

AD 2. AERODROMES**VERP AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

VERP - SWAMI VIVEKANANDA AIRPORT, RAIPUR / INTL

VERP AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	Aerodrome reference point coordinates and its site	211052N 0814419E 254 DEG/270M FM Intersection of Runway and Taxiway C and D
2	Direction and distance of aerodrome reference point from the center of the city or town which the aerodrome serves	135 DEG/18KM from Raipur Railway Station
3	Aerodrome elevation and reference temperature	1041 FT / 42.0 DEG C
4	Magnetic variation, date of information and annual change	0.37 DEG W (2010) /0.017 DEG E
5	Name of aerodrome operator, address, telephone, telefax, e-mail address, AFS address, website (if available)	Airports Authority of India, Raipur Airport, Raipur -492015, Telephone: +91-771-2418167 Fax: +91-771-2418168 AFS: VARPYDYX VARPYHYX Email: apcrpr@AAI.AERO
6	Types of traffic permitted (IFR/VFR)	IFR/VFR
7	Remarks	NIL

VERP AD 2.3 OPERATIONAL HOURS

1	Aerodrome Operator	MON-FRI 0400-1230 UTC (0930-1800 IST) SAT, SUN+HOL: NIL
2	Custom and immigration	NIL
3	Health and sanitation	NIL
4	AIS briefing office	AS ATS
5	ATS reporting office (ARO)	AS ATS
6	MET Briefing office	As ATS
7	Air Traffic Service	Consult NOTAM for Current ATS HR.
8	Fuelling	As ATS
9	Handling	As ATS
10	Security	As ATS
11	De-icing	NIL
12	Remarks	Outside of ATS hour's services are available O/R with 24 HR PN to AD. ATS approved hourly runway traffic handling capacity Maximum number of arrival and departure- 12 (minimum spacing between two successive arrivals shall be more than five minutes) Maximum number of arrival only – 06 Maximum number of departure only -10

VERP AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Nil
2	Fuel and Oil types	JET A1

3	Fuelling facilities and capacity	BPCL: 2X15 KLO, 2X12 KL, 1X9 KL 800/600 liters/min (Total 5 Refuellers) Reliance: 2X11 KL, 1x6 KL 700/350 liters/min (Total 3 refuellers)
4	De-icing facilities	NIL
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	NIL

VERP AD 2.5 PASSENGER FACILITIES

1	Hotel(s) at or in the vicinity of aerodrome	In the city
2	Restaurant(s) at or in the vicinity of aerodrome	At AD and in the city
3	Transportation possibilities	Taxi and Car hire from the AD.
4	Medical Facilities	First aid at AD. Hospitals in the city.
5	Bank and post office at or in the vicinity of aerodrome	Banks: In the city. Post office: In the city.
6	Tourist office	At AD & the city.
7	Remarks	NIL

VERP AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	Aerodrome category for fire fighting	Within ATS HR: CAT-6
2	Rescue equipment	Available as per category.
3	Capability for removal of disabled aircraft	Nil
4	Remarks	NIL

VERP AD 2.7 SEASONAL AVAILABILITY CLEARING

1	Type(s) of clearing equipment	NIL
2	Clearance priorities	NIL
3	Remarks	Airport operational during all seasons.

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

1	Designation, surface and strength of aprons	Designator: New Surface: Concrete Strength: PCN 64/R/B/W/T Surface: Strength:
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2	Designation, width, surface and strength of taxiways	Designator: A Width: 23 M Surface: Concrete Strength: PCN 64/R/B/W/T Designator: B Width: 23 M Surface: Concrete Strength: PCN 64/R/B/W/T Designator: C Width: 23 M Surface: Asphalt Strength: PCN 38/F/B/W/T Designator: D Width: 23 M Surface: Concrete Strength: PCN 47/R/B/W/T
3	Location and elevation of altimeter checkpoints	Location At old apron Holding Point Taxiway A Holding Point Taxiway B Elevation 1032 FT 1039FT 1038FT
4	Location of VOR checkpoints	On Taxiway C Holding Point R295/0.2NM.
5	Position of INS checkpoints	NIL

