	+4000	-	-	RNAV 1
TF	KAGPA	-	120°	6.0	L	+3000	-	-	RNP APCH

**AERONAUTICAL DATA TABULATION**

FIX/POINT/NAVAID	COORDINATES
VMK	02°15'29.55" N 102°14'45.79" E
AKRUL	02°18'12.85" N 102°52'04.65" E
DOSIK	01°45'54.00" N 102°02'35.88" E
DUMOK	02°17'57.12" N 102°00'15.12" E
EMRUN	02°01'40.28" N 102°13'53.16" E
GUPTA	02°09'47.88" N 102°38'30.12" E
INTUR	02°21'10.11" N 102°04'26.62" E
KAGPA (IAF)	02°04'41.74" N 102°08'42.08" E
OMKER	02°07'43.18" N 102°03'30.98" E
VELTU	02°16'23.86" N 101°57'27.50" E
KM505	02°03'16.16" N 102°18'24.06" E



**STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
ARRIVAL (13 DME ARC) RWY 03**

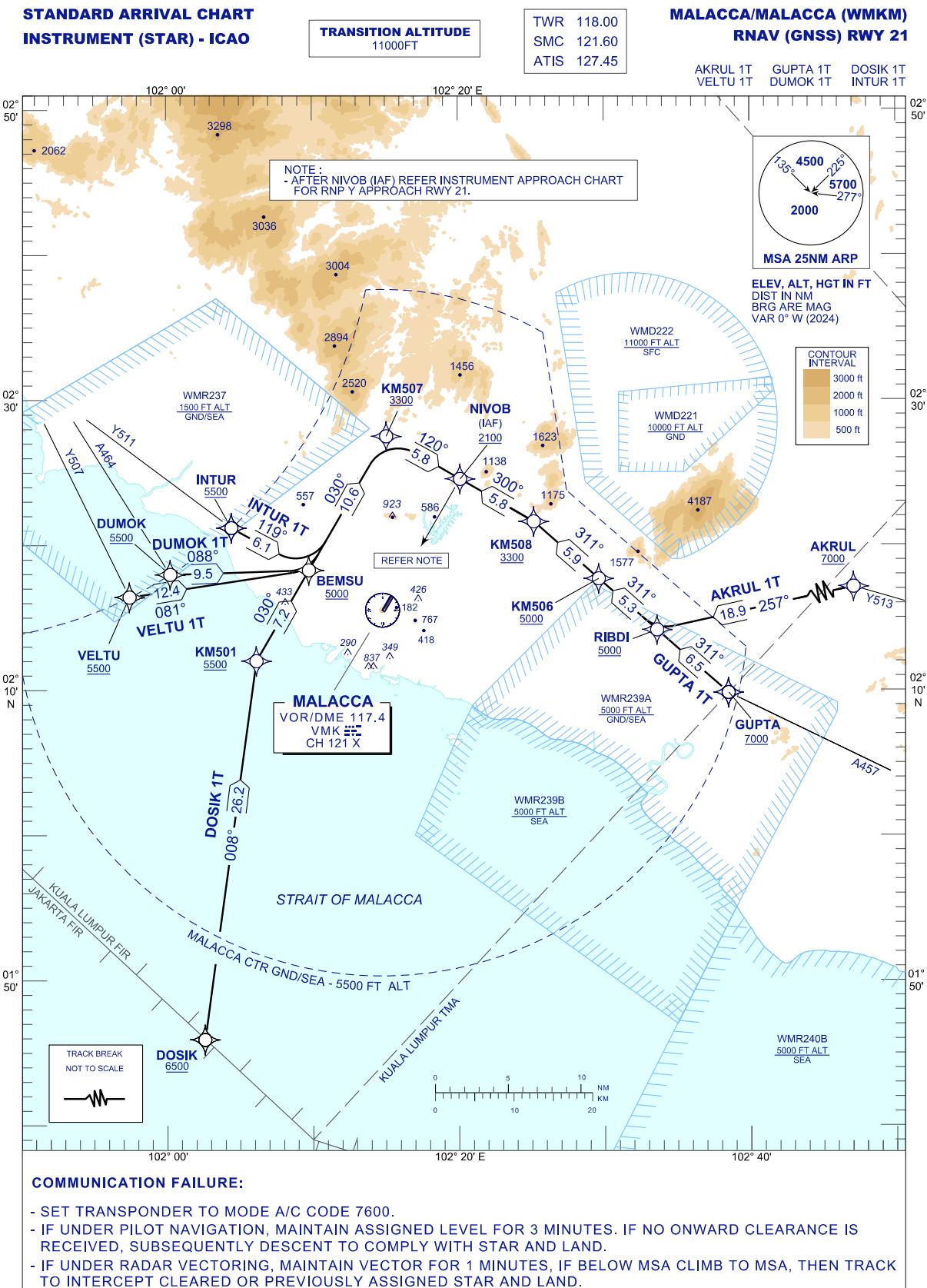
 AKRUL 2S    GUPTA 2S    DOSIK 2S  
 VELTU 2S    DUMOK 2S    INTUR 2S

**TABULAR DESCRIPTION**

DESIGNATOR	AIRWAYS	STAR DESCRIPTION
AKRUL TWO SIERRA (AKRUL 2S)	FROM Y513	AT AKRUL TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 245 VMK OUTBOUND AT 11 DME VMK TURN LEFT TO JOIN 13 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY 03.  NOTE : TO CROSS 12 DME VMK 5000FT OR ABOVE DUE TO ACTIVITIES AT WMR239 A&B.
GUPTA TWO SIERRA (GUPTA 2S)	FROM A457	AT GUPTA TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 245 VMK OUTBOUND AT 11 DME VMK TURN LEFT TO JOIN 13 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY 03.  NOTE : TO CROSS 9 DME VMK 5000FT OR ABOVE DUE TO ACTIVITIES AT WMR239 A&B.
DOSIK TWO SIERRA (DOSIK 2S)	FROM DOSIK	AT DOSIK TRACK TO VMK VOR/DME, AT 22 DME VMK TURN LEFT HEADING 005° TO INTERCEPT RDL 210 VMK INBOUND FOR STRAIGHT-IN APPROACH RWY 03.
VELTU TWO SIERRA (VELTU 2S)	FROM Y507	AT VELTU TRACK TO VMK VOR/DME, AT 15 DME VMK TURN RIGHT TO JOIN 13 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY 03.
DUMOK TWO SIERRA (DUMOK 2S)	FROM A464	AT DUMOK TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 177 VMK OUTBOUND AT 11 DME VMK TURN RIGHT TO JOIN 13 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY 03.
INTUR TWO SIERRA (INTUR 2S)	FROM Y511	AT INTUR TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 177 VMK OUTBOUND AT 11 DME VMK TURN RIGHT TO JOIN 13 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY 03.

**AERONAUTICAL DATA TABULATION**

FIX/POINT/NAVAID	COORDINATES
VMK      117.4 MHZ / CH121X	02°15'29.55" N 102°14'45.79" E
AKRUL     RDL 086 / D37.5 VMK	02°18'12.85" N 102°52'04.65" E
DOSIK     RDL 202 / D31.9 VMK	01°45'54.00" N 102°02'35.88" E
DUMOK     RDL 280 / D14.7 VMK	02°17'57.12" N 102°00'15.12" E
GUPTA     RDL 103 / D24.4 VMK	02°09'47.88" N 102°38'30.12" E
INTUR     RDL 299 / D11.8 VMK	02°21'10.11" N 102°04'26.62" E
KAGPA (IAF)	RDL 210 / D12.3 VMK
VELTU	RDL 273 / D17.4 VMK



**STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 21**

 AKRUL 1T    GUPTA 1T    DOSIK 1T  
 VELTU 1T    DUMOK 1T    INTUR 1T

**TABULAR DESCRIPTION**
**AKRUL ONE TANGO ARRIVAL (AKRUL 1T)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	AKRUL	-	-	-	-	+7000	-	-	RNAV 1
TF	RIBDI	-	257°	18.9	-	+5000	-	-	RNAV 1
TF	KM506	-	311°	5.3	R	+5000	-	-	RNAV 1
TF	KM508	-	311°	5.9	-	+3300	-	-	RNAV 1
TF	NIVOB	-	300°	5.8	-	+2100	-	-	RNP APCH

**GUPTA ONE TANGO ARRIVAL (GUPTA 1T)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	GUPTA	-	-	-	-	+7000	-	-	RNAV 1
TF	RIBDI	-	311°	6.5	-	+5000	-	-	RNAV 1
TF	KM506	-	311°	5.3	-	+5000	-	-	RNAV 1
TF	KM508	-	311°	5.9	-	+3300	-	-	RNAV 1
TF	NIVOB	-	300°	5.8	-	+2100	-	-	RNP APCH

