

# AIP SUPPLEMENT MALAYSIA

PHONE: 6-03-8871 4000  
FAX: 6-03-8881 0530  
AFTN: WMKKYAYS

AERONAUTICAL INFORMATION SERVICES  
DEPARTMENT OF CIVIL AVIATION  
NO. 27, PERSIARAN PERDANA  
LEVEL 1-4, PODIUM BLOCK, PRECINCT 4,  
62618 PUTRAJAYA,  
MALAYSIA

**25/2015**  
**26 NOV**  
**AIRAC**

## KUALA LUMPUR FLIGHT INFORMATION REGION

### KL INTERNATIONAL / SEPANG AIRPORT IMPLEMENTATION OF NEW ILS RWY 14R AND RWY 32L OPERATIONS

(This AIP Supplement replaces AIP Supplement 24/2015 dated 29 Oct 2015)

#### 1 INTRODUCTION

- 1.1 The purpose of this AIP Supplement is to notify the aviation industry of the new ILS CAT I and CAT II for RWY 14R and RWY 32L has been installed at KL International Airport.
- 1.2 The ILS CAT I for both runway 14R and runway 32L will be available on 07 Jan 2016 whilst availability of ILS CAT II for both runway 14R and runway 32L will be activated by NOTAM.
- 1.3 This AIP Supplement supersedes any and all those information previously published in AIP SUPP 10/2014 with regards to operations of ILS RWY 14R and ILS RWY 32L.

#### 2 NEW DATA

- 2.1 Revised aerodrome obstacle with regards to new ILS facilities.

In APCH/TKOF areas			In circling area and at aerodrome		Remarks
1			2		3
RWY and area affected	Obstacle type Elevation Markings and Lights	Coordinates WGS84	Obstacle type Elevation Markings and Lights	Coordinates WGS84	
a	b	c	a	b	
14R/APCH 32L/TKOF	LOC antennas 19.83m Red / Red obstruction lights	02 44 43.68 N 101 41 47.44 E	GP aerial 27.8m Red & White / Red obstruction lights	02 44 25.61 N 101 41 55.00 E	NIL
32L/APCH 14R/TKOF	LOC antennas 15.46m Red / Red obstruction lights	02 42 41.22 N 101 43 09.48 E	GP aerial 26.63m Red & White / Red obstruction lights	02 42 53.83 N 101 42 56.54 E	NIL

2.2 Revised radio navigation and landing aids data of the new ILS facilities.

Type of aid CAT of ILS	ID	Frequency	Hour of operation	Site TX antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS CAT II	IWR	110.70 MHz	H24	GP: 02 44 25.61 N 101 41 55.00 E  LOC: 02 42 41.22 N 101 43 09.48 E	-	14R
DME	IWR	CH 44X		02 44 25.61 N 101 41 55.00 E	13.85M	14R
ILS CAT II	IWL	111.90 MHz		GP: 02 42 53.83 N 101 42 56.54 E  LOC: 02 44 43.68 N 101 41 47.44 E	-	32L
DME	IWL	CH 56X		02 42 53.83 N 01 42 56.54 E	13.32M	32L

**3 INSTRUMENT FLIGHT PROCEDURES**

3.1 Instrument Approach charts and the associated charts corresponding to the new ILS procedures are as follows:

3.2 Aerodrome Obstacle Chart Type A – RWY 14R/32L. See Appendix A-1.

3.3 RUNWAY 14R:

3.3.1 Precision Approach Terrain Chart RWY 14R. See Appendix A-2.

3.3.2 ILS Z or LOC Z RWY 14R. See Appendix A4.

3.3.3 ILS Y or LOC Y RWY 14R. See Appendix A5

3.4 RUNWAY 32L:

3.4.1 Precision Approach Terrain Chart RWY 32L. See Appendix A-3.

3.4.2 ILS Z or LOC Z RWY 32L. See Appendix A6.

3.4.3 ILS Y or LOC Y RWY 32L. See Appendix A7.

**4 IMPLEMENTATION DATE**

4.1 This AIP Supplement and the relevant charts will become effective at 0001UTC on 07 January 2016. A trigger NOTAM will be issued to alert users on the implementation of the ILS CAT I and CAT II for RWY 14R and RWY 32L procedures.

