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**AIP SUP
10/2024**

Effective from 22 FEB 2024
PERM
Published on 25 JAN 2024

**IPOH / SULTAN AZLAN SHAH AIRPORT (WMKI)
REVISION OF SIDs AND STARs AND NEW PERFORMANCE BASED NAVIGATION (PBN)
APPROACH PROCEDURES**

(This AIP Supplement replaces AIRAC AIP Supplement 48/2023)

1 INTRODUCTION

- 1.1 New PBN Instrument Approach Procedures, and revision of Standard Instrument Departures (SIDs) and Standard Instrument Arrival (STARs) are introduced to facilitate efficient and orderly operation of aircraft at IPOH - Sultan Azlan Shah (SAS) airport.
- 1.2 The purpose of this AIP supplement is to notify the aviation industry of the additional new flight procedures that are implemented at SAS airport.
- 1.3 The new charts and aeronautical operation data and information provided in this AIP supplement are presented in similar ICAO format applicable for the Aeronautical Information Publication.

2 REVISED STANDARD INSTRUMENT DEPARTURES (SIDs) AND ARRIVAL (STARs) PROCEDURE

- 2.1 The revised Ipoh CTR and Holding Areas, Standard Instrument Departure (SIDs) and Arrival (STARs) Procedures are as follows: -

<u>Reference</u>	<u>Chart Name</u>
APPENDIX A-1	IPOH CONTROL ZONE AND HOLDING AREAS
APPENDIX B-1	STANDARD DEPARTURE CHART INSTRUMENT (SID) – ICAO RNAV (GNSS) RWY 22
APPENDIX B-2	STANDARD DEPARTURE CHART INSTRUMENT (SID) – ICAO RWY 22
APPENDIX C-1	STANDARD ARRIVAL CHART INSTRUMENT (STAR) – ICAO RNAV (GNSS) RWY 04
APPENDIX C-2	STANDARD ARRIVAL CHART INSTRUMENT (STAR) – ICAO VOR/DME ARC RWY 04

3 REVISED PRECISION AND NON-PRECISION INSTRUMENT APPROACH PROCEDURES AND THE INTRODUCTION OF NEW PBN APPROACH PROCEDURES

- 3.1 The instrument approach procedures are as follows: -

<u>Reference</u>	<u>Chart Name</u>
APPENDIX D-1	INSTRUMENT APPROACH CHART-ICAO-ILS Z RWY 04
APPENDIX D-2	INSTRUMENT APPROACH CHART-ICAO-ILS Y RWY 04
APPENDIX D-3	INSTRUMENT APPROACH CHART-ICAO-RNP Z RWY 04

- APPENDIX D-4 INSTRUMENT APPROACH CHART-ICAO-RNP Y RWY 04
 APPENDIX D-5 INSTRUMENT APPROACH CHART-ICAO-VOR Z RWY 04
 APPENDIX D-6 INSTRUMENT APPROACH CHART-ICAO-VOR Y RWY 04

4 SUPERSEDED OR WITHDRAWN CHARTS

4.1 The following charts pertaining to IPOH - Sultan Azlan Shah Airport are superseded or withdrawn:

<u>Chart Name</u>	<u>Page</u>
IPOH CONTROL ZONE AND HOLDING AREAS	AD2-WMKI-4-1
STANDARD DEPARTURE CHART INSTRUMENT – ICAO – RNAV (GNSS) RWY 22	AD2-WMKI-6-1
STANDARD DEPARTURE CHART INSTRUMENT – ICAO – RWY 22	AD2-WMKI-6-3
STANDARD ARRIVAL CHART INSTRUMENT (STAR) – ICAO – RNAV (GNSS) RWY 04	AD2-WMKI-7-1
STANDARD ARRIVAL CHART INSTRUMENT (STAR) – ICAO – (13 DME ARC) RWY 04	AD2-WMKI-7-5
INSTRUMENT APPROACH CHART – ICAO – ILS Z/LOC Z RWY 04	AD2-WMKI-8-1
INSTRUMENT APPROACH CHART – ICAO – ILS Y/LOC Y RWY 04	AD2-WMKI-8-3
INSTRUMENT APPROACH CHART – ICAO – ILS X/LOC X RWY 04	AD2-WMKI-8-5
INSTRUMENT APPROACH CHART – ICAO – VOR Z RWY 04	AD2-WMKI-8-7
INSTRUMENT APPROACH CHART – ICAO – VOR Y RWY 04	AD2-WMKI-8-9
INSTRUMENT APPROACH CHART - ICAO - VOR X RWY 04	AD2-WMKI-8-11

5 NEW WAYPOINTS

5.1 The following Waypoints are established: -

Designator	WGS 84 coordinates		From VIH	
	Latitude	Longitude	RDL	DIST (NM)
IKILI	04°26'50.17"N	100°59'10.67" E	221	9.9
OKDAD	04°44'50.28"N	100°57'47.12"E	323	13.0
IDGUR	04°25'16.20"N	100°57'48.36"E	221	12.0
IGRAP	04°26'41.56"N	100°59'20.66" E	220	9.9
IRSEP	04°23'03.75"N	100°55'52.37"E	221	14.9
KI503	04°27'39.72"N	101°00'27.42"E	218	8.5
KI504	04°28'33.11"N	101°00'40.83"E	221	7.7
KI505	04°30'03.41"N	100°56'05.89"E	246	10.5
KI506	04°28'19.40"N	101°00'28.82"E	221	8.0
KI507	04°35'08.25"N	101°06'27.02"E	049	1.1
KI508	04°46'13.40"N	101°08'04.73"E	012	12.0

Designator	WGS 84 coordinates		From VIH	
	Latitude	Longitude	RDL	DIST (NM)
KI509	04°46'15.21"N	101°07'55.75"E	011	12.0
KI510	04°50'27.43"N	101°06'43.73"E	004	16.0
KI511	04°52'49.76"N	100°59'16.26"E	341	19.4
OLSIG	04°42'12.12"N	100°56'27.51"E	310	12.0
OMGEP	04°46'26.47"N	100°56'34.63"E	323	15.0
OVTED	04°25'04.82"N	100°58'01.89"E	220	12.0
UKEGI	04°28'40.35"N	100°54'31.08"E	243	12.5
URKEV	04°22'25.39"N	101°01'34.25" E	199	12.6
GUMDA	05°00'11.37"N	100°57'59.28" E	344	26.8
KI512	04°47'23.48"N	100°50'20.32"E	-	-
KI513	04°29'06.02"N	101°01'09.66" E	-	-
KI514	04°31'38.38"N	101°03'23.13" E	-	-

6 IMPLEMENTATION

6.1 This AIP Supplement and relevant charts will become effective on **22 February 2024**.

7 VALIDITY

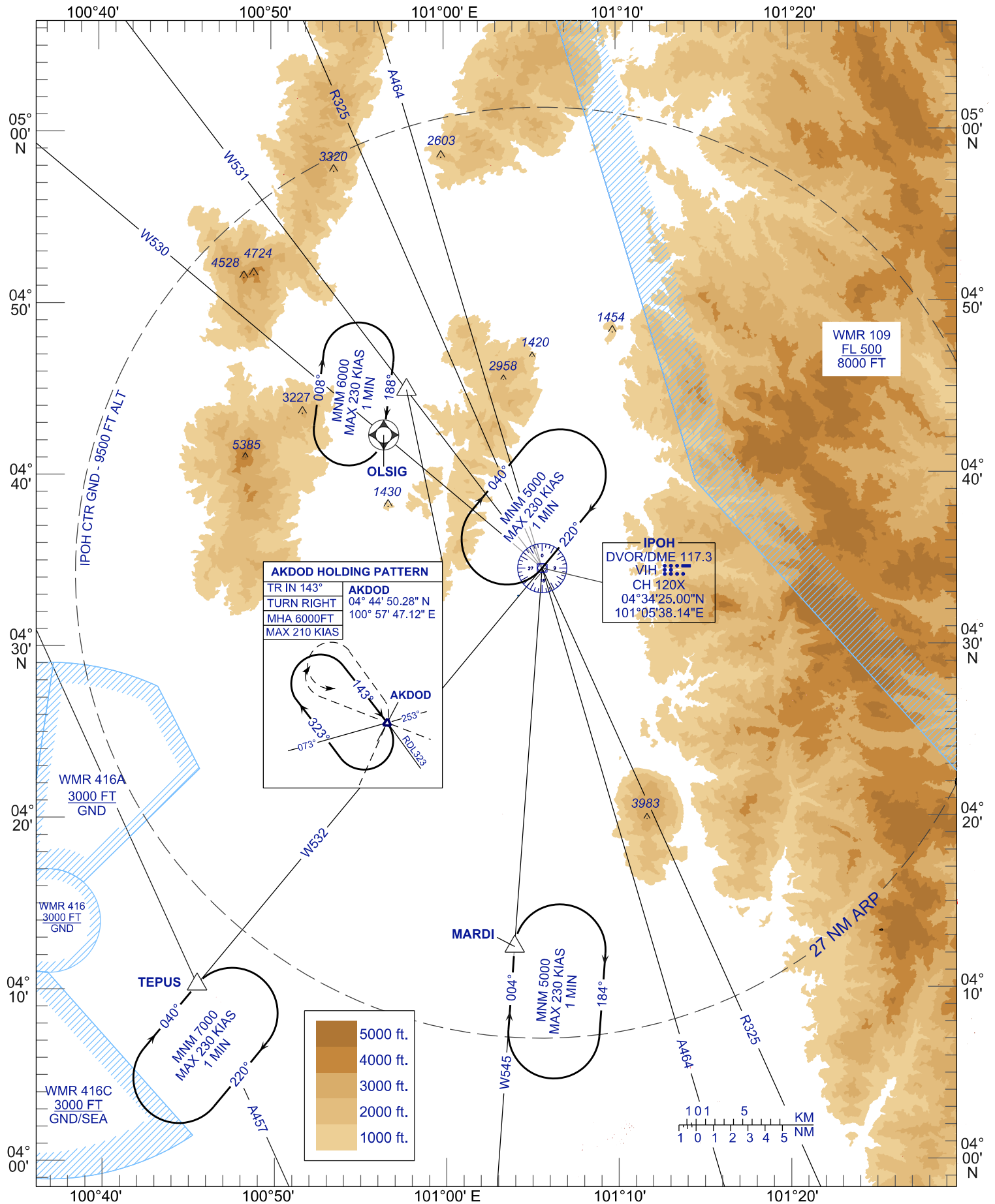
7.1 This AIP Supplement supersedes **AIRAC AIP Supplement 48/2023** dated 14 December 2023.

