AD 2. AERODROMES

FYWB AD 2.1 AERODROME LOCATION INDICATOR AND NAME

FYWB - Walvis Bay International Airport

FYWB AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1.	*ARP co-ordinates and site at AD*	225845S 0143849E 07° / 1500 M from THR09
2.	*Direction and distance from (city)*	270° East, 8 NM from Walvis Bay
3.	*Elevation/reference temperature*	316 FT / 25°C
4.	*Geoid undulation at AD ELEV PSN*	96 FT
5.	*MAG VAR/annual change*	13° W (2025)/ 0.07° decreasing
6.	*Name of aerodrome operator, address, telephone, telefax numbers, e-mail address, AFS address and, if available, website address*	Namibia Airports Company Limited Walvis Bay International Airport Walvis Bay Airport Manager Ms. Chrizelda George Contact Details Tel: +264 64 271 100 Telefax: +264 64 200 164 Cell: +264 81 163 5038 (during or after hours) Email : georgec@airports.com.na wvboperations@airports.com.na Website: www.airports.com.na ATC Tel: +264 64 702690/1 Fax: +264 64 702699 AFS: FYWBYDYX
7.	*Types of traffic permitted (IFR/VFR)*	IFR/VFR
8.	*Remarks*	NIL

FYWB AD 2.3 OPERATIONAL HOURS

1.	*AD Operator*	MON-SUN: 0700 – 1600
2.	*Customs and immigration*	MON-SUN: 0800-1500
3.	*Health and sanitation*	Available within AD Hours. 2 HR PN to AD required
4.	*AIS briefing office*	NIL
5.	*ATS reporting office (ARO)*	As AD Administration
6.	*MET briefing office*	As AD Administration
7.	*ATS*	TWR: MON-FRI: 0700-1500 SAT/SUN/Public Holidays: 0800-1500 APP: MON-FRI: 0500-1700
8.	*Fuelling*	As AD Administration

9.	*Handling*	As AD Administration
10.	*Security*	24 HR
11.	*De-icing*	NIL
12.	*Remarks*	Outside AD HR, services are available O/R. Request to be submitted to the AD not later than 1100 UTC. NAMRA/Customs and Excise Contact Details Tel: +264 64 206 522 After Hour: +264 81 261 6596 Home Affairs: Immigration Contact Details Tel: +264 81 951 0254 After Hour: +264 81 389 8137 Aeronautical Information Services Contact Details (FYWE) Tel: +264 61 702 080/1/3 Fax: +264 61 702 088 Meteorological Services Contact Details Tel: +264 64 702 685 After Hour: +264 81 247 6225 Air Traffic Services Contact Details Tel: +264 64 702 2690/1 After Hour: +264 81 277 7918 and +264 81 308 1520 Port Health Tel: +264 64 216 354 After Hour: +264 81 490 2035

FYWB AD 2.4 HANDLING SERVICES AND FACILITIES

1.	*Cargo-handling facilities*	Hydraulic staircases, forklift 3 ton, air starter unit, 5 ton high loader, tractor, 5 ton scale, hangar parking, baggage trolleys cargo trailers, GPU, toilet services, vehicle (bakkie) & aircraft cleaning.
2.	*Fuel/oil types*	Jet A1 and AVGAS 100LL
3.	*Fuelling facilities/capacity*	1 x Jet A1 refuelling truck – 18 000 L 1 x Jet A1 refuelling truck – 11 000 L 1 x AVGAS refuelling truck – 3 000 L
4.	*De-icing facilities*	NIL
5.	*Hangar space for visiting aircraft*	Limited by prior arrangement only.
6.	*Repair facilities for visiting aircraft*	NIL
7.	*Remarks*	Handling services available within AD HR or by arrangement with the AD. Walvis Bay Airport Services (WBAS) Tel: +264 64 201 2180/ +264 64 204 878 Telefax: +264 64 204 878 Mobile: +264 81 147 3186, +264 81 885 1427 and +264 81

		225846.06S 0143831.15E Frequency: 113.6 MHz
5.	*INS checkpoints*	NIL
6.	*Remarks*	Refer to AD 2.20 Local Traffic Regulations 5. Taxi Limitations

FYWB AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1.	*Use of aircraft stand ID signs, TWY guide lines and visual docking/ parking guidance system of aircraft stands*	NIL facilities Parking of ACFT as per ARFF Marshaller
2.	*RWY and TWY markings and LGT*	RWY: Designation, THR, TDZ, centre line, aiming point edge runway end as appropriate, marked, and lighted. TWY: Centre Line, holding positions at TWY B, C and F intersections, VOR checkpoint at TWY B and C holding positions, TWY leading lines, marked.
3.	*Stop bars*	Stop Bar on main intersection from main taxiway to cargo apron. Stop Bar on main intersection from RWY 27 to main taxiway. Stop Bar on main intersection from RWY 09 to main taxiway.
4.	*Other runway protection measures*	Guard Light is on the same line as the stop bar, on the side. Guard Light located on main intersection from main taxiway to cargo apron. Guard Light on main intersection from RWY 27 to main taxiway. Guard Light on main intersection from RWY 09 to main taxiway.
5.	*Remarks*	Refer to AD 2.20 Local Traffic Regulations 5. Taxi Limitations

FYWB AD 2.10 AERODROME OBSTACLES

In Area 1					
OBST ID/ Designation	*OBST Type*	*OBST position*	*ELEV/HGT (FT)*	*Markings / Type, Colour, Lighting (LGT)*	*Remarks*
a	**b**	**c**	**d**	**e**	**f**
HI GRND1	Mountain	225820.12S 0144017.71E	368FT	NIL	09/TKOF 27/APCH

In Area 2					
OBST ID/ Designation	*OBST Type*	*OBST position*	*ELEV/HGT (FT)*	*Markings / Type, Colour, Lighting (LGT)*	*Remarks*
a	**b**	**c**	**d**	**e**	**f**
ROOI RES	RESERVOIR	225850.47S 0143937.36E	509/124	Marked	NIL
VOR WBV	NAV Aid	225855.59S 0143840.48E	299/3	Marked/LGT	NIL
ARB C	NAV Aid	225851.32S 0143847.51E	322/10	Marked/LGT	NIL
GP Container	NAV Aid	225835.90S 0143937.11E	322/10	Marked/LGT	NIL
GP27 Mon Pole	Glide Path 27	225834.77S 0143940.80E	312/20	Marked/ LGT	NIL
MET Station Mid	NAV Aid	225855.70S 0143828.48E	299/33	Marked	NIL
MET Station 09	NAV Aid	225904.17S 0143800.02E	272/33	Marked	NIL
MET Station 27	NAV Aid	225835.94S 0143935.09E	344/33	Marked	NIL
Wind Sensor OLD	NAV Aid	225852.38S 0143844.81E	305/33	Marked	NIL
Wind Sensor 09	NAV Aid	225903.14S 0143803.63E	253/10	Marked	NIL
Wind Sensor 27_A	NAV Aid	225836.81S 0143932.10E	328/10	Marked	NIL
LOC09 Monitor	NAV Aid	225904.18S 0143748.75E	240/3	Marked/LGT	NIL
Sub27	NAV Aid	225837.06S 0143937.51E	322/10	Marked	NIL
GP 27	Glide Path 27	225835.82S 0143937.28E	367/33	Marked/ LGT	NIL
HI GRND2	TERRAIN	225830.51S 0144035.10E	407/26	NIL	NIL
Windsock_ Mid	NAV Aid	225852.15S 0143850.76E	299/26	Marked/LGT	NIL
Windsock27	NAV Aid	225834.43S 0143945.01E	334/26	Marked	NIL

In Area 3					
OBST ID/ Designation	*OBST Type*	*OBST position*	*ELEV/HGT*	*Markings / Type, Colour, Lighting (LGT)*	*Remarks*
a	b	c	d	e	f
NIL					