**CANCELLATION**

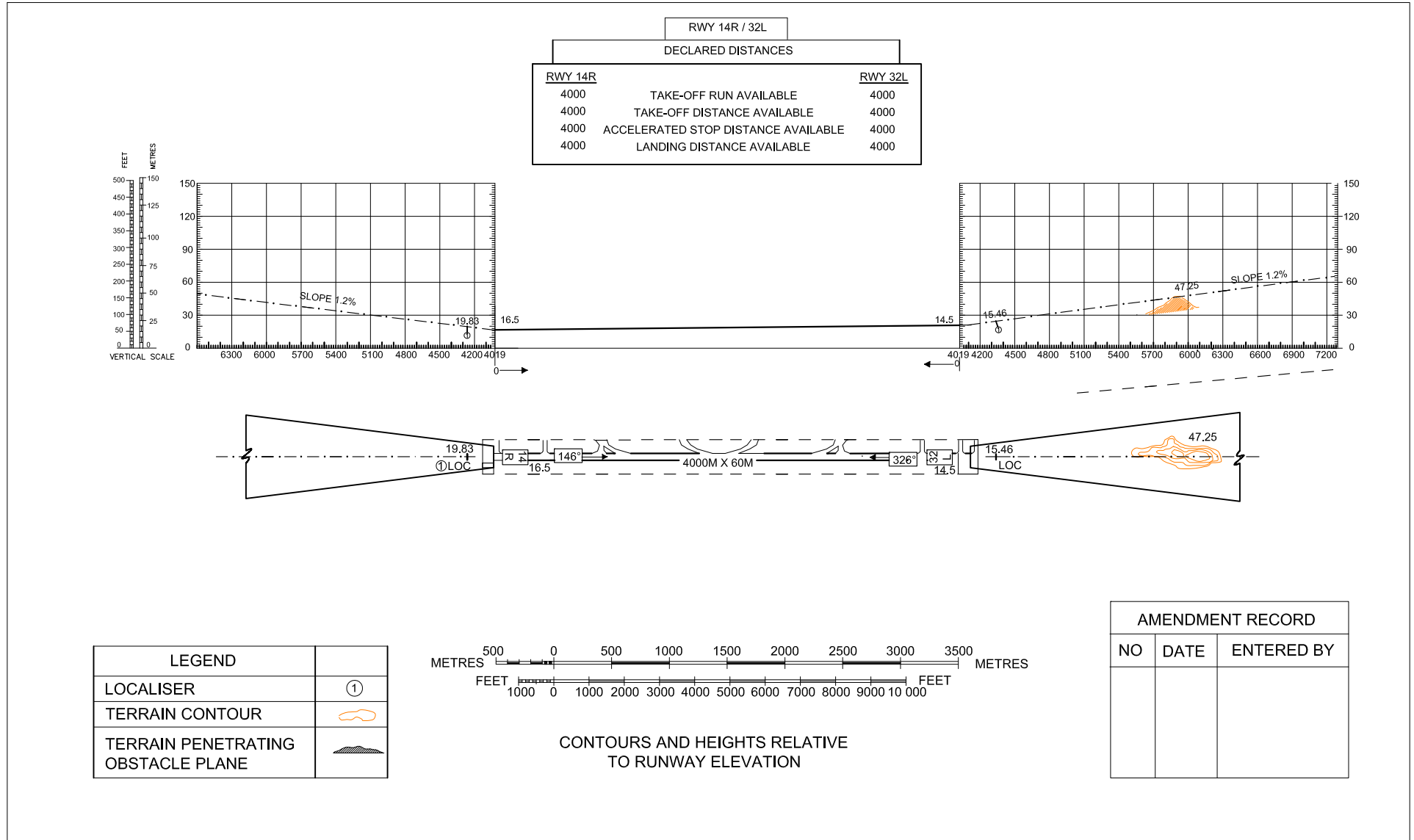
This AIP Supplement will remain current until the information is published in AIP Malaysia.