8 CANCELLATION

8.1 If no major changes required this AIP Supplement will remain until the information is published in AIP Malaysia.

- END -

IPOH CONTROL ZONE AND HOLDING AREAS



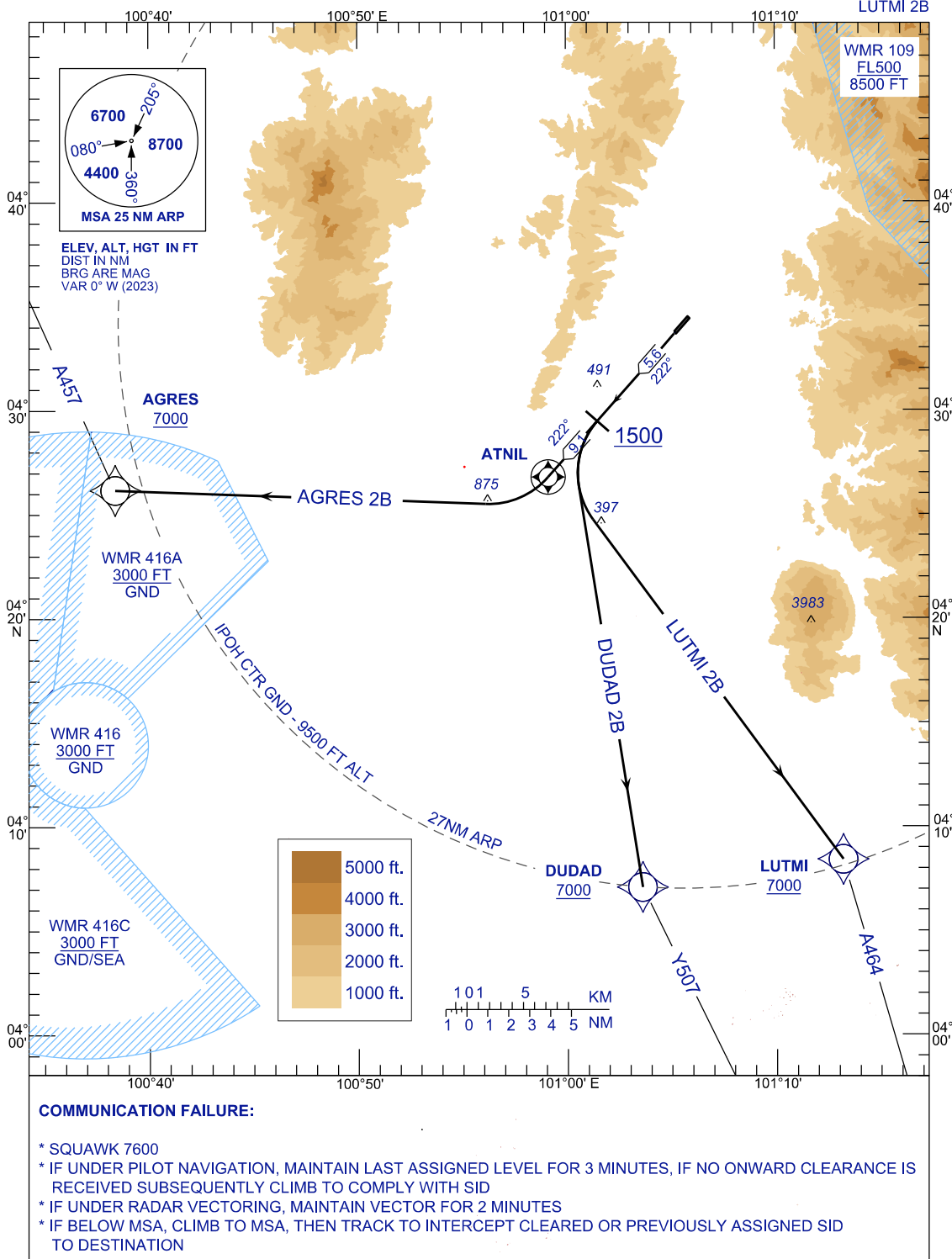
REPLACEMENT CHART

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

**IPOH/SULTAN
AZLAN SHAH (WMKI)**
RNAV (GNSS) RWY 22
AGRES 2B DUDAD 2B
LUTMI 2B

TRANSITION ALTITUDE
11000 FT

TWR	122.10
SMC	121.60
ATIS	127.05



REPLACEMENT CHART

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

TRANSITION ALTITUDE
11000 FT

**IPOH/SULTAN
AZLAN SHAH (WMKI)**
RNAV (GNSS) RWY 22
AGRES 2B DUDAD 2B
LUTMI 2B

TABULAR DESCRIPTIONS

AGRES 2B

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
CF	ATNIL	Y	222°	9.1	-	-	-	-	RNAV 1
DF	AGRES	-	-	-	R	+7000	-	-	RNAV 1

MINIMUM CLIMB GRADIENT PDG 4.0% UNTILL PASSING 5500 FT DUE TO OBSTACLE

DUDAD 2B

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
CA	-	-	222°	-	-	+1500	-	-	RNAV 1
DF	DUDAD	-	-	-	L	+7000	-	-	RNAV 1

MINIMUM CLIMB GRADIENT PDG 4.0% UNTILL PASSING 5500 FT DUE TO OBSTACLE

LUTMI 2B

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/TRACK (°M)	DISTANCE (NM)	TURN DIRECTION	ALTITUDE CONSTRAINT	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAVIGATION SPECIFICATION
CA	-	-	222°	-	-	+1500	-	-	RNAV 1
DF	LUTMI	-	-	-	L	+7000	-	-	RNAV 1

MINIMUM CLIMB GRADIENT PDG 4.0% UNTILL PASSING 5500 FT DUE TO OBSTACLE

WAYPOINT LIST

FIX/POINT	COORDINATES
AGRES	04°26'10.35"N 100°38'23.42"E
LUTMI	04°08'24.94"N 101°13'11.78"E
DUDAD	04°07'05.50"N 101°03'35.85"E
ATNIL	04°26'47.50"N 100°59'06.80"E

REPLACEMENT CHART

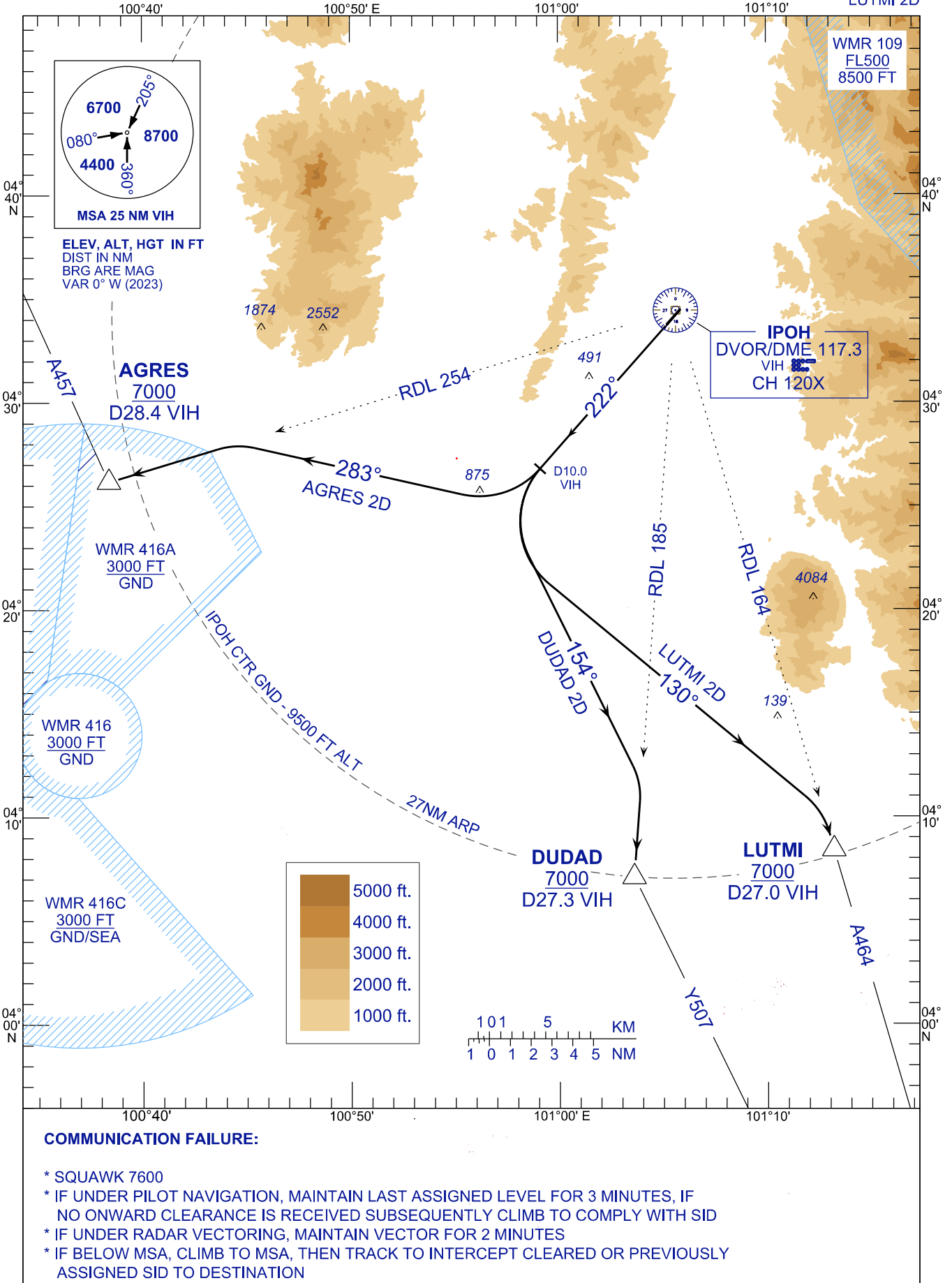
STANDARD DEPARTURE CHART
INSTRUMENT (SID) - ICAO

TRANSITION ALTITUDE
11000 FT

TWR 122.10
SMC 121.60
ATIS 127.05

IPOH/SULTAN
AZLAN SHAH (WMKI)

RWY 22
AGRES 2D DUDAD 2D
LUTMI 2D



REPLACEMENT CHART

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

TRANSITION ALTITUDE
11000 FT

**IPOH/SULTAN
AZLAN SHAH (WMKI)**

RWY 22
AGRES 2D DUDAD 2D
LUTMI 2D

DEPARTURE DESCRIPTIONS

INITIAL CLIMB PROCEDURE (ICP)	DESIGNATOR	SID DESCRIPTIONS (ICP EXECUTED)
AFTER TAKE-OFF PROCEED ON RWY HEADING (TRACK 222°), AFTER D10.0 VIH TURN RIGHT THEN FOLLOW THE ASSIGNED SID	AGRES 2D	TRACK HEADING 283° TO INTERCEPT RDL 254 VIH TO AGRES. THEN CONTINUE ON AIRWAY A457.
AFTER TAKE-OFF PROCEED ON RWY HEADING (TRACK 222°), AFTER D10.0 VIH TURN LEFT THEN FOLLOW THE ASSIGNED SID	DUDAD 2D	TRACK HEADING 154° TO INTERCEPT RDL 185 VIH TO DUDAD. THEN CONTINUE ON AIRWAY Y507.
	LUTMI 2D	TRACK HEADING 130° TO INTERCEPT RDL 164 VIH TO LUTMI. THEN CONTINUE ON AIRWAY A464.