6	Remarks	<p>i. New Apron: -</p> <p>a) Location: North side of RWY 24 adjacent to Terminal Building.</p> <p>b) Dimensions-160/120 M</p> <p>c) Shoulder: 3.5 M</p> <p>d) Elevation: 316.336 M</p> <p>ii. Taxi instruction: Aircraft to taxi out, turn right and follow lead out line to join TWY 'A' or TWY 'B'.</p> <p>iii. Pilots to taxi in and taxi out from apron under own responsibility and under marshaller guidance.</p> <p>iv. New apron area partially not visible from ATC TWR.</p> <p>v. TWY D: Linking RWY 24/06 to isolation bay. Location 1025.5 M from beginning of RWY 24, south side. Shoulder: 7.5 M, Length: 151.5 M.</p> <p>vi. Isolation Bay: Location South of RWY 06/24 connected to TWY "D", Dimensions: 76M X 76 M, Shoulder: 7.5M, Surface: Concrete, Strength: 47/R/B/W/T, Elevation: 1020 FT, Coordinates: 211047N 0814430E, Critical aircraft: A320 (Power-in/Power-out), Markings: Edge and Centre line markings, Lightings: Blue Edge Lights.</p> <p>vii. TWY A linking RWY 24/06 to new apron. Location 750 M from beginning of RWY 24 North side, Shoulder 3.5 M, Length-244 M.</p> <p>viii. TWY B linking RWY 24/06 to new apron. Location 887 M from beginning of RWY 24 North Side, Shoulder 3.5 M, Length 244 M.</p> <p>ix. TWY C linking RWY 24/06 to Old Apron. Location 1025.5 M from beginning of RWY 24.</p> <p>x. At OLD Apron: Standard Parking position for 2 B737 Non-Standard parking for B737 & A320 simultaneously. Positive clearance required for non-Sked aircraft.</p>
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VERP AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand identification signs, taxiway guidelines and visual docking/parking guidance system at aircraft stands	TWY guidance signal at all the intersection with TWY and RWY and at all holding position Guidelines at Apron. Nose in guidance at aircraft stands.
2	Runway and taxiway markings and lights	<p>RWY</p> <p>Markings</p> <p>Designation, THR, Centreline, RWY Edge, End</p> <p>Lights</p> <p>THR, RWY Edge, End</p> <p>TWY</p> <p>Marking</p> <p>Centreline, Holding Positions at all TWY/RWY intersections</p> <p>Lights</p> <p>Edge</p>
3	Stop bars (if any)	Nil
4	Remarks	<p>Apron Edge and aircraft stand marking available.</p> <p>Isolation Bay Marking and Lighting available.</p>

VERP AD 2.10 AERODROME OBSTACLES

In Approach/Take-off/Circling Area and at AD					
1	2	3	4	5	6
RWY/Area affected	Obstacle type	Coordinates	Elevation	Marking/LGT	Remarks
24/TKOF 06/APCH	WALL	211032.7N 0814346.6E	1018 FT	NIL	Airport BDRY wall with F/T
24/TKOF 06/APCH	TREE	211030.6N 0814338.3E	1054 FT	NIL	Group of Trees
24/TKOF 06/APCH	OTHER	211029.9N 0814348.7E	1025 FT	NIL	Light on LOC Building Top
24/TKOF 06/APCH	OTHER	211036.0N 0814344.9E	1025 FT	NIL	Mobile Road Traffic
24/TKOF 06/APCH	WALL	211035.9N 0814344.6E	1021 FT	NIL	BDRY wall with F/T
24/TKOF 06/APCH	OTHER	211027.3N 0814350.4E	1023 FT	NIL	Mobile Road Traffic
24/TKOF 06/APCH	OTHER	211031.1N 0814346.6E	1023 FT	NIL	Mobile Road Traffic
24/TKOF 06/APCH	ANTENNA	211031.6N 0814347.7E	1016 FT	NIL	LOC Antenna
24/APCH 06/TKOF	OTHER	211109.8N 0814505.4E	1040 FT	NIL	Mobile Road Traffic
In circling area and at AD	TREE	211013.5N 0814333.8E	1082 FT	NIL	Group of Trees
In circling area and at AD	OTHER	211105.1N 0814454.4E	1052 FT	NIL	GP Monitor Antenna
In circling area and at AD	ANTENNA	211103.7N 0814451.9E	1081 FT	NIL	GP Antenna
In circling area and at AD	BUILDING	211103.4N 0814451.4E	1049 FT	NIL	GP Building
In circling area and at AD	ANTENNA	211103.6N 0814451.6E	1053 FT	NIL	DME Antenna on GP Building
In circling area and at AD	ANTENNA	211100.5N 0814422.9E	1097 FT	NIL	Beacon on ATC Building
In circling area and at AD	ANTENNA	211058.9N 0814422.1E	1083 FT	NIL	Self-Radiating Mast
In circling area and at AD	OTHER	211101.0N 0814423.8E	1107 FT	NIL	Flood Light
In circling area and at AD	OTHER	211101.6N 0814425.3E	1108 FT	NIL	Flood Light
In circling area and at AD	OTHER	211048.0N 0814426.4E	1054 FT	NIL	WDI
In circling area and at AD	OTHER	211050.9N 0814434.5E	1072 FT	NIL	DVOR Monitor Antenna