FYWB AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1.	*Associated Met office*	Windhoek
2.	*Hours of service* *MET office outside hours*	MON-FRI: 0330 – 1830 SAT-SUN: 0330 – 1230 SAT-SUN: 1730 – 1830 (one reading is taken between these times) 2 HR
3.	*Office responsible for TAF preparation* *Periods of validity*	Windhoek 6 HR
4.	*Type of landing forecast* *Interval of issuance*	NIL
5.	*Briefing/consultation provided*	Personal Consultation
6.	*Flight documentation* *Language(s) used*	Charts, abbreviated plain language text English
7.	*Charts and other information available for briefing or consultation*	S3, U85, U7, U5, U2, P5
8.	*Supplementary equipment available for providing information*	NIL supplementary equipment
9.	*ATS units provided with information*	Windhoek FIC
10.	*Additional information (limitation of service, etc.)*	1. Satellite Imagery 2. Windsock Geographical Location, Elevation, Marking and Lighting

Windsock Designation	**Latitude Longitude**	**Height (FT)**	**Marked/ LGT**
Windsock E: Abeam ATC	225852.15S 0143850.76E	304	Marked/ LGT
Windsock 27: Abeam THR	225834.43S 0143945.01E	302	Marked

FYWB AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	*TRUE BRG*	*Dimensions of RWY (M)*	*Strength (PCN) and surface of RWY and SWY*	*THR coordinates RWY end coordinates THR geoid undulation*	*THR Elevation and highest elevation of TDZ of precision APPRWY*
1	2	3	4	5	6
09	071.58°	3 440 x 60	130/F/B/W/T Asphalt	225903.14S 0143752.23E GUND 96FT	THR 236FT TDZ 239FT
27	251.58°	3 440 x 60	130/F/B/W/T Asphalt	225828.55S 0143947.08E GUND 96FT	THR 315FT TDZ 313FT

Designations RWY NR	*Slope of RWY-SWY*	*SWY dimensions (M)*	*CWY dimensions (M)*	*Strip dimensions (M)*	*Dimensions of runway end safety areas*
1	7	8	9	10	11
09	RWY – 0.7% SWY - NIL	NIL	NIL	3 560 x 280	120 x 90
27	RWY – 0.7% SWY - NIL	NIL	NIL	3 560 x 280	120 x 90

Designations RWY NR	*Location and description of arresting system*	*OFZ*	*Remarks*
1	12	13	14
09	NIL	NIL	RESA Long Slope: 2.17% RESA Trans Slope: 0.2%
27	NIL	NIL	RESA Long Slope: 0.85% RESA Trans Slope: 1.3%

FYWB AD 2.13 DECLARED DISTANCES

RWY Designator	*TORA (M)*	*TODA(M)*	*ASDA (M)*	*LDA (M)*	*Remarks*
1	**2**	**3**	**4**	**5**	**6**
09	3440	3440	3440	3440	NIL
27	3440	3440	3440	3440	NIL

FYWB AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	*APCH LGT type LEN INTST*	*THR LGT colour WBAR*	*VASIS (MEHT) PAPI*	*TDZ, LGT, LEN*	*RWY Centre line LGT length, spacing, colour, INTST*
1	2	3	4	5	6
09	CAT I 900 M LIH	Green	PAPI, Both/3° (30FT)	TDZ: 749.1M	3390 M, 15 M, white middle and red end
27	CAT II 900 M LIH	Green	PAPI, Both/3° (69FT)	TDZ: 762M	3390 M, 15 M, white middle and red end

RWY Designator	*RWY edge LGT LEN, spacing colour INTST*	*RWY End LGT colour WBAR*	*SWY LGT LEN (M) colour*	*Remarks*
1	7	8	9	10
09	3360 M, 60 M, white, LIH	Red	40 M Yellow and red	Non-precision APP
27	3360 M, 60 M, white, LIH	Red	40 M Yellow and red	Non-precision APP

FYWB AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1.	*ABN/IBN location, characteristics, and hours of operation*	ABN: Abeam Centre RWY, FLG W G EV 2 SEC/ IBN: NIL
2.	*LDI location and LGT* *Anemometer location and LGT*	LDI: NIL Anemometer: AMS E 320 M from THR 27, lighted AMS C 1000 M from THR 09, lighted AMS W 200 M from THR 09, lighted
3.	*TWY edge lights, centre line lights and stop bars (if any)*	TWY edge lights are only available at intersection “C”

4.	*Secondary power supply/switch-over time*	Secondary power supply to all lighting at AD Switch over time: 15 SEC
5.	*Remarks*	NIL Aerodrome identification beacon Signalling lamp is located in the ATC tower 2 x 400kva Cummins generator sets, with a capacity of 5 000L diesel. The power is distributed to the Runway, taxiway, approach lighting, terminal building, hangars, PAPI lighting, ATC control tower, Meteorological equipment, fire station, VOR, Glideslope, Localizer and Receiver station.

FYWB AD 2.16 HELICOPTER LANDING AREA

1.	*Coordinates TLOF or THR of FATO* *Geoid undulation*	NIL
2.	*TLOF and/or FATO elevation M/FT*	NIL
3.	*TLOF and FATO area dimensions, surface, strength, marking*	NIL
4.	*True BRG of FATO*	NIL
5.	*Declared distance available*	NIL
6.	*APP and FATO lighting*	NIL
7.	*Remarks*	NIL

FYWB AD 2.17 ATS AIRSPACE

1.	*Designation and lateral limits*	Walvis Bay CTR Lateral limits 225100.61S 0144701.68E – Clockwise along the arc of a circle, radius 10NM centred at 225828.55S 0143947.08E – 230414.63S 0144839.60E – 230833.04S 0143421.75E – clockwise along the arc of a circle, radius 10NM centred at 225903.14S 0143752.23E – 225657.72S 0142716.09E to point of origin.
2.	*Vertical limits*	GND/2500FT AMSL
3.	*Airspace classification*	C
4.	*ATS unit call sign* *Language(s)*	Walvis Bay Tower English
5.	*Transition altitude*	10 000 FT MSL
6.	*Remarks*	1. Speed restrictions apply in FYWB TMA. Refer FYWB AD 2.22 Flight procedures. 2. Use FYWB QNH within the lateral confines of FYWB TMA at and below 10000FT AMSL. Refer ENR 2.1-6 Note 2. 3. All traffic operating in Class G airspace within the lateral confines of the FYWB TMA, must contact Walvis Bay Approach on 122.5MHz for Flight Information Service.

FYWB AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	*Call sign*	*Frequency*	*Hours of operation*	*Remarks*
1	**2**	**3**	**4**	**5**
Tower/APP	Walvis Bay Tower	122.5 MHz	TWR: MON-FRI: 0700 - 1500, SAT/SUN/Public Holidays: 0800-1500 APP: MON-FRI: 0500-1700	NIL
ATIS	Walvis Bay ATIS	127.0 MHz	H24	Fully operational 50NM radius around airport on this FREQ 127.0 MHz or TEL +264 81 3323509

FYWB AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, CAT of ILS/MLS (for VOR/ILS/ MLS give VAR)	*ID*	*Frequency*	*Hours of Operation*	*Position of transmitting antenna co-ordinates*	*Elevation of DME transmitting antenna*	*Remarks*
1	**2**	**3**	**4**	**5**	**6**	**7**
VOR/DME (13°W/2016)	WBV	113.6 MHz CH 83X	H24	225855.59S 0143840.48E	299 FT	NIL
RNP APCH	N/A	1575.42 MHz	H24	N/A	N/A	Transmitting antennas are satellite based

FYWB AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

1.1 Hazard, Incident and Accident Reporting

All safety hazards, incidents and accidents are to be reported to FYWB fire station control room at +264 64 271 123 or the Safety & Environmental Officer on duty at +264 64 271 102/127 or emailed to walvisbaysafety@airports.com.na.

1.2 High Ground on APCH RWY27

- Terrain on approach runway 27 mountain with red and white painted reservoir atop.
- High ground 1, terrain on approach runway 27, published in the AIP approach charts.

1.3 Circuit Altitude

- Turbine-powered aircraft 2000 FT ALT.
- Reciprocating engine-powered aircraft 1500 FT ALT.

1.4 Reflective Jackets

- All pilots and crew operating at Walvis Bay International Airport must wear a lime green reflective jacket depicting their airline name on the rear of the jacket for safety reasons as well as easy identification.

1.5 New Aircraft Operating at Walvis Bay International Airport

- Aircraft operators intending to operate an aircraft for the first time at Walvis Bay International Airport must apply in writing via email to georgec@airports.com.na the Airport Manager to complete the new Aircraft Application form. Pilots may only operate the new aircraft upon approval by the Airport Manager. This assessment will also include a comparison of the aircraft ACN against the Airport airside Pavement PCN.

