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02 MAR
AIRAC

KUALA LUMPUR FLIGHT INFORMATION REGION

KL INTERNATIONAL/SEPANG AIRPORT INTRODUCTION OF NEW BARO-VNAV INSTRUMENT APPROACH PROCEDURES

(This AIP Supplement replaces AIP Supplement 26/2015 dated 24 Dec 2015 and NOTAM A0229/16)

1 INTRODUCTION

- 1.1 The purpose of this AIP Supplement is to notify the aviation industry of the introduction of new APV/Baro-VNAV Instrument Approach Procedures for Kuala Lumpur International Airport/ Sepang.
- 1.2 The information provided in this AIP Supplement is presented in an ICAO format similar to that applicable to the Aeronautical Information Publication.

2 INSTRUMENT FLIGHT PROCEDURES

- 2.1 New Instrument Approach Charts RNAV (GNSS) are introduced and are shown as follow:

APPENDIX - A1 INSTRUMENT APPROACH CHART - ICAO - RNAV (GNSS) RWY 14L
APPENDIX - A2 INSTRUMENT APPROACH CHART - ICAO - RNAV Y (GNSS) RWY 14R
APPENDIX - A3 INSTRUMENT APPROACH CHART - ICAO - RNAV Z (GNSS) RWY 14R
APPENDIX - A4 INSTRUMENT APPROACH CHART - ICAO - RNAV (GNSS) RWY 15
APPENDIX - A5 INSTRUMENT APPROACH CHART - ICAO - RNAV Y (GNSS) RWY 32L
APPENDIX - A6 INSTRUMENT APPROACH CHART - ICAO - RNAV Z (GNSS) RWY 32L
APPENDIX - A7 INSTRUMENT APPROACH CHART - ICAO - RNAV (GNSS) RWY 32R
APPENDIX - A8 INSTRUMENT APPROACH CHART - ICAO - RNAV (GNSS) RWY 33

- 2.2 The following Charts pertaining to Sepang KL International Airport in AIP SUPP Malaysia 10/2014 are superseded and withdrawn:

APPENDIX - G8 INSTRUMENT APPROACH CHART - ICAO- RNAV Z (GNSS) RWY 14R
APPENDIX - G9 INSTRUMENT APPROACH CHART - ICAO- RNAV Y (GNSS) RWY 14R
APPENDIX - G12 INSTRUMENT APPROACH CHART - ICAO- RNAV (GNSS) RWY 15
APPENDIX - G17 INSTRUMENT APPROACH CHART - ICAO- RNAV Z (GNSS) RWY 32L
APPENDIX - G18 INSTRUMENT APPROACH CHART - ICAO- RNAV Y (GNSS) RWY 32L
APPENDIX - G24 INSTRUMENT APPROACH CHART - ICAO- RNAV (GNSS) RWY 33

3 NEW IFR HOLDINGS

3.1 New Holding areas for IFR aircraft are implemented. The details are as follows:

| HLDG ID/FIX/WPT COORDINATES | INBD TR (°MAG) | DIRECTION of PTN | MAX IAS (KTS) | MNM-MAX HLDG LVL FL/FT (MSL) | TIME (MIN) DIST OUBD | Controlling unit and frequency |
|---|---------------------------|-----------------------------|----------------------|---|---------------------------------|---|
| EKUDA (MA holding) 025420N 1012529E | 056° | Right | 230 | 3 000 FT - 8 000 FT | 1 min | Lumpur Radar 124.200 MHz |
| KIDOT (MA holding) R-346/20.4 DME VKL 030320N 1013922E | 236° | Right | 210 | 5 000 FT - 8 000 FT | 1 min | Lumpur Radar 118.650 MHz |

4 IMPLEMENTATION

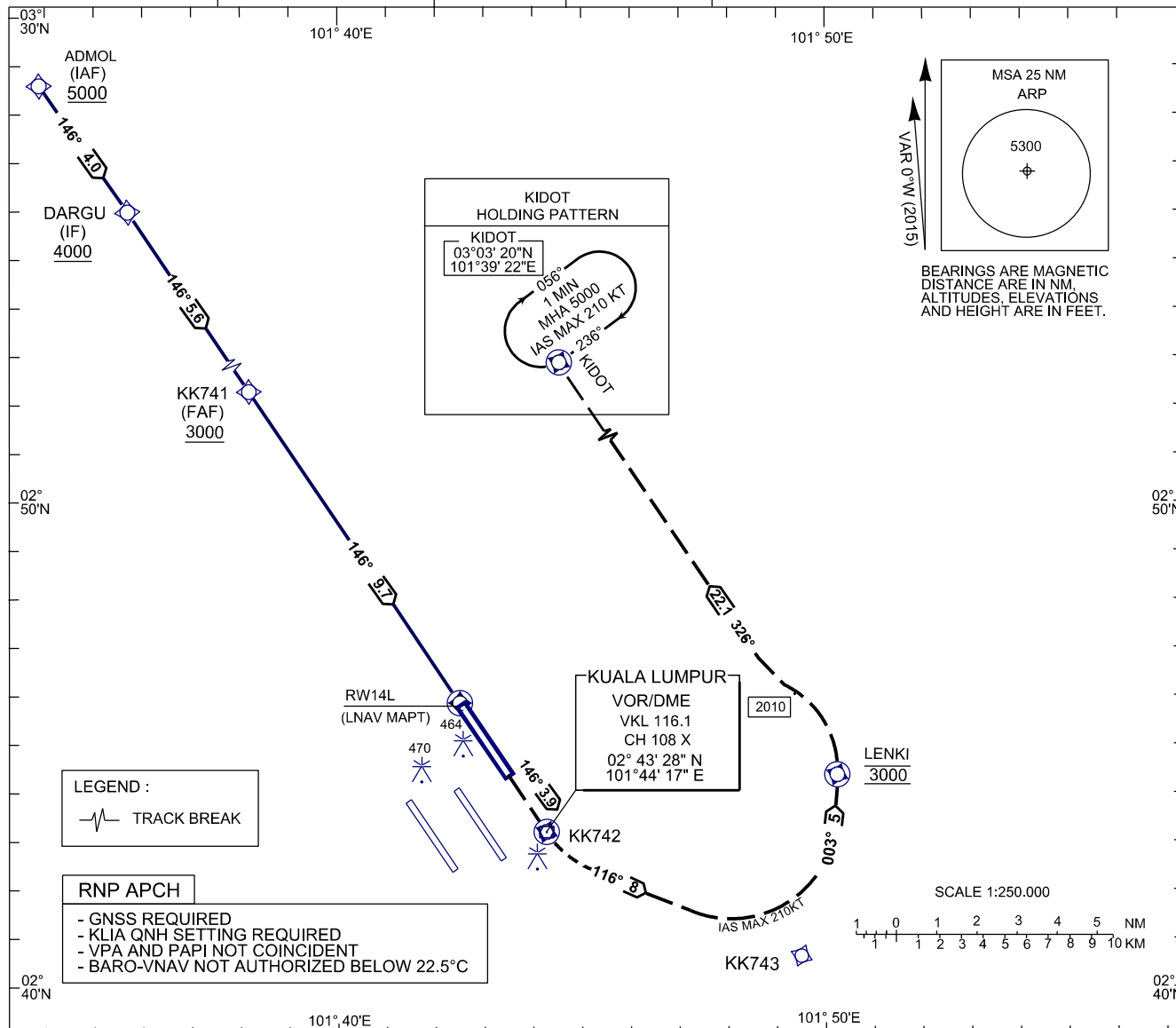
4.1 This AIP Supplement and relevant charts will become effective on 31 March 2016 at 0001 UTC. A trigger NOTAM will be issued to alert users on the implementation of changes to operation, procedures and facilities.