*NOTE : MINIMUM CLIMB GRADIENT PDG 4.8% UNTIL 5500FT

AERONAUTICAL DATA TABULATION

FIX/POINT	COORDINATES
VIH VOR/DME 117.30MHZ / CH120X	04°34'25.00"N 101°05'38.14"E
AGRES RDL 254 / D28.4 VIH	04°26'10.35"N 100°38'23.42"E
LUTMI RDL 164 / D27.0 VIH	04°08'24.94"N 101°13'11.78"E
DUDAD RDL 185 / D27.3 VIH	04°07'05.50"N 101°03'35.85"E

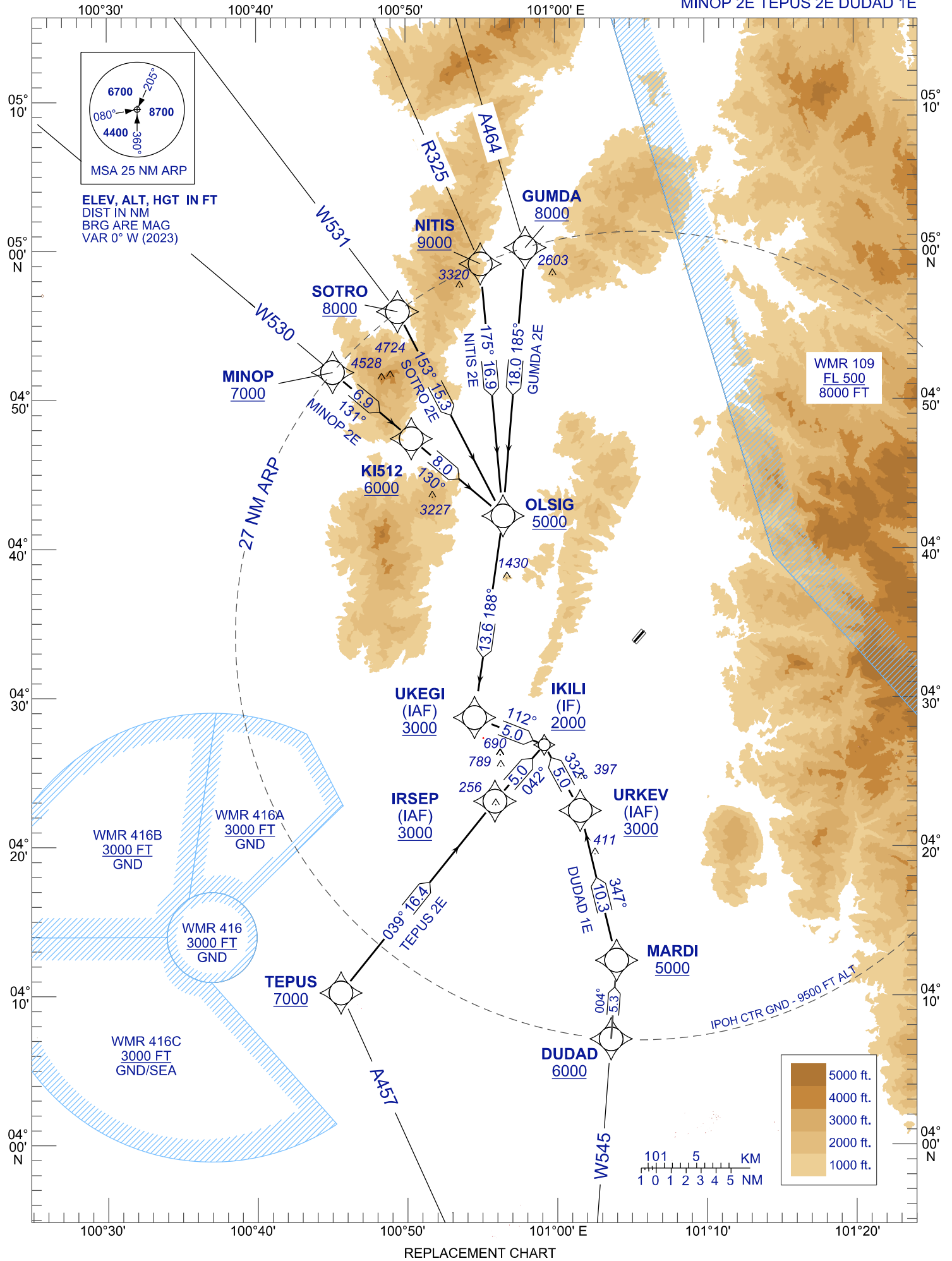
REPLACEMENT CHART

**STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO**

**IPOH/SULTAN
AZLAN SHAH (WMKI)**
RNAV (GNSS) RWY 04
GUMDA 2E NITIS 2E SOTRO 2E
MINOP 2E TEPUS 2E DUDAD 1E

TRANSITION ALTITUDE
11000 FT

TWR 122.10
SMC 121.60
ATIS 127.05



**STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO**

TRANSITION ALTITUDE 11000 FT

**IPOH/SULTAN
AZLAN SHAH (WMKI)**
RNAV (GNSS) RWY 04
GUMDA 2E NITIS 2E SOTRO 2E
MINOP 2E TEPUS 2E DUDAD 1E

TABULAR DESCRIPTION
GUMDA TWO (2) ECHO ARRIVAL (FROM AIRWAY A464)

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	TURN DIRECTION	DISTANCE (NM)	ALTITUDE	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAV. SPEC
IF	GUMDA	-	-	-	-	<u>8000</u>	-	-	-
TF	OLSIG	-	185°	R	18.0	<u>5000</u>	-	-	RNAV 1
TF	UKEGI	-	188°	-	13.6	<u>3000</u>	-	-	RNAV 1
TF	IKILI	-	112°	L	5.0	<u>2000</u>	-	-	RNAV 1

NITIS TWO (2) ECHO ARRIVAL (FROM AIRWAY R325)

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	TURN DIRECTION	DISTANCE (NM)	ALTITUDE	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAV. SPEC
IF	NITIS	-	-	-	-	<u>9000</u>	-	-	-
TF	OLSIG	-	175°	R	16.9	<u>5000</u>	-	-	RNAV 1
TF	UKEGI	-	188°	-	13.6	<u>3000</u>	-	-	RNAV 1
TF	IKILI	-	112°	L	5.0	<u>2000</u>	-	-	RNAV 1

SOTRO TWO (2) ECHO ARRIVAL (FROM AIRWAY W531)

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	TURN DIRECTION	DISTANCE (NM)	ALTITUDE	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAV. SPEC
IF	SOTRO	-	-	-	-	<u>8000</u>	-	-	-
TF	OLSIG	-	153°	R	15.3	<u>5000</u>	-	-	RNAV 1
TF	UKEGI	-	188°	R	13.6	<u>3000</u>	-	-	RNAV 1
TF	IKILI	-	112°	L	5.0	<u>2000</u>	-	-	RNAV 1

MINOP TWO (2) ECHO ARRIVAL (FROM AIRWAY W530)

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	TURN DIRECTION	DISTANCE (NM)	ALTITUDE	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAV. SPEC
IF	MINOP	-	-	-	-	<u>7000</u>	-	-	-
IF	KI512	-	131°	-	6.9	<u>6000</u>	-	-	RNAV 1
TF	OLSIG	-	130°	-	8.0	<u>5000</u>	-	-	RNAV 1
TF	UKEGI	-	188°	R	13.6	<u>3000</u>	-	-	RNAV 1
TF	IKILI	-	112°	L	5.0	<u>2000</u>	-	-	RNAV 1

REPLACEMENT CHART

**STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO**

TRANSITION ALTITUDE 11000 FT

**IPOH/SULTAN
AZLAN SHAH (WMKI)**
RNAV (GNSS) RWY 04
GUMDA 2E NITIS 2E SOTRO 2E
MINOP 2E TEPUS 2E DUDAD1E

TABULAR DESCRIPTION
TEPUS TWO (2) ECHO ARRIVAL (FROM AIRWAY A457)

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	TURN DIRECTION	DISTANCE (NM)	ALTITUDE	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAV. SPEC
IF	TEPUS	-	-	-	-	7000	-	-	-
TF	IRSEP	-	039°	R	16.4	3000	-	-	RNAV 1
TF	IKILI	-	042°	-	5.0	2000	-	-	RNAV 1

DUDAD ONE (1) ECHO ARRIVAL (FROM AIRWAY W545)

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE/ TRACK (M)	TURN DIRECTION	DISTANCE (NM)	ALTITUDE	SPEED LIMIT (KT)	RECOMMENDED NAVAIDS	NAV. SPEC
IF	DUDAD	-	-	-	-	6000	-	-	-
TF	MARDI	-	004°	-	5.3	5000	-	-	RNAV 1
TF	URKEV	-	347°	L	10.3	3000	-	-	RNAV 1
TF	IKILI	-	332°	L	5.0	2000	-	-	RNAV 1

WAYPOINT LIST

WAYPOINT IDENTIFIER	COORDINATES
URKEV	04°22'25.39" N 101°01'34.25" E
IKILI (IF)	04°26'50.17" N 100°59'10.67" E
IRSEP	04°23'03.75" N 100°55'52.37" E
UKEGI	04°28'40.35" N 100°54'31.08" E
OLSIG	04°42'12.12" N 100°56'27.51" E
MARDI	04°12'22.39" N 101°03'58.79" E
NITIS	04°59'06.62" N 100°54'58.95" E
SOTRO	04°55'54.86" N 100°49'26.16" E
TEPUS	04°10'13.00" N 100°45'33.00" E
MINOP	04°51'50.71" N 100°45'05.03" E
GUMDA	05°00'11.37" N 100°57'59.28" E
DUDAD	04°07'05.50" N 101°03'35.85" E
KI512	04°47'23.48" N 100°50'20.32" E