1.6 Airport Fees Administration

1.6.1 After Hour Operations

Request for ad hoc extension to hours of operation.
Applicant must apply in writing at least 48 hours in advance to the Airport Manager, who after consultation with service providers will approve or reject the request. Application must be submitted to wvboperations@airports.com.na

1.6.2 Landing/Parking and Passenger fees

All unscheduled and charter flights are to effect payment directly to NAC upon arrival and before departure and not to any third parties, payment can be done at the Apron office located on the ground floor of the terminal building.

2. Taxiing to and from stands

Standard Taxi Routes (Aircraft)

a) Aircraft with outer main gear wheel span greater than > 6m make use of the following standard taxi routes:

- Aircraft which are about to take-off on runway 09, may exit the cargo apron via intersection Bravo, via Alpha 4 to enter the runway to proceed west to threshold 09.
- Aircraft which are about to take-off on runway 27, may exit the cargo apron via intersection Bravo, and Alpha 4 to enter the runway to proceed east to threshold 27.
- Aircraft landing on runway 27 may proceed to intersection Alpha 4 and then Bravo to enter the cargo apron.
- Aircraft landing on runway 09 can exit the runway using intersections Alpha 4 then Bravo to enter the cargo apron.

b) Aircraft with main gear wheel span less than > 6M make use of the following standard taxi routes:

- Aircraft which are about to take-off on runway 09, may exit the apron via intersection Bravo, via Alpha 4 or Alpha 5 to enter the runway to proceed west to threshold 09.
- Aircraft which are about to take-off on runway 27, may exit the apron via intersection Bravo, Alpha Taxiway, Alpha 1, 2, 3 or 4 to enter the runway to proceed east to threshold 27.
- Aircraft landing on runway 27 may proceed to intersection Alpha 4 and then Bravo to enter the cargo apron; or landing on runway 27 proceed to intersection Alpha 3 then Charlie to enter the passenger apron.

- Aircraft landing on runway 09 can exit the runway using intersections Alpha 4 then Bravo to enter the cargo apron, or Alpha 3 then Charlie onto passenger apron.

c) Standard taxiway designations are contained under Appendix 20 to the aerodrome manual.

d) Standard taxiway routes are presented as Appendix 21 in the aerodrome manual.

Note: Intersection TWY Delta and Echo located abeam the fuel farm, are permanently closed to traffic.

3. Parking area for small aircraft (general aviation)

General aviation aircraft shall be guided by marshallers to the parking area for small aircraft.

4. Parking area for helicopters

Once the helicopter enters the apron, ATC will instruct the Pilot to follow the direction of the Aircraft Marshallers to an allocated parking position on the apron.

5. Apron – taxiing during winter conditions

Inbound Traffic:

Once aircraft enter the apron, ATC will instruct the Pilot to follow the directions of the Aircraft Marshallers to an allocated parking position.

Departing IFR flights shall contact the TWR to obtain ATC clearance before commencing taxiing. Request for ATC clearance may take place at the earliest 10 minutes prior to engine start-up. Frequency 122.5 MHz is to be used in the period 0700 – 1500 UTC.

6. Taxiing – limitations

The separation distance between the runway and parallel taxiway does not allow simultaneous movement of landing and taxiing aircraft.

Taxiway Delta and Echo are closed permanently.

Standard taxiway routes exist for all aircraft above Code B via Taxiway Alpha 4 and onto Taxiway Bravo.

Passenger apron via Taxiway Charlie, adjacent to the passenger terminal building, is closed to traffic subjected to prior approval from Airport Manager.

7. School and training flights - Technical test flights - Use of runways

School and training flights must only be made after permission has been obtained from the ATC.

8. Helicopter traffic - Limitation

Non-scheduled public air traffic with helicopters is permitted only after prior approval from the Walvis Bay International Airport Administration. Any contact concerning the above shall be made via the handling company or directly to the airport during the hours of service and, if possible, not later than the day before the flight is to be carried out.

Any request for approval of traffic shall contain the following information:

a) Owner/Operator

b) Type of helicopter, registration/call sign

c) Date, arrival time/departure time, destination(s).

Furthermore, other details relevant to the evaluation for the request shall be given as required.

9. Removal of disabled aircraft from runways

The registered owner or aircraft operator will always retain complete responsibility for the removal of the disabled aircraft. All airline operators at FYWB are expected to have an aircraft recovery plan. For non-airlines operators at FYWB, the pilot or aircraft owner is responsible for the immediate removal and or disposal of the disabled aircraft.

FYWB AD 2.21 NOISE ABATEMENT PROCEDURES

NIL procedures.

FYWB AD 2.22 FLIGHT PROCEDURES

Radio Communication Failure
a) Aircraft to join overhead the Aerodrome at 2000 feet AGL
b) Observe and join the Aerodrome TFC
c) Make all turns to the left whenever possible
d) Land as soon as possible and report to the ATC

Speed Restriction:

Speed restrictions within Walvis Bay TMA for arriving and departing aircraft, MAX IAS 250KT restriction applies at and below A100. Speed is mandatory and must be complied with. ATC may vary the speeds for traffic management purposes.

FYWB AD 2.23 ADDITIONAL INFORMATION

1. Model Flying

Model flying activities taking place on weekends 5NM southwest of FYWB at position 230237S 0143515E.

2. Paragliding

Paragliding activities in dunes near Lang strand throughout the year.

3. SECURING OF LIGHT AIRCRAFT

There are no designated stands for the parking of small aircraft, pilots are strictly requested to adhere to the marshalling signals from the marshaller.
No aircraft mooring points are available at FYWB, aircraft mooring weights available:

The equipment available is listed below:

4 x 43 KG pairs;
4 x 90 KG pairs;
4 x 92 KG pairs;
4 x 115 KG
1 x mobile trolley (for transportation of mooring equipment only)

The mooring equipment are stored at the now defunct temporary passenger terminal building structure, on airside located west of the passenger terminal building.
Pilots requiring mooring weights shall inform the aircraft marshaller on duty at the apron or the Airport Rescue and Fire Fighting Services Control Room.
Note! – The Pilot in Command (PIC) shall at own discretion select the weights for the type of aircraft in operation at the time.

Once the mooring weights have been used, it is the responsibility of the aircraft operator to return the mooring weight equipment to the designated storage area.

4. LIMITATIONS ON THE USE OF THE AERODROME

Simultaneous Movements
The separation distance between the runway and the taxiway does not allow simultaneous movements of landing and taxiing aircraft.

Taxiway Restrictions
Taxiways Delta and Echo are closed permanently.

Standard taxiway routes exist for all aircraft above Code B through Taxiway Alpha 4 and onto Taxiway Bravo.

Passenger apron through Taxiway Charlie, adjacent to the passenger terminal building, is closed to traffic subject to prior approval from the Airport Manager.

Other Restrictions
No night operations, outside of natural light hours, are allowed at Walvis Bay International Airport.

Pre-Flight Altimeter Checkpoint
The apron at Walvis Bay International Airport is not provided with Pre-Flight Altimeter checkpoint(s). The pre-flight altimeter checks are currently conducted on any position on the Apron. Pilots obtain the QNH from ATC, which is obtained from the Pressure Sensor of Meteorological Services.

Apron Markings
Airport Apron lead in lines is not commensurate with aircraft operations. There are no aircraft stand markings on FYWB cargo or passenger apron. Pilots are to follow aircraft marshaller instructions.