**DATO' SRI AZHARUDDIN ABDUL RAHMAN**  
**Director General**  
**Department of Civil Aviation**  
**Malaysia**

# AERODROME OBSTACLE CHART - ICAO TYPE A ( OPERATING LIMITATIONS)

SEPANG (WMKK)  
KL INTERNATIONAL AIRPORT  
RUNWAY 14R / 32L

DIMENSIONS AND ELEVATION IN METRES  
MAGNETIC VARIATION 0° W 2015

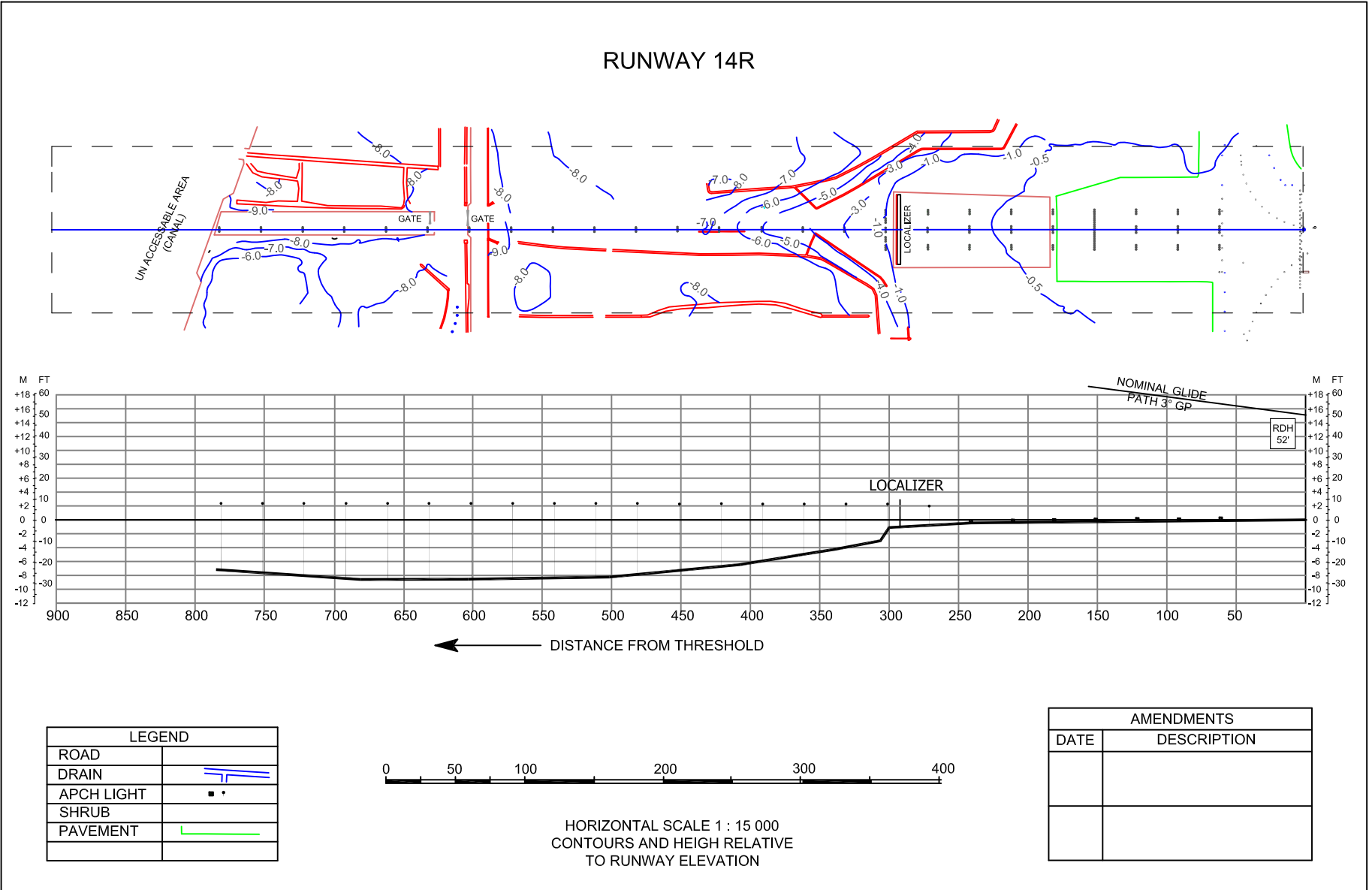


PRECISION APPROACH TERRAIN - ICAO

KL INTERNATIONAL AIRPORT  
SELANG

DISTANCE IN METERS  
HEIGHT IN FEET AND METERS

RUNWAY 14R

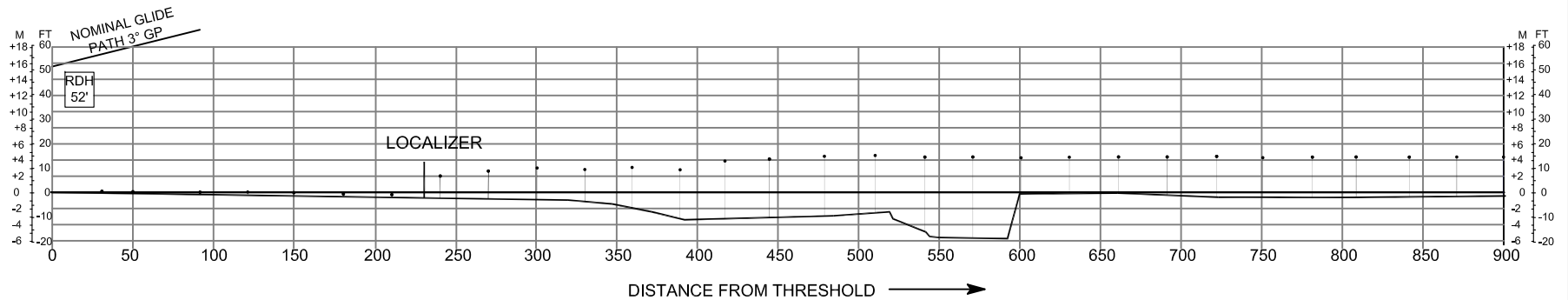
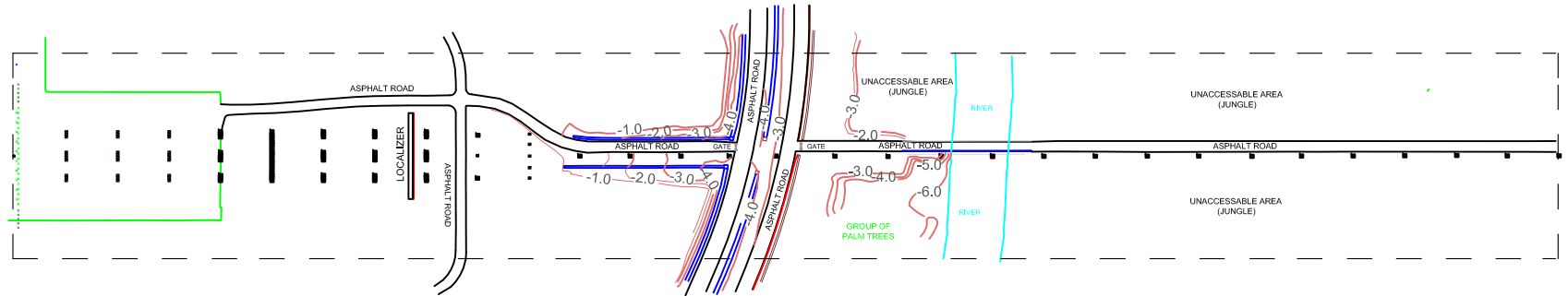