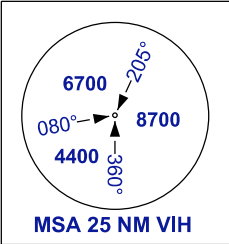
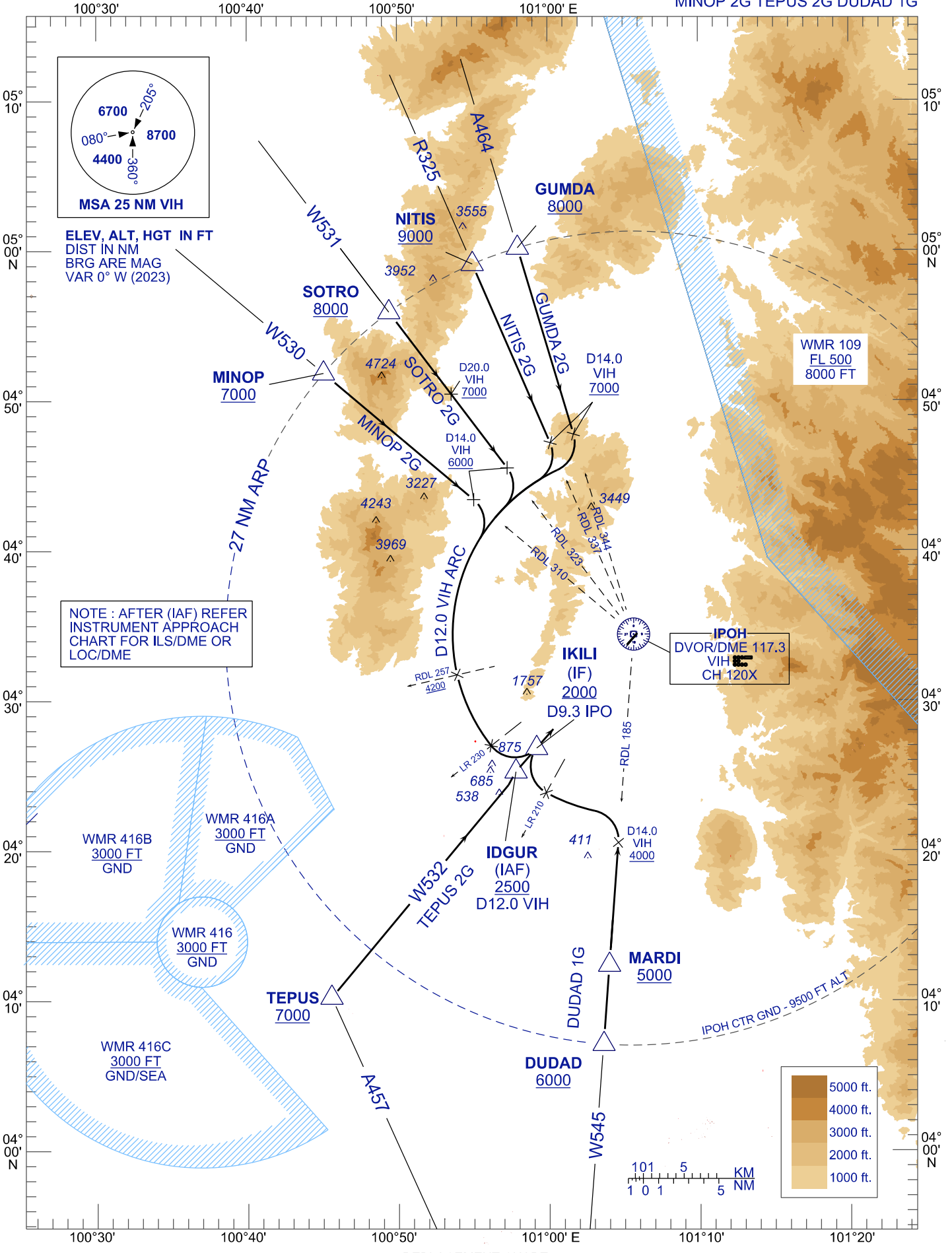
REPLACEMENT CHART

STANDARD ARRIVAL CHART INSTRUMENT (STAR) - ICAO

IPOH/SULTAN AZLAN SHAH (WMKI) RWY 04 (VOR/DME ARC) GUMDA 2G NITIS 2G SOTRO 2G MINOP 2G TEPUS 2G DUDAD 1G

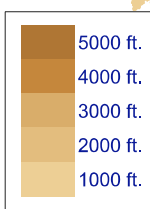
TWR 122.10
SMC 121.60
ATIS 127.05

TRANSITION ALTITUDE
11000 FT



ELEV, ALT, HGT IN FT
DIST IN NM
BRG ARE MAG
VAR 0° W (2023)

NOTE : AFTER (IAF) REFER
INSTRUMENT APPROACH
CHART FOR ILS/DME OR
LOC/DME



REPLACEMENT CHART

**STANDARD ARRIVAL CHART
INSTRUMENT (STAR) - ICAO**

TRANSITION ALTITUDE 11000 FT

**IPOH/SULTAN
AZLAN SHAH (WMKI)**
 RWY 04 (VOR/DME ARC)
 GUMDA 2G NITIS 2G SOTRO 2G
 MINOP 2G TEPUS 2G DUDAD 1G

AERONAUTICAL DATA TABULATION

DESIGNATOR	STAR DESCRIPTION
GUMDA 2G	FROM GUMDA TRACK INBOUND ON RDL 344 VIH AT D14.0 TURN RIGHT TO JOIN D12.0 VIH ARC FOR STRAIGHT IN APPROACH RWY 04.
NITIS 2G	FROM NITIS TRACK INBOUND ON RDL 337 VIH AT D14.0 TURN RIGHT TO JOIN D12.0 VIH ARC VOR FOR ILS DME OR LOC/DME APP RWY 04.
SOTRO 2G	FROM SOTRO TRACK INBOUND ON RDL 323 VIH AT D14.0 TURN RIGHT TO JOIN D12.0 VIH ARC FOR STRAIGHT IN APP RWY 04.
MINOP 2G	FROM MINOP TRACK INBOUND ON RDL 310 VIH AT D14.0 TURN RIGHT TO JOIN D12.0 VIH ARC FOR STRAIGHT IN APP RWY 04.
TEPUS 2G	FROM TEPUS TRACK INBOUND ON RDL 220 VIH TO IDGUR FOR STRAIGHT IN APP RWY 04.
DUDAD 1G	FROM DUDAD TRACK INBOUND ON RDL 185 VIH, AT D14.0 TURN LEFT TO JOIN D12.0 VIH ARC FOR STRAIGHT IN APP RWY 04.

WAYPOINT LIST

FIX / POINT	REFERENCE TO VIH VOR/DME	COORDINATES
IDGUR (IAF)	RDL 221/D12 .0	04° 25' 16.20" N 100° 57' 48.36" E
MARDI	RDL 184/D22.0	04° 12' 22.39" N 101° 03' 58.79" E
NITIS	RDL 337/D26.8	04° 59' 06.62" N 100° 54' 58.95" E
SOTRO	RDL 323/D26.8	04°55' 54.86" N 100°49' 26.16" E
TEPUS	RDL 220/D31.4	04° 10' 13.00" N 100° 45' 33.00" E
MINOP	RDL 310/D26.9	04° 51' 50.71" N 100° 45' 05.03" E
GUMDA	RDL 344/D26.8	05° 00' 11.37" N 100° 57' 59.28" E
DUDAD	RDL 185/D27.3	04° 07' 05.50" N 101° 03' 35.85" E

REPLACEMENT CHART

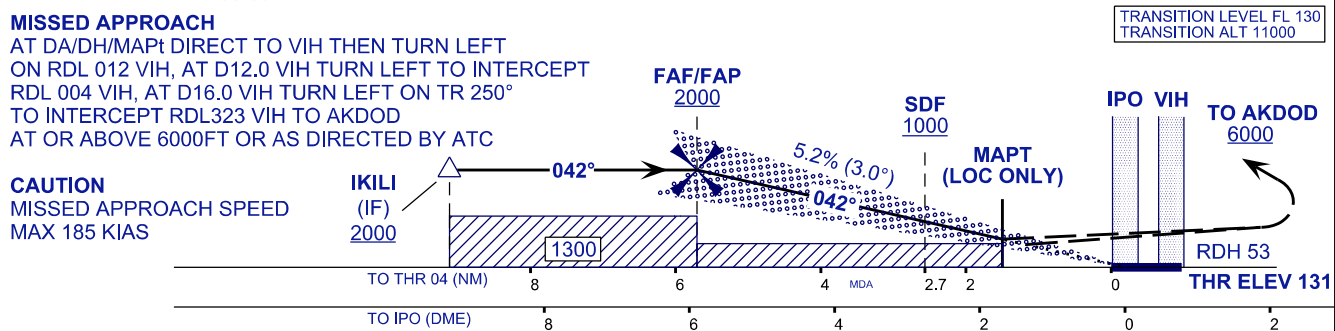
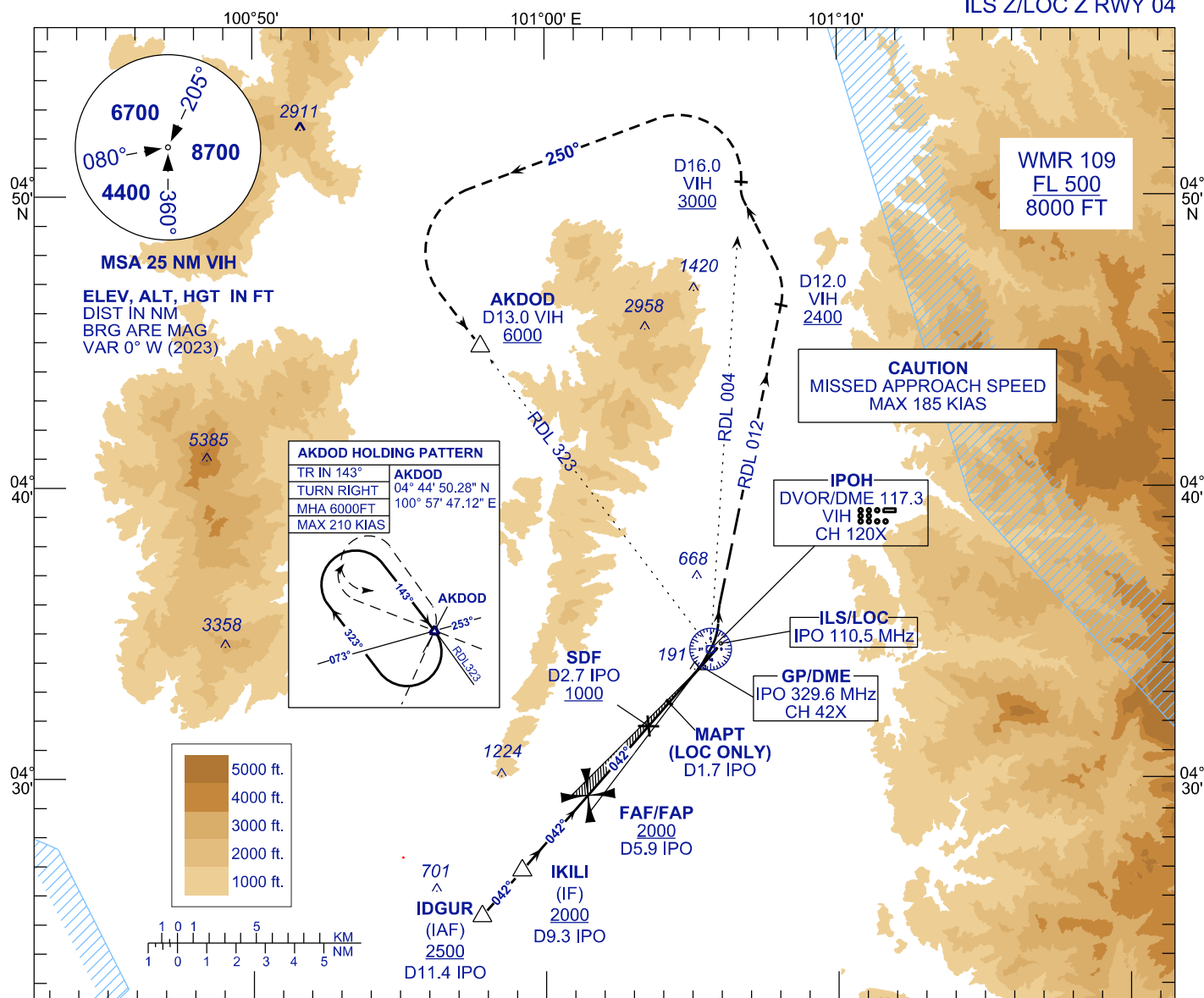
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 131 FT
 HEIGHTS RELATED TO
 THR RWY 04 - ELEV 131 FT