FYWB AD 2.24 CHARTS RELATED TO WALVIS BAY

AERODROME CHART-ICAO

22°58'45"S
014°38'49"E

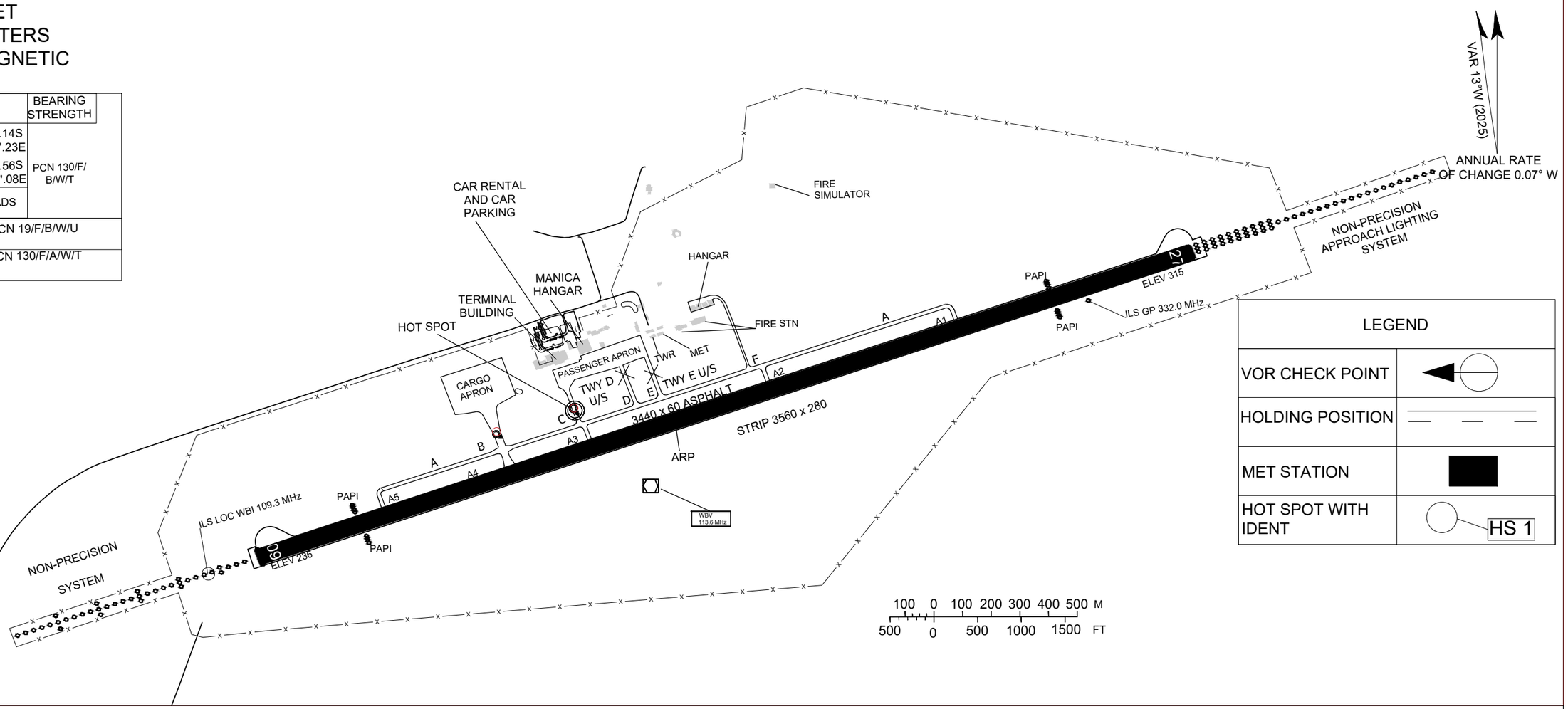
ELEV 316 FT

WALVIS BAY TWR	122.5
WALVIS BAY ATIS	127.0

WALVIS BAY/
WALVIS BAY INTERNATIONAL AIRPORT

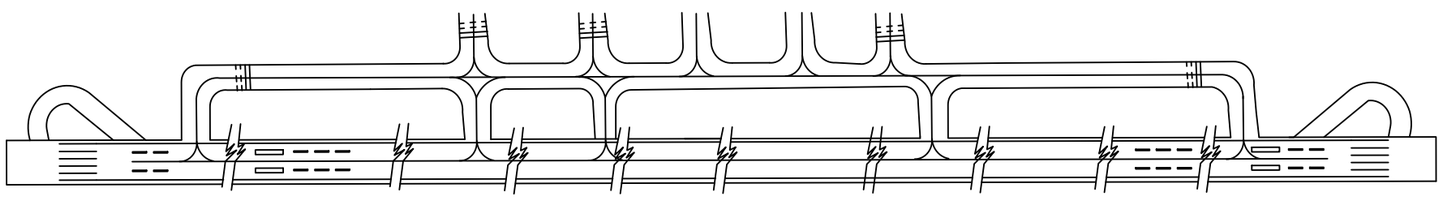
ELEVATION IN FEET
DIMENSION IN METERS
BEARING ARE MAGNETIC

RWY	DIRECTION	THR	BEARING STRENGTH
09	071°	22°59'03".14S 014°37'52".23E	PCN 130/F/ B/W/T
27	251°	22°58'28".56S 014°39'47".08E	
RWY 09 AND RWY 27 TURN PADS			
TWY A, TWY C, TWY D, TWY E		PCN 19/F/B/W/U	
TWY B		PCN 130/F/A/W/T	

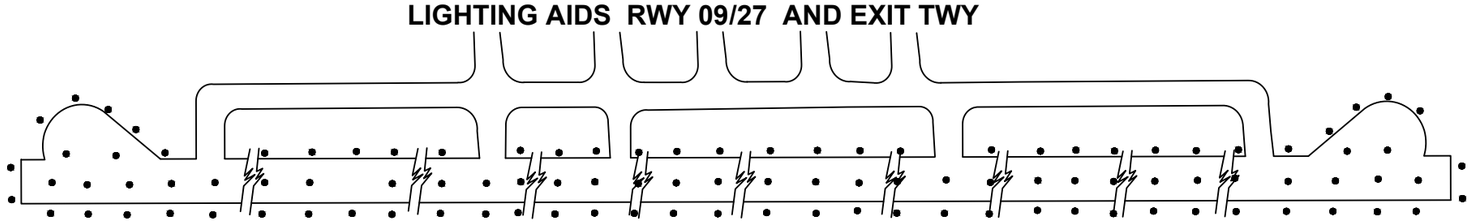


LEGEND	
VOR CHECK POINT	
HOLDING POSITION	
MET STATION	
HOT SPOT WITH IDENT	HS 1

MARKING AIDS RWY 09/27 AND EXIT TWY



LIGHTING AIDS RWY 09/27 AND EXIT TWY



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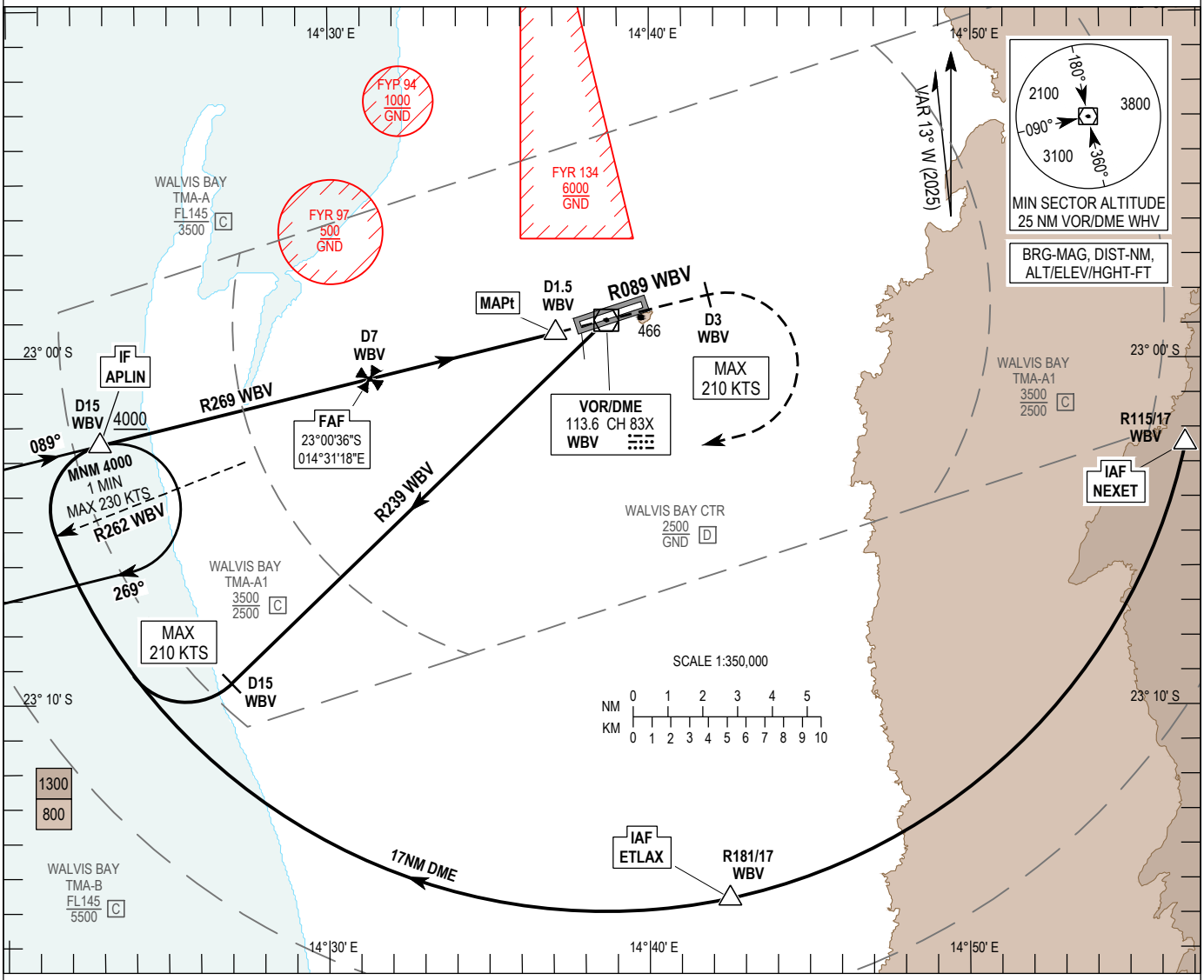
INSTRUMENT APPROACH CHART - ICAO

