

AD 2. AERODROMES

WBAK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

WBAK – ANDUKI / Private

WBAK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	0438151N 11422561E
2	Direction and distance from (city)	Nil
3	Elevation/Reference temperature	2.78M / Nil
4	MAG VAR/Annual change	0.36° E
5	Heliport Administration, address, telephone, telefax, AFS	Anduki Airfield, Brunei Shell Petroleum Company Sendirian Berhad, Seria KB3534, Negara Brunei Darussalam. Tel Nr : 673-3372203 Fax Nr : 673-3372125 AFS: : Nil
6	Types of traffic permitted (IFR/VFR)	IFR/SVFR/VFR
7	Remarks	Nil

WBAK AD 2.3 OPERATIONAL HOURS

1	Heliport Administration	2330 – 0830UTC
2	Customs and immigration	By prior arrangement
3	Health and Sanitation	By prior arrangement
4	AIS Briefing Office	Nil
5	ATS Reporting Office (ARO)	Nil
6	MET Briefing Office	Nil
7	ATS	2200 – 1000UTC
8	Fuelling	MON-SUN between 2200/1000 UTC Pre-notified during working hours : Tel : 673-3372203
9	Handling	2200 – 1000UTC
10	Security	H24
11	De-icing	Nil
12	Remarks	Private Aerodrome, Helicopter Operations only

WBAK AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	By prior arrangement
2	Fuel / Oil types	Jet A1
3	Fuelling facilities / Capacity	Pre-notified during working hours: Tel: 673-3372203
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

WBAK AD 2.5 PASSENGER FACILITIES

1	Hotels	Seria 6km, Kuala Belait 22km, Bandar Seri Begawan 75km
2	Restaurants	Seria 6km, Lumut 11km, Kuala Belait 22 km, Bandar Seri Begawan 75km
3	Transportation	By prior arrangement
4	Medical facilities	First Aid Only (semi-equipped health centre 9km away and fully equipped hospital 22km away)
5	Bank and Post Office	Seria 6km, Kuala Belait 22km, Bandar Seri Begawan 75km
6	Tourist Office	Nil
7	Remarks	Nil

WBAK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	Category 3 (2200 / 1000UTC)
2	Rescue equipment	(1) Rescue vehicle available for immediate use are :- 1 x Rescue Vehicle 1 x Crash Rescue Tender (CRT) (2) Extinguishing Agents available in the CRT are:- 4500 litres water (Discharge rate of 4000litre/min) 500 litres foam agent 150 kg dry chemicals 5 kg CO2 (portable) (3) Additional reserves maintained at the main BSP Fire Station are:- 1 x Crash Rescue Tender (CRT) 2 x Foam/water Tender (FWT) 1 x Rapid Rescue Vehicle (RRV) 1 x Hose Layer 3 x Ambulances 1 x Emergency Common Vehicle (ECV)
3	Capacity for removal of disable aircraft	Available S92 equivalent
4	Remarks	Nil

WBAK AD 2.7 SEASONAL AVAILABILITY – CLEARING

1	Types of clearing equipment	Nil
2	Clearance priorities	Nil
3	Remarks	Nil

WBAK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	Apron/Helicopter stands surface and strength	Tarmac / Concrete / Not Available
2	Taxiway width, surface and strength	20M, Tarmac and Concrete and A, B and C
3	Altimeter check location and elevation	Apron and 9ft
4	VOR / INS checkpoints	Nil
5	Remarks	Nil

WBAK AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Final approach and take-off markings	Solid white line around perimeter, broken white centre-line, 'piano keys' at thresholds with white 'H' and orientation marked (05/23)
2	TWY, Air TWY, Air Transit Route Markers	Yellow taxiway markings, blue edge lighting, holding point guard lights.
3	Remarks	Illuminated Holding Point and FATO exit Marker Boards

WBAK AD 2.10 AERODROME OBSTACLES

In approach/TKOF areas			At helicopter		Remarks
1A			1B		3
Rwy/Area affected	Obstacle type Elevation Markings/LGT	Coordinates	Obstacle type Elevation Markings/LGT	Coordinates	Nil
a	b	c	a	b	
Nil	Nil	Nil	Nil	Nil	

WBAK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	WBSB / Brunei International
2	Hours of service MET Office outside hours	H24
3	Office responsible for TAF preparation Periods of validity	Meteorological Forecast Office H30
4	Trend forecast interval of issuance	TAF 0024:0606:1212 and 1818: Takeoff Forecast available for schedule flights and unscheduled flights (on request only)
5	Briefing/Consultation provided	Forecast, Briefing and Routed Area forecast
6	Flight documentation Language (s) used	English
7	Charts and other information available for briefing or consultation	Surface Chart : SIG WX Chart : Upper Chart, Satellite weather pictures. NWP Chart
8	Supplementary equipment available for providing information	Doppler Radar/ Key Board Display System/ AWOS/AFTN
9	ATS units provided with information	DATIS
10	Additional information (limitation of services, etc.)	Forecaster available as from 2130UTC to 0600UTC

WBAK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE & MAG BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR Coordinates	THR elevation and highest elevation of TDZ of precision APP Rwy
1	2	3	4	5	6
05	055°	810M	Asphalt/Not Available	05 THR : 4°37.99'N 114°22.55'E	Nil
23	235°	810M	Asphalt/Not Available	23 THR : 4°38.24'N 114°22.91'E	Nil

WBAK AD 2.13 DECLARED DISTANCES

<i>RWY Designator</i>	<i>TORA (M)</i>	<i>TODA (M)</i>	<i>ASDA (M)</i>	<i>LDA (M)</i>	<i>Remarks</i>
1	2	3	4	5	6
05	Nil	810M	Nil	Nil	Nil
23	Nil	810M	Nil	Nil	Nil