5 CANCELLATION

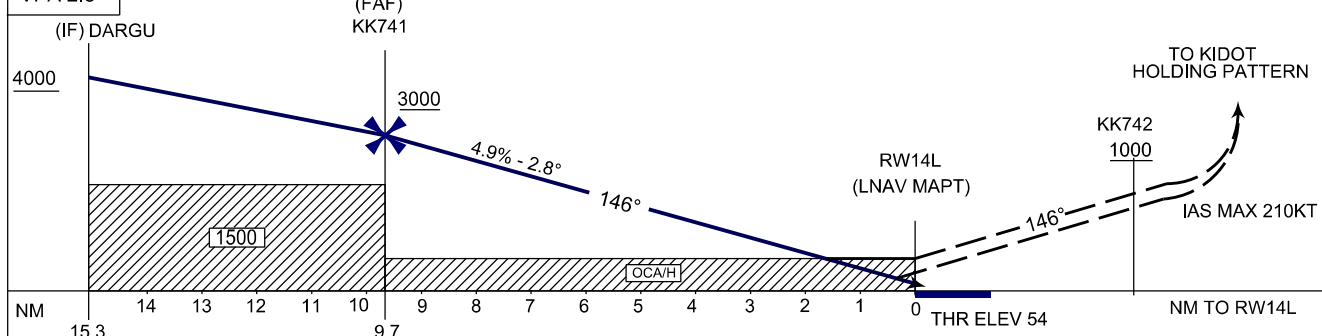
5.1 This AIP Supplement will remain current until the information is published in AIP Malaysia.

DATO' SRI AZHARUDDIN ABDUL RAHMAN
Director General
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| | | | | | | |
|--|------------------------------|-------------|--------------|--|--|---|
| INSTRUMENT APPROACH CHART - ICAO | AD ELEV 70 FT THR ELEV 54 | FREQUENCIES | | | | SEPANG (WMKK) KL INTERNATIONAL AIRPORT RWY 14L RNAV (GNSS) |
| | | APP 118.650 | TWR 118.800 | | | |
| | | 135.750 | GND 121.650 | | | |
| | | 120.350 | ATIS 126.250 | | | |



TRANSITION ALT 11000 MISSED APPROACH : PROCEED ON TR 146° CLIMBING INITIALLY TO 3000 FT. AT KK742 TURN LEFT TO KK743 THEN TURN LEFT (IAS MAX 210KT) TO LENKI. AT LENKI, CLIMBING TO 5000 FT, TURN LEFT TO TR326° BOUND TO KIDOT HOLDING PATTERN.



| | | | | | | |
|----------------------|-----------|----------|----------|------------|----------|----|
| OCA (OCH) | | A | B | C | D | DL |
| STRAIGHT IN APPROACH | LNAV | 700(650) | | | | |
| | LNAV/VNAV | 430(380) | 440(390) | 450(400) | 460(410) | |
| (*) CIRCLING | | 840(770) | | 1260(1190) | | |

| ALTITUDE / HEIGHT ON FINAL APPROACH | | | | | |
|-------------------------------------|------------|------------|------------|------------|------------|
| NM TO RWY14L | 9 | 8 | 7 | 6 | 5 |
| ALTITUDE (HGT) | 2792(2738) | 2495(2441) | 2198(2144) | 1901(1847) | 1604(1550) |
| NM TO RWY4L | 4 | 3 | 2 | 1 | |
| ALTITUDE (HGT) | 1307(1253) | 1010(956) | 713(659) | | |

(*) CIRCLING NOT PERMITTED EAST OF RWY 14L/32R CENTERLINE, EXCEPT WHEN AUTHORIZED BY ATC

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

SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV (GNSS) RWY 14L

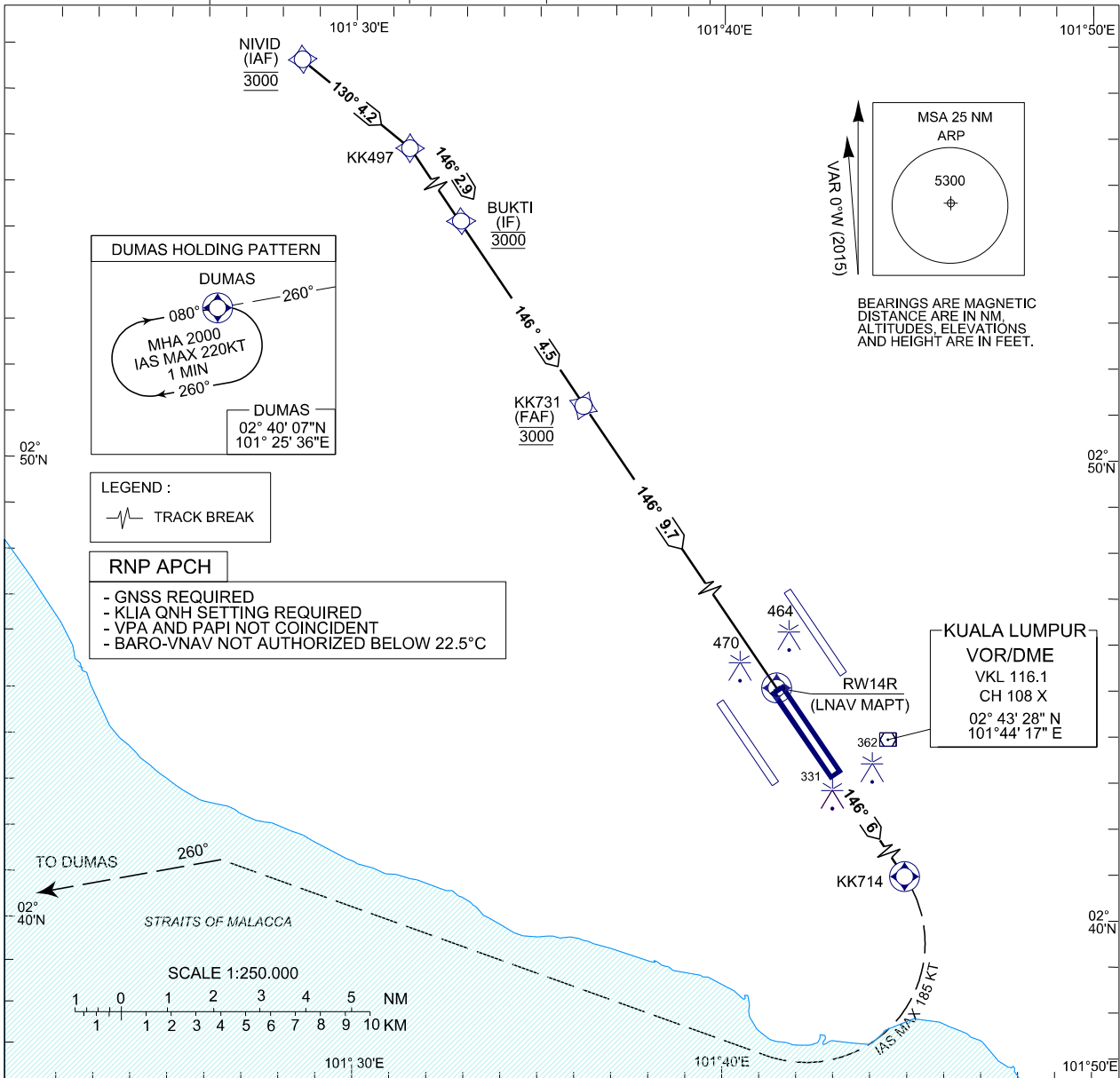
TABULAR DESCRIPTION
RNAV (GNSS) RWY 14L

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | ADMOL | - | - | - | - | +5000 | 210 | - | - | RNAV 1 |
| 2 | TF | DARGU | - | 146° | 4.0 | - | +4000 | 180 | - | - | RNAV 1 |
| 3 | TF | KK741 (FAF) | - | 146° | 5.4 / 5.6 | - | +3000 | - | - | - | RNP APCH |
| 4 | TF | RW14L (MAPt LNAV) | Y | 146° | 9.7 | - | +700 | - | - | 2.8° /52 | RNP APCH |
| 5 | TF | KK742 | Y | 146° | 3.9 | - | +1000 | - | - | - | RNP APCH |
| 6 | TF | KK743 | - | 116° | 8.0 | L | - | 210 | - | - | RNP APCH |
| 7 | TF | LENKI | Y | 003° | 5.0 | L | @3000 | 210 | - | - | RNP APCH |
| 8 | TF | KIDOT | Y | 326° | 22.1 | - | +5000 | - | VKL VOR/ DME | - | RNP APCH |
| 9 | HM | KIDOT | - | 236° | - | R | +5000 | 210 | - | - | RNP APCH |