TWR	122.10
SMC	121.60
ATIS	127.05

IPOH/SULTAN AZLAN SHAH (WMKI)

ILS Z/LOC Z RWY 04



		OCA (H)								
CATEGORY OF AIRCRAFT	A	B	C	D	DME IPO	NM	FT	FT	FT	FT
LOC/DME (GP IN-OP)	550 (419)				5.9	4.9	3.9	2.9	1.9	0.9
ILS/DME CAT I	464 (333)	475 (344)	481 (350)	492 (361)	DIST THR / RW04	5.7	4.7	3.7	2.7	1.7
					ALTITUDE	2000	1680	1361	1042	724
					GROUND SPEED (GS)	KT	80	100	120	140
					FAF04-THR(5.7 NM)	MIN:SEC	4:17	3:25	2:51	2:27
					RATE OF DESCEND (318.4 FT/NM)	FT/MIN	420	530	640	740
							850	960		

REPLACEMENT CHART

**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**

**IPOH/SULTAN
AZLAN SHAH (WMKI)**

ILS Z/LOC Z RWY 04

AERONAUTICAL DATA TABULATION

FIX / POINT		COORDINATES
VIH VOR/DME	117.30MHZ / CH120X	04°34'25.00"N 101°05'38.14"E
GP / DME	IPO 329.6 MHz / CH 42X	04°33'47.40"N 101°05'22.70"E
ILS / LOC	IPO 110.5 MHz	04°34'36.50"N 101°05'59.20"E
IDGUR (IAF)	D11.4 IPO	04°25'16.20" N 100°57'48.36"E
IKILI (IF)	D9.3 IPO	04°26'50.17"N 100°59'10.67"E
FAF/FAP	D5.9 IPO	04°29'24.50"N 101°01'25.84"E
AKDOD	RDL 323 / D13.0 VIH	04°44'50.28"N 100°57'47.12"E

REPLACEMENT CHART

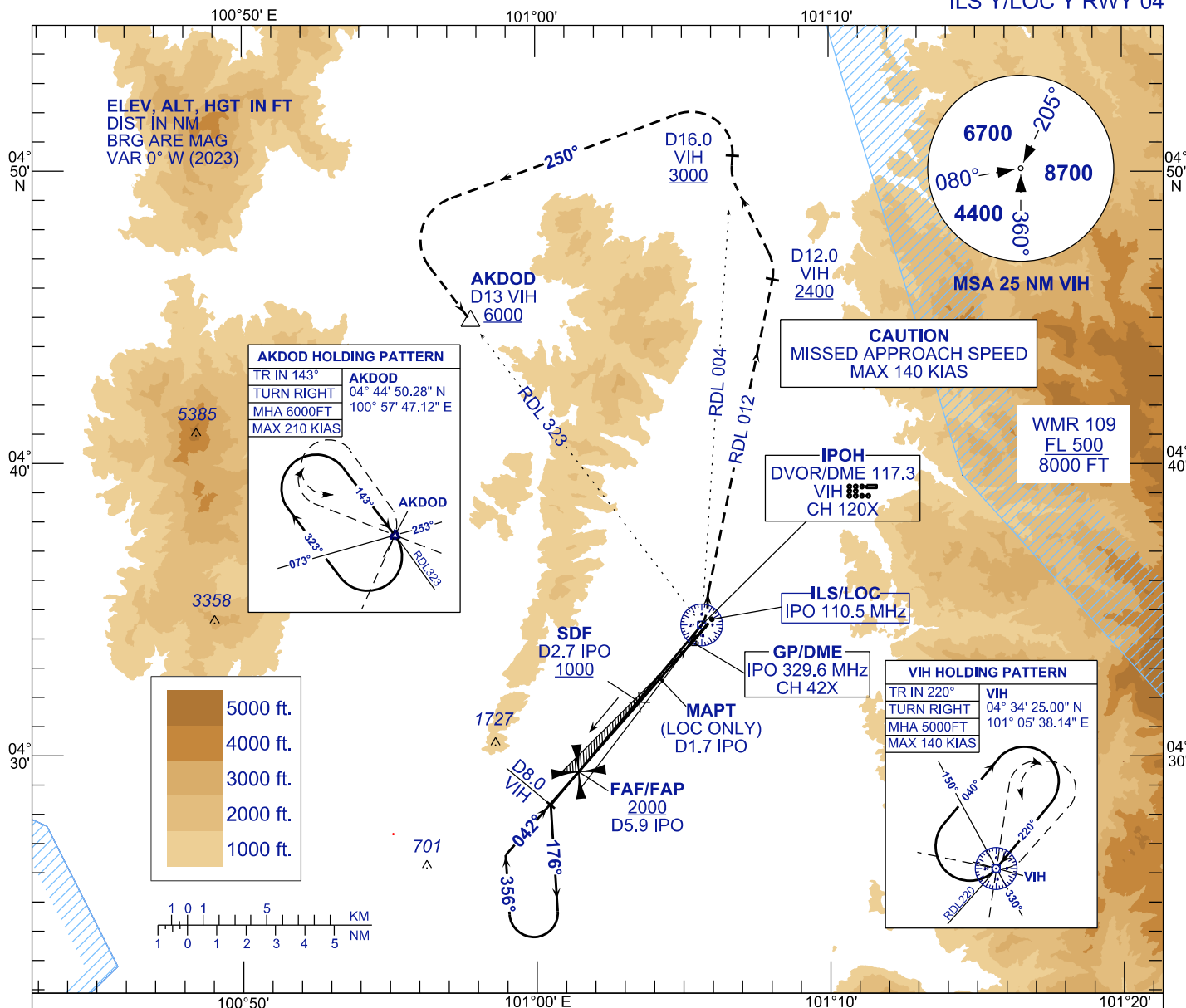
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 131 FT
 HEIGHTS RELATED TO
 THR RWY 04 - ELEV 131 FT

TWR 122.10
 SMC 121.60
 ATIS 127.05

IPOH/SULTAN AZLAN SHAH (WMKI)

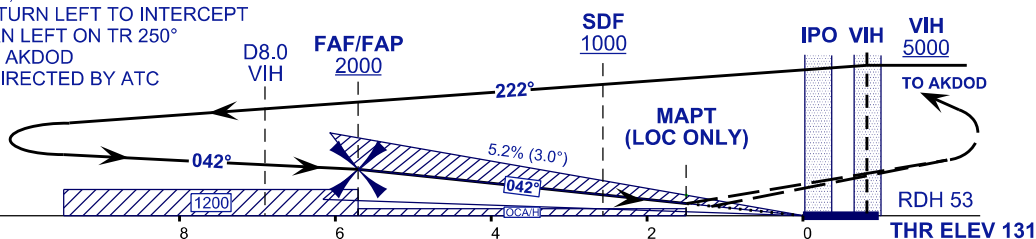
ILS Y/LOC Y RWY 04



MISSED APPROACH

AT DA/DH/MAPT DIRECT TO VIH, TURN LEFT
 ON RDL 012 VIH, AT D12.0 VIH TURN LEFT TO INTERCEPT
 RDL 004 VIH, AT D16.0 VIH TURN LEFT ON TR 250°
 TO INTERCEPT RDL323 VIH TO AKDOD
 AT OR ABOVE 6000FT OR AS DIRECTED BY ATC

CAUTION
 MISSED APPROACH SPEED
 MAX 140 KIAS



	OCA (H)									
CATEGORY OF AIRCRAFT	A	B	DME IPO	NM	5.9	4.9	3.9	2.9	1.9	0.9
LOC/DME (GP IN-OP)	550 (419)		DIST THR / RW04	NM	5.7	4.7	3.7	2.7	1.7	0.7
ILS/DME CAT I	464(333)	475(344)	ALTITUDE	FT	2000	1680	1361	1042	724	406
			GROUND SPEED (GS)	KT	80	100	120	140	160	180
			FAF04-THR(5.7 NM)	MIN:SEC	4:17	3:25	2:51	2:27	2:08	1:54
			RATE OF DESCEND (318.4 FT/NM)	FT/MIN	420	530	640	740	850	960

REPLACEMENT CHART

**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**

**IPOH/SULTAN
AZLAN SHAH (WMKI)**

ILS Y/LOC Y RWY 04

AERONAUTICAL DATA TABULATION

FIX / POINT		COORDINATES
VIH VOR/DME	117.30MHZ / CH120X	04°34'25.00"N 101°05'38.14"E
GP / DME	IPO 329.6 MHz / CH 42X	04°33'47.40"N 101°05'22.70"E
ILS / LOC	IPO 110.5 MHz	04°34'36.50"N 101°05'59.20"E
FAF/FAP	D5.9 IPO	04°29'24.50"N 101°01'25.84"E
AKDOD	RDL 323 / 13.0 VIH	04°44'50.28"N 100°57'47.12"E