WBAK AD 2.14 APPROACH AND RUNWAY LIGHTING

<i>RWY Designator</i>	<i>APCH LGT Type LEN INST</i>	<i>THR LGT Colour of W-Bar</i>	<i>VASIS (MEHT) PAPI</i>	<i>TDZ LGT LEN</i>
1	2	3	4	5
05 & 23	Single bar, with running strobes	Nil	A-PAPI	Nil
Rwy Centre-line Lgt Length, spacing colour INTST	Rwy edge LGT LEN, spacing colour INTST	Rwy End LGT colour INTST W/BAR	SWY LGT LEN (M) colour	Remark
6	7	8	9	10
Nil	White edge lighting	Nil	Nil	Nil

WBAK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	Nil
2	LDI location and LGT Anemometer location and LGT	Nil Control Tower and Not available
3	TWY edge and centre line lighting	Inset blue edge lights
4	Secondary power supply/switch-over time	Nil
5	Remarks	Nil

WBAK AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO geoid undulation	05 THR : 4°37.99'N 114°22.55'E 23 THR : 4°38.24'N 114°22.91'E
2	TLOF and/or FATO elevation M/FT	2.78M
3	TLOF and FATO area dimensions, surface, strength, marking	Nil and 810M x 32M, asphalt, nil
4	True BRG of FATO	235°/055°
5	Declared distance available	810M
6	APP and FATO lighting	Single bar with running strobes and white edge lighting
7.	Remarks	Nil

WBAK AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	Anduki CTZ is defined as a rectangular area roughly centered at Anduki Aerodrome reference point (043815N 1142256E). The area starts from Point A 9NM West of Anduki Airfield at WGS 84 coordinate (043807N 1141356E), thence straight line to Point B (044606N 1142716E) thence a straight line to Point C (044024N 1143111E) thence a straight line to Point D (043131N 1141830E) and a straight line terminated at Point A. Anduki Special Rules Area (SRA) are defined as area from Anduki CTZ point 043558N 1141524E thence along the coast to the west 043514N 1140701E thence straight line to the north 050557N 1140323E thence straight line to join an arc of Circle 5NM radius centred on 051237N 1144452E from 051157N 1143854E clockwise to 051334N 1144829E clockwise to 050640N 1144232E thence straight line to 045839N 1143709E thence straight line to 044403N 1143342E thence along the coast joining the Control Zone point 044150N 1143012E thence straight line to Point B(044606N 1142716E) thence straight line to point A(043807N 1141356E) thence straight line joining point 043558N 1141524E
2	Vertical limits	CTZ - 2000 ft - Sea Level SRA - Sea Level – 1000ft 1001ft – 2000ft
3	Airspace classification	Class C - Sea Level to 2000ft Class G - Sea Level to 1000ft Class D - 1001ft to 2000ft
4	ATS unit call sign Language(s)	Anduki Tower, English
5	Transition altitude	11,000 ft
6	Remarks	Nil

WBAK AD 2.18 ATS COMMUNICATION FACILITIES

Service Designation	Call sign	Frequency	Hours of Operation	Remarks
1	2	3	4	5
APP	Nil	Nil	Nil	Nil
TWR	Anduki Tower	122.10 Mhz	2200 – 1000 UTC	Nil
FIS	Anduki Tower	122.10 Mhz	2200 – 1000 UTC	Nil
OFFSHORE LOGISTICS	Offshore platforms/Rigs	129.10Mhz	2200 – 1000 UTC	Nil
ANDUKI LOGISTICS	Anduki Tower	130.60Mhz	2200 – 1000 UTC	Nil

WBAK AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| NOT APPLICABLE

WBAK AD 2.20 LOCAL TRAFFIC REGULATIONS

NOT APPLICABLE

WBAK AD 2.21 NOISE ABATEMENT PROCEDURES

NOT APPLICABLE

WBAK AD 2.22 FLIGHT PROCEDURES

NOT APPLICABLE

WBAK AD 2.23 ADDITIONAL INFORMATION

NOT APPLICABLE

WBAK AD 2.24 CHARTS RELATED TO AN AERODROME

- a) Aerodrome / Heliport Chart
- b) GNSS Standard Departure Chart Instrument (SIDs) Rwy 05
- c) GNSS Standard Arrival Chart Instrument (STAR) Rwy 05
- d) Instrument Approach Chart Rwy 05
- e) GNSS Standard Departure Chart Instrument (SIDs) Rwy 23
- f) GNSS Standard Arrival Chart Instrument (STAR) Rwy 23
- g) Instrument Approach Chart Rwy 23