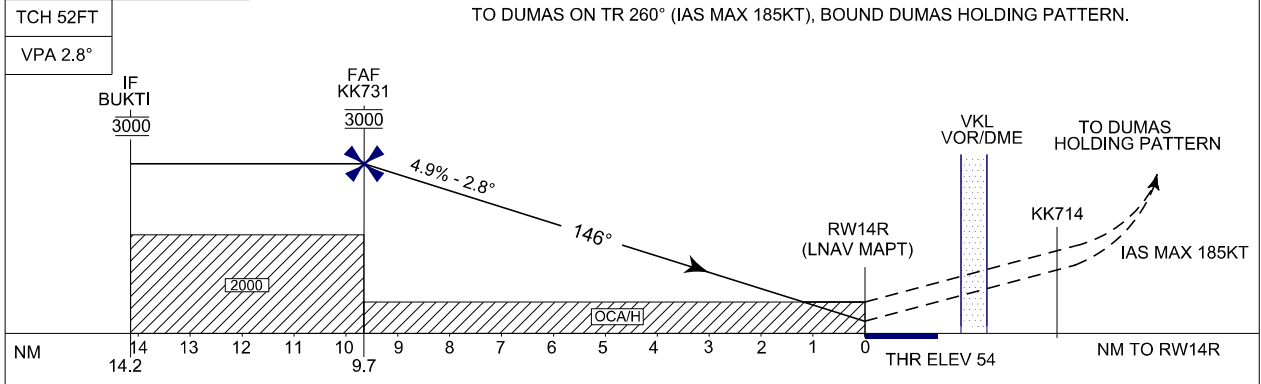
WAYPOINT LIST
RNAV (GNSS) RWY 14L

| Waypoint Identifier | Coordinates |
|---------------------|------------------------------|
| ADMOL | 03°02'47.01"N 101°31'19.78"E |
| DARGU | 02°59'27.00"N 101°33'34.00"E |
| KK741 | 02°54'49.22"N 101°36'40.13"E |
| RW14L | 02°46'42.52"N 101°42'06.67"E |
| KK742 | 0243'28.00"N 101°44'17.00"E |
| KK743 | 02°39'56.53"N 101°51'28.11"E |
| LENKI | 02°44'56.12"N 101°51'44.24"E |
| KIDOT | 03°03'20.00"N 101°39'22.00"E |

| | | | | |
|----------------------------------|------------------------------|-----------------------------------|---|---|
| INSTRUMENT APPROACH CHART - ICAO | AD ELEV 70 FT THR ELEV 54 | FREQUENCIES | | SEPANG (WMKK) KL INTERNATIONAL AIRPORT RWY 14R RNAV-Y (GNSS) |
| | | APP 124.200 119.450 124.650 | TWR 118.500 GND 121.800 122.525 ATIS 126.250 | |



TRANSITION ALT 11000 **MISSED APPROACH** : CLIMB TO 2000 FT. PROCEED TO KK714 ON TR 146°, AT KK714 TURN RIGHT TO DUMAS ON TR 260° (IAS MAX 185KT), BOUND DUMAS HOLDING PATTERN.



| | | | | | | |
|----------------------|-----------|----------|------------|----------|---|----|
| OCA (OCH) | | A | B | C | D | DL |
| STRAIGHT IN APPROACH | LNAV | 670(620) | | | | |
| | LNAV/VNAV | 580(530) | 590(540) | 600(550) | | |
| (*) CIRCLING | | 840(770) | 1260(1190) | | | |

| ALTITUDE / HEIGHT ON FINAL APPROACH | | | | |
|-------------------------------------|------------|------------|------------|------------|
| NM TO RW14R | 8 | 7 | 6 | 5 |
| ALTITUDE (HGT) | 2676(2622) | 2351(2297) | 2027(1973) | 1703(1649) |
| NM TO RW14R | 4 | 3 | 2 | |
| ALTITUDE (HGT) | 1379(1325) | 1055(1001) | 731(677) | |