**DOSIK ONE TANGO ARRIVAL (DOSIK 1T)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	DOSIK	-	-	-	-	+6500	-	-	RNAV 1
TF	KM501	-	008°	26.2	-	+5500	-	-	RNAV 1
TF	BEMSU	-	030°	7.2	R	+5000	-	-	RNAV 1
TF	KM507	-	030°	10.6	-	+3300	-	-	RNAV 1
TF	NIVOB	-	120°	5.8	R	+2100	-	-	RNP APCH

**VELTU ONE TANGO ARRIVAL (VELTU 1T)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	VELTU	-	-	-	-	+5500	-	-	RNAV 1
TF	BEMSU	-	081°	12.4	-	+5000	-	-	RNAV 1
TF	KM507	-	030°	10.6	L	+3300	-	-	RNAV 1
TF	NIVOB	-	120°	5.8	R	+2100	-	-	RNP APCH

**STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
RNAV (GNSS) RWY 21**

 AKRUL 1T    GUPTA 1T    DOSIK 1T  
 VELTU 1T    DUMOK 1T    INTUR 1T

**DUMOK ONE TANGO ARRIVAL (DUMOK 1T)**

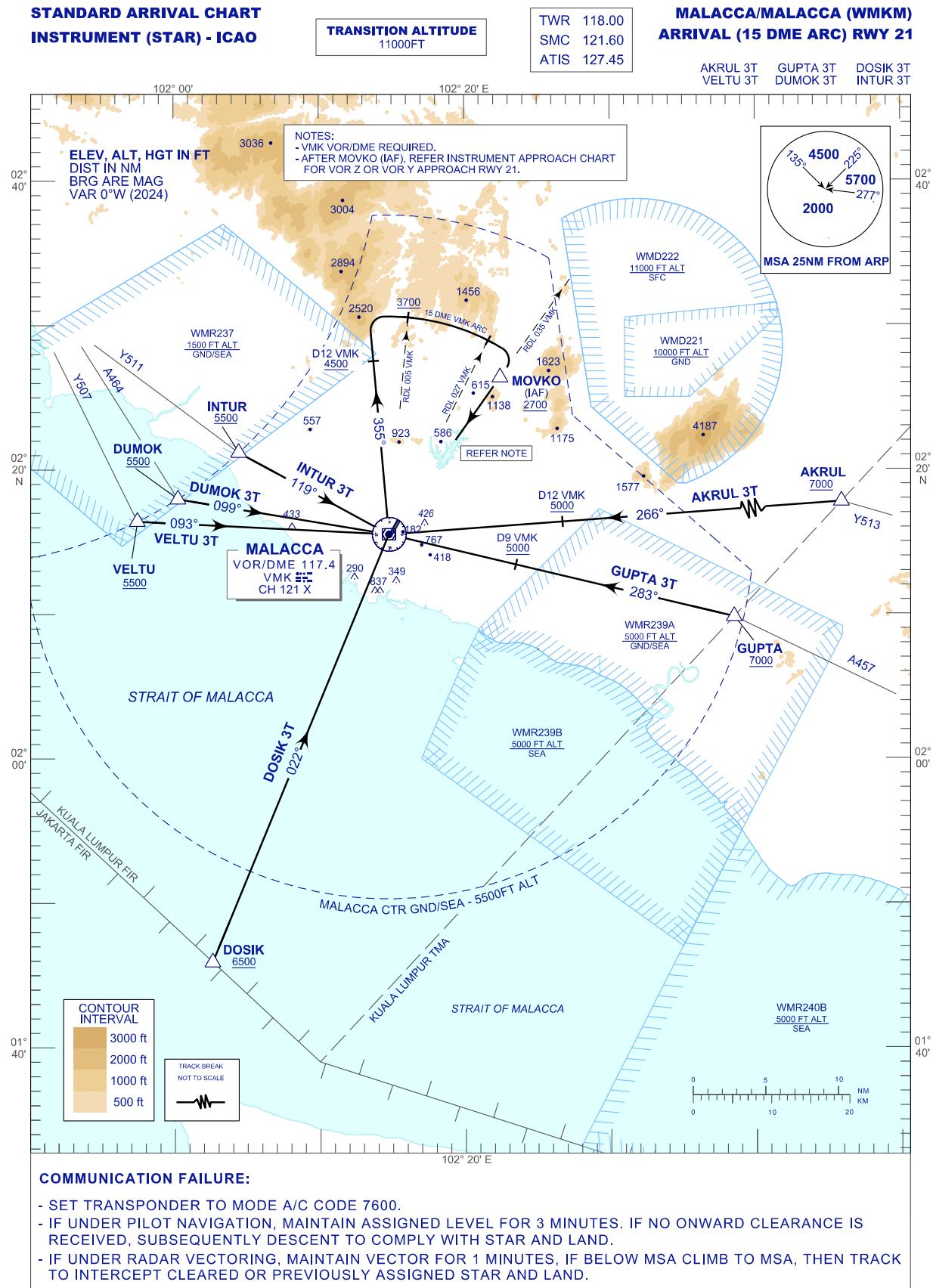
PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	DUMOK	-	-	-	-	+5500	-	-	RNAV 1
TF	BEMSU	-	088°	9.5	-	+5000	-	-	RNAV 1
TF	KM507	-	030°	10.6	L	+3300	-	-	RNAV 1
TF	NIVOB	-	120°	5.8	R	+2100	-	-	RNP APCH

**INTUR ONE TANGO ARRIVAL (INTUR 1T)**

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE NM	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
IF	INTUR	-	-	-	-	+5500	-	-	RNAV 1
TF	BEMSU	-	119°	6.1	-	+5000	-	-	RNAV 1
TF	KM507	-	030°	10.6	L	+3300	-	-	RNAV 1
TF	NIVOB	-	120°	5.8	R	+2100	-	-	RNP APCH

**AERONAUTICAL DATA TABULATION**

FIX/POINT/NAVAID	COORDINATES
VMK	02°15'29.55" N 102°14'45.79" E
AKRUL	02°18'12.85" N 102°52'04.65" E
BEMSU	02°18'14.87" N 102°09'45.29" E
DOSIK	01°45'54.00" N 102°02'35.88" E
DUMOK	02°17'57.12" N 102°00'15.12" E
GUPTA	02°09'47.88" N 102°38'30.12" E
INTUR	02°21'10.11" N 102°04'26.62" E
NIVOB (IAF)	02°24'31.86" N 102°20'07.35" E
RIBDI	02°14'07.60" N 102°33'36.52" E
VELTU	02°16'23.86" N 101°57'27.50" E
KM501	02°11'59.55" N 102°06'08.91" E
KM506	02°17'39.28" N 102°29'37.18" E
KM507	02°27'28.41" N 102°15'04.42" E
KM508	02°21'35.25" N 102°25'10.33" E



**STANDARD ARRIVAL CHART  
INSTRUMENT (STAR) - ICAO**
**TRANSITION ALTITUDE  
11000FT**
**MALACCA/MALACCA (WMKM)  
ARRIVAL (15 DME ARC) RWY 21**

