

## **AD 2. AERODROME**

### **VNRB AD 2.1 AERODROME LOCATION INDICATOR AND NAME**

#### **VNRB – Rajbiraj/Domestic**

### **VNRB AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1.	ARP Coordinates and site at AD	263038N 0864417E
2.	Direction and Distance from (city)	4Km, South of Rajbiraj City
3.	Elevation/Reference Temperature	249 ft. (76m)
4.	MAG VAR/Annual Change	
5.	AD Administration, address Telephone, Telefax, AFS	Civil Aviation Authority of Nepal Rajbiraj Civil Aviation Office, Rajbiraj, Saptari Tel-977- 031-522458 (TWR) Fax - AFS - VNRBYDYX
6.	Types of traffic permitted (IFR/VFR)	VFR
7.	Remarks	-

### **VNRB AD 2.3 OPERATIONAL HOURS**

1.	AD Administration	SUN-THU 10:00 -17:00 LT (SUMMER), 10:00-1600 LT (WINTER), FRI 10:00-1500 LT
2.	Customs and immigration	-
3.	Health and sanitation	-
4.	AIS Briefing Office	NIL
5.	ATS Reporting Office (ARO)	NIL
6.	MET Briefing	-
7.	ATS	1) From 30 Jan - 01 Nov