(*) CIRCLING NOT PERMITTED EAST OF RWY 14R/32L CENTERLINE, EXCEPT WHEN AUTHORIZED BY ATC

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

SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV-Y (GNSS) RWY 14R

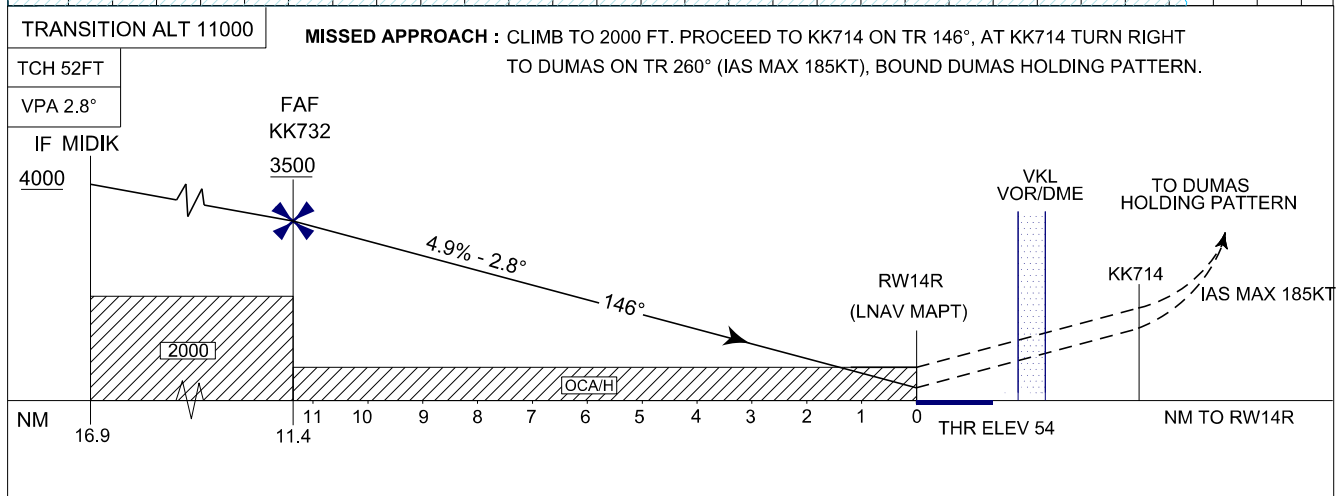
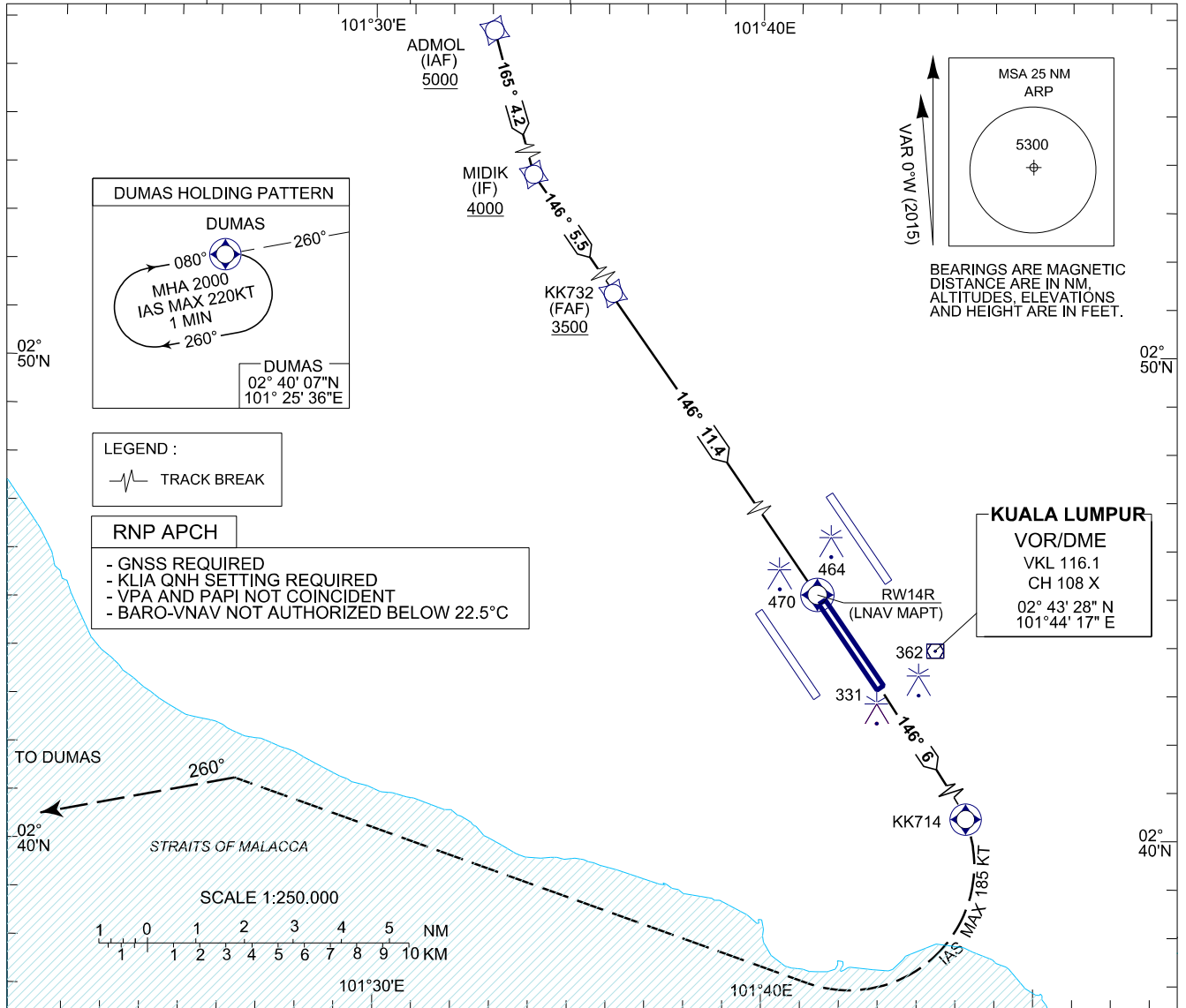
TABULAR DESCRIPTION
RNAV-Y (GNSS) RWY 14R

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | NIVID | - | - | - | - | @3000 | 210 | - | - | RNAV 1 |
| 2 | TF | KK497 | | 130° | - | - | - | - | - | - | RNAV 1 |
| 3 | TF | BUKTI | - | 146° | - | - | @3000 | 180 | - | - | RNAV 1 |
| 4 | TF | KK731 (FAF) | - | 146° | 4.5 | - | @3000 | - | - | - | RNP APCH |
| 5 | TF | RW14R (MAPt LNAV) | Y | 146° | 9.7 | - | +670 | - | - | 2.8° /52 | RNP APCH |
| 6 | TF | KK714 | Y | 146° | 6.0 | - | +1400 | - | - | - | RNP APCH |
| 7 | CF | DUMAS | Y | 260° | - | R | +2000 | 185 | VKL VOR/ DME | - | RNP APCH |
| 8 | HM | DUMAS | - | 080° | - | R | +2000 | 220 | - | - | RNP APCH |

WAYPOINT LIST
RNAV-Y (GNSS) RWY 14R

| Waypoint Identifier | Coordinates |
|---------------------|------------------------------|
| NIVID | 03°01'35.76"N 101°29'02.86"E |
| KK497 | 02°58'55.81"N 101°32'15.84"E |
| BUKTI | 02°56'25.92"N 101°33'56.36"E |
| KK731 | 02°52'41.96"N 101°36'25.10"E |
| RW14R | 02°44'35.84"N 101°41'52.63"E |
| KK714 | 02°39'33.95"N 101°45'14.85"E |
| DUMAS | 02°40'07.00"N 101°25'36.00"E |

| | | | | |
|----------------------------------|------------------------------|-----------------------------------|---|---|
| INSTRUMENT APPROACH CHART - ICAO | AD ELEV 70 FT THR ELEV 54 | FREQUENCIES | | SEPANG (WMKK) KL INTERNATIONAL AIRPORT RWY 14R RNAV-Z (GNSS) |
| | | APP 124.200 119.450 124.650 | TWR 118.500 GND 121.800 122.525 ATIS 126.250 | |



| | | | | | | | | | | | | | |
|----------------------|-----------|----------|------------|----------|---|----|-------------------------------------|----------------|------------|------------|------------|------------|---|
| OCA (OCH) | | A | B | C | D | DL | ALTITUDE / HEIGHT ON FINAL APPROACH | | | | | | |
| STRAIGHT IN APPROACH | LNAV | 670(620) | | | | | NM TO RW14R | 10 | 9 | 8 | 7 | 6 | |
| | LNAV/VNAV | 580(530) | 590(540) | 600(550) | | | ALTITUDE (HGT) | 3084(3030) | 2787(2733) | 2490(2436) | 2193(2139) | 1896(1842) | |
| (* CIRCLING) | | 840(770) | 1260(1190) | | | | | NM TO RW14R | 5 | 4 | 3 | 2 | 1 |
| | | | | | | | | ALTITUDE (HGT) | 1599(1545) | 1302(1248) | 1005(951) | 708(654) | |

(* CIRCLING NOT PERMITTED EAST OF RWY 14R/32L CENTERLINE, EXCEPT WHEN AUTHORIZED BY ATC)