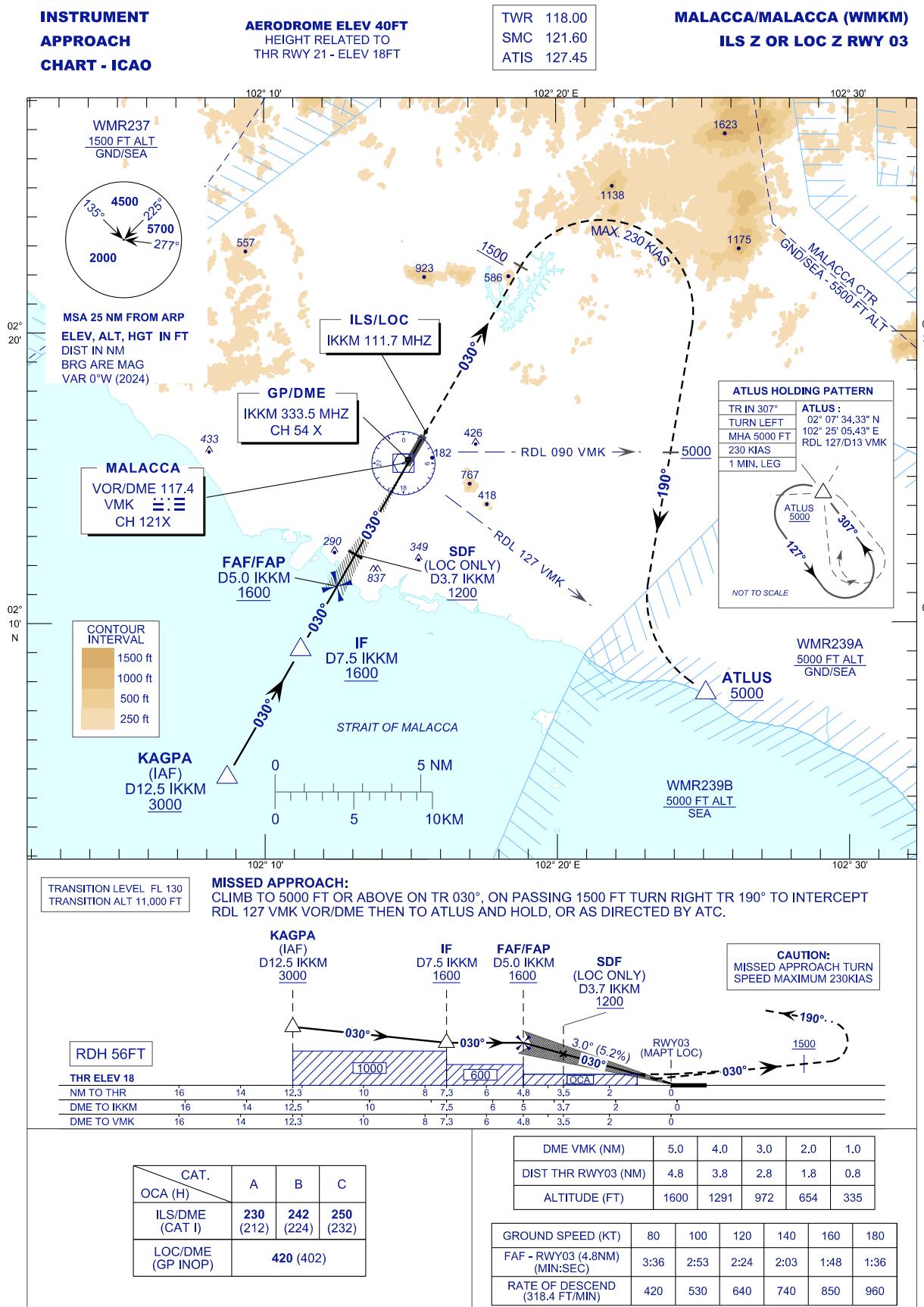
 AKRUL 3T    GUPTA 3T    DOSIK 3T  
 VELTU 3T    DUMOK 3T    INTUR 3T

**TABULAR DESCRIPTION**

DESIGNATOR	AIRWAYS	STAR DESCRIPTION
AKRUL THREE TANGO (AKRUL 3T)	FROM Y513	AT AKRUL TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 355 VMK OUTBOUND AT 12 DME VMK TURN RIGHT TO JOIN 15 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY21.  NOTE : TO CROSS 12 DME VMK 5000FT OR ABOVE DUE TO ACTIVITIES IN WMR239 A&B.
GUPTA THREE TANGO (GUPTA 3T)	FROM A457	AT GUPTA TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 355 VMK OUTBOUND AT 12 DME VMK TURN RIGHT TO JOIN 15 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY21.  NOTE : TO CROSS 9 DME VMK 5000FT OR ABOVE DUE TO ACTIVITIES IN WMR239 A&B.
DOSIK THREE TANGO (DOSIK 3T)	FROM DOSIK	AT DOSIK TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 355 VMK OUTBOUND AT 12 DME VMK TURN RIGHT TO JOIN 15 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY21.
VELTU THREE TANGO (VELTU 3T)	FROM Y507	AT VELTU TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 355 VMK OUTBOUND AT 12 DME VMK TURN RIGHT TO JOIN 15 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY21.
DUMOK THREE TANGO (DUMOK 3T)	FROM A464	AT DUMOK TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 355 VMK OUTBOUND AT 12 DME VMK TURN RIGHT TO JOIN 15 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY21.
INTUR THREE TANGO (INTUR 3T)	FROM Y511	AT INTUR TRACK TO VMK VOR/DME, THEN INTERCEPT RDL 355 VMK OUTBOUND AT 12 DME VMK TURN RIGHT TO JOIN 15 DME ARC VMK FOR STRAIGHT-IN APPROACH RWY21.

**AERONAUTICAL DATA TABULATION**

FIX/POINT/NAVAID	COORDINATES
VMK      117.4 MHZ / CH121X	02°15'29.55" N 102°14'45.79" E
AKRUL     RDL 086 / D 37.5 VMK	02°18'12.85" N 102°52'04.65" E
DOSIK     RDL 202 / D 31.9 VMK	01°45'54.00" N 102°02'35.88" E
DUMOK     RDL 280 / D 14.7 VMK	02°17'57.12" N 102°00'15.12" E
GUPTA     RDL 103 / D 24.4 VMK	02°09'47.88" N 102°38'30.12" E
INTUR     RDL 299 / D 11.8 VMK	02°21'10.11" N 102°04'26.62" E
MOVKO (IAF)	RDL 035 / D 13.0 VMK
VELTU     RDL 273 / D 17.4 VMK	02°16'23.86" N 101°57'27.50" E



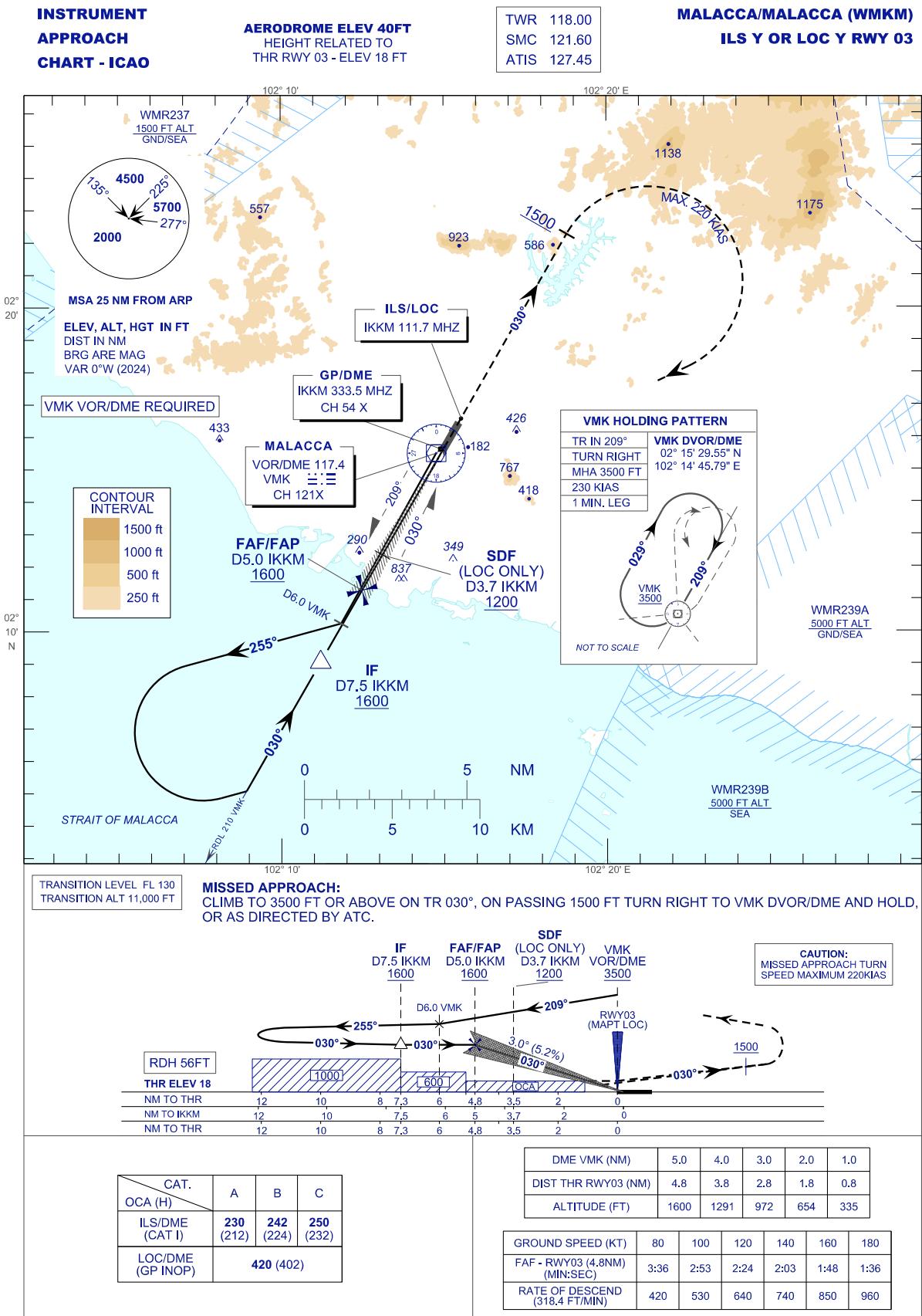
**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT  
HEIGHT RELATED TO  
THR RWY 21 - ELEV 18FT**