REPLACEMENT CHART

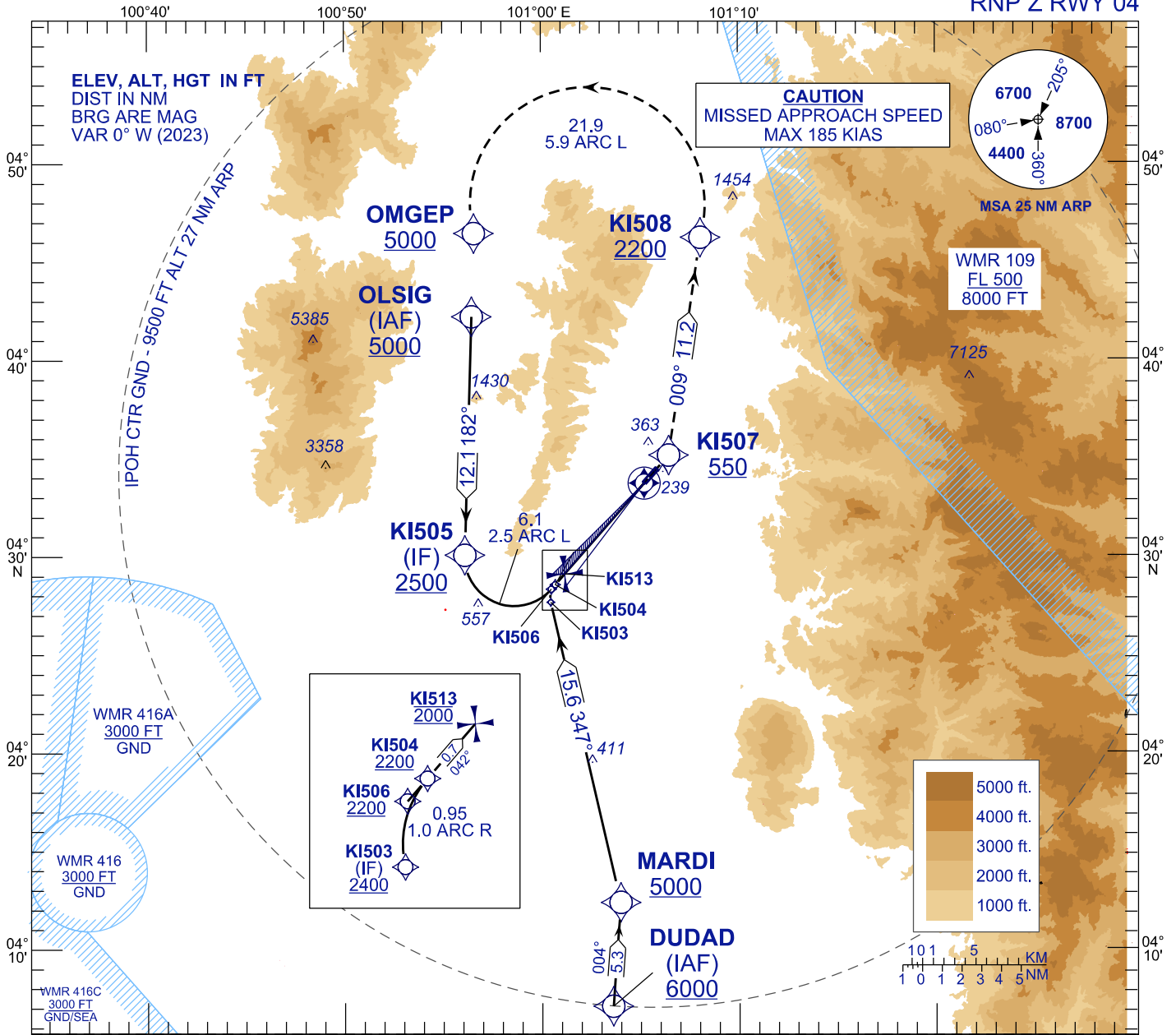
**INSTRUMENT
APPROACH
CHART - ICAO**

AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT

TWR 122.10
SMC 121.60
ATIS 127.05

**IPOH/SULTAN
AZLAN SHAH (WMKI)**

RNP Z RWY 04



TCH 53
VPA 2.8°

MISSED APPROACH
CLIMB TO 5000FT OR ABOVE VIA RNP Z MISSED APCH
TRACK TO OMGEP OR AS DIRECTED BY ATC

CAUTION
MISSED APPROACH SPEED
MAX 185 KIAS

THR ELEV 131
TO THR 04 (NM)

TRANSITION LEVEL FL 130
TRANSITION ALT 11000

STRAIGHT IN-APPROACH	OCA (H)	
CATEGORY OF AIRCRAFT	C	D
RNP 0.3	488 (357)	
CIRCLING AND ALTERNATE N/A		

AUTHORIZATION REQUIRED

- NOTES**
- 1) APPROACH NOT AUTHORIZED WHEN AIRPORT TEMPRETURE BELOW 15°C OR ABOVE 40°C.
 - 2) RF REQUIRED.
 - 3) WMKI ALTIMETER SETTING REQUIRED.
 - 4) GNSS REQUIRED.
 - 5) PAPI AND VERTICAL PATH ANGLE NOT COINCIDENT.
 - 6) RNP 0.30 FROM IAFS TO KI507.
 - 7) RNP 0.50 FROM KI507 TO KI504
- DISTANCE IN NM. BEARING ARE MAGNETIC. ELEVATION IN FEET AMSL.

NEW CHART

**INSTRUMENT
APPROACH
CHART - ICAO**
**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**
**IPOH/SULTAN
AZLAN SHAH (WMKI)**

RNP Z RWY 04

TABULAR DESCRIPTION
DUDAD TRANSITION

SEQ	PATH TERM	ID	RF ARC CENTER	FLY OVER	WPT DESC	TRACK/ DISTANCE OR COURSE/TIME	ARC DIRECTION	ALTITUDE (FT)	MAX IAS (KT)	VPA	RNP
010	IF	DUDAD	-	N	IAF	-	-	+6000	-	-	-
020	TF	MARDI	-	N	-	004°M / 5.3NM	-	+5000	-	-	0.3
030	TF	KI503	-	N	IF	347° M/15.6NM	L	+2400	-	-	0.3
040	RF	KI504	RKI01	N	-	1.0NM RF /0.95NM	R	+2200	-	-	0.3
050	TF	KI513	-	N	-	042°M / 0.7NM	-	@2000	@185	-	0.3

OLSIG TRANSITION

SEQ	PATH TERM	ID	RF ARC CENTER	FLY OVER	WPT DESC	TRACK/ DISTANCE OR COURSE/TIME	ARC DIRECTION	ALTITUDE (FT)	MAX IAS (KT)	VPA	RNP
010	IF	OLSIG	-	N	IAF	-	-	+5000	-	-	-
020	TF	KI505	-	N	IF	182° M/12.1NM	-	+2500	-	-	0.3
030	RF	KI506	RKI02	N	-	2.5 NM RF / 6.1NM	L	+2200	@185	-	0.3
040	TF	KI513	-	N	-	042° M/1.0NM	-	@2000	@185	-	0.3

FINAL AND MISSED APPROACH

SEQ	PATH TERM	ID	RF ARC CENTER	FLY OVER	WPT DESC	TRACK/ DISTANCE OR COURSE/TIME	ARC DIRECTION	ALTITUDE (FT)	MAX IAS (KT)	VPA	RNP
010	IF	KI513	-	N	FAF	-	-	@2000	@185	-	0.3
020	TF	RWY04	-	Y	LTP/FTP	042° M/6.1NM	-	+184	-	-2.80°	0.3
030	TF	KI507	-	N	-	042° M/1.9NM	-	+550	-	-	0.3
040	TF	KI508	-	N	-	009° M/11.2NM	R	+2200	-185	-	0.5
050	RF	OMGEP	RKI03	N	-	5.9 NM RF /21.9NM	-	+5000	-185	-	1.0

NEW CHART

**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**

**IPOH/SULTAN
AZLAN SHAH (WMKI)**

RNP Z RWY 04

AERONAUTICAL DATA TABULATION

WAYPOINT IDENTIFIER	COORDINATES
DUDAD	04°07'05.50" N 101°03'35.85" E
MARDI	04°12'22.39" N 101°03'58.79" E
KI503	04°27'39.72" N 101°00'27.42" E
KI504	04°28'33.11" N 101°00'40.83" E
RKI01	04°27'53.30" N 101°01'25.95" E
KI513 (FAP)	04°29'06.02" N 101°01'09.66" E
OLSIG	04°42'12.12" N 100°56'27.51" E
KI505	04°30'03.41" N 100°56'05.89" E
KI506	04°28'19.40" N 101°00'28.82" E
RKI02	04°29'58.92" N 100°58'36.02" E
RWY04	04°33'42.92" N 101°05'12.25" E
KI507	04°35'08.25" N 101°06'27.02" E
KI508	04°46'13.40" N 101°08'04.73" E
OMGEP	04°46'26.47" N 100°56'34.63" E
RKI03	04°47'54.11" N 101°02'21.46" E