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

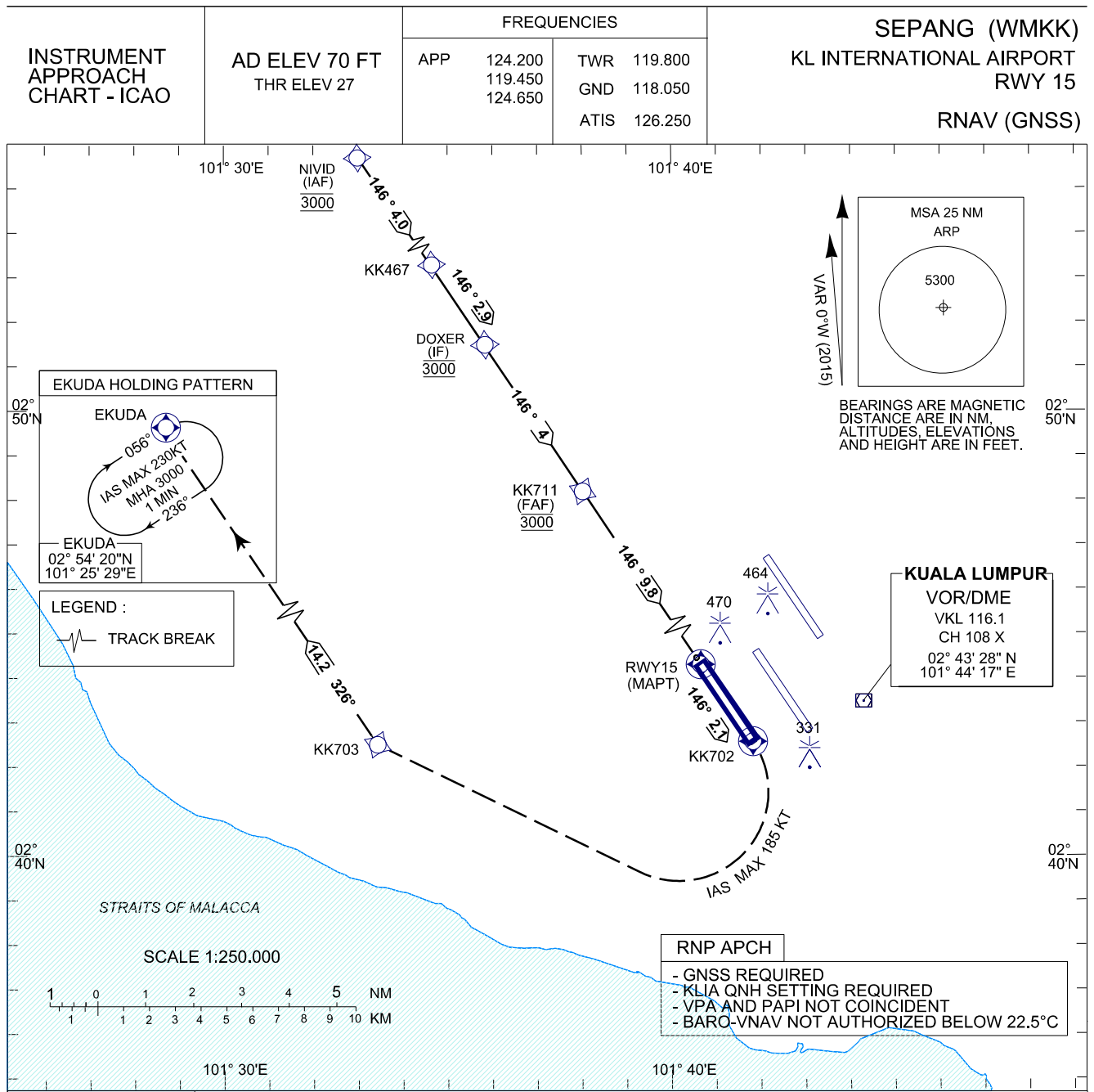
SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV-Z (GNSS) RWY 14R

TABULAR DESCRIPTION
RNAV-Z (GNSS) RWY 14R

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | ADMOL | - | - | - | - | +5000 | 210 | - | - | RNAV 1 |
| 2 | TF | MIDIK | - | 165° | - | - | +4000 | 180 | - | - | RNAV 1 |
| 3 | TF | KK732 (FAF) | - | 146° | 5.5 | - | +3500 | - | - | - | RNP APCH |
| 4 | TF | RW14R (MAPt LNAV) | Y | 146° | 11.4 | - | +670 | - | - | 2.8°/ 52 | RNP APCH |
| 5 | TF | KK714 | Y | 146° | 6.0 | - | +1400 | - | - | - | RNP APCH |
| 6 | CF | DUMAS | Y | 260° | - | R | +2000 | 185 | VKL VOR/ DME | - | RNP APCH |
| 7 | HM | DUMAS | - | 080° | - | R | +2000 | 220 | - | - | RNP APCH |

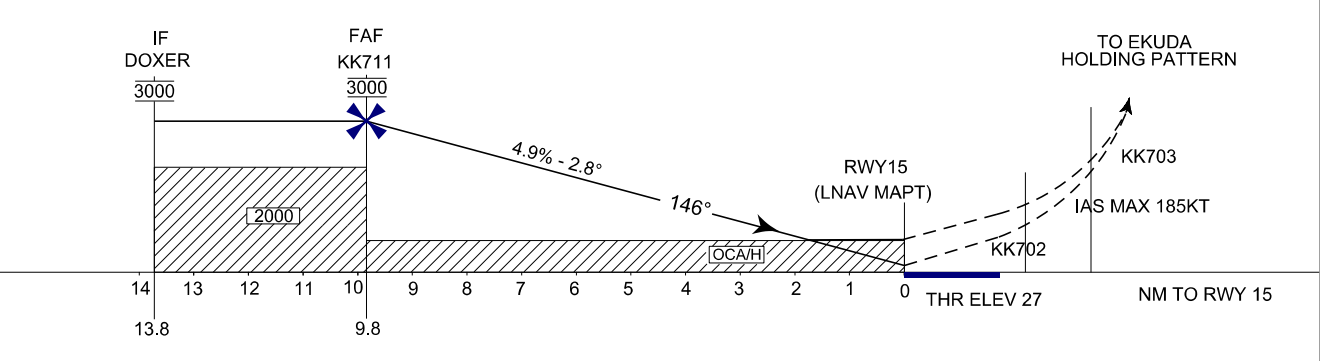
WAYPOINT LIST
RNAV-Z (GNSS) RWY 14R

| Waypoint Identifier | Coordinates |
|---------------------|------------------------------|
| ADMOL | 03°02'47.01"N 101°31'19.78"E |
| MIDIK | 02°58'41.80"N 101°32'25.23"E |
| KK732 | 02°54'05.90"N 101°35'28.57"E |
| RW14R | 02°44'35.84"N 101°41'52.63"E |
| KK714 | 02°39'33.95"N 101°45'14.85"E |
| DUMAS | 02°40'07.00"N 101°25'36.00"E |



TRANSITION ALT 11000
TCH 52FT
VPA 2.8°

MISSED APPROACH : CLIMB TO 3000 FT. PROCEED TO KK702 ON TR 146°, AT KK702 TURN RIGHT DIRECT TO KK703 (IAS MAX 185KT), THEN TURN RIGHT TO EKUDA HOLDING PATTERN.



| | | | | | | |
|-------------------------|-----------|----------|----------|------------|---|----|
| OCA (OCH) | | A | B | C | D | DL |
| STRAIGHT IN APPROACH | LNAV | 650(630) | | | | |
| | LNAV/VNAV | 570(550) | 580(560) | 590(570) | | |
| ✳ CIRCLING | | 770(700) | | 1260(1190) | | |

| ALTITUDE / HEIGHT ON FINAL APPROACH | | | | |
|-------------------------------------|------------|------------|------------|------------|
| NM TO RWY15 | 9.8 | 8 | 7 | 6 |
| ALTITUDE (HGT) | 3000(2973) | 2465(2438) | 2168(2141) | 1871(1844) |
| NM TO RWY15 | 5 | 4 | 3 | 2 |
| ALTITUDE (HGT) | 1379(1325) | 1055(1001) | 731(677) | 683(656) |