**MALACCA/MALACCA (WMKM)  
ILS Z OR LOC Z RWY 03**

### AERONAUTICAL DATA TABULATION

WAYPOINT / NAVAID/ FIX	NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID	COORDINATES (WGS84)	
ATLUS	RDL 127 VMK / D 13.0 VMK	02° 07' 34.33" N	102° 25' 05.43" E
KAGPA	RDL 210 VMK / D 12.5 IKKM	02° 04' 41.74" N	102° 08' 42.08" E
IF	RDL 209 VMK / D 7.5 IKKM	02° 09' 05.32" N	102° 11' 13.71" E
FAF/FAP	RDL 209 VMK / D 5.0 IKKM	02° 11' 15.79" N	102° 12' 28.76" E
SDF (LOC ONLY)	RDL 208 VMK / D 3.7 IKKM	02° 12' 21.41" N	102° 13' 06.37" E
MAPT (LOC ONLY)	THR RWY03	02° 15' 25.96" N	102° 14' 52.70" E
IKKM ILS/LOC	111.7 MHZ	02° 16' 33.74" N	102° 15' 31.70" E
IKKM GP/DME	333.5 MHZ / CH 54X	02° 15' 37.16" N	102° 14' 54.61" E
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E



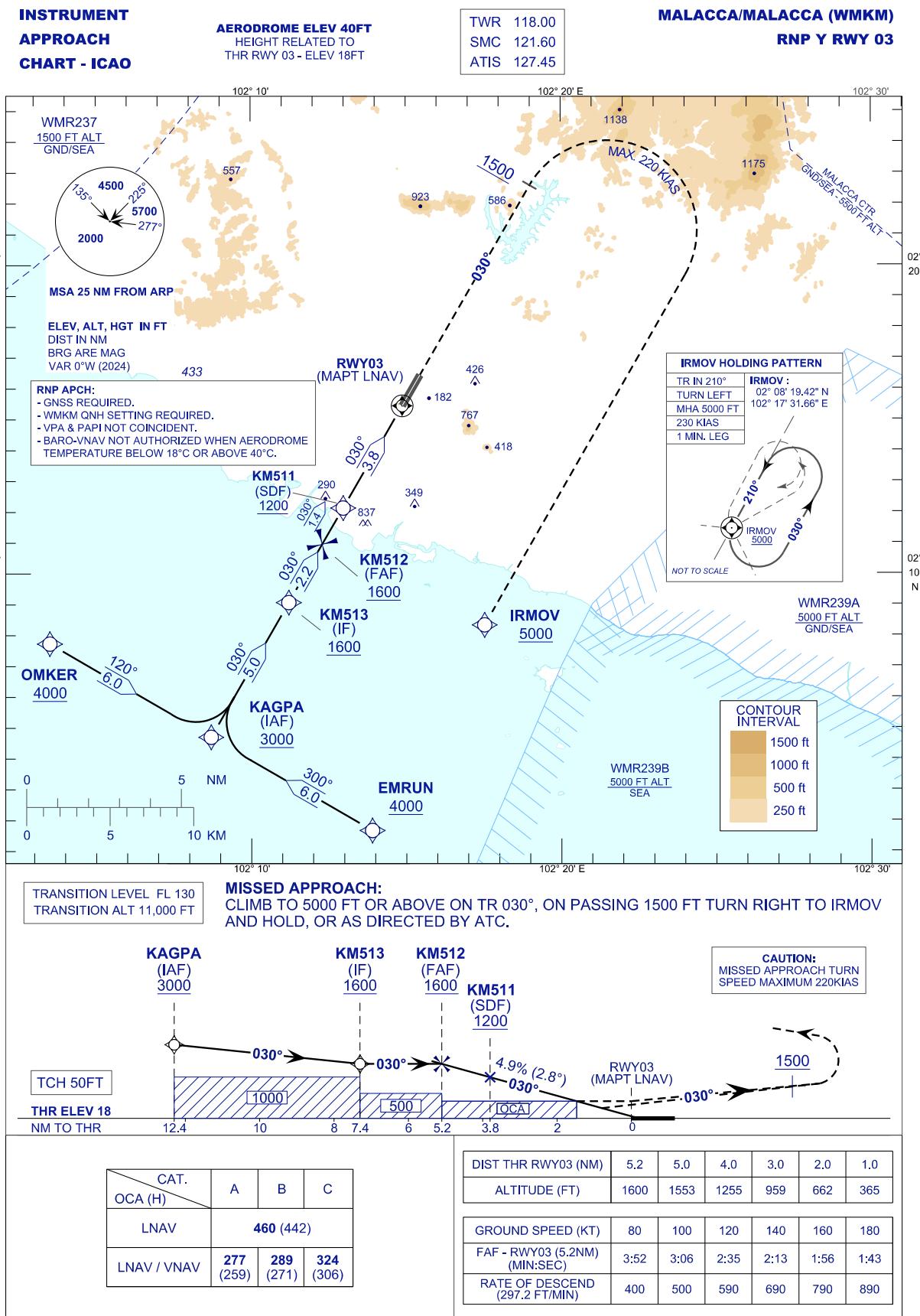
**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT**  
HEIGHT RELATED TO  
THR RWY 03 - ELEV 18 FT

**MALACCA/MALACCA (WMKM)**  
**ILS Y OR LOC Y RWY 03**

### AERONAUTICAL DATA TABULATION

WAYPOINT / NAVAID/ FIX	NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID	COORDINATES (WGS84)	
IF	RDL 209 VMK / D 7.5 IKKM	02° 09' 05.32" N	102° 11' 13.71" E
FAF/FAP	RDL 209 VMK / D 5.0 IKKM	02° 11' 15.79" N	102° 12' 28.76" E
SDF (LOC ONLY)	RDL 208 VMK / D 3.7 IKKM	02° 12' 21.41" N	102° 13' 06.37" E
MAPT (LOC ONLY)	THR RWY03	02° 15' 25.96" N	102° 14' 52.70" E
IKKM ILS/LOC	111.7 MHZ	02° 16' 33.74" N	102° 15' 31.70" E
IKKM GP/DME	333.5 MHZ / CH 54X	02° 15' 37.16" N	102° 14' 54.61" E
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E



**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT**  
HEIGHT RELATED TO  
THR RWY 03 - ELEV 18FT

**MALACCA/MALACCA (WMKM)  
RNP Y RWY 03**
**TABULAR DESCRIPTION**
**KAGPA TRANSITION**

SEQ.	PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/ RDH (FT)	NAVIGATION SPECIFICATION
010	IF	KAGPA	-	-	-	-	+3000	-	-	RNP APCH
020	TF	KM513	-	030°	5.0	-	+1600	-	-	RNP APCH
030	TF	KM512	-	030°	2.2	-	+1600	-	-	RNP APCH
040	TF	KM511	-	030°	1.4	-	+1200	-	-	RNP APCH
050	TF	RWY03	Y	030°	3.8	-	-	-	-2.8°/50	RNP APCH
060	VA	-	-	030°	-	-	+1500	-	-	RNP APCH
070	DF	IRMOV	-	-	-	R	+5000	- 220	-	RNP APCH
080	HM	IRMOV	Y	-	-	L	+5000	@ 230	-	RNAV 1

**OMKER TRANSITION**

SEQ.	PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/ RDH (FT)	NAVIGATION SPECIFICATION
010	IF	OMKER	-	-	-	-	+4000	-	-	RNP APCH
020	TF	KAGPA	-	120°	6.0	-	+3000	-	-	RNP APCH
030	TF	KM513	-	030°	5.0	L	+1600	-	-	RNP APCH
040	TF	KM512	-	030°	2.2	-	+1600	-	-	RNP APCH
050	TF	KM511	-	030°	1.4	-	+1200	-	-	RNP APCH
060	TF	RWY03	Y	030°	3.8	-	-	-	-2.8°/50	RNP APCH
070	VA	-	-	030°	-	-	+1500	-	-	RNP APCH
080	DF	IRMOV	-	-	-	R	+5000	- 220	-	RNP APCH
090	HM	IRMOV	Y	-	-	L	+5000	@ 230	-	RNAV 1