VERP AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Name of the associated meteorological office	Raipur
2	Hours of service and, where applicable, the designation of the responsible meteorological office outside these hours	As ATS
3	Office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts	Raipur 9 Hrs
4	Availability of the trend forecast for the aerodrome and interval of issuance	Available 2 Hrs

5	Information on how briefing and/or consultation is provided	Available
6	Types of flight documentation supplied and language(s) used in flight documentation	Tabular form English
7	Charts and other information displayed or available for briefing or consultation	Nil
8	Supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;	Nil
9	The air traffic services unit(s) provided with meteorological information	Raipur ATC and ACS
10	Additional information, e.g. concerning any limitation of service.	Documents Provide A/R (As and when required.)

VERP AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations	TRUE Bearings	Dimensions of RWY (M)	Strength of pavement (PCN) and associated data) and surface of runway and associated stopways	Geographical coordinates for threshold and runway end
1	2	3	4	5
06	58.50 DEG	2286 x 45 M	68/F/B/W/T Asphalt *Refer Remarks	THR: 211035.50N 0814354.00E
24	238.50 DEG	2286 x 45 M	68/F/B/W/T Asphalt *Refer Remarks	THR: 211111.60N 0814458.00E

THR elevation and highest elevation of TDZ of precision APP RWY	Slope of runway and associated stopway	Dimensions of stopway (M)	Dimensions of clearway (M)	Dimensions of strips (M)
6	7	8	9	10
THR: 1016.0FT TDZ: 1033.0FT	0.39%	NIL	NIL	2406 x 300 M
THR: 1034.0FT TDZ: 1042.0FT		NIL	NIL	2406 x 300 M

Dimensions of runway end safety areas	Location and description of arresting system (if any)	Existence of an obstacle-free zone	Remarks.
11	12	13	14
150M x 90M		----	*PCN Last 331 M: 64/F/B/W/T
240M x 90M RESA not available		----	*PCN First 331 M: 64/F/B/W/T

VERP AD 2.13 DECLARED DISTANCES

RWY Designator	Take-off run available TORA (M)	Take-off distance available TODA (M)	Accelerate distance available ASDA (M)	Landing distance available LDA (M)	Remarks (including runway entry or start point where alternative reduced declared distances have been declared)
1	2	3	4	5	6
06	2286	2286	2286	2156	SLOPE 1:50
24	2286	2286	2286	2286	SLOPE 1:50

VERP AD 2.14 APPROACH AND RUNWAY LIGHTING

Runway Designator	Type, length and intensity of approach lighting system	Runway threshold lights, colour and wing bars	Type of visual slope indicator system	Length of runway touchdown zone lights
1	2	3	4	5
06		Green	PAPI LEFT/3.00 DEG	
24	SALS 420 M LIH	Green	PAPI LEFT/3.00 DEG	

Length, spacing, colour and intensity of runway centre line lights	Length, spacing, colour and intensity of runway edge lights	Colour of runway end lights and wing bars	Length and colour of stopway lights	Remarks
6	7	8	9	10
	2286 M 60 M White LIH	Red		NIL
	2286 M 60 M White LIH	Red		NIL