INTENTIONALLY

LEFT

BLANK

AERODROME CHART 4°38'15.1"N
114°22'56.1"E

ELEV 2.78m

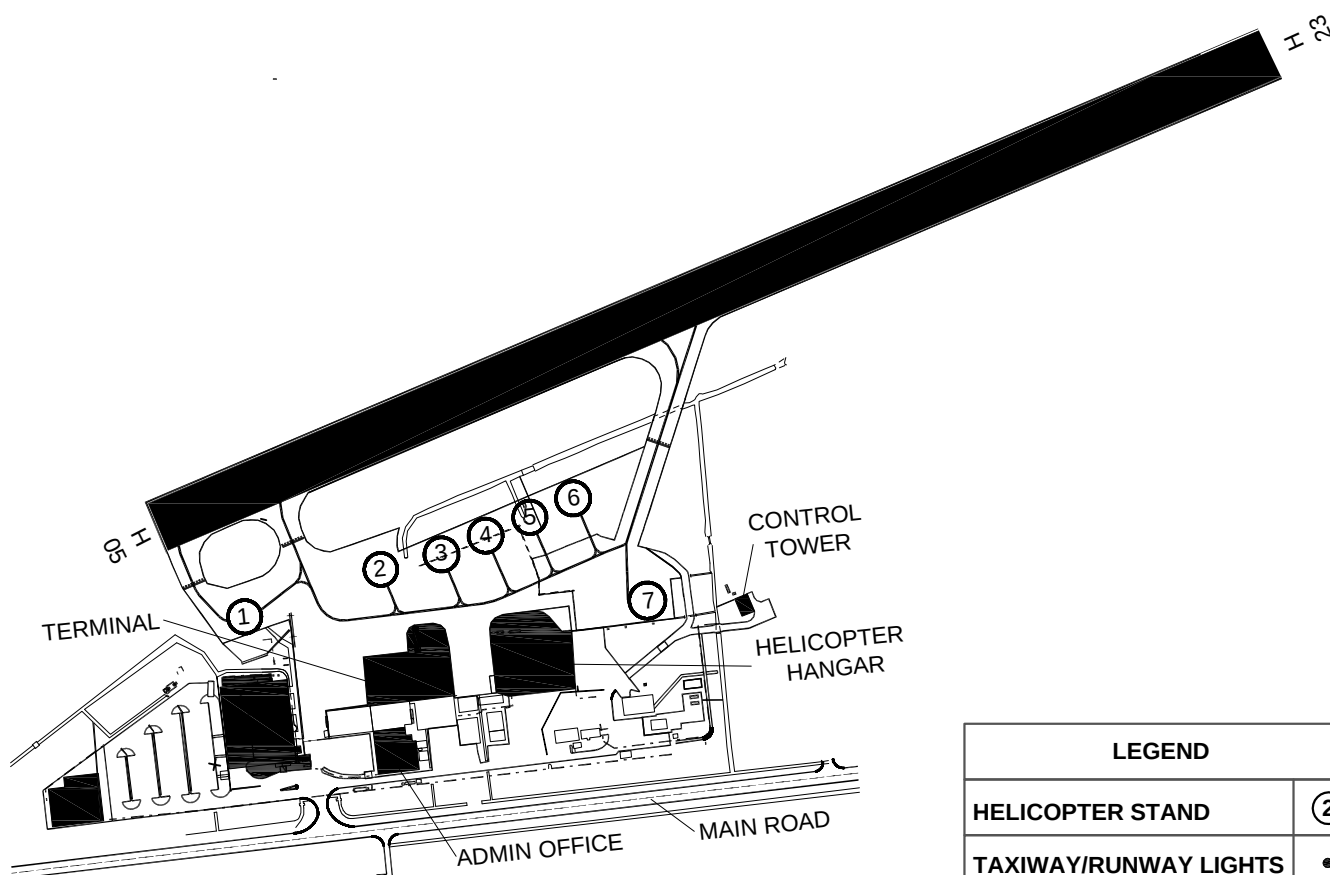
TOWER 122.1

ANDUKI HELIPORT (WBAK)

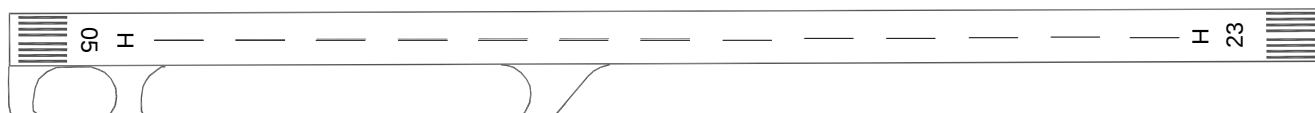
RWY	DIRECTION	THR	BEARING STRENGTH
05	N/A	N/A	N/A
23	N/A	N/A	N/A

ELEVATIONS AND DIMENSION IN METRES
BEARING ARE MAGNETIC

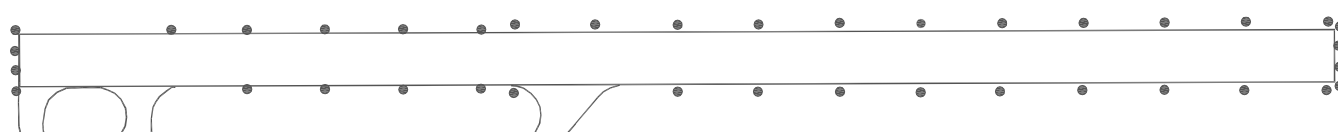
VAR 3.8°E (2008)