PRECISION APPROACH TERRAIN - ICAO

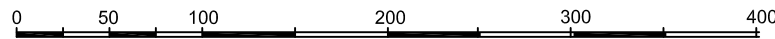
KL INTERNATIONAL AIRPORT  
SELANG

DISTANCE IN METERS  
HEIGHT IN FEET AND METERS

RUNWAY 32L

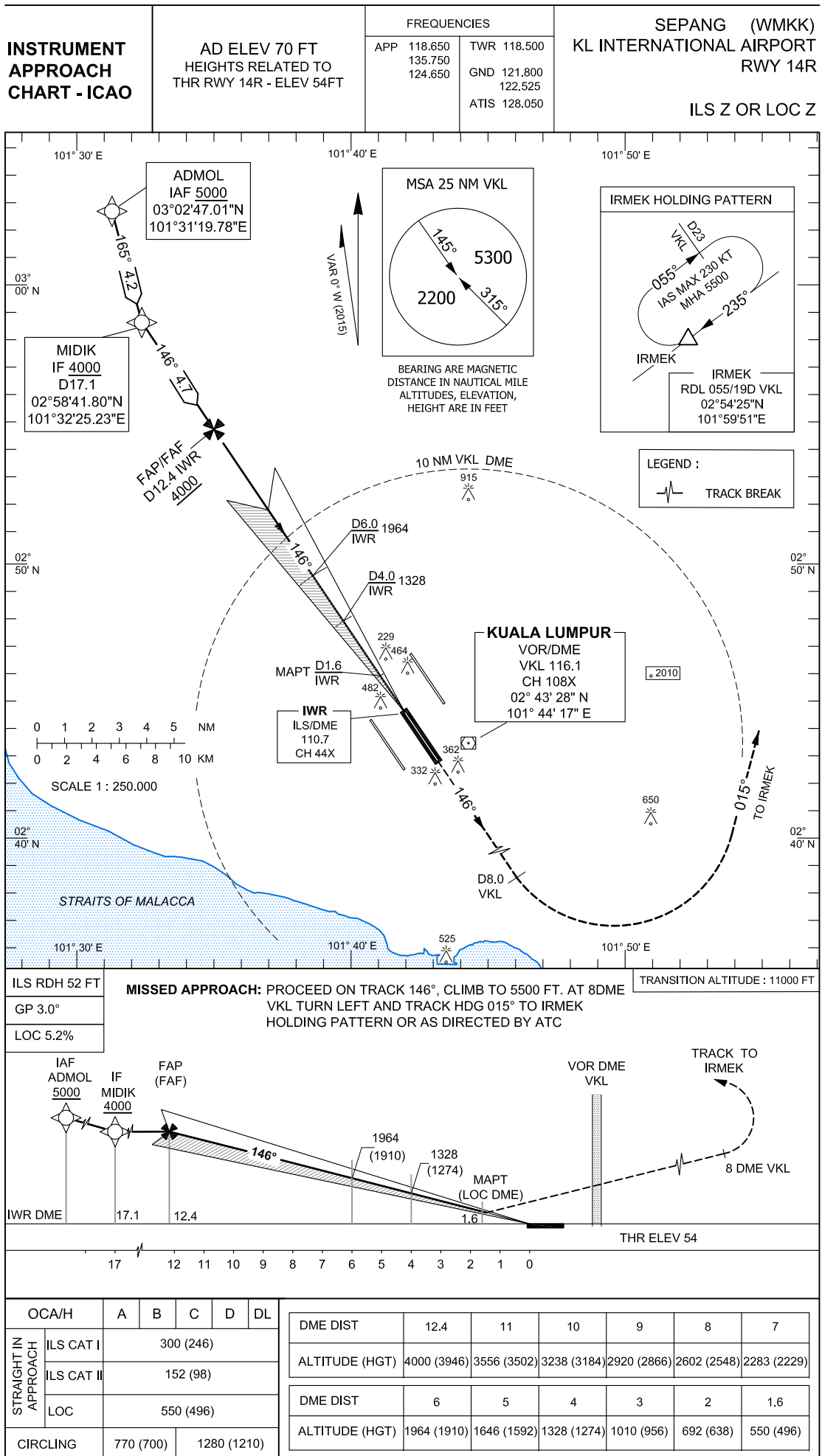


LEGEND	
ROAD	
DRAIN	
APCH LIGHT	
SHRUB	
PAVEMENT	



HORIZONTAL SCALE 1 : 15 000  
CONTOURS AND HEIGH RELATIVE  
TO RUNWAY ELEVATION

AMENDMENTS	
DATE	DESCRIPTION



**INSTRUMENT** AERODROME ELEV 70 FT  
**APPROACH** HEIGHTS RELATED TO  
**CHART - ICAO** THR RWY 14R - ELEV 54 FT

**SEPANG (WMKK)**  
**KL INTERNATIONAL AIRPORT**  
**ILS-Z RWY 14R**

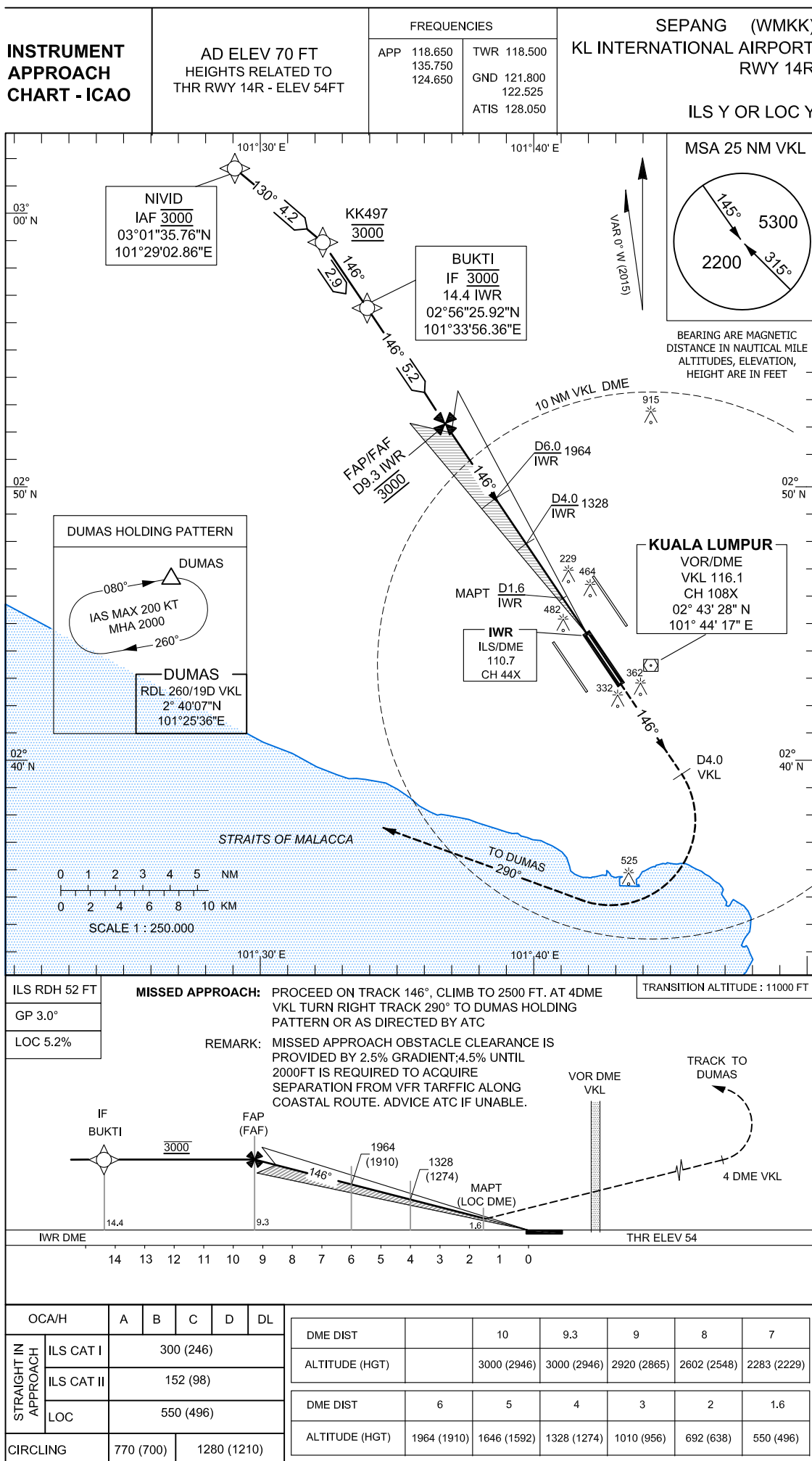
**TABULAR DESCRIPTION (INITIAL APPROACH FROM ADMOL)**  
**ILS-Z RWY 14R**

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course /Track °M	Distance (NM)	Turn Direction	Altitude	Speed Limit (kt)	Recomanded Navaid	VPA/ TCH	Navigation Specification