VERP AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	Location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any)	ABN	At Tower Building, FLG W&G EV2SEC
		IBN	Nil
2	Location and lighting (if any) of anemometer/landing direction indicator;	LDI	NIL
		Anemometer	On tower building
3	Taxiway edge and taxiway centre line lights;	Edge	Available
		Centre Line	NIL
4	Secondary power supply including switch-over time;	Secondary Power supply to all lighting at AD. Switch-over time :15 SEC.	
5	Remarks	Apron flood lights and blue edge light	

VERP AD 2.16 HELICOPTER LANDING AREA

1	Geographical coordinates of the geometric centre of touchdown and lift-off (TLOF) or of each threshold of final approach and take-off (FATO) area	Not Established
2	TLOF and/or FATO area elevation:	Not Established
3	TLOF and FATO area dimensions to the nearest metre or foot, surface type, bearing strength and marking;	Not Established
4	True bearings of FATO;	Not Established
5	Declared distances available	Not Established
6	Approach and FATO lighting;	Not Established
7	Remarks	Not Established

VERP AD 2.17 AIR TRAFFIC SERVICE AIRSPACE

1	Airspace designation, geographical coordinates and lateral limits	CTR: Circular area centered on DVOR RRP (211052N 0814438E) within a 30NM radius.
2	Vertical limits	FL 100
3	Airspace classification	D
4	Call sign and language(s) of the air traffic services unit providing service;	Raipur Tower, English
5	Transition altitude	5000 FT
6	Hours of applicability	HO
7	Remarks	NIL

VERP AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

Service Designation	Call sign	Channel(s)	SATVOICE Number(s), if available
1	2	3	4
TWR	Raipur Tower	124.300 MHZ	
TWR	Raipur Tower	124.750 MHZ	
ATIS	Raipur Information	126.650 MHZ	

Logon address, as appropriate	Hours of operation	Remarks
5	6	7
	AS ATS	Standby
	AS ATS	NIL
	As ATS	NIL

VERP AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aids, magnetic variation and type of supported operation for ILS/MLS, basic GNSS, SBAS and GBAS, and for VOR/ILS/MLS station used for technical lineup of the aid	Identification	Frequency(ies), Channel number(s), Service provider, and reference path identifier(s) (RPI), as appropriate	Hours of operation, as appropriate;
1	2	3	4
LOC 24	IRAI	110.300 MHz	As ATS
GP 24	IRAI	335.000 MHz	As ATS
DME ILS 24	IRAI	CH40X	As ATS
DVOR/DME	RRP	116.100 MHz CH108X	As ATS

Geographical coordinates of the position of the transmitting antenna	Elevation of transmitting antenna of DME/ elevation of GBAS reference point	Service volume radius from the GBAS reference point	Remarks
5	6	7	8
211031.6N 0814347.9E			
211103.0N 0814451.7E			3 DEG
211103.0N 0814451.7E	1053 FT		Collocated with GP
211051.8N 0814437.6E			

VERP AD 2.20 LOCAL AERODROME REGULATIONS

i. PUSH BACK PROCEDURE: -

a) Aircraft to pushback on apron taxi lane A1 facing East/West as specified by ATC.

b) In case of pushback from stand 3 facing East aircraft to pushback deep on taxiway B and then pull forward to align on taxi lane A1.

c) In case of pushback from stand 6 facing West, aircraft to pushback deep on taxiway A and then pull forward to align on taxi lane A1.

d) Since apron is not completely visible from Tower, Pushback Ground Staff/PIC must ensure that no person/vehicle/equipment are near or behind the aircraft

VERP AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

VERP AD 2.22 FLIGHT PROCEDURES

NIL

VERP AD 2.23 ADDITIONAL INFORMATION

i. Taxiway A1 on New Apron with following characteristics: -

- a) Length: 132 M
- b) PCN: 54/R/C/X/T
- c) Orientation: East-West on New Apron

ii. Details of aircraft stands on New Apron:

S. No.	Aircraft Stand No.	Coordinates	Type	Remarks
1.	3	211106.8N 0814425.2E	Power-in/ Pushback	Upto A321-200
2.	4	211106.9N 0814426.9E	Power-in/ Pushback	Upto A321-200
3.	5	211107.7N 0814428.2E	Power-in/ Pushback	Upto A321-200
4.	6	211109.0N 0814429.2E	Power-in/ Pushback	Upto A321-200