MARKING AIDS RWY 05/23 AND EXIT TWY



LIGHTING AIDS RWY 05/23 AND EXIT TWY



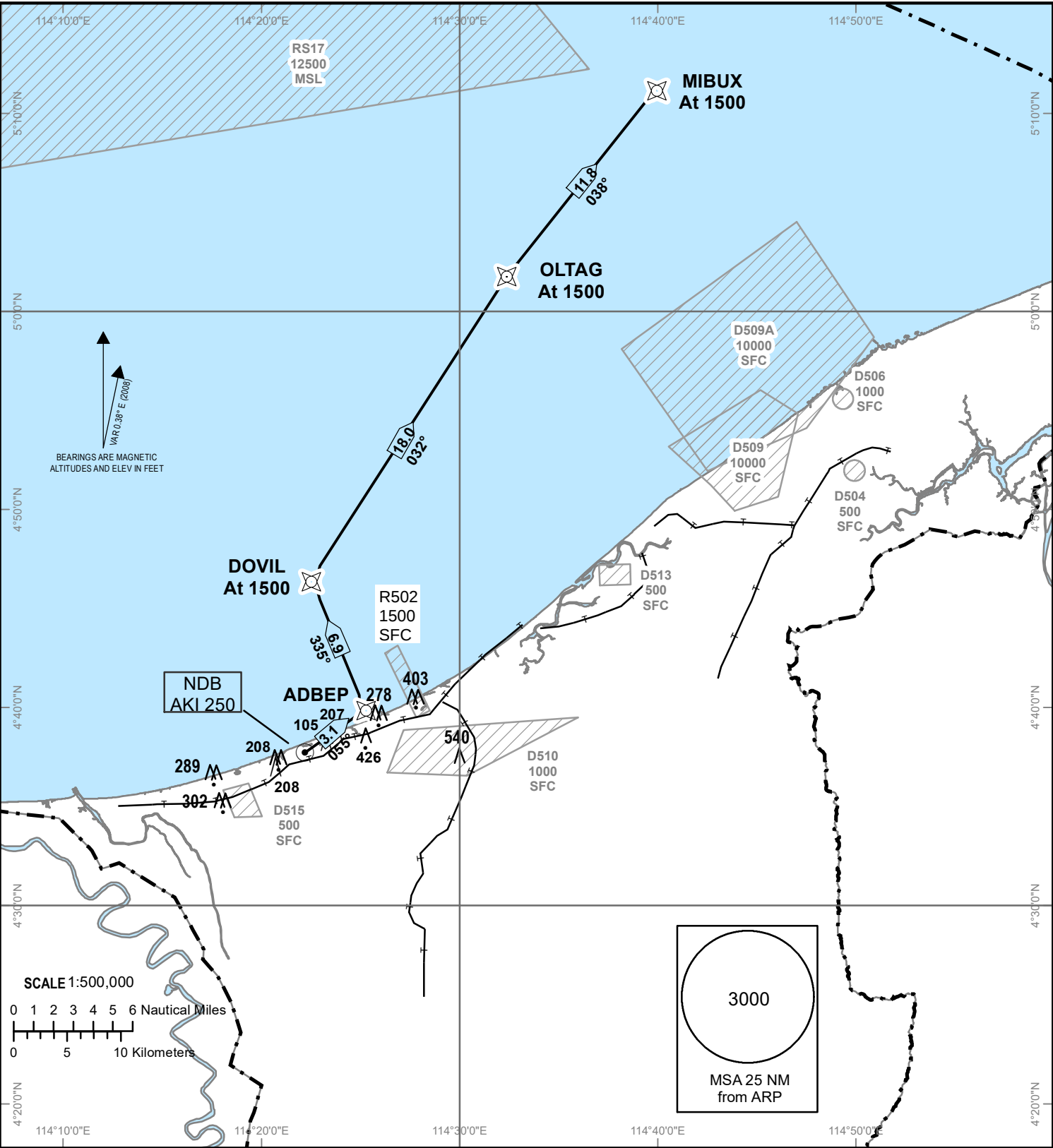
0 100 200 300 metres
0 200 500 1000 feet

STANDARD DEPARTURE CHART
INSTRUMENT (SID)

TRANSITION ALTITUDE
11000ft

TWR 122.10

ANDUKI
RNAV (GNSS)
RWY 05



Routing
DER23-ADBEP[A1500-,R]-DOVIL[A1500,R]-OLTAG[A1500,R]-MIBUX[A1500]

- Notes
1. Close-in obstacles exist for RWY 23 departures.
 2. For obstacle clearance, climb at 5.0% (minimum) to 1500' AMSL.
 3. Critical nav aids: Nil.
 4. All waypoints are fly-by.
 5. All positions are referenced to WGS84 datum.