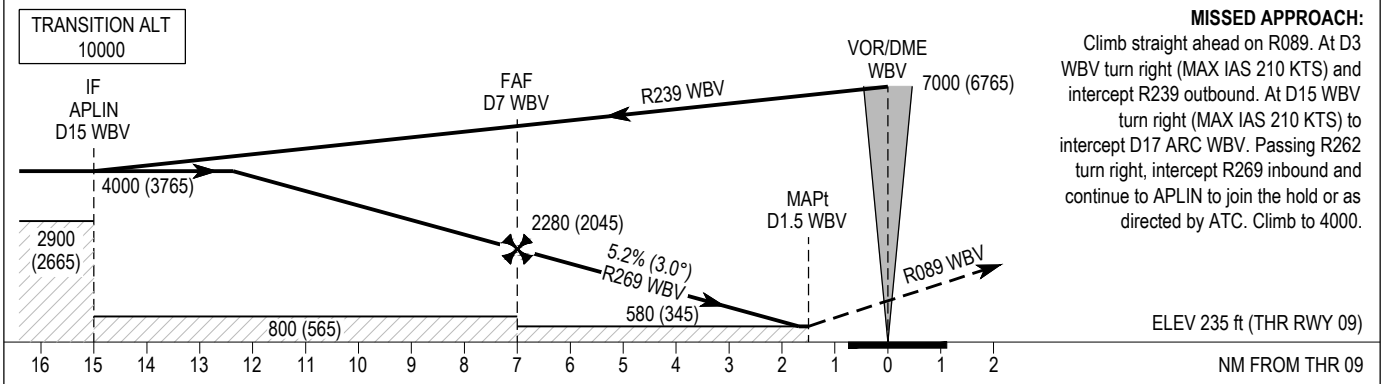
AERODROME ELEV 316 ft
HEIGHTS RELATED TO
THR RWY 09 - ELEV 235 ft

TWR	122.50
ATIS	127.00

WALVIS BAY (FYWB) VOR RWY 09

(ACFT CAT A, B, C, D)





MISSED APPROACH:
Climb straight ahead on R089. At D3 WBV turn right (MAX IAS 210 KTS) and intercept R239 outbound. At D15 WBV turn right (MAX IAS 210 KTS) to intercept D17 ARC WBV. Passing R262 turn right, intercept R269 inbound and continue to APLIN to join the hold or as directed by ATC. Climb to 4000.

OCA (H)	A	B	C	D
Straight-in	580 (345)			
Visual Manoeuvring South of RWY (Heights AAL)	870 (554)	940 (624)	1160 (844)	1240 (924)
Circling to the North Prohibited				

NOTES:
1. WBV DME required.
2. GNSS permitted in lieu of DME. Reference waypoint WBV VOR.

Recommended Profile on Final Approach (3.0° / 5.2%)					
DIST WBV DME	6	5	4	3	2
ALT / HT (ft)	1960 (1725)	1640 (1405)	1320 (1085)	1000 (765)	680 (445)

Ground Speed	kts	80	100	120	140	160
Descent rate gradient - 5.2% (3.0°) 320 ft/NM	ft / min	430	530	640	740	850

CHANGE: AD elev.

VOR RWY09 Approach

Descent Angle:	5.24% (3.00°)			
Fix	IAF NEXET (D17.0 WBV)	IAF ETLAX (D17.0 WBV)	IF APLIN (D15.0 WBV)	FAF - (D7.0 WBV)
Fix Coordinates	230227.8 S 0145641.8 E	231536.5 S 0144230.2 E	230230.4 S 0142253.4 E	230036.2 S 0143117.8 E
Fix Formation Bearing (°T)	102.03 WBV	168.03 WBV	256.18 WBV	256.18 WBV
Fix Formation Distances	17.00 WBV	17.00 WBV	15.00 WBV	7.00 WBV

Descent Angle:	5.24% (3.00°)			
Fix	MAPt - (D1.5 WBV)	TP - (D3.0 WBV)	TP - (D15.0 WBV)	VOR/DME WBV -
Fix Coordinates	225917.2 S 0143705.4 E	225812.4 S 0144150.0 E	230922.5 S 0142658.0 E	225855.6 S 0143840.5 E
Fix Formation Bearing (°T)	256.18 WBV	076.18 WBV	226.00WBV	-
Fix Formation Distances	1.50 WBV	3.00 WBV	15.00 WBV	-

Hold Identification

Holding Fix	**Latitude (S) / Longitude (E)**	**Inbound True Track (degrees)**	**Inbound Mag Track (degrees)**	**Maximum Indicated Airspeed (kts)**	**Minimum Holding Level / Altitude (FL/ft)**	**Maximum Holding Level / Altitude (FL/ft)**	**Outbound Time (min)**	**Direction of Turn**
APLIN D15 WBV	230230.4 / 0142253.4	076.3	089	230	+A4000	-	1	R