**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT**  
HEIGHT RELATED TO  
THR RWY 03 - ELEV 18FT

**MALACCA/MALACCA (WMKM)**  
**RNP Y RWY 03**

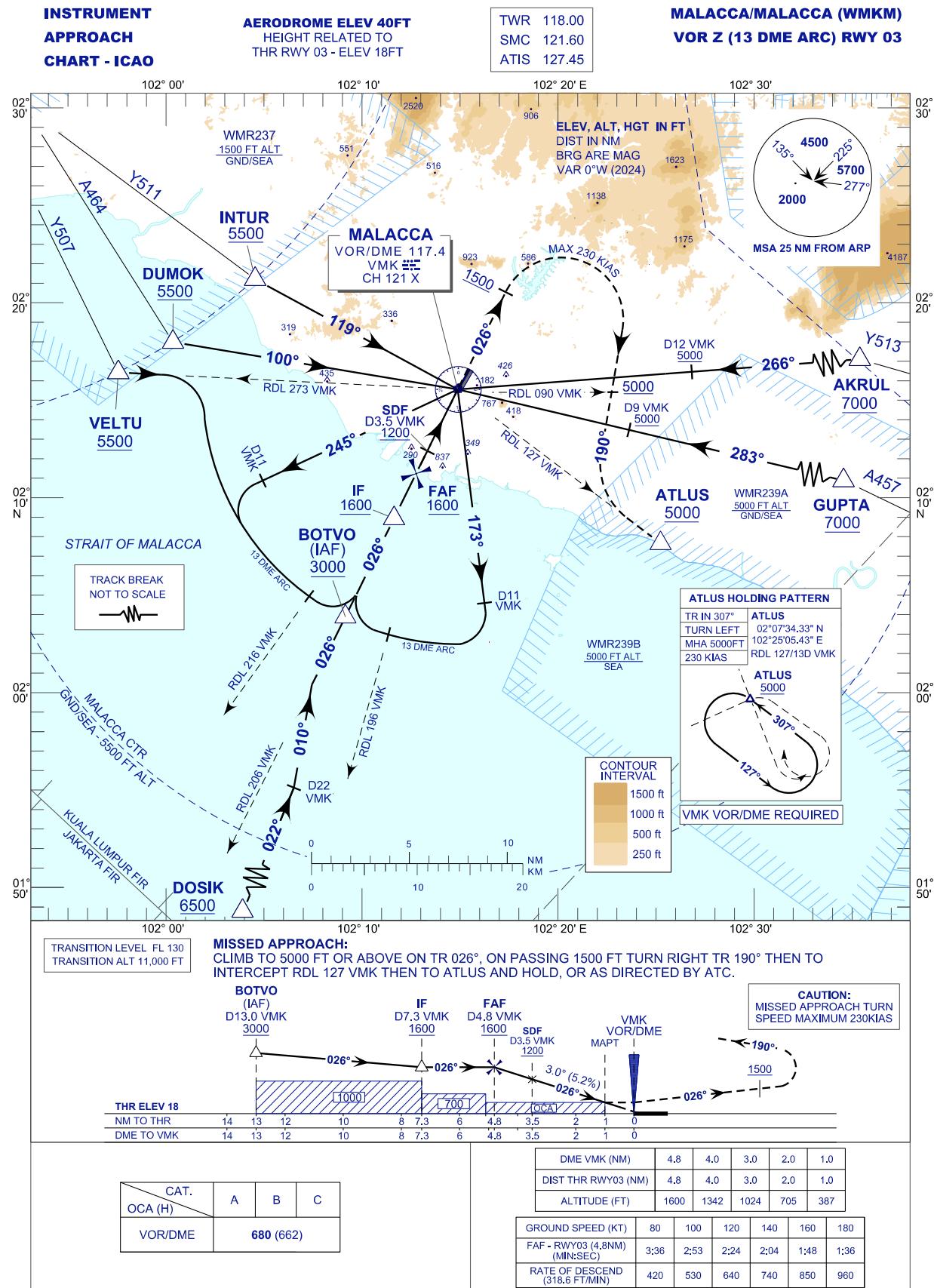
### TABULAR DESCRIPTION

#### EMRUN TRANSITION

SEQ.	PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/ RDH (FT)	NAVIGATION SPECIFICATION
010	IF	EMRUN	-	-	-	-	+4000	-	-	RNP APCH
020	TF	KAGPA	-	300°	6.0	-	+3000	-	-	RNP APCH
030	TF	KM513	-	030°	5.0	R	+1600	-	-	RNP APCH
040	TF	KM512	-	030°	2.2	-	+1600	-	-	RNP APCH
050	TF	KM511	-	030°	1.4	-	+1200	-	-	RNP APCH
060	TF	RWY03	Y	030°	3.8	-	-	-	-2.8°/50	RNP APCH
070	VA	-	-	030°	-	-	+1500	-	-	RNP APCH
080	DF	IRMOV	-	-	-	R	+5000	- 220	-	RNP APCH
090	HM	IRMOV	Y	-	-	L	+5000	@ 230	-	RNAV 1

### AERONAUTICAL DATA TABULATION

WAYPOINT IDENTIFIER	COORDINATES	
EMRUN	02° 01' 40.28" N	102° 13' 53.16" E
OMKER	02° 07' 43.18" N	102° 03' 30.98" E
KAGPA (IAF)	02° 04' 41.74" N	102° 08' 42.08" E
KM513 (IF)	02° 09' 02.67" N	102° 11' 12.18" E
KM512 (FAF)	02° 10' 57.02" N	102° 12' 17.68" E
KM511 (SDF)	02° 12' 07.23" N	102° 12' 58.14" E
THR RWY03 (MAPT LNAV)	02° 15' 25.96" N	102° 14' 52.70" E
IRMOV	02° 08' 19.42" N	102° 17' 31.66" E



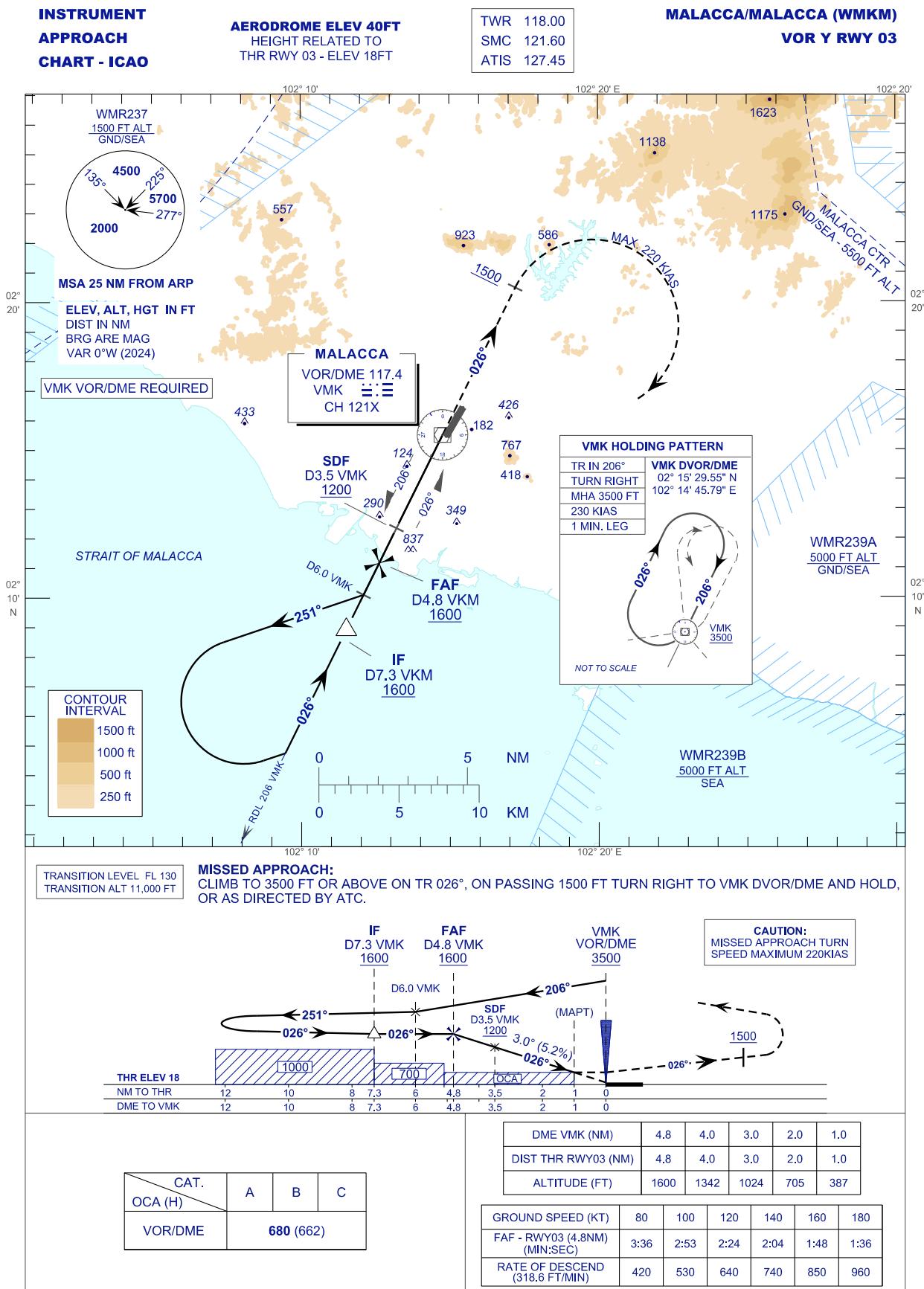
**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT  
HEIGHT RELATED TO  
THR RWY 03 - ELEV 18FT**