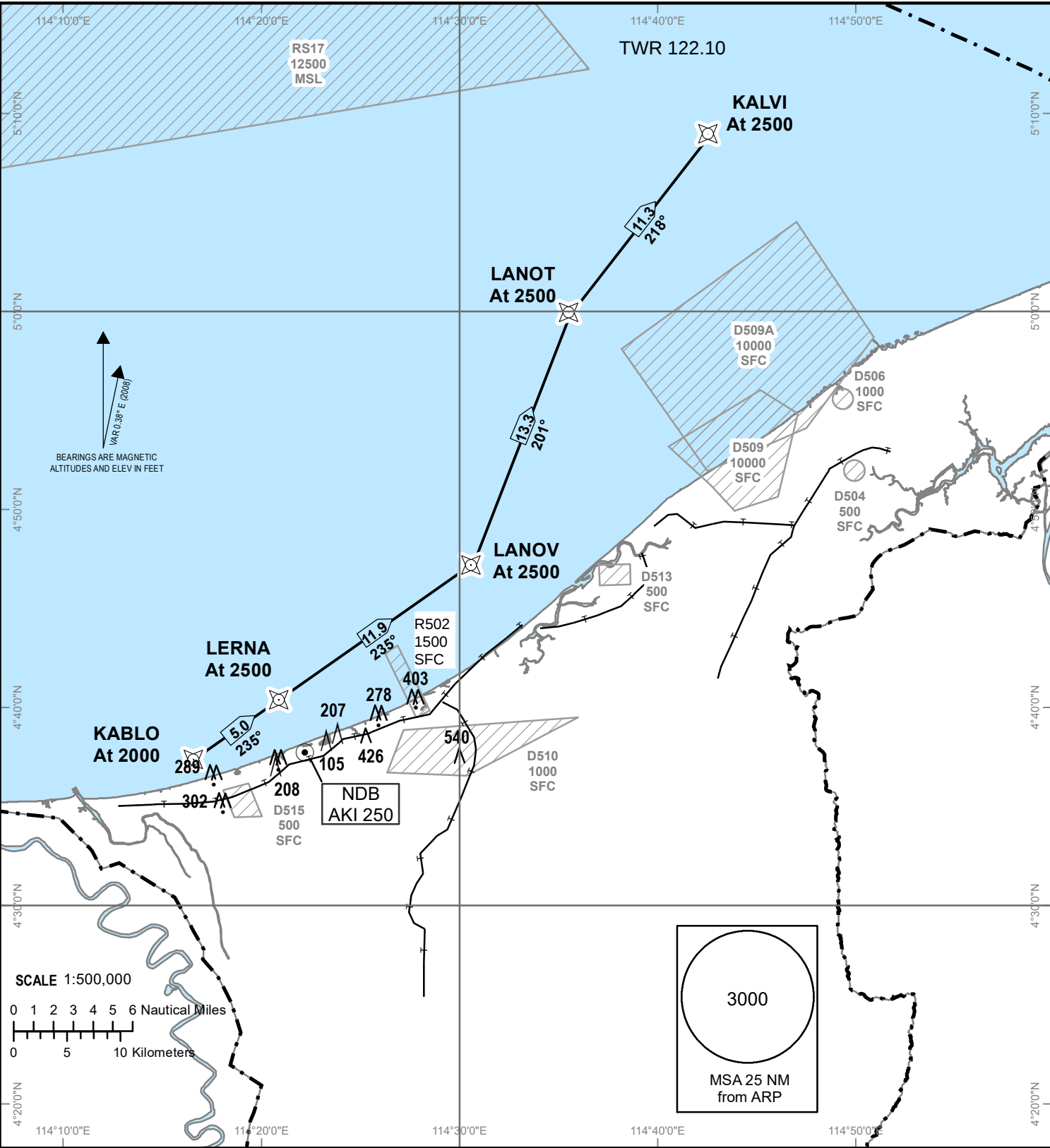
DEPARTURE END RWY 05		
AK05D	043814.49N	1142254.46E
WAYPOINTS		
ADBEP	044000.65N	1142526.23E
DOVIL	44621.92N	1142234.52E
OLTAG	050135.26N	1143218.83E
MIBUX	051053.70N	1143938.41E

STANDARD ARRIVAL CHART
INSTRUMENT (STAR)

TRANSITION ALTITUDE
11000ft

TWR 122.10

ANDUKI
RNAV (GNSS)
RWY 05



- Notes
1. Critical nav aids: Nil.
 2. All waypoints are fly-by.
 3. All positions are referenced to WGS84 datum.

WAYPOINTS

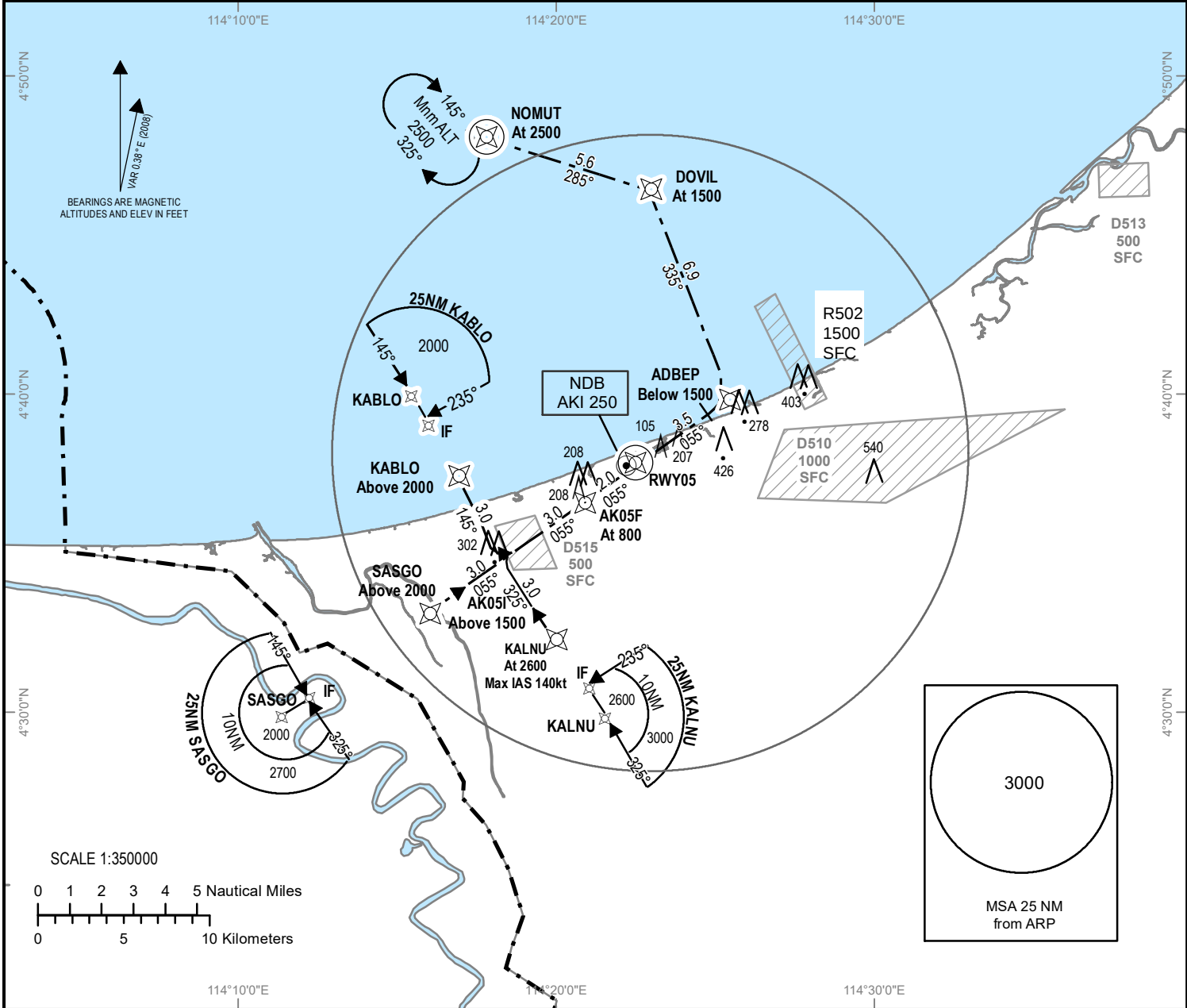
KALVI	050842.90N	1144223.66E
LANOT	045947.16N	1143521.91E
LANOV	044719.23N	1143034.62E
LERNA	044027.37N	1142049.40E
KALBO	043734.14N	1141643.38E