1	IF	ADMOL	-	-	-	-	+5000	210	-	-	RNAV1
2	TF	MIDIK	-	165°	4.2	-	+4000	180	-	-	RNAV1

**WAYPOINT LIST**  
**ILS-Z RWY 14R**

Waypoint Identifier	Coordinates
VKL VOR/DME	02°43'28.00"N 101°44'17.00"E
ADMOL (IAF)	03°02'47.01"N 101°31'19.78"E
MIDIK (IF) D17.1 IWR	02°58'41.80"N 101°32'25.23"E
FAP / FAF D12.4 IWR	02°54'46.80"N 101°35'03.00"E
MAPT D1.6 IWR	02°45'47.70"N 101°41'04.50"E
INT TR 146°/D8.0 VKL	02°36'08.00"N 101°47'33.20"E
IRMEK (MAHF) R-055/D19.0 VKL	02°54'25.00"N 101°59'51.00"E





ILS RDH 52 FT	<b>MISSED APPROACH:</b> PROCEED ON TRACK 146°, CLIMB TO 2500 FT. AT 4DME VKL TURN RIGHT TRACK 290° TO DUMAS HOLDING PATTERN OR AS DIRECTED BY ATC	TRANSITION ALTITUDE : 11000 FT
GP 3.0°		<b>REMARK:</b> MISSED APPROACH OBSTACLE CLEARANCE IS PROVIDED BY 2.5% GRADIENT; 4.5% UNTIL 2000FT IS REQUIRED TO ACQUIRE SEPARATION FROM VFR TRAFFIC ALONG COASTAL ROUTE. ADVICE ATC IF UNABLE.
LOC 5.2%		