(*) CIRCLING NOT PERMITTED EAST OF RWY 15/33 CENTERLINE, EXCEPT WHEN AUTHORIZED BY ATC

INSTRUMENT **AERODROME ELEV 70 FT**
APPROACH **HEIGHTS RELATED TO**
CHART - ICAO **THR RWY 15 - ELEV 27 FT**

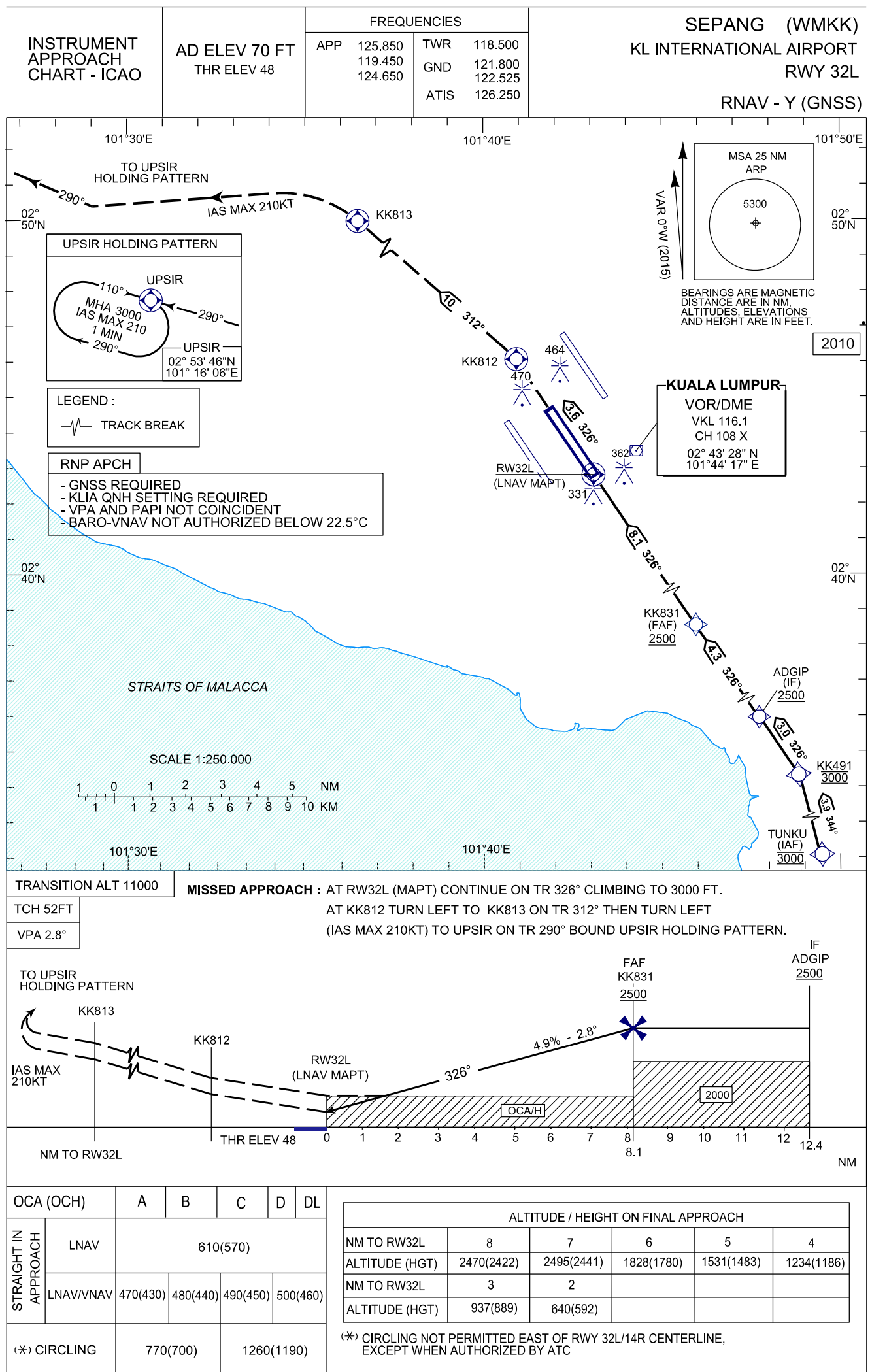
SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV (GNSS) RWY 15

TABULAR DESCRIPTION
RNAV (GNSS) RWY 15

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | NIVID | - | - | - | - | @3000 | 210 | - | - | RNAV 1 |
| 2 | TF | KK467 | - | 146° | - | - | - | - | - | - | RNAV 1 |
| 3 | TF | DOXER | - | 146° | - | - | @3000 | 180 | - | - | RNAV 1 |
| 4 | TF | KK711 (FAF) | - | 146° | 4.0 | - | @3000 | - | - | - | RNP APCH |
| 5 | TF | RWY15 (MAPt LNAV) | Y | 146° | 9.8 | - | +650 | - | - | 2.8° /52 | RNP APCH |
| 6 | TF | KK702 | Y | 146° | 2.1 | - | +800 | - | - | - | RNP APCH |
| 7 | DF | KK703 | - | - | - | R | - | 185 | - | - | RNP APCH |
| 8 | TF | EKUDA | Y | 326° | 14.2 | - | +3000 | 230 | - | - | RNP APCH |
| 9 | HM | EKUDA | - | 056° | - | R | +3000 | 230 | - | - | RNP APCH |

WAYPOINT LIST
RNAV (GNSS) RWY 15

| Waypoint Identifier | Coordinates |
|---------------------|------------------------------|
| NIVID | 03°01'35.76"N 101°29'02.86"E |
| KK467 | 02°58'15.88"N 101°31'16.88"E |
| DOXER | 02°55'45.95"N 101°32'57.34"E |
| KK711 | 02°52'28.73"N 101°35'09.45"E |
| RWY15 | 02°44'17.57"N 101°40'38.97"E |
| KK702 | 02°42'33.37"N 101°41'48.80"E |
| KK703 | 02°42'29.62"N 101°33'25.49"E |
| EKUDA | 02°54'20.19"N 101°25'28.91"E |



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

SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV-Y (GNSS) RWY 32L

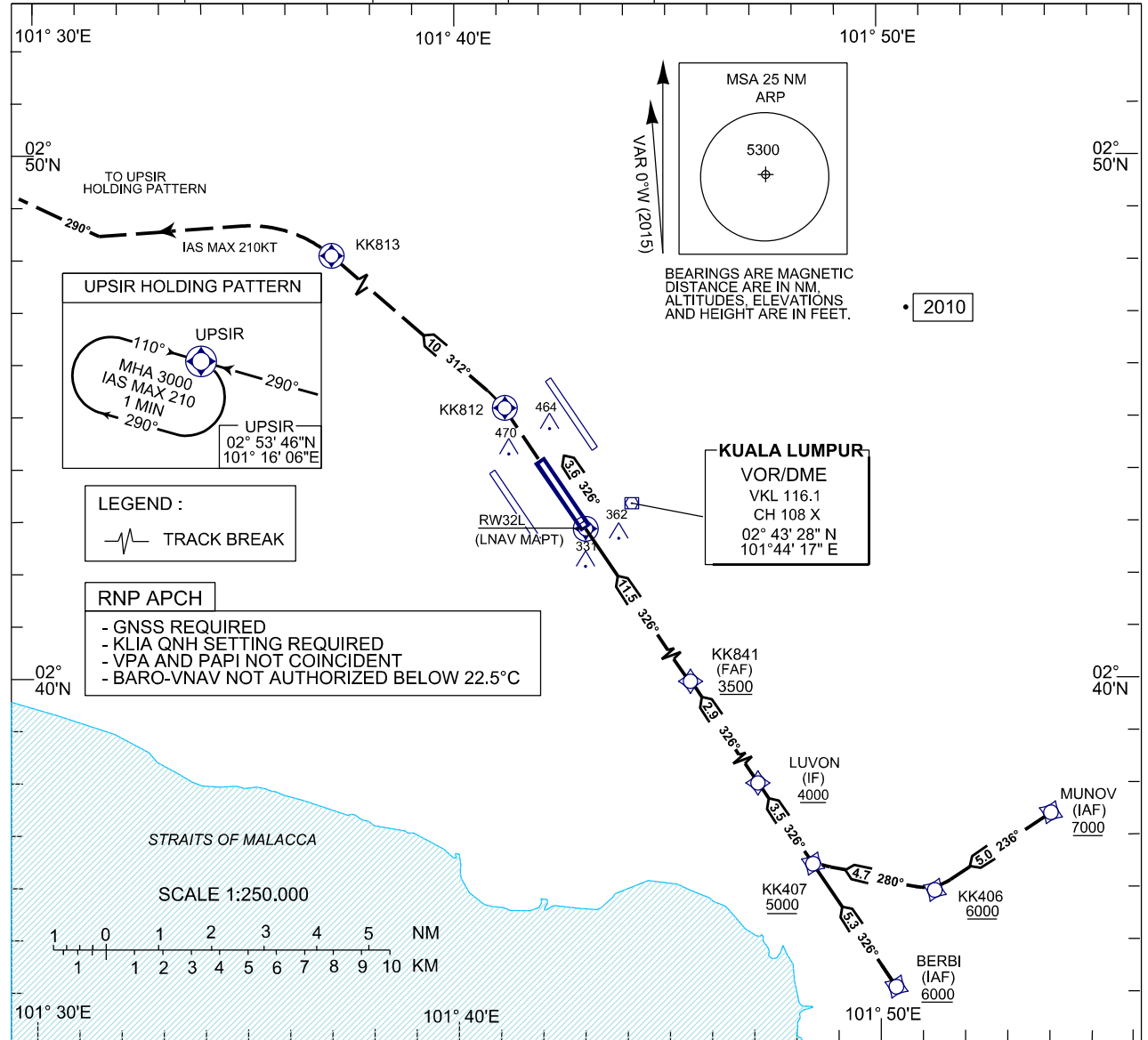
TABULAR DESCRIPTION
RNAV-Y (GNSS) RWY 32L