INSTRUMENT
APPROACH
CHART-ICAO

AERODROME ELEV 9ft
HEIGHTS RELATED TO
THR 05-ELEV 9ft
MIN TEMP 20°C

TWR 122.10

ANDUKI
RNAV (GNSS)
(CAT H) RWY 05

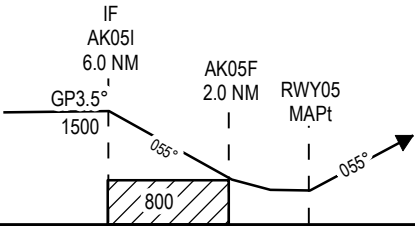


Transition Altitude: 11000ft

Note: Recommended profile of 3.5° (6.12%)

ELEV 9ft

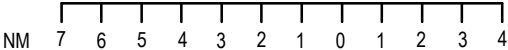
(THR RWY 05)



MISSED APPROACH (RWY 05) 4.2%

Climb straight ahead to be below 1500' at ADBEP then left to be 1500' at DOVIL then left climbing to 2500' to NOMUT and hold.

RDH 50 FT



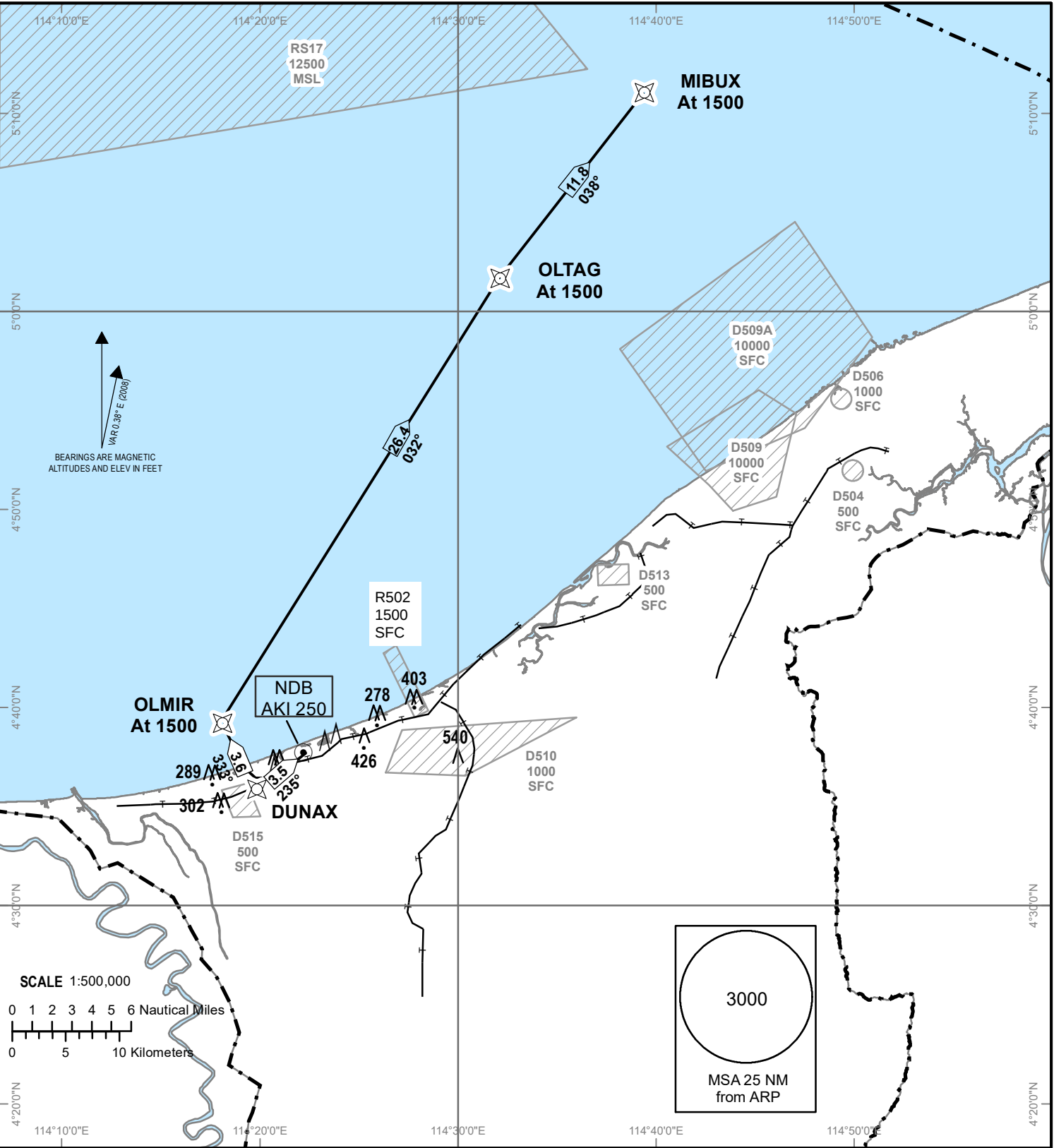
OCA(H)								
Category of Aircraft	H	NM TO THR						
LNAV/VNAV	263 (254)	7	6	5	4	3	2	1
LNAV	460(451)	2660 (2651)	2290 (2281)	1920 (1911)	1550 (1541)	1170 (1161)	800 (791)	430 (421)