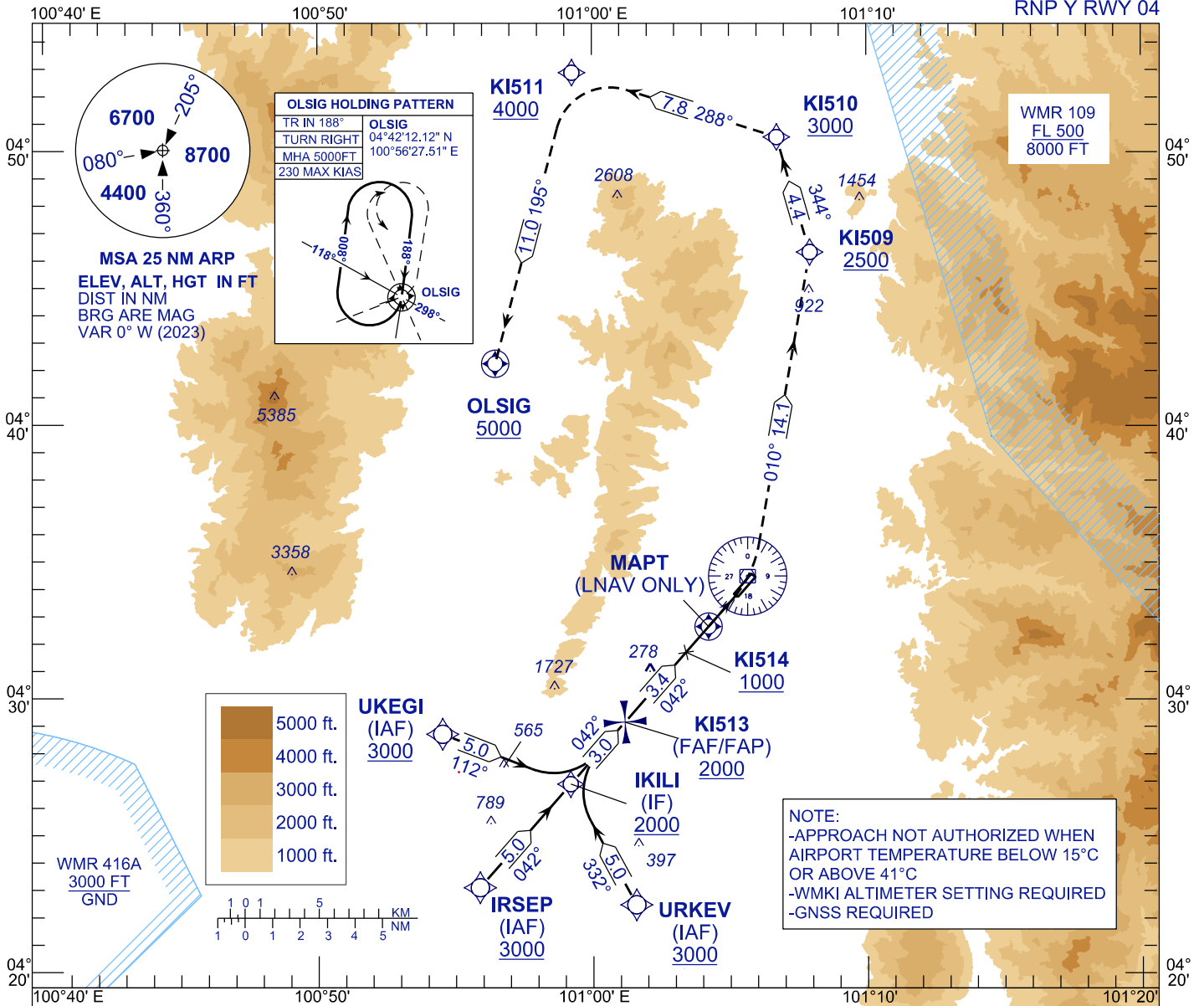
NEW CHART

INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 131 FT
 HEIGHTS RELATED TO
 THR RWY 04 - ELEV 131 FT

TWR	122.10
SMC	121.60
ATIS	127.05

IPOH/SULTAN AZLAN SHAH (WMKI)



TCH 53
 VPA 2.8°

MISSED APPROACH
 CLIMB TO 5000ft OR ABOVE VIA RNP Y (FAF/FAP)
 MISSED APCH TRACK TO OLSIG OR AS DIRECTED BY ATC

CAUTION
 MISSED APPROACH SPEED
 MAX 185 KIAS

THR ELEV 131
 TO THR 04 (NM)

TRANSITION LEVEL FL 130
 TRANSITION ALT 11000

	OCA (H)				DIST THR / RW04	NM	6.1	5.1	4.1	3.1	2.1	1.1
CATEGORY OF AIRCRAFT	A	B	C	D	ALTITUDE	FT	2000	1700	1402	1104	807	510
LNAV ONLY	510 (379)				GROUND SPEED (GS)	KT	80	100	120	140	160	180
LNAV/VNAV	615 (484)	634 (503)	643 (512)	654 (523)	FAF04-MA04(4.6 NM)	MIN:SEC	3:28	2:46	2:18	1:59	1:44	1:32
					RATE OF DESCEND (318.4 FT/NM)	FT/MIN	400	500	590	690	790	890

NEW CHART

**INSTRUMENT
APPROACH
CHART - ICAO**
**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**
**IPOH/SULTAN
AZLAN SHAH (WMKI)**

RNP Y RWY 04

TABULAR DESCRIPTION
URKEV TRANSITION

SEQ.	PATH TERM.	WAYPOINT IDENTIFIER	FLY OVER	WPT. DESC.	COURSE/ TRACK (°M)	DISTANCE (NM)	TURN DIR.	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/TCH	NAV. SPEC.
010	IF	URKEV	N	IAF	-	-	-	+3000	-250	-	-
020	TF	IKILI	N	IF	332°	5.0	-	+2000	-	-	RNP APCH
030	TF	KI513	N	FAF	042°	3.0	R	+2000	@185	-	RNP APCH

IRSEP TRANSITION

SEQ.	PATH TERM.	WAYPOINT IDENTIFIER	FLY OVER	WPT. DESC.	COURSE/ TRACK (°M)	DISTANCE (NM)	TURN DIR.	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/TCH	NAV. SPEC.
010	IF	IRSEP	N	IAF	-	-	-	+3000	-250	-	-
020	TF	IKILI	N	IF	042°	5.0	-	+2000	-	-	RNP APCH
030	TF	KI513	N	FAF	042°	3.0	-	+2000	@185	-	RNP APCH

UKEGI TRANSITION

SEQ.	PATH TERM.	WAYPOINT IDENTIFIER	FLY OVER	WPT. DESC.	COURSE/ TRACK (°M)	DISTANCE (NM)	TURN DIR.	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/TCH	NAV. SPEC.
010	IF	UKEGI	N	IAF	-	-	-	+3000	-250	-	-
020	TF	IKILI	N	IF	112°	5.0	-	+2000	-	-	RNP APCH
030	TF	KI513	N	FAF	042°	3.0	L	+2000	@185	-	RNP APCH

FINAL AND MISSED APPROACH

SEQ.	PATH TERM.	WAYPOINT IDENTIFIER	FLY OVER	WPT. DESC.	COURSE/ TRACK (°M)	DISTANCE (NM)	TURN DIR.	ALTITUDE (FT)	SPEED LIMIT (KT)	VPA/TCH	NAV. SPEC.
010	IF	IKILI	N	IF	-	-	-	+2000	-	-	-
020	TF	KI513	N	FAF/FAP	042°	3.0	-	+2000	-185	-	RNP APCH
030	TF	KI514	N	SDF	042°	3.4	-	+1000	-	-2.8°	RNP APCH
040	TF	RWY04	Y	LTP/FTP	042°	2.8	-	+183	-	-2.8°/53	RNP APCH
050	TF	KI509	N	-	010°	14.1	L	+2500	-185	-	RNP APCH
060	TF	KI510	N	-	344°	4.4	L	+3000	-185	-	RNP APCH
070	TF	KI511	N	-	288°	7.8	L	+4000	-185	-	RNP APCH
080	TF	OLSIG	Y	-	195°	11.0	L	+5000	-185	-	RNP APCH
090	HM	OLSIG	Y	-	188°	-	R	+5000	-230	-	RNP APCH

NEW CHART

**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**

**IPOH/SULTAN
AZLAN SHAH (WMKI)**

RNP Y RWY 04

WAYPOINT LIST

WAYPOINT IDENTIFIER	COORDINATES
IKILI (IF)	04°26'50.17" N 100°59'10.67" E
IRSEP	04°23'03.75" N 100°55'52.37" E
KI509	04°46'15.21" N 101°07'55.75" E
KI510	04°50'27.43" N 101°06'43.73" E
KI511	04°52'49.76" N 100°59'16.26" E
KI513 (FAF/FAP)	04°29'06.02" N 101°01'09.66" E
KI514 (SDF)	04°31'38.38" N 101°03'23.13" E
MAPT	04°32'35.00" N 101°04'12.74" E
OLSIG	04°42'12.12" N 100°56'27.51" E
RWY04	04°33'42.92" N 101°05'12.25" E
URKEV (IAF)	04°22'25.39" N 101°01'34.25" E
UKEGI	04°28'40.35" N 100°54'31.08" E

NEW CHART

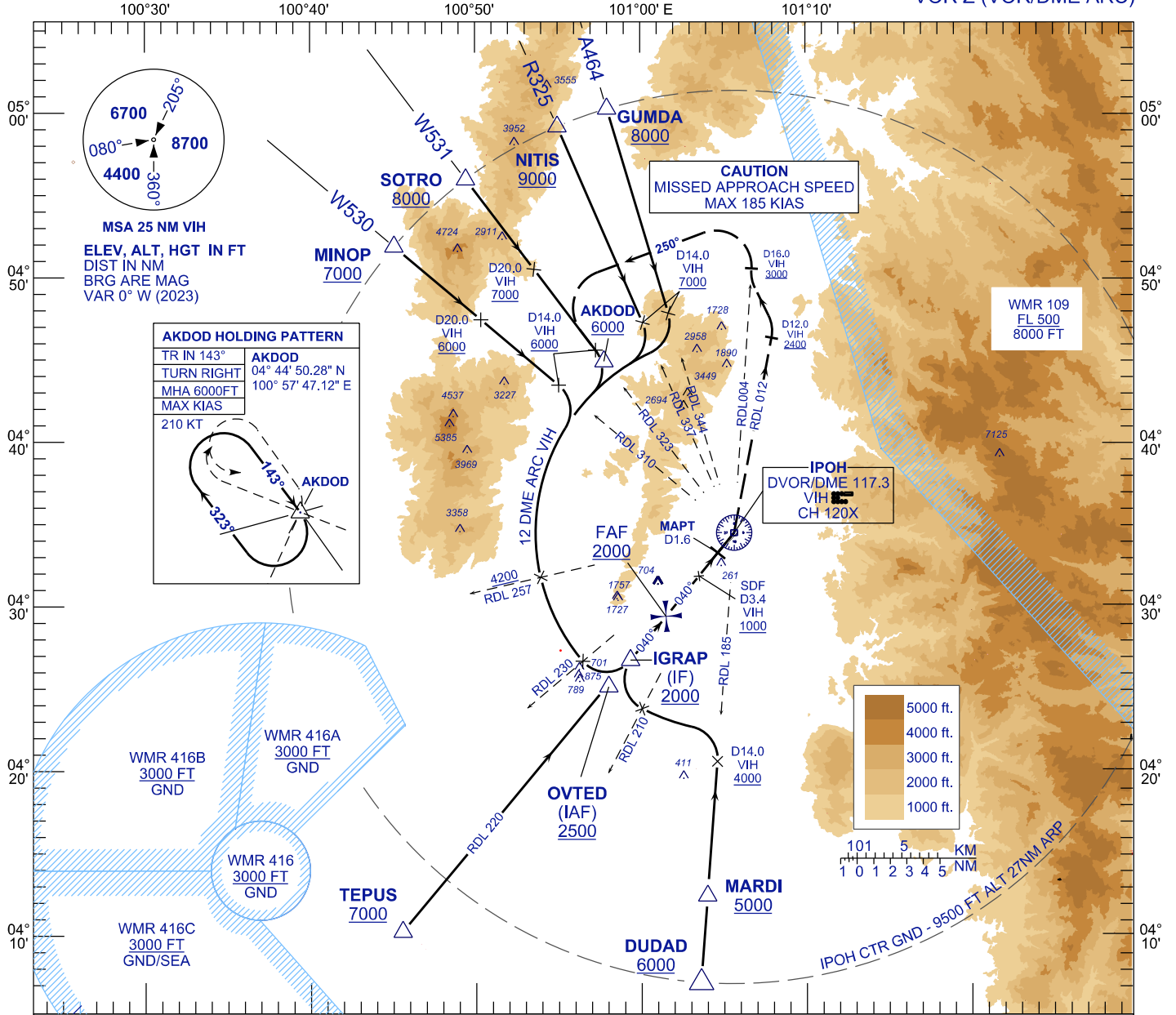
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 131 FT
 HEIGHTS RELATED TO
 THR RWY 04 - ELEV 131 FT