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | TUNKU | - | - | - | - | @3000 | 210 | - | - | RNAV 1 |
| 2 | TF | KK491 | - | 344° | - | - | @3000 | - | - | - | RNAV 1 |
| 3 | TF | ADGIP | - | 326° | - | - | +2500 | 180 | - | - | RNAV 1 |
| 4 | TF | KK831 (FAF) | - | 326° | 4.3 | - | +2500 | - | - | - | RNP APCH |
| 5 | TF | RW32L (MAPt LNAV) | Y | 326° | 8.1 | - | +610 | - | - | 2.8° /52 | RNP APCH |
| 6 | TF | KK812 | Y | 326° | 3.4 / 3.6 | - | - | - | - | - | RNP APCH |
| 7 | TF | KK813 | Y | 312° | 10 | - | - | - | - | - | RNP APCH |
| 8 | CF | UPSIR | Y | 290° | - | - | +3000 | 210 | VKL VOR/ DME | - | RNP APCH |
| 9 | HM | UPSIR | - | 110° | - | R | +3000 | 210 | - | - | RNP APCH |

WAYPOINT LIST
RNAV-Y (GNSS) RWY 32L

| Waypoint Identifier | Coordinates |
|---------------------|------------------------------|
| TUNKU | 02°26'15.62"N 101°52'44.62"E |
| KK491 | 02°29'58.83"N 101°51'40.61"E |
| ADGIP | 02°32'28.69"N 101°50'00.15"E |
| KK831 | 02°36'04.01"N 101°47'35.79"E |
| RW32L | 02°42'47.86"N 101°43'05.03"E |
| KK812 | 02°45'49.85"N 101°41'03.05"E |
| KK813 | 02°52'30.55"N 101°33'33.88"E |
| UPSIR | 02°53'46.30"N 101°16'06.40"E |

| | | | | | | |
|---|------------------------------|--------------------|---------|------|---------|--|
| INSTRUMENT APPROACH CHART - ICAO | AD ELEV 70 FT THR ELEV 48 | FREQUENCIES | | | | SEPANG (WMKK) KL INTERNATIONAL AIRPORT RWY 32L RNAV - Z (GNSS) |
| | | APP | 125.850 | TWR | 118.500 | |
| | | | 119.450 | GND | 121.800 | |
| | | | 124.650 | GND | 122.525 | |
| | | | | ATIS | 126.250 | |

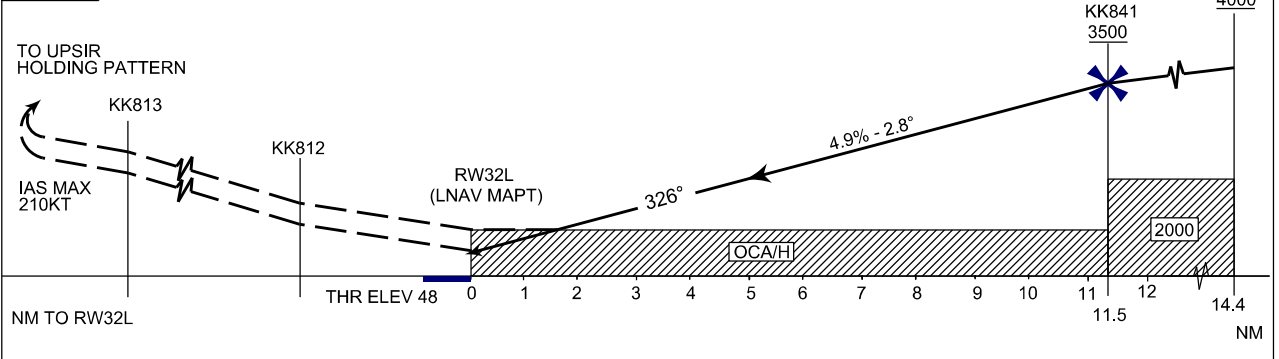


TRANSITION ALT 11000

MISSED APPROACH : AT RW32L (MAPT) CONTINUE ON TR 326° CLIMBING TO 3000 FT. AT KK812 TURN LEFT TO KK813 ON TR 312° THEN TURN LEFT (IAS MAX 210KT) TO UPSIR ON TR 290° BOUND UPSIR HOLDING PATTERN.

TCH 52FT

VPA 2.8°



| | | | | | | |
|----------------------|-----------|----------|----------|------------|----------|----|
| OCA (OCH) | | A | B | C | D | DL |
| STRAIGHT IN APPROACH | LNAV | 610(570) | | | | |
| | LNAV/VNAV | 470(430) | 480(440) | 490(450) | 500(460) | |
| (*) CIRCLING | | 770(700) | | 1260(1190) | | |

| ALTITUDE / HEIGHT ON FINAL APPROACH | | | | | |
|-------------------------------------|------------|------------|------------|------------|------------|
| NM TO RW32L | 10 | 9 | 8 | 7 | 6 |
| ALTITUDE (HGT) | 3064(3016) | 2767(2719) | 2470(2422) | 2173(2125) | 1828(1780) |
| NM TO RW32L | 5 | 4 | 3 | 2 | |
| ALTITUDE (HGT) | 1531(1483) | 1234(1186) | 937(889) | 640(592) | |

(*) CIRCLING NOT PERMITTED EAST OF RWY 32L/14R CENTERLINE, EXCEPT WHEN AUTHORIZED BY ATC

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

SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV-Z (GNSS) RWY 32L

TABULAR DESCRIPTION RNAV-Z (GNSS) RWY 32L

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | MUNOV | - | - | - | - | +7000 | 210 | - | - | RNAV 1 |
| 2 | TF | KK406 | - | 236° | - | - | +6000 | - | - | - | RNAV 1 |
| 3 | TF | KK407 | - | 280° | - | - | +5000 | - | - | - | RNAV 1 |
| 4 | TF | LUVON | - | 326° | - | - | +4000 | 180 | - | - | RNAV 1 |