**INSTRUMENT** AERODROME ELEV 70 FT  
**APPROACH** HEIGHTS RELATED TO  
**CHART - ICAO** THR RWY 14R - ELEV 54 FT

**SEPANG (WMKK)**  
**KL INTERNATIONAL AIRPORT**  
**ILS-Y RWY 14R**

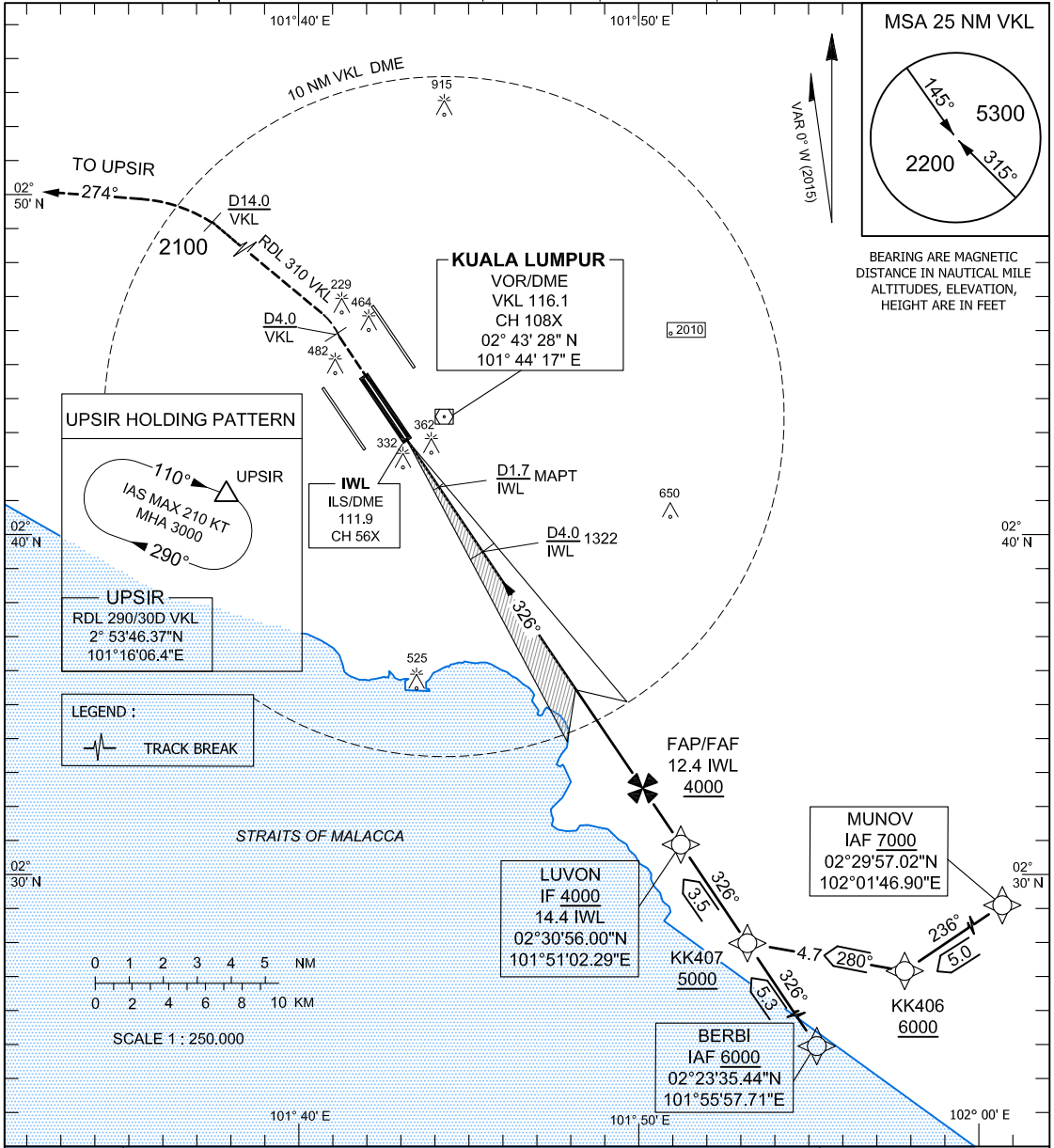
**TABULAR DESCRIPTION (INITIAL APPROACH FROM NIVID)**  
**ILS-Y RWY 14R**

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course /Track °M	Distance (NM)	Turn Direction	Altitude	Speed Limit (kt)	Recomanded Navaid	VPA/ TCH	Navigation Specification
1	IF	NIVID	-	-	-	-	@3000	210	-	-	RNAV1
2	TF	KK497	-	130°	4.2	R	@3000	-	-	-	RNAV1
3	TF	BUKTI	-	146°	2.9	-	@3000	180	-	-	RNAV1

**WAYPOINT LIST**  
**ILS-Y RWY 14R**

Waypoint Identifier	Coordinates
VKL VOR/DME	02°43'28.00"N 101°44'17.00"E
NIVID (IAF)	03°01'35.76"N 101°29'02.86"E
BUKTI (IF) D14.4 IWR	02°56'25.92"N 101°33'56.36"E
FAP / FAF D9.3 IWR	02°52'09.90"N 101°36'48.20"E
MAPT D1.6 IWR	02°45'47.70"N 101°41'04.50"E
INT TR 146°/D4.0 VKL	02°39'34.00"N 101°45'14.90"E
DUMAS (MAHF) R-260/D19.0 VKL	02°40'07.00"N 101°25'36.00"E

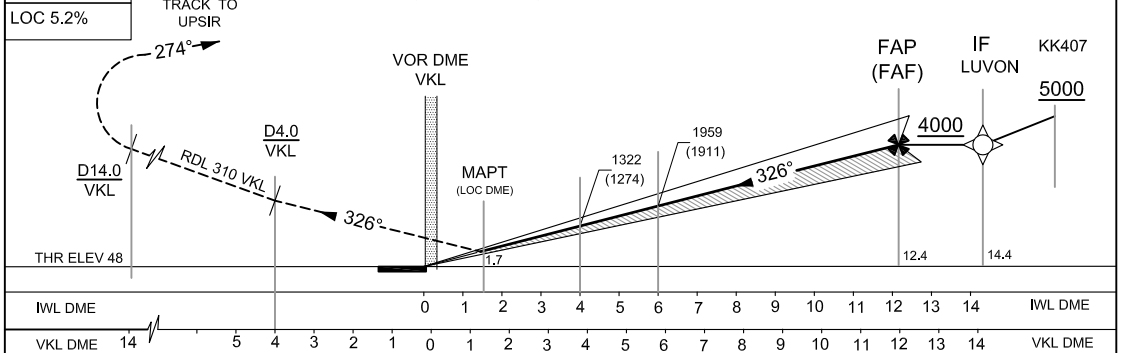
<b>INSTRUMENT APPROACH CHART - ICAO</b>	AD ELEV 70 FT HEIGHTS RELATED TO THR RWY 32L - ELEV 48FT	FREQUENCIES		SEPANG (WMKK) KL INTERNATIONAL AIRPORT RWY 32L  ILS Z OR LOC Z
		APP 118.650 135.750 124.650	TWR 118.500 GND 121.800 122.525 ATIS 128.050	



ILS RDH 52 FT  
GP 3°  
LOC 5.2%

**MISSED APPROACH:** PROCEED ON TRACK 326°, CLIMB TO 3000 FT. AT 4DME VKL TURN LEFT ON RDL 310° VKL. AT D14 VKL TURN LEFT TRACK 274° TO UPSIR HOLDING PATTERN OR AS DIRECTED BY ATC