STANDARD DEPARTURE CHART
INSTRUMENT (SID)

TRANSITION ALTITUDE
11000ft

TWR 122.10

ANDUKI
RNAV (GNSS)
RWY 23



ROUTING
DER23-DUNAX[A1500-,R]-OLMIR[A1500,R]-OLTAG[A1500,R]-MIBUX[A1500]

- Notes
1. Close-in obstacles exist for RWY 23 departures.
 2. For obstacle clearance, climb at 5.0% (minimum) to 1500' AMSL.
 3. Critical nav aids: Nil.
 4. All waypoints are fly-by.
 5. All positions are referenced to WGS84 datum.

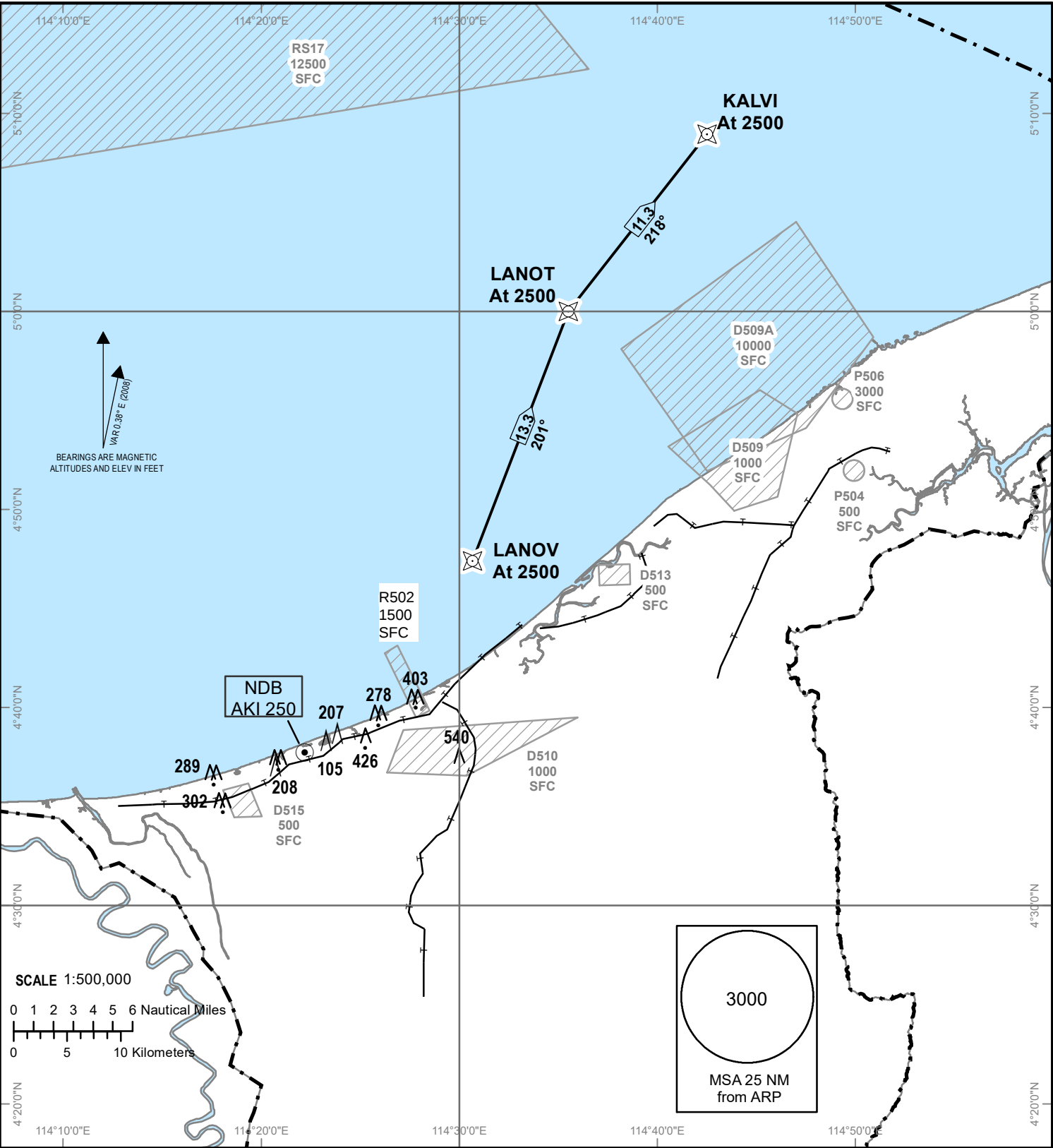
DEPARTURE END RWY 23		
AK23D	043759.40N	1142232.88E
WAYPOINTS		
DUNAX	043558.71N	1141940.37E
OLMIR	043914.40N	1141801.19E
OLTAG	050135.26N	1143218.83E
MIBUX	051053.70N	1143938.41E

STANDARD ARRIVAL CHART
INSTRUMENT (STAR)

TRANSITION ALTITUDE
11000ft

TWR 122.10

ANDUKI
RNAV (GNSS)
RWY 23



- Notes
1. Critical nav aids: Nil.
 2. All waypoints are fly-by.
 3. All positions are referenced to WGS84 datum.