TWR 122.10
 SMC 121.60
 ATIS 127.05

IPOH/SULTAN AZLAN SHAH (WMKI)

RWY04
 VOR Z (VOR/DME ARC)



MISSED APPROACH
 AT MAPT DIRECT TO VIH THEN TURN LEFT ON RDL 012 VIH, AT D12.0 VIH TURN LEFT TO INTERCEPT RDL 004 VIH, AT D16.0 VIH TURN LEFT ON TR 250° TO INTERCEPT RDL323 VIH TO AKDOD AT OR ABOVE 6000FT OR AS DIRECTED BY ATC

CAUTION
 MISSED APPROACH SPEED MAX 185 KIAS

TO THR 04 (NM)
 TO VIH (DME)

VIH
 TO AKDOD

TRANSITION LEVEL FL 130
 TRANSITION ALT 11000

RDH 53
 THR ELEV 131

5.2% (3.0°)
 040°

	OCA (H)				DME VIH	NM	6.5	5.5	4.5	3.5	2.5	1.5
CATEGORY OF AIRCRAFT	A	B	C	D	DIST THR / RW04	NM	5.7	4.7	3.7	2.7	1.7	0.7
VOR / DME	600 (469)				ALTITUDE	FT	2000	1680	1362	1043	724	404
					GROUND SPEED (GS)	KT	80	100	120	140	160	180
					FAF-MAPT(4.9 NM)	MIN:SEC	3:42	2:58	2:28	2:07	1:51	1:39
					RATE OF DESCEND (318.4 FT/NM)	FT/MIN	420	530	640	740	850	960

REPLACEMENT CHART

**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**

**IPOH/SULTAN
AZLAN SHAH (WMKI)**
RWY04
VOR Z (VOR/DME ARC)

AERONAUTICAL DATA TABULATION

FIX / POINT	REFERENCE TO VIH VOR/DME	COORDINATES
OVTED (IAF)	RDL 220/D12.0	04°25'04.82" N 100°58'01.89" E
MARDI	RDL 184/D22.0	04°12'22.39" N 101°03'58.79" E
NITIS	RDL 337/D26.8	04°59'06.62" N 100°54'58.95" E
SOTRO	RDL 323/D26.8	04°55'54.86" N 100°49'26.16" E
TEPUS	RDL 220/D31.4	04°10'13.00" N 100°45'33.00" E
MINOP	RDL 310/D26.9	04°51'50.71" N 100°45'05.03" E
GUMDA	RDL 344/D26.8	05°00'11.37" N 100°57'59.28" E
AKDOD	RDL 323/D13.0	04°44'50.28" N 100°57'47.12" E
IGRAP (IF)	RDL 220/D9.9	04°26'41.56" N 100°59'20.66" E
FAF	RDL 220/D6.5	04°29'20.80" N 101°01'30.35" E
MAPT	RDL 220/D1.6	04°33'11.61" N 101°04'38.35" E
VIH VOR/DME	117.30MHZ / CH120X	04°34'25.00" N 101°05'38.14" E

REPLACEMENT CHART

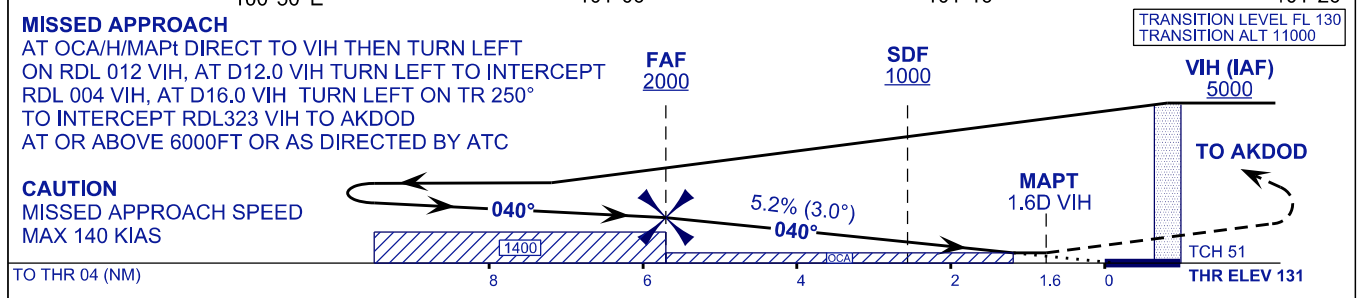
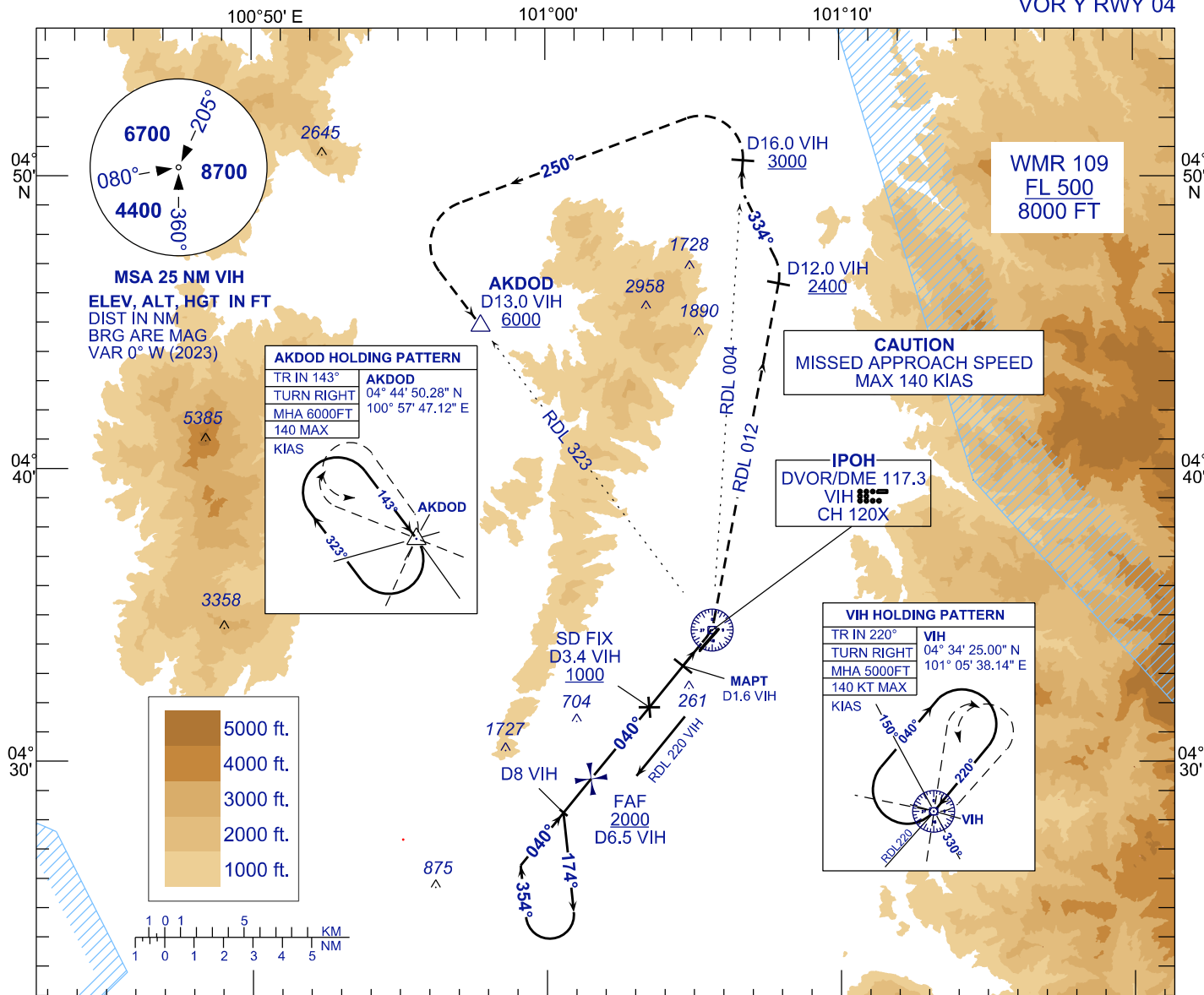
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 131 FT
 HEIGHTS RELATED TO
 THR RWY 04 - ELEV 131 FT

TWR	122.10
SMC	121.60
ATIS	127.05

IPOH/SULTAN AZLAN SHAH (WMKI)

VOR Y RWY 04



TO THR 04 (NM)		8	6	4	2	1.6	0			
TO VIH (DME)		10	8	6	4	2	0			
CATEGORY OF AIRCRAFT	OCA / OCH									
	A	B	DME VIH	NM	6.5	5.5	4.5	3.5	2.5	1.5
VOR / DME	560 (429)		DIST THR / RW04	NM	5.7	4.7	3.7	2.7	1.7	0.7
			ALTITUDE	FT	2000	1680	1362	1043	724	404
		GROUND SPEED (GS)	KT	80	100	120	140	160	180	
		FAF-MAPT(4.9 NM)	MIN:SEC	3:42	2:58	2:28	2:07	1:51	1:39	
		RATE OF DESCEND (318.4 FT/NM)	FT/MIN	420	530	640	740	850	960	

REPLACEMENT CHART

**INSTRUMENT
APPROACH
CHART - ICAO**

**AERODROME ELEV 131 FT
HEIGHTS RELATED TO
THR RWY 04 - ELEV 131 FT**

**IPOH/SULTAN
AZLAN SHAH (WMKI)**

VOR Y RWY 04

AERONAUTICAL DATA TABULATION

FIX / POINT		COORDINATES
AKDOD	RDL 323 / D13.0 VIH	04°44'50.28"N 100°57'47.12"E
FAF	RDL 220 / 6.5D VIH	04°29'20.80"N 101°01'30.35"E
MAPT	RDL 220 / D1.6 VIH	04°33'11.61"N 101°04'38.35"E
VIH VOR/DME	117.30MHZ / CH120X	04°34'25.00"N 101°05'38.14"E

REPLACEMENT CHART