TRANSITION ALTITUDE : 11000 FT



OCA/H	A	B	C	D	DL								
STRAIGHT IN APPROACH	ILS CAT I	288 (240)					DME DIST	12.4	11	10	9	8	7
	ILS CAT II	153 (105)					ALTITUDE (HGT)	4000 (3952)	3551 (3503)	3232 (3184)	2914 (2866)	2596 (2548)	2277 (2229)
	LOC	570 (522)					DME DIST	6	5	4	3	2	1.7
CIRCLING	770 (700)		1280 (1210)			ALTITUDE (HGT)	1959 (1911)	1640 (1592)	1322 (1274)	1003 (955)	685 (637)	570 (522)	

**INSTRUMENT** AERODROME ELEV 70 FT  
**APPROACH** HEIGHTS RELATED TO  
**CHART - ICAO** THR RWY 32L - ELEV 48 FT

**SEPANG (WMKK)**  
**KL INTERNATIONAL AIRPORT**  
**ILS-Z RWY 32L**

**TABULAR DESCRIPTION (INITIAL APPROACH FROM MUNOV)**  
**ILS-Z RWY 32L**

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course /Track °M	Distance (NM)	Turn Direction	Altitude	Speed Limit (kt)	Recomanded Navaid	VPA/ TCH	Navigation Specification
1	IF	MUNOV	-	-	-	-	+7000	210	-	-	RNAV1
2	TF	KK406	-	263°	5.0	R	+6000	-	-	-	RNAV1
3	TF	KK407	-	280°	4.7	-	+5000	-	-	-	RNAV1
4	TF	LUVON	-	326°	3.5	-	+4000	180	-	-	RNAV1

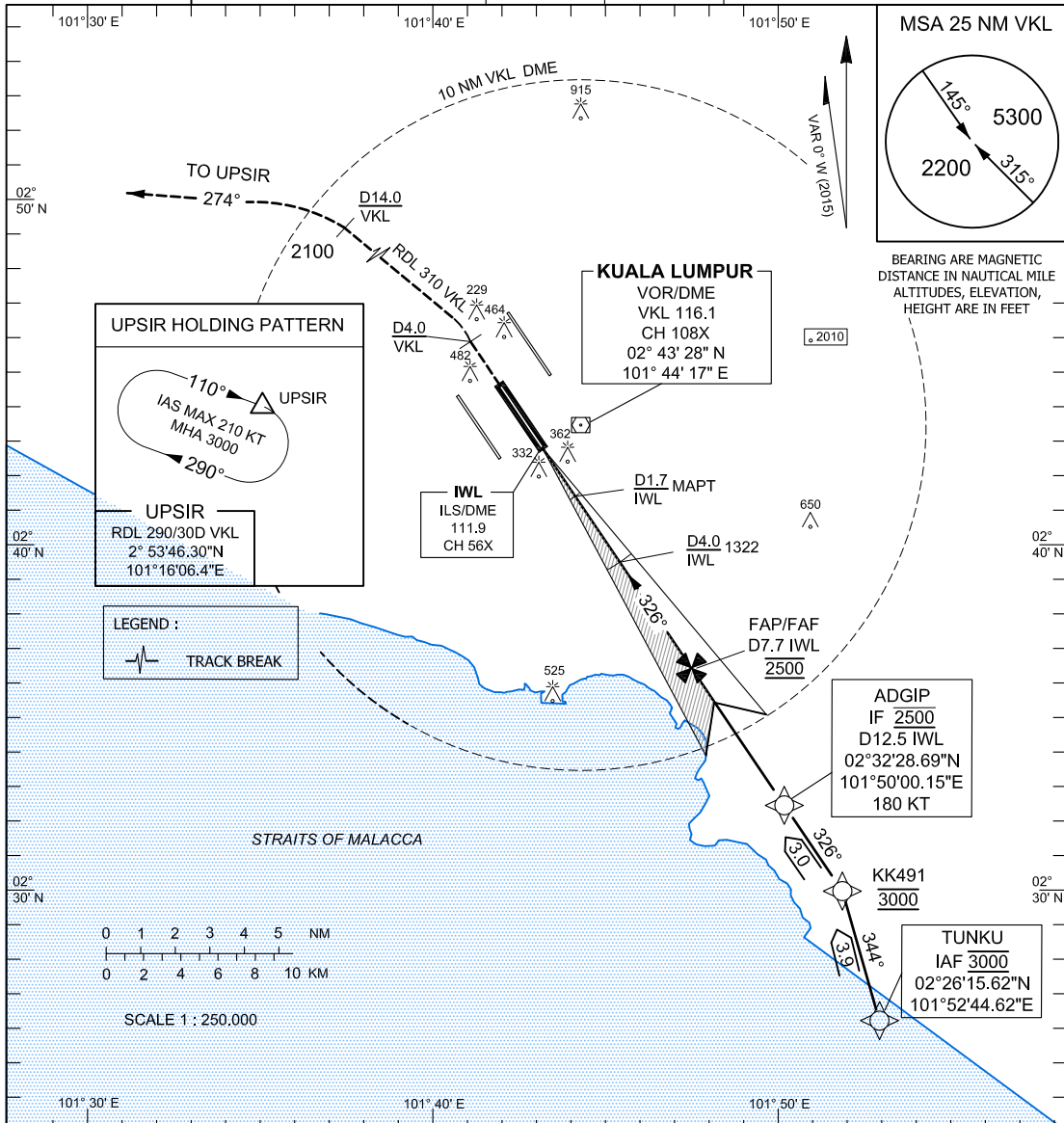
**TABULAR DESCRIPTION (INITIAL APPROACH FROM BERBI)**  
**ILS-Z RWY 32L**

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course /Track °M	Distance (NM)	Turn Direction	Altitude	Speed Limit (kt)	Recomanded Navaid	VPA/ TCH	Navigation Specification
1	IF	BERBI	-	-	-	-	+6000	210	-	-	RNAV1
2	TF	KK407	-	326°	5.3	-	+5000	-	-	-	RNAV1
3	TF	LUVON	-	326°	3.5	-	+4000	180	-	-	RNAV1