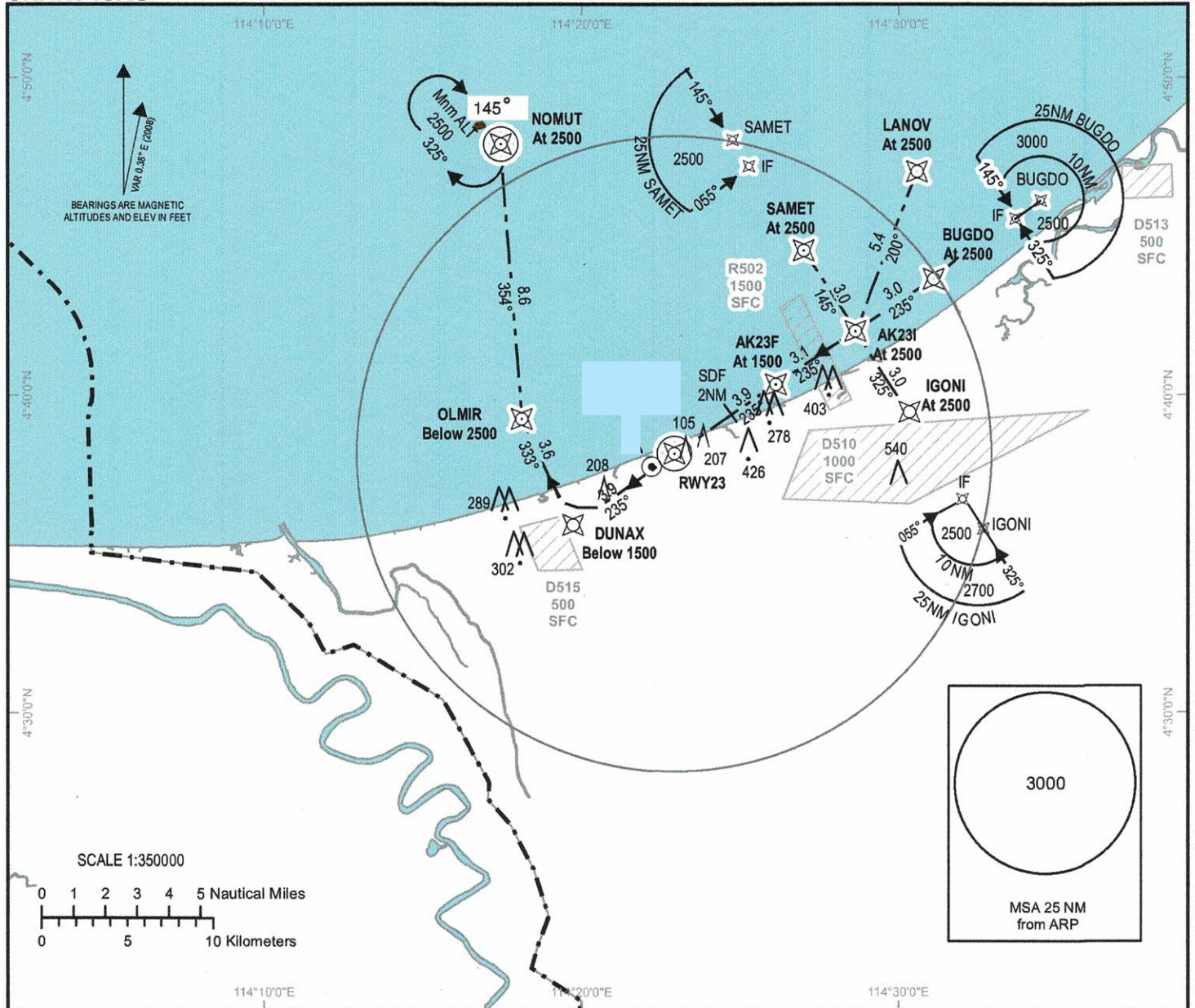
WAYPOINTS		
KALVI	050842.90N	1144223.66E
LANOT	045947.16N	1143521.91E
LANOV	044719.23N	1143034.62E

**INSTRUMENT
APPROACH
CHART-ICAO**

AERODROME ELEV 9ft
HEIGHTS RELATED TO
THR 23-ELEV 9ft
MIN TEMP 20° C

TWR 122.10

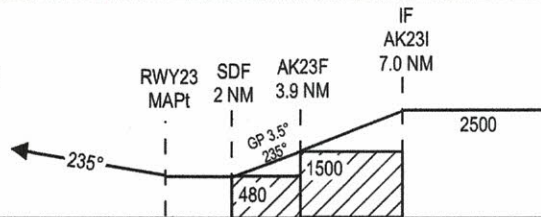
ANDUKI
RNAV (GNSS)
(CAT H) RWY 23



Transition Altitude: 11000ft

MISSED APPROACH (RWY 23) 4.2%
Climb straight ahead to below 1500' at DUNAX then right below 2500' at OLMIR, then climbing to 2500' to NOMUT and hold.

RDH 50 FT



Note: Recommended profile of 3.5% (6.12%)

0 1 2 3 4 5 6 7 8 9 10 Nautical Miles

OCA(H)								
Category of Aircraft	H	NM TO THR						
LNAV/VNAV	328(319)	7	6	5	4	3	2	1
LNAV	460(451)	2660 (2651)	2290 (2281)	1920 (1911)	1550 (1541)	1170 (1161)	800 (791)	430 (421)