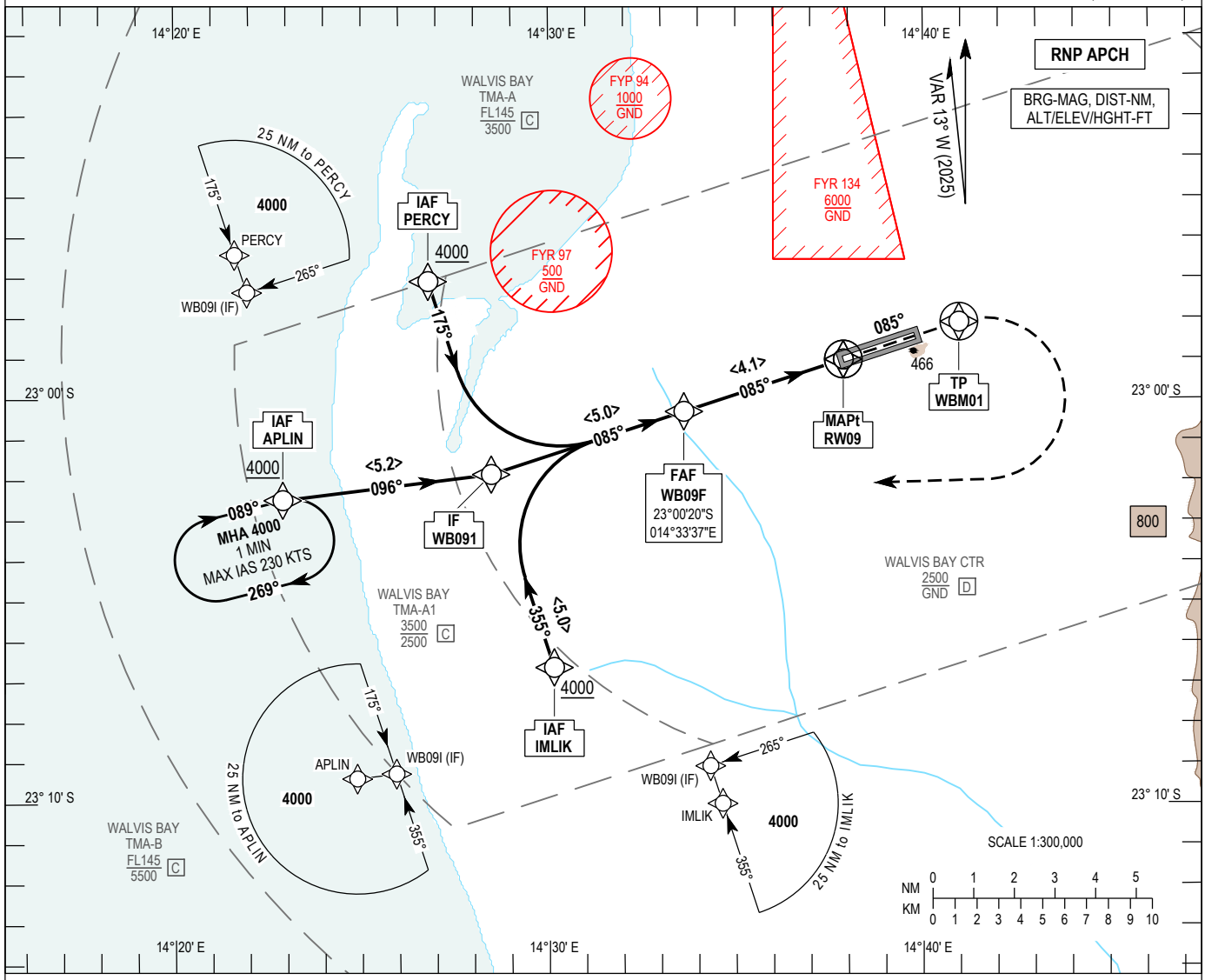
INSTRUMENT APPROACH CHART - ICAO

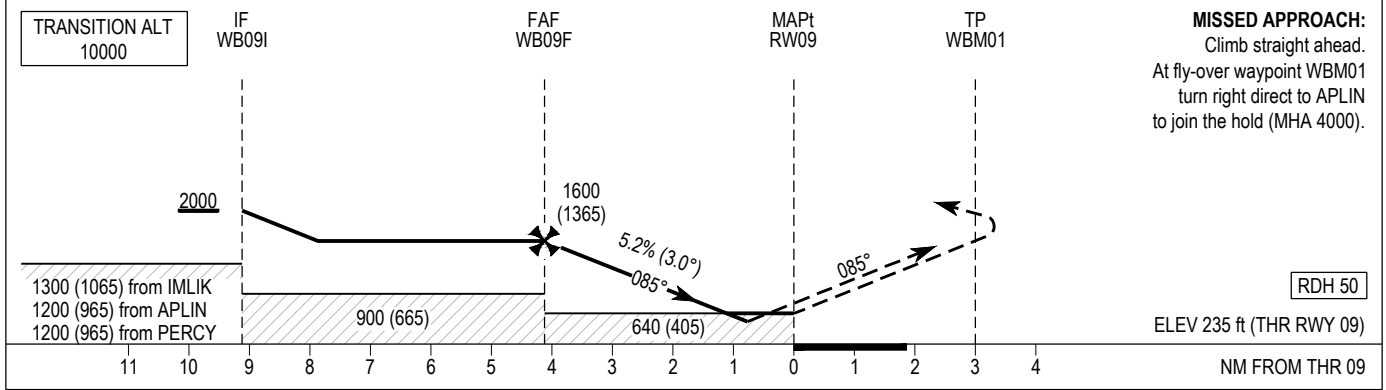
AERODROME ELEV 316 ft
HEIGHTS RELATED TO THR RWY 09 - ELEV 235 ft

TWR	122.50
ATIS	127.00

WALVIS BAY (FYWB) RNP RWY 09

(ACFT CAT A, B, C, D)
MNM TEMP -10°C (BARO VNAV)
MAX TEMP +60°C (BARO VNAV)





MISSED APPROACH:
Climb straight ahead.
At fly-over waypoint WBM01 turn right direct to APLIN to join the hold (MHA 4000).

OCA (H)	A	B	C	D
LNAV	640 (405)			
LNAV/VNAV	530 (295)	540 (305)	550 (315)	560 (325)
Visual Manoeuvring South of RWY (Heights AAL)	870 (554)	940 (624)	1160 (844)	1240 (924)

NOTES:
1. MAX IAS 250 KTS at and below 10000.
2. Descent gradient greater than 5.6% (3.2°) from IMLIK and PERCY.

Recommended LNAV Profile on Final Approach						
DIST THR RWY 09	4		3		2	
ALT / HT (ft)	1560 (1325)		1240 (1005)		920 (685)	
Ground Speed	kts	80	100	120	140	160
Descent rate gradient - 5.2% (3.0°) 320 ft/NM	ft / min	430	530	640	740	850

CHANGE: AD elev; VMC added.

RNP RWY09 via IMLIK

Nav. Spec.	WPT Name	Latitude (S) / Longitude (E)	Path Term	Fly-By Fly-Over	True Track / Mag Track	Distance (NM)	Upper Limit / Lower Limit	Speed Limit (kts)	VPA (°) / TCH (ft)	Remarks
RNP APCH	IMLIK	230639.1 / 0143008.1	IF	-	-	-	- / +A4000	-	-	-
RNP APCH	WB09I	230152.9 / 0142827.5	TF	-	342.0 / 355	5.0	- / +A2000	-	-	-
RNP APCH	WB09F	230019.9 / 0143336.8	TF	Fly-By	072.0 / 085	5.0	-	-	-	Turn R
RNP APCH	RW09	225903.1 / 0143752.2	TF	Fly-Over	072.0 / 085	4.1	-	-	3.00 / 50	-
RNP APCH	WBM01	225807.4 / 0144057.8	CF	Fly-Over	072.0 / 085	-	-	-	-	082° / D2.3 WBV
RNP APCH	APLIN	230230.4 / 0142253.4	DF	Fly-By	-	-	-	230	-	Turn R

RNP RWY09 via APLIN

Nav. Spec.	WPT Name	Latitude (S) / Longitude (E)	Path Term	Fly-By Fly-Over	True Track / Mag Track	Distance (NM)	Upper Limit / Lower Limit	Speed Limit (kts)	VPA (°) / TCH (ft)	Remarks
RNP APCH	APLIN	230230.4 / 0142253.4	IF	-	-	-	- / +A4000	-	-	-
RNP APCH	WB09I	230152.9 / 0142827.5	TF	-	083.1 / 096	5.2	- / +A2000	-	-	-
RNP APCH	WB09F	230019.9 / 0143336.8	TF	Fly-By	072.0 / 085	5.0	-	-	-	Turn L
RNP APCH	RW09	225903.1 / 0143752.2	TF	Fly-Over	072.0 / 085	4.1	-	-	3.00 / 50	-
RNP APCH	WBM01	225807.4 / 0144057.8	CF	Fly-Over	072.0 / 085	-	-	-	-	082° / D2.3 WBV
RNP APCH	APLIN	230230.4 / 0142253.4	DF	Fly-By	-	-	-	230	-	Turn R

RNP RWY09 via PERCY

Nav. Spec.	WPT Name	Latitude (S) / Longitude (E)	Path Term	Fly-By Fly-Over	True Track / Mag Track	Distance (NM)	Upper Limit / Lower Limit	Speed Limit (kts)	VPA (°) / TCH (ft)	Remarks
RNP APCH	PERCY	225706.6 / 0142647.1	IF	-	-	-	- / +A4000	-	-	-
RNP APCH	WB09I	230152.9 / 0142827.5	TF	-	162.0 / 175	5.0	- / +A2000	-	-	-
RNP APCH	WB09F	230019.9 / 0143336.8	TF	Fly-By	072.0 / 085	5.0	-	-	-	Turn L
RNP APCH	RW09	225903.1 / 0143752.2	TF	Fly-Over	072.0 / 085	4.1	-	-	3.00 / 50	-
RNP APCH	WBM01	225807.4 / 0144057.8	CF	Fly-Over	072.0 / 085	-	-	-	-	082° / D2.3 WBV
RNP APCH	APLIN	230230.4 / 0142253.4	DF	Fly-By	-	-	-	230	-	Turn R