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

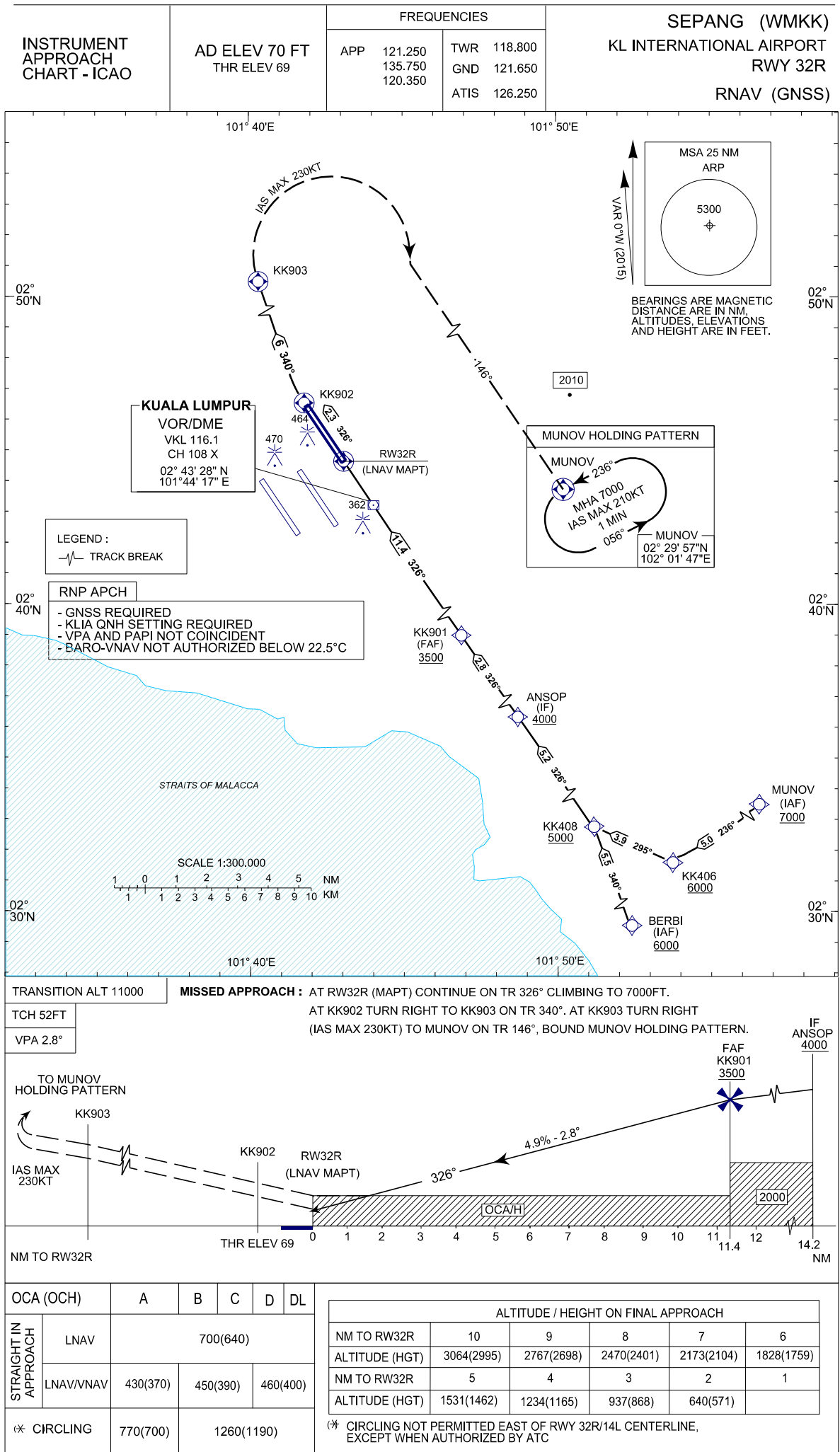
| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | LUVON | - | - | - | - | +4000 | - | - | - | RNP APCH |
| 2 | TF | KK841 (FAF) | - | 326° | 2.9 | - | +3500 | - | - | - | RNP APCH |
| 3 | TF | RW32L (MAPt LNAV) | Y | 326° | 11.5 | - | +610 | - | - | 2.8° /52 | RNP APCH |
| 4 | TF | KK812 | Y | 326° | 3.4 / 3.6 | - | - | - | - | - | RNP APCH |
| 5 | TF | KK813 | Y | 312° | 10.0 | - | - | - | - | - | RNP APCH |
| 6 | CF | UPSIR | Y | 290° | - | - | +3000 | 210 | VKL VOR/ DME | - | RNP APCH |
| 7 | HM | UPSIR | - | 110° | - | R | +3000 | 210 | - | - | RNP APCH |

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

SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV-Z (GNSS) RWY 32L

WAYPOINT LIST
RNAV-Z (GNSS) RWY 32L

| Waypoint Identifier | Coordinates |
|----------------------------|------------------------------|
| MUNOV | 02°29'57.02"N 102°01'46.90"E |
| BERBI | 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 | 02°30'56.00"N 101°51'02.29"E |
| KK841 | 02°33'15.92"N 101°49'25.49"E |
| RW32L | 02°42'47.86"N 101°43'05.03"E |
| KK812 | 02°45'49.85"N 101°41'03.05"E |
| KK813 | 02°52'30.55"N 101°33'33.88"E |
| UPSIR | 02°53'46.30"N 101°16'06.40"E |



INSTRUMENT AERODROME ELEV 70 FT
APPROACH HEIGHTS RELATED TO
CHART - ICAO THR RWY 32R - ELEV 69 FT

SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV (GNSS) RWY 32R

TABULAR DESCRIPTION
RNAV (GNSS) RWY 32R

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | MUNOV | - | - | - | - | +7000 | 210 | - | - | RNAV 1 |
| 2 | TF | KK406 | - | 236° | - | - | +6000 | - | - | - | RNAV 1 |
| 3 | TF | KK408 | - | 295° | - | - | +5000 | - | - | - | RNAV 1 |
| 4 | TF | ANSOP | - | 326° | - | - | +4000 | 180 | - | - | RNAV 1 |

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | BERBI | - | - | - | - | +6000 | 210 | - | - | RNAV 1 |
| 2 | TF | KK408 | - | 340° | - | - | +5000 | - | - | - | RNAV 1 |
| 3 | TF | ANSOP | - | 326° | - | - | +4000 | 180 | - | - | RNAV 1 |

| Serial Number | Path Terminator | Waypoint Identifier | Fly Over | Course /Track °M | Distance (NM) | Turn Direction | Altitude | Speed Limit (kt) | Recommended Navaid | VPA/ TCH | Navigation Specification |
|---------------|-----------------|---------------------|----------|------------------|---------------|----------------|----------|------------------|--------------------|----------|--------------------------|
| 1 | IF | ANSOP | - | - | - | - | +4000 | - | - | - | RNP APCH |
| 2 | TF | KK901 (FAF) | - | 326° | 2.8 | - | +3500 | - | - | - | RNP APCH |
| 3 | TF | RW32R (MAPt LNAV) | Y | 326° | 11.4 | - | +700 | - | - | 2.8° /52 | RNP APCH |
| 4 | TF | KK902 | Y | 326° | 2.3 | - | - | - | - | - | RNP APCH |
| 5 | TF | KK903 | Y | 340° | 6.0 | - | - | - | - | - | RNP APCH |
| 6 | CF | MUNOV | Y | 146° | - | R | +7000 | 230 | VKL VOR/ DME | - | RNP APCH |
| 7 | HM | MUNOV | - | 236° | - | L | +7000 | 210 | - | - | RNP APCH |

INSTRUMENT **AERODROME ELEV 70 FT**
APPROACH **HEIGHTS RELATED TO**
CHART - ICAO **THR RWY 32R - ELEV 69 FT**

SEPANG (WMKK)
KL INTERNATIONAL AIRPORT
RNAV (GNSS) RWY 32R

WAYPOINT LIST
RNAV (GNSS) RWY 32R

| Waypoint Identifier | Coordinates |
|----------------------------|------------------------------|
| BERBI | 02°23'35.44"N 101°55'57.71"E |
| KK406 | 02°27'10.17"N 101°57'37.60"E |
| KK408 | 02°28'47.09"N 101°54'07.30"E |
| ANSOP | 02°33'06.00"N 101°51'14.00"E |
| KK901 | 02°35'26.16"N 101°49'41.00"E |
| RW32R | 02°44'54.03"N 101°43'19.41"E |
| KK902 | 02°46'48.70"N 101°42'02.50"E |
| KK903 | 02°52'31.46"N 101°39'58.28"E |
| MUNOV | 02°29'57.02"N 102°01'46.90"E |