**WAYPOINT LIST**  
**ILS-Z RWY 32L**

Waypoint Identifier	Coordinates
VKL VOR/DME	02°43'28.00"N 101°44'17.00"E
MUNOV (IAF)	02°29'57.02"N 102°01'46.90"E
BERBI (IAF)	02°23'35.44"N 101°55'57.71"E
KK406	02°27'10.17"N 101°57'37.60"E
KK407	02°28'01.20"N 101°52'59.52"E
LUVON (IF) D14.4 IWL	02°30'56.00"N 101°51'02.29"E
FAP / FAF D12.4 IWL	02°32'36.10"N 101°49'55.40"E
MAPT D1.7 IWL	02°41'31.10"N 101°43'56.70"E
INT TR 326°/D4.0 VKL	02°45'49.90"N 101°41'03.10"E
RDL 310°/D14.0 VKL	02°52'30.60"N 101°33'33.90"E
UPSIR (MAHF) R-260/D19.0 VKL	02°53'46.30"N 101°16'06.40"E

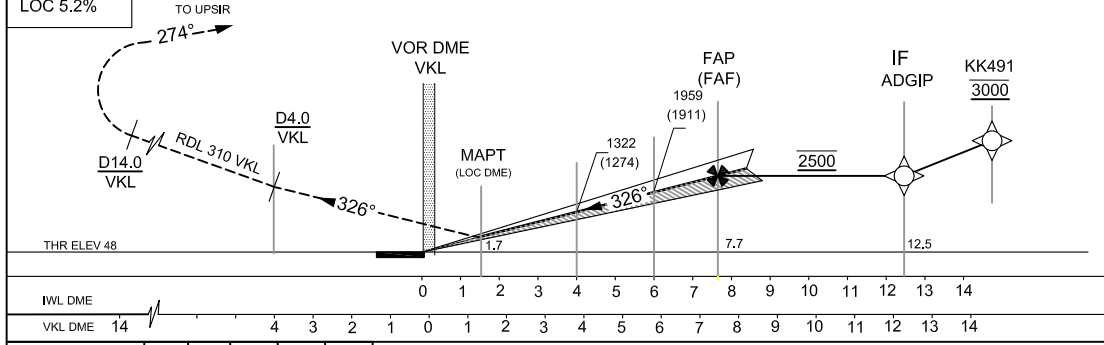
<b>INSTRUMENT APPROACH CHART - ICAO</b>	AD ELEV 70 FT HEIGHTS RELATED TO THR RWY 32L - ELEV 48FT	FREQUENCIES		SEPANG (WMKK) KL INTERNATIONAL AIRPORT RWY 32L  ILS Y OR LOC Y
		APP 118.650 135.750 124.650	TWR 118.500 GND 121.800 122.525 ATIS 128.050	



ILS RDH 52 FT  
GP 3°  
LOC 5.2%

**MISSED APPROACH:** PROCEED ON TRACK 326°, CLIMB TO 3000 FT. AT 4DME VKL TURN LEFT ON RDL 310° VKL. AT D14 VKL TURN LEFT TRACK 274° TO UPSIR HOLDING PATTERN OR AS DIRECTED BY ATC

TRANSITION ALTITUDE : 11000 FT



OCA/H	A	B	C	D	DL
STRAIGHT IN APPROACH	ILS CAT I	288 (240)			
	ILS CAT II	153 (105)			
	LOC	570 (522)			
CIRCLING	770 (700)		1280 (1210)		

DME DIST	8	7.7	7	6
ALTITUDE (HGT)	2500 (2452)	2500 (2452)	2277 (2229)	1959 (1911)

DME DIST	5	4	3	2	1.7
ALTITUDE (HGT)	1640 (1592)	1322 (1274)	1003 (955)	685 (637)	570 (522)

**INSTRUMENT** AERODROME ELEV 70 FT  
**APPROACH** HEIGHTS RELATED TO  
**CHART - ICAO** THR RWY 32L - ELEV 48 FT

**SEPANG (WMKK)**  
**KL INTERNATIONAL AIRPORT**  
**ILS-Y RWY 32L**

**TABULAR DESCRIPTION (INITIAL APPROACH FROM TUNKU)**  
**ILS-Y RWY 32L**

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course /Track °M	Distance (NM)	Turn Direction	Altitude	Speed Limit (kt)	Recomanded Navaid	VPA/ TCH	Navigation Specification
1	IF	TUNKU	-	-	-	-	@3000	210	-	-	RNAV1
2	TF	KK491	-	344°	3.9	-	@3000	-	-	-	RNAV1
3	TF	ADGIP	-	326°	3.0	L	@2500	180	-	-	RNAV1

**WAYPOINT LIST**  
**ILS-Y RWY 32L**

Waypoint Identifier	Coordinates
VKL VOR/DME	02°43'28.00"N 101°44'17.00"E
TUNKU (IAF)	02°26'15.62"N 101°52'44.62"E
KK491	02°29'58.83"N 101°51'40.61"E
ADGIP (IF) D12.5 IWL	02°32'28.69"N 101°50'00.15"E
FAP / FAF D7.7 IWL	02°36'31.30"N 101°47'17.50"E
MAPT D1.7 IWL	02°41'31.10"N 101°43'56.70"E
INT TR 326°/D4.0 VKL	02°45'49.90"N 101°41'03.10"E
RDL 310°/D14.0 VKL	02°52'30.60"N 101°33'33.90"E
UPSIR (MAHF) R-290/D30.0 VKL	02°53'46.30"N 101°16'06.40"E