Hold Identification

Holding Fix	Latitude (S) / Longitude (E)	Inbound True Track (degrees)	Inbound Mag Track (degrees)	Maximum Indicated Airspeed (kts)	Minimum Holding Level / Altitude (FL/ft)	Maximum Holding Level / Altitude (FL/ft)	Outbound Time (min)	Direction of Turn
APLIN	230230.4 / 0142253.4	076.0	089	230	+A4000	-	1	R

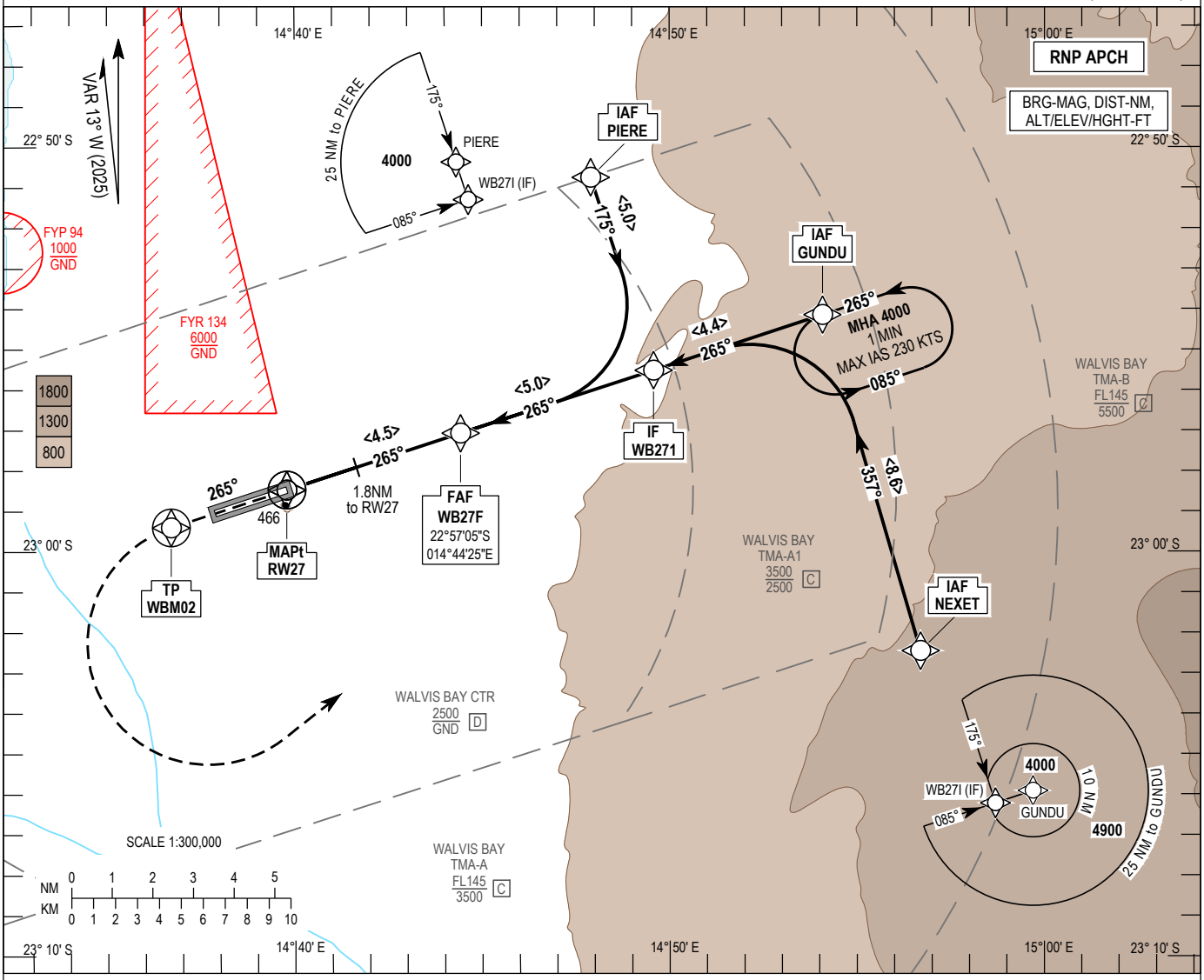
INSTRUMENT APPROACH CHART - ICAO

AERODROME ELEV 316 ft
HEIGHTS RELATED TO THR RWY 27 - ELEV 316 ft

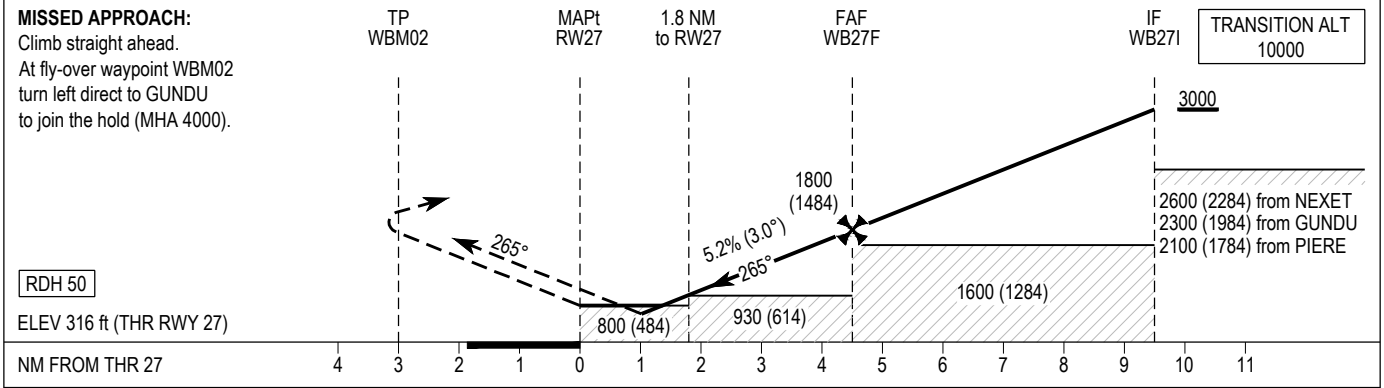
TWR	122.50
ATIS	127.00

WALVIS BAY (FYWB) RNP RWY 27

(ACFT CAT A, B, C, D)
MNM TEMP -10°C (BARO VNAV)
MAX TEMP +60°C (BARO VNAV)



MISSED APPROACH:
Climb straight ahead.
At fly-over waypoint WBM02 turn left direct to GUNDU to join the hold (MHA 4000).



OCA (H)	A	B	C	D
LNAV	800 (484)			
LNAV/VNAV	690 (374)	700 (384)	710 (394)	720 (404)
Visual Manoeuvring South of RWY (Heights AAL)	870 (554)	940 (624)	1160 (844)	1240 (924)

NOTES:
1. MAX IAS 250 KTS at and below 10000.

Recommended LNAV Profile on Final Approach

DIST THR RWY 27	2	3	4
ALT / HT (ft)	1000 (684)	1320 (1004)	1640 (1324)

Ground Speed	kts	80	100	120	140	160
Descent rate gradient - 5.2% (3.0°) 320 ft/NM	ft / min	430	530	640	740	850

CHANGE: AD elev; VMC added.