**MALACCA/MALACCA (WMKM)  
VOR Z (13 DME ARC) RWY 03**

### AERONAUTICAL DATA TABULATION

WAYPOINT / NAVAID/ FIX	NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID	COORDINATES (WGS84)	
AKRUL	RDL 086 VMK / D 37.5 VMK	02° 18' 12.85" N	102° 52' 04.65" E
ATLUS	RDL 127 VMK / D 13.0 VMK	02° 07' 34.33" N	102° 25' 05.43" E
BOTVO (IAF)	RDL 206 VMK / D 13.0 VMK	02° 03' 47.42" N	102° 08' 59.42" E
DOSIK	RDL 202 VMK / D 31.9 VMK	01° 45' 54.00" N	102° 02' 35.88" E
DUMOK	RDL 280 VMK / D 14.7 VMK	02° 17' 57.12" N	102° 00' 15.12" E
GUPTA	RDL 103 VMK / D 24.4 VMK	02° 09' 47.88" N	102° 38' 30.12" E
INTUR	RDL 299 VMK / D 11.8 VMK	02° 21' 10.11" N	102° 04' 26.62" E
VELTU	RDL 273 VMK / D 17.4 VMK	02° 16' 23.86" N	101° 57' 27.50" E
IF	RDL 206 VMK / D 7.3 VMK	02° 08' 54.76" N	102° 11' 31.02" E
FAF	RDL 206 VMK / D 4.8 VMK	02° 11' 09.79" N	102° 12' 37.63" E
SDF (STEP DOWN FIX)	RDL 206 VMK / D 3.5 VMK	02° 12' 20.54" N	102° 13' 12.54" E
MAPT	RDL 206 VMK / D 1.0 VMK	02° 14' 35.54" N	102° 14' 19.14" E
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E



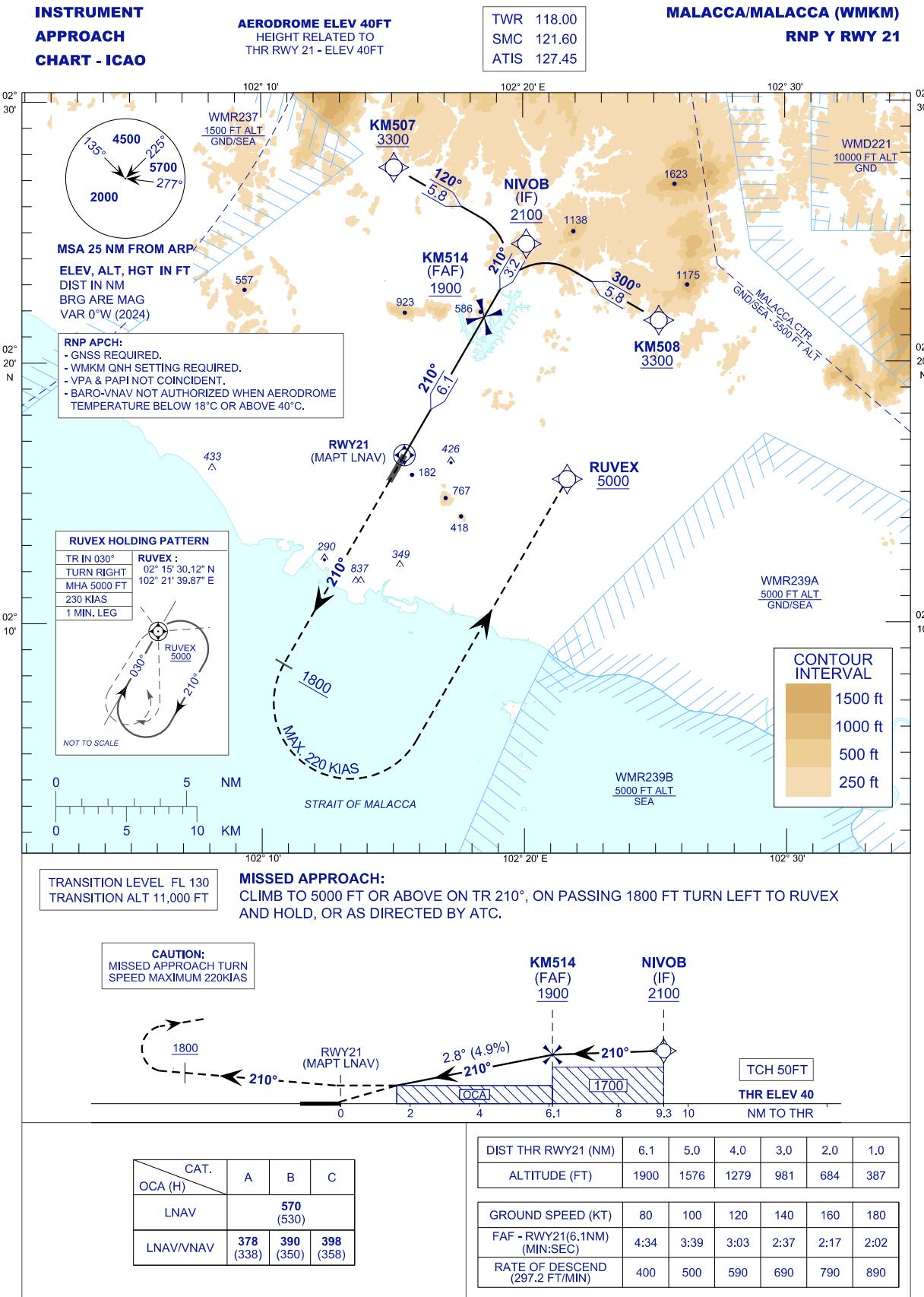
**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT**  
HEIGHT RELATED TO  
THR RWY 03 - ELEV 18FT

**MALACCA/MALACCA (WMKM)**  
**VOR Y RWY 03**

### AERONAUTICAL DATA TABULATION

WAYPOINT / NAVAID/ FIX	NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID	COORDINATES (WGS84)	
IF	RDL 206 VMK / D 7.3 VMK	02° 08' 54.76" N	102° 11' 31.02" E
FAF	RDL 206 VMK / D 4.8 VMK	02° 11' 09.79" N	102° 12' 37.63" E
SDF (STEP DOWN FIX)	RDL 206 VMK / D 3.5 VMK	02° 12' 20.54" N	102° 13' 12.54" E
MAPT	RDL 206 VMK / D 1.0 VMK	02° 14' 35.54" N	102° 14' 19.14" E
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E