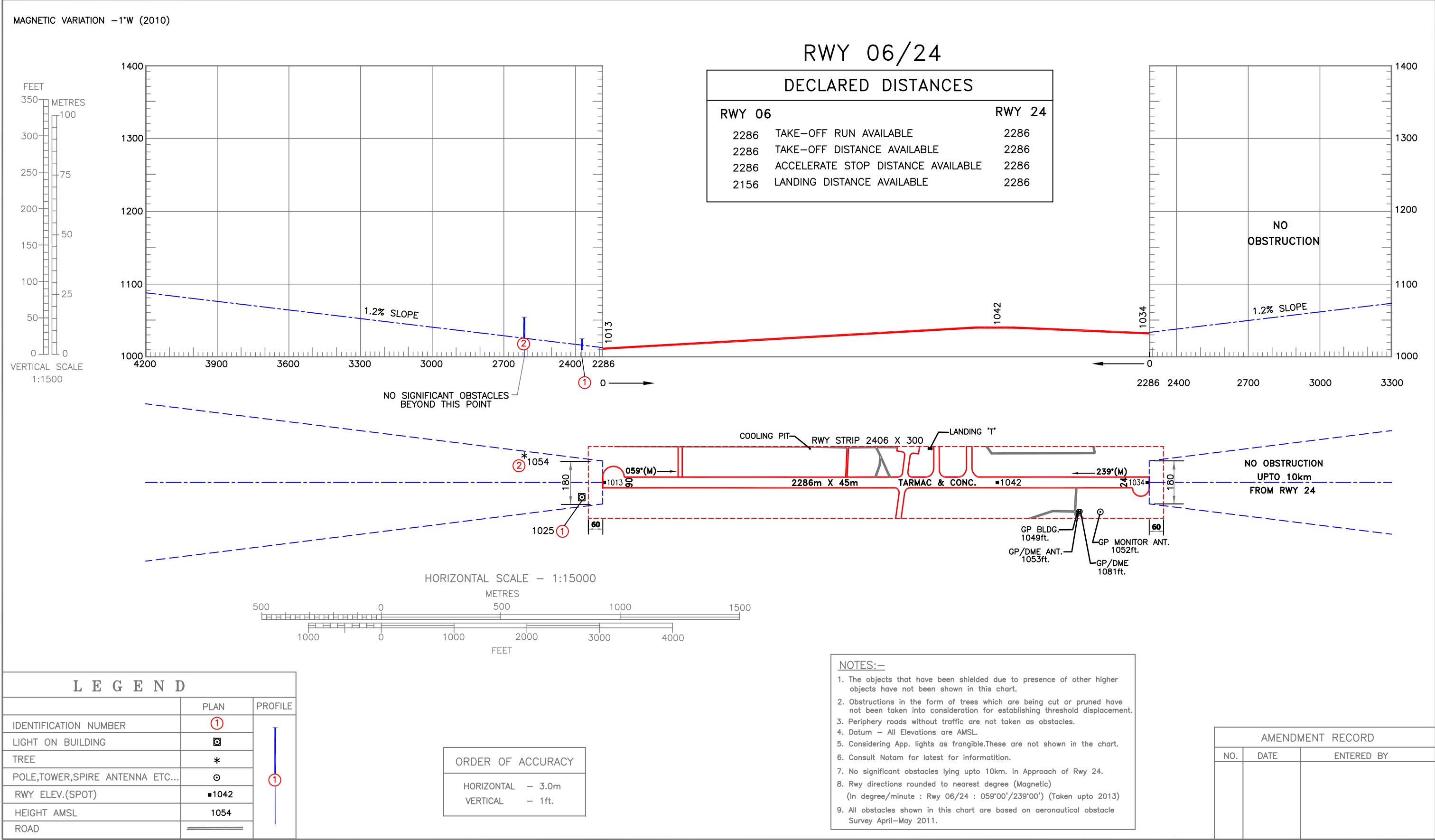
VERP AD 2.24 CHARTS RELATED TO AN AERODROME

- 1. Aerodrome Obstacle Chart, Type-A RWY 06/24
- 2. ILS Procedure RWY 24
- 3. VOR (Z) Procedure RWY 06
- 4. VOR (Z) Procedure RWY 24

ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

AERODROME OBSTACLE CHART
TYPE -A (OPERATING LIMITATIONS)

INDIA/RAIPUR
RAIPUR AIRPORT/RWY 06/24



INSTRUMENT

APPROACH

CHART

AERODROME ELEV 1042ft.