RNP RWY27 via GUNDU

Nav. Spec.	WPT Name	Latitude (S) / Longitude (E)	Path Term	Fly-By Fly-Over	True Track / Mag Track	Distance (NM)	Upper Limit / Lower Limit	Speed Limit (kts)	VPA (°) / TCH (ft)	Remarks
RNP APCH	GUNDU	225409.3 / 0145404.8	IF	-	-	-	- / +A4000	-	-	-
RNP APCH	WB27I	225531.6 / 0144934.5	TF	N	251.8 / 265	4.4	- / +A3000	-	-	-
RNP APCH	WB27F	225704.7 / 0144425.4	TF	N	252.0 / 265	5.0		-	-	-
RNP APCH	RW27	225828.6 / 0143947.1	TF	Y	252.0 / 265	4.5	-	-	3.00 / 50	-
RNP APCH	WBM02	225924.4 / 0143641.6	CF	Y	252.0 / 265	-	-	-	-	268° / D1.9 WBV
RNP APCH	GUNDU	225409.3 / 0145404.8	DF	N	-	-	-	230	-	Turn L

RNP RWY27 via NEXET

Nav. Spec.	WPT Name	Latitude (S) / Longitude (E)	Path Term	Fly-By Fly-Over	True Track / Mag Track	Distance (NM)	Upper Limit / Lower Limit	Speed Limit (kts)	VPA (°) / TCH (ft)	Remarks
RNP APCH	NEXET	230227.8 / 0145641.8	IF	-	-	-	- / +A4000	-	-	-
RNP APCH	GUNDU	225409.3 / 0145404.8	TF	N	343.7 / 357	8.6	-	-	-	-
RNP APCH	WB27I	225531.6 / 0144934.5	TF	N	251.8 / 265	4.4	- / +A3000	-	-	Turn L
RNP APCH	WB27F	225704.7 / 0144425.4	TF	N	252.0 / 265	5.0	-	-	-	-
RNP APCH	RW27	225828.6 / 0143947.1	TF	Y	252.0 / 265	4.5	-	-	3.00 / 50	-
RNP APCH	WBM02	225924.4 / 0143641.6	CF	Y	252.0 / 265	-	-	-	-	268° / D1.9 WBV
RNP APCH	GUNDU	225409.3 / 0145404.8	DF	N	-	-	-	230	-	Turn L

RNP RWY27 via PIERE

Nav. Spec.	WPT Name	Latitude (S) / Longitude (E)	Path Term	Fly-By Fly-Over	True Track / Mag Track	Distance (NM)	Upper Limit / Lower Limit	Speed Limit (kts)	VPA (°) / TCH (ft)	Remarks
RNP APCH	PIERE	225045.32S /	IF	-	-	-	- / +A4000	-	-	-
RNP APCH	WB27I	225531.6 / 0144934.5	TF	N	162.0 / 175	5.0	- / +A3000	-	-	-
RNP APCH	WB27F	225704.7 / 0144425.4	TF	N	252.0 / 265	5.0	-	-	-	Turn R
RNP APCH	RW27	225828.6 / 0143947.1	TF	Y	252.0 / 265	4.5	-	-	3.00 / 50	-
RNP APCH	WBM02	225924.4 / 0143641.6	CF	Y	252.0 / 265	-	-	-	-	268° / D1.9 WBV
RNP APCH	GUNDU	225409.3 / 0145404.8	DF	N	-	-	-	230	-	Turn L

Hold Identification

Holding Fix	Latitude (S) / Longitude (E)	Inbound True Track (degrees)	Inbound Mag Track (degrees)	Maximum Indicated Airspeed (kts)	Minimum Holding Level / Altitude (FL/ft)	Maximum Holding Level / Altitude (FL/ft)	Outbound Time (min)	Direction of Turn
GUNDU	225409.3 / 0145404.8	251.8	265	230	+A4000	-	1	L

CTR CHART

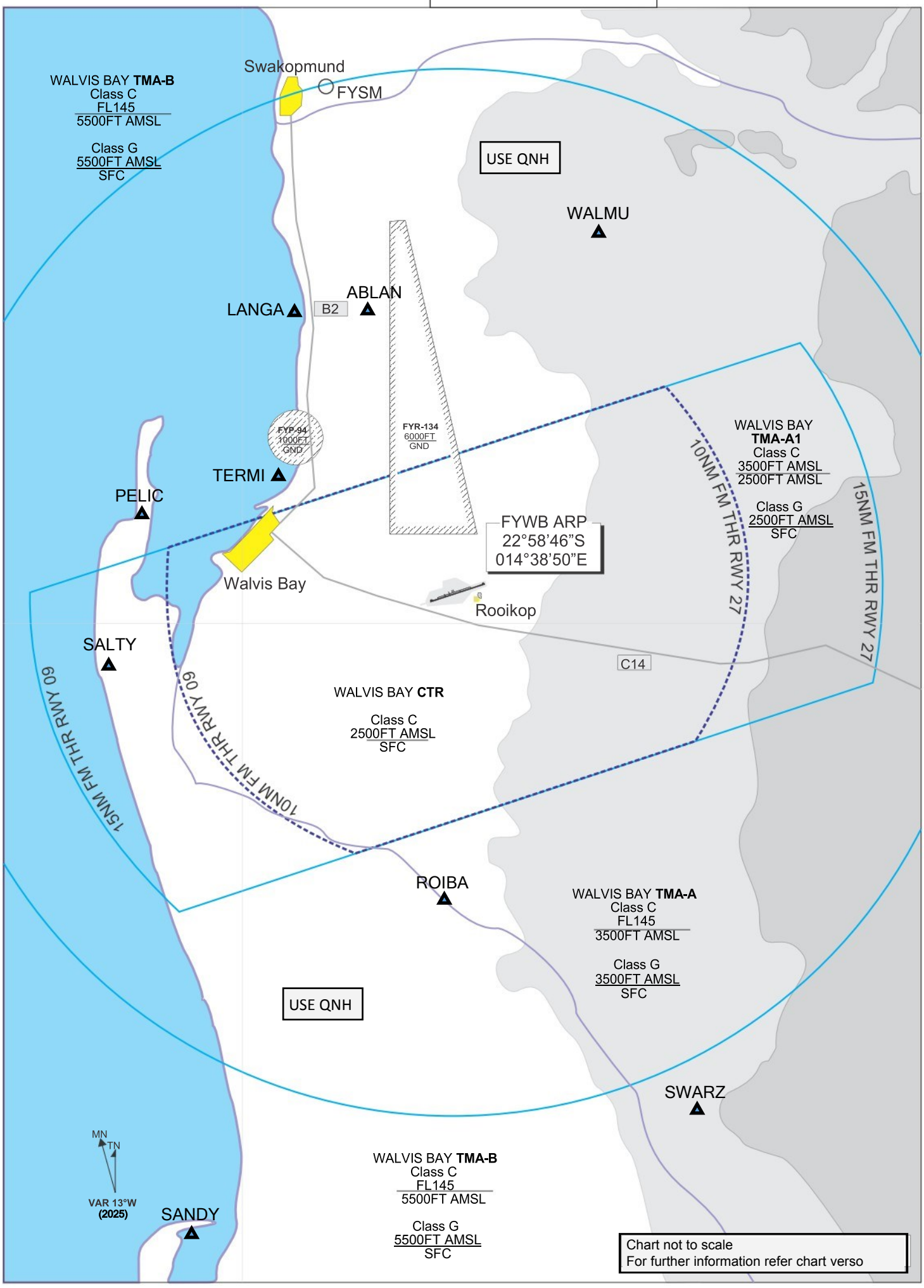
AERODROME ELEV 316 FT

TA 10000FT

WALVIS BAY:
TWR 122.5 Mhz
ATIS 127.0 Mhz

WALVIS BAY (FYWB)

CTR



CHANGES: VFR points, Class G airspace, notes

Com failure:

1. Squawk 7600;
2. If possible, phone TWR +264 64 702690;
3. Join overhead the aerodrome at 2000FT AMSL;
4. Observe and join the TFC circuit;
5. Transmit your intentions at all times;
6. Make all turns LEFT where possible;
7. Ensure landing lights and strobes are on;
8. Watch TWR for optical signals.

Waypoints:

ABLAN	224834S 0143534E
LANGA	224834S 0143238E
PELIC	225542S 0142606E
ROIBA	231046S 0143858E
SALTY	230045S 0142429E
SANDY	232228S 0142828E
SWARZ	231834S 0144916E
TERMI	225418S 0143118E
TOWER	225838S 0143841E
VOGEL	230305S 0145951E
WALMU	224600S 0144416E

Waypoints must be spoken as:

ABLAN	East Abeam Langstrand
LANGA	Langstrand
PELIC	Pelican Point
SALTY	Salt Works
SANDY	Sandwich Harbour
SWARZ	Swarzbank Berg
TERMI	Oil Terminal
TOWER	Overhead Walvis Bay Tower
VOGEL	Vogelfederberg
WALMU	Walmund Power Station