**INSTRUMENT  
APPROACH  
CHART - ICAO**

AERODROME ELEV 40FT  
HEIGHT RELATED TO  
THR RWY 21 - ELEV 40FT

**MALACCA/MALACCA (WMKM)**  
**RNP Y RWY 21**

### TABULAR DESCRIPTION

#### KM507 TRANSITION

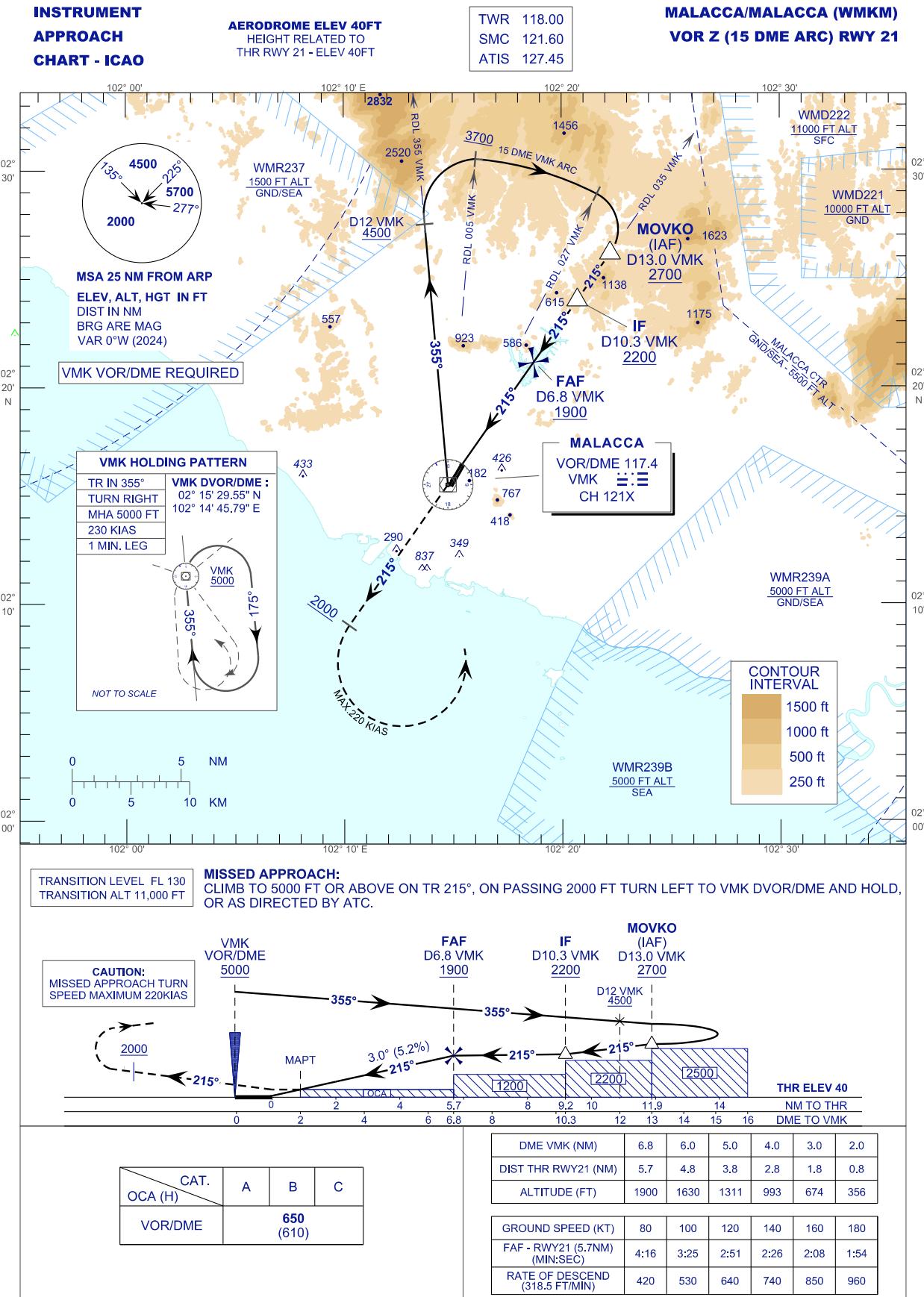
SEQ.	PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/ RDH (FT)	NAVIGATION SPECIFICATION
010	IF	KM507	-	-	-	-	+3300	-	-	RNP APCH
020	TF	NIVOB	-	120°	5.8	-	+2100	-	-	RNP APCH
030	TF	KM514	-	210°	3.2	R	+1900	-	-	RNP APCH
040	TF	RWY21	Y	210°	6.1	-	-	-	-2.8°/50	RNP APCH
050	VA	-	-	210°	-	-	+1800	-	-	RNP APCH
060	DF	RUVEX	-	-	-	L	+5000	-220	-	RNP APCH
070	HM	RUVEX	Y	-	-	R	+5000	@ 230	-	RNAV 1

#### KM508 TRANSITION

SEQ.	PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/ RDH (FT)	NAVIGATION SPECIFICATION
010	IF	KM508	-	-	-	-	+3300	-	-	RNP APCH
020	TF	NIVOB	-	300°	5.8	-	+2100	-	-	RNP APCH
030	TF	KM514	-	210°	3.2	L	+1900	-	-	RNP APCH
040	TF	RWY21	Y	210°	6.1	-	-	-	-2.8°/50	RNP APCH
050	VA	-	-	210°	-	-	+1800	-	-	RNP APCH
060	DF	RUVEX	-	-	-	L	+5000	-220	-	RNP APCH
070	HM	RUVEX	Y	-	-	R	+5000	@ 230	-	RNAV 1

### AERONAUTICAL DATA TABULATION

WAYPOINT IDENTIFIER	COORDINATES
KM507	02°27'28.41" N 102°15'04.42" E
KM508	02°21'35.25" N 102°25'10.33" E
NIVOB (IF)	02°24'31.86" N 102°20'07.35" E
KM514 (FAF)	02°21'43.78" N 102°18'30.59" E
THR RWY21 (MAPT LNAV)	02°16'26.09" N 102°15'27.36" E
RUVEX	02°15'30.12" N 102°21'39.87" E



**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT**  
HEIGHT RELATED TO  
THR RWY 21 - ELEV 40FT

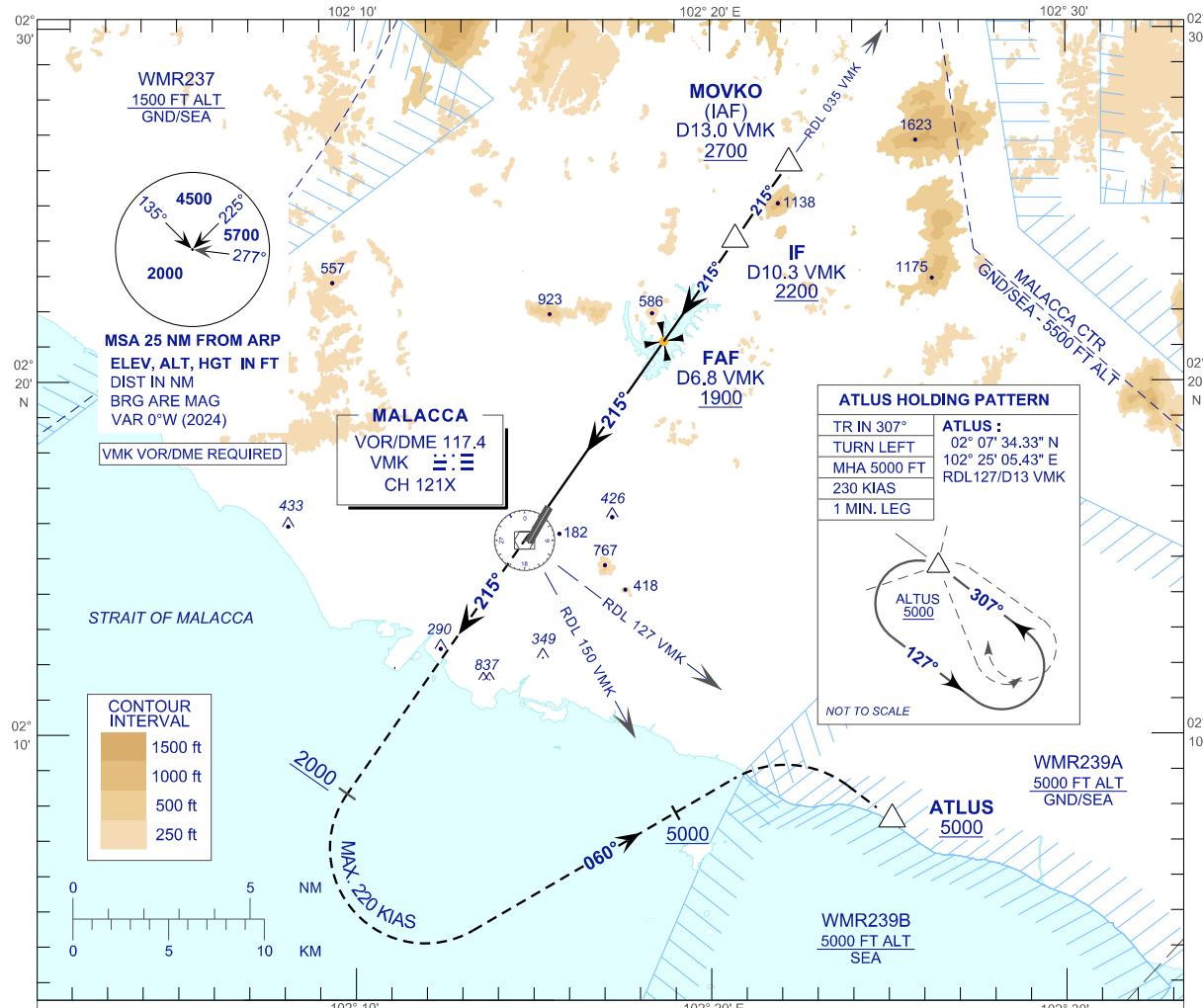
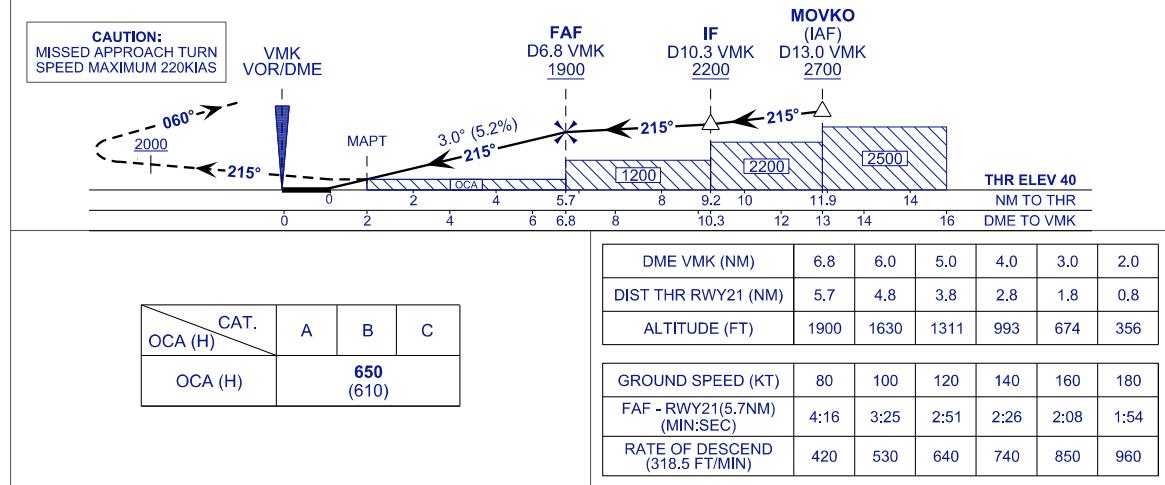
**MALACCA/MALACCA (WMKM)**  
**VOR Z (15 DME ARC) RWY 21**