HEIGHTS RELATED TO

THR RWY 24-ELEV 1034ft

TWR.124.75

RAIPUR

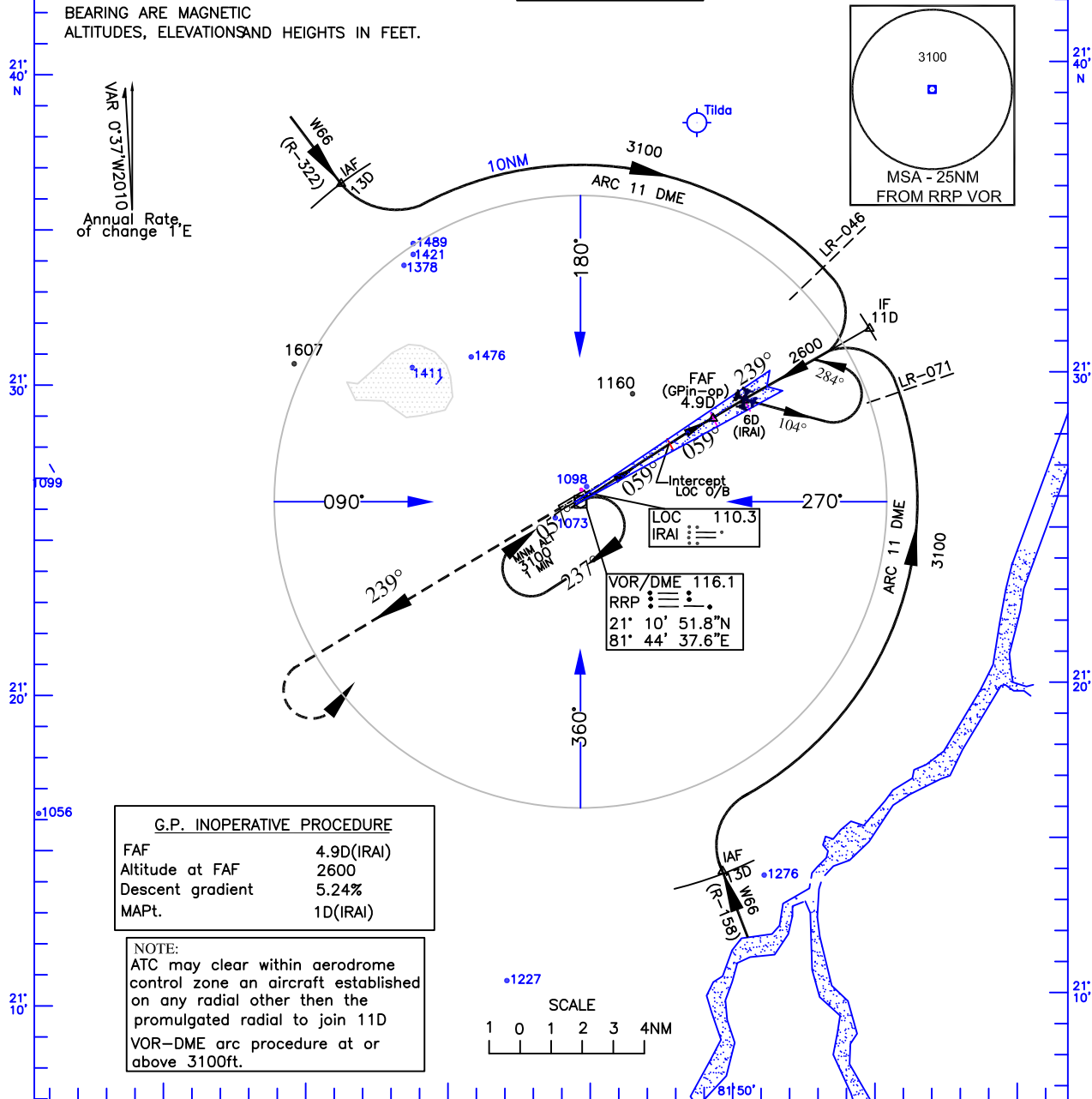
INDIA

ILS RWY 24

(Cat.A/B&C)

All Radials and Distances are from
VOR (116.1 RRP) unless otherwise specified.
COORDS OF RADIO NAV AID WGS-84
BEARING ARE MAGNETIC
ALTITUDES, ELEVATIONS AND HEIGHTS IN FEET.