### AERONAUTICAL DATA TABULATION

WAYPOINT / NAVAID/ FIX	NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID	COORDINATES (WGS84)	
MOVKO (IAF)	RDL 035 VMK / D 13.0 VMK	02° 26' 09.66" N	102° 22' 13.19" E
IF	RDL 035 VMK / D 10.3 VMK	02° 24' 00.03" N	102° 20' 42.59" E
FAF	RDL 035 VMK / D 6.8 VMK	02° 21' 07.40" N	102° 18' 41.91" E
MAPT	RDL 035 VMK / D 2.0 VMK	02° 17' 08.20" N	102° 15' 54.73" E
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E

**INSTRUMENT  
APPROACH  
CHART - ICAO**
**AERODROME ELEV 40FT**  
 HEIGHT RELATED TO  
 THR RWY 21 - ELEV 40FT

 TWR 118.00  
 SMC 121.60  
 ATIS 127.45

**MALACCA/MALACCA (WMKM)**  
**VOR Y RWY 21**

**MISSED APPROACH:**  
 CLIMB TO 5000 FT OR ABOVE ON TR 215°, ON PASSING 2000 FT TURN LEFT TR 060° TO  
 INTERCEPT RDL 127 VMK THEN TO ATLUS AND HOLD, OR AS DIRECTED BY ATC.


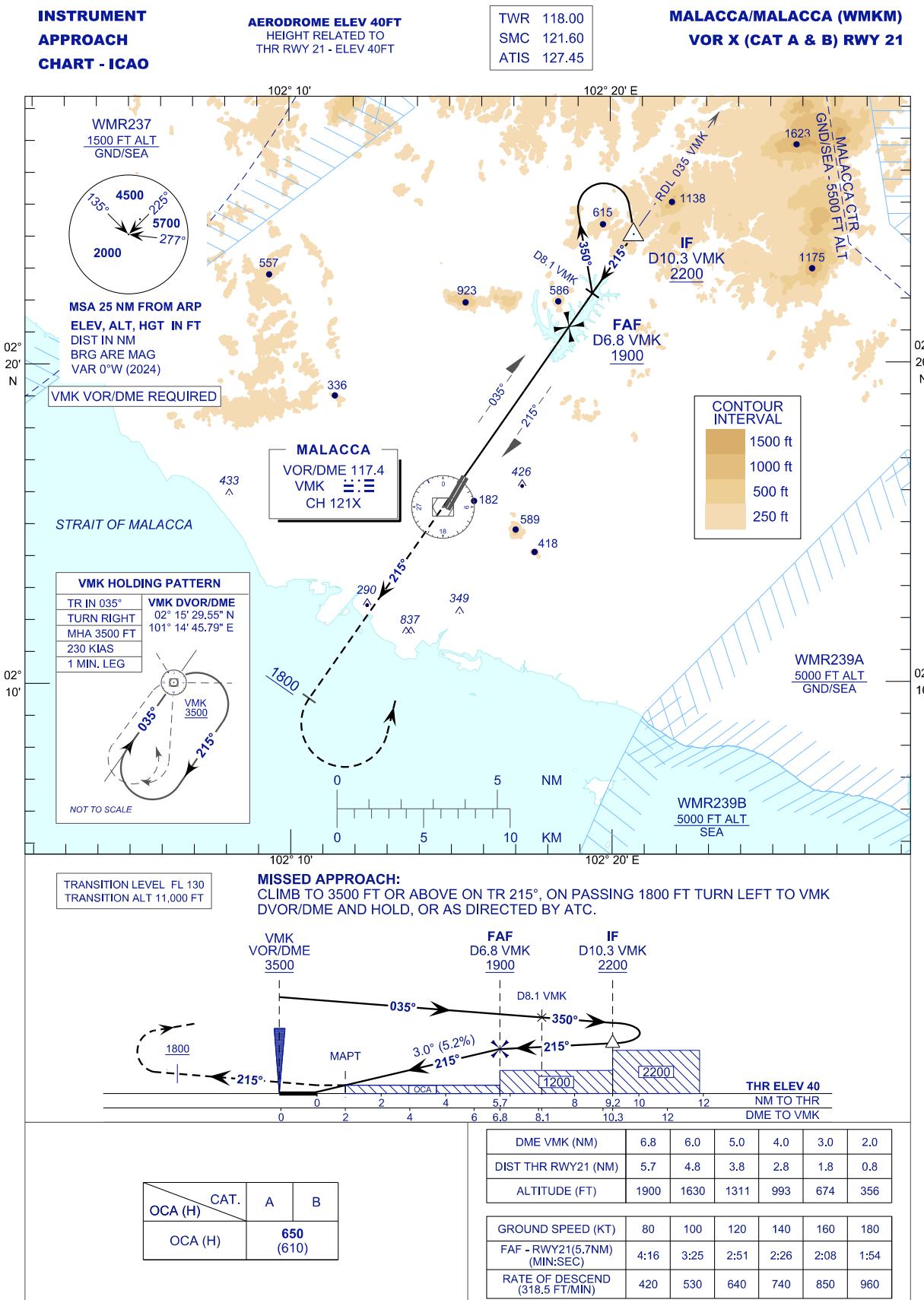
**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT**  
HEIGHT RELATED TO  
THR RWY 21 - ELEV 40FT

**MALACCA/MALACCA (WMKM)**  
**VOR Y RWY 21**

### AERONAUTICAL DATA TABULATION

WAYPOINT / NAVAID/ FIX	NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID	COORDINATES (WGS84)	
MOVKO (IAF)	RDL 035 VMK / D 13.0 VMK	02° 26' 09.66" N	102° 22' 13.19" E
IF	RDL 035 VMK / D 10.3 VMK	02° 24' 00.03" N	102° 20' 42.59" E
FAF	RDL 035 VMK / D 6.8 VMK	02° 21' 07.40" N	102° 18' 41.91" E
MAPT	RDL 035 VMK / D 2.0 VMK	02° 17' 08.20" N	102° 15' 54.73" E
ATLUS	RDL 127 VMK / D 13.0 VMK	02° 07' 34.33" N	102° 25' 05.43" E
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E



**INSTRUMENT  
APPROACH  
CHART - ICAO**

**AERODROME ELEV 40FT**  
HEIGHT RELATED TO  
THR RWY 21 - ELEV 40FT

**MALACCA/MALACCA (WMKM)**  
**VOR X (CAT A & B) RWY 21**

### TABULAR DESCRIPTION

WAYPOINT / NAVAID/ FIX	NAVAID FREQUENCY / CROSS REFERENCE FROM NAVAID	COORDINATES (WGS84)	
IF	RDL 035 VMK / D 10.3 VMK	02° 24' 00.03" N	102° 20' 42.59" E
FAF	RDL 035 VMK / D 6.8 VMK	02° 21' 07.40" N	102° 18' 41.91" E
MAPT	RDL 035 VMK / D 2.0 VMK	02° 17' 08.20" N	102° 15' 54.73" E
VMK VOR/DME	117.4 MHZ / CH 121X	02° 15' 29.55" N	102° 14' 45.79" E