DME REQUIRED

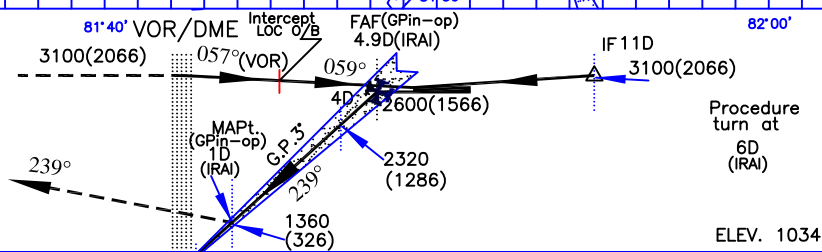


Transition Altitude 5000

MISSED APPROACH

Climb straight ahead to 3100ft.,
then turn LEFT to VOR
to join holding
or as instructed by ATC.

ILS RDH 50



NAUTICAL MILES FROM THR RWY 24

O C A (H)			Distance (IRAI)/Altitude information for G.P.inoperative procedure				
CAT. OF AIRCRAFT	A/B	C	Distance(NM)	4.9D	4D	3D	2D
STRAIGHT-IN	1260 (226)	1260 (226)	Altitude (ft.)	2600	2320	2000	1680
VISUAL CIRCLING	1530 (488)	1630 (588)	Time and Rate of Descent information (G.P.in-op. procedure)				
G.P.Inoperative procedure			Distance from FAF to MAPt: 3.9D				
STRAIGHT-IN	1440 (406)	1440 (406)	Ground speed (kt.)	80	100	120	140
VISUAL CIRCLING	1530 (488)	1630 (588)	Rate of descent (ft./min)	425	530	635	745

DRG. NO. AAI/11-IALC/07/01-05-2016

INSTRUMENT

APPROACH

CHART

AERODROME ELEV 1042ft.

HEIGHTS RELATED TO

THR RWY 24-ELEV 1034ft

TWR.124.75

RAIPUR

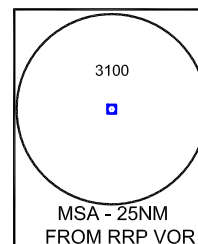
INDIA

VOR (Z) RWY 24

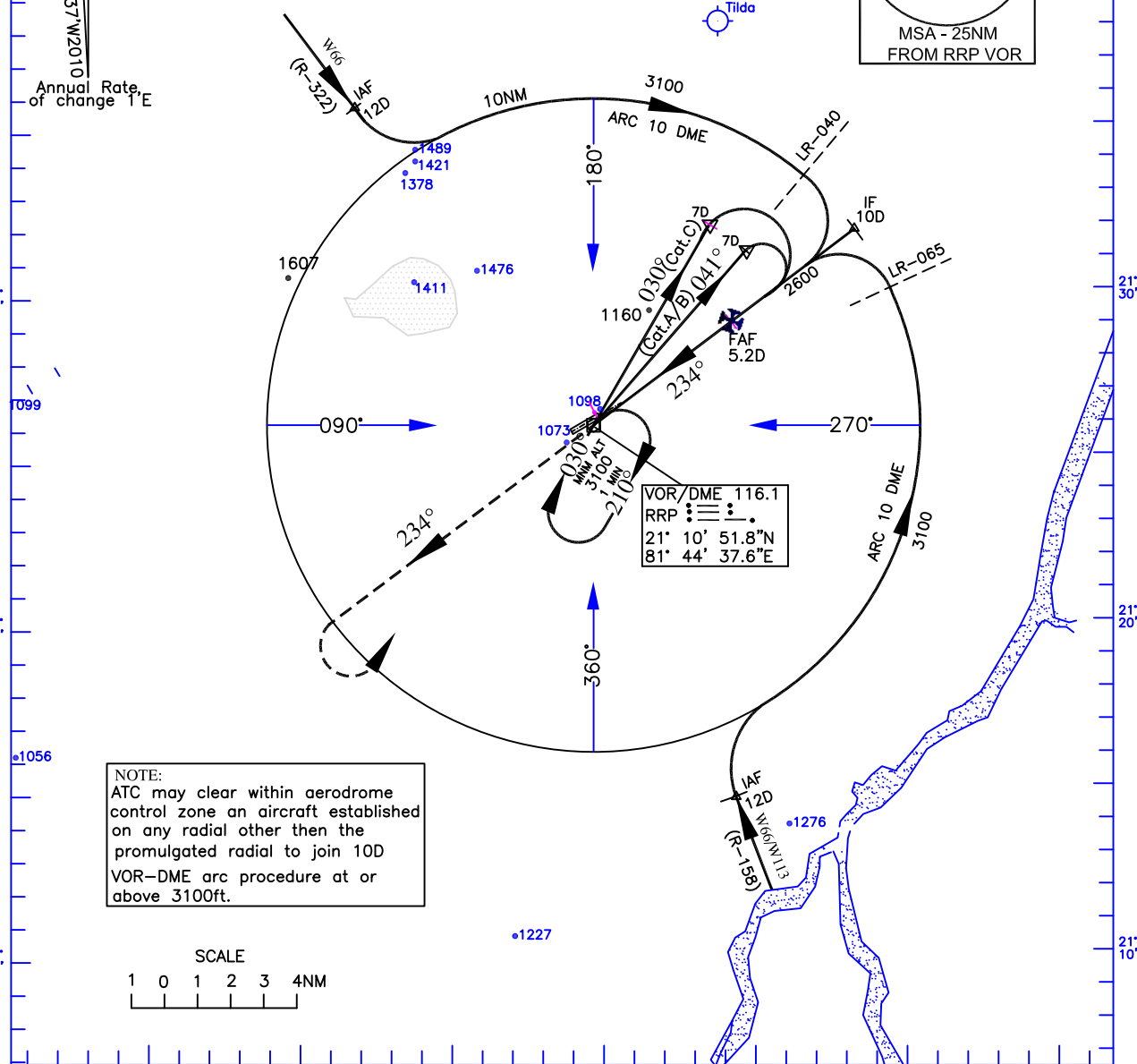
(Cat.A/B&C)

All Radials and Distances are from
VOR (116.1 RRP) unless otherwise specified.
COORDS OF RADIO NAV AID WGS-84
BEARING ARE MAGNETIC
ALTITUDE, ELEVATIONS AND HEIGHTS IN FEET.

DME REQUIRED



VAR 0.37°W2010
Annual Rate
of change 1°E



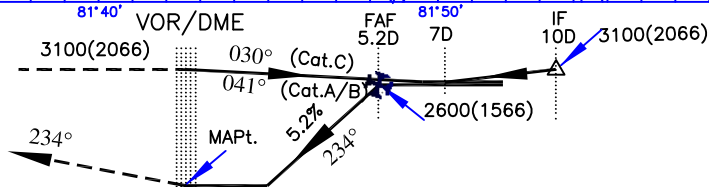
NOTE:
ATC may clear within aerodrome
control zone an aircraft established
on any radial other than the
promulgated radial to join 10D
VOR-DME arc procedure at or
above 3100ft.

SCALE
1 0 1 2 3 4NM

Transition Altitude 5000

MISSED APPROACH

Climb straight ahead to 3100.ft.,
then turn LEFT to join VOR
holding or as instructed by ATC.



Start
turn at
7D

ELEV. 1034

NAUTICAL MILES FROM THR RWY 24

O C A (H)			Distance (VOR DME)/Altitude information				
CAT. OF AIRCRAFT	A/B	C	Distance(NM)	5.2D	5D	4D	3D
STRAIGHT-IN	1440(406)	1440(406)	Altitude (ft.)	2600	2530	2210	1890
VISUAL CIRCLING	1540(498)	1640(598)	Rate of Descent/Ground speed information				
			Ground speed (kt.)		80	100	120
			Rate of descent (ft/min)		420	525	630
					735	845	

DRG. NO. AAI/04-IALC/96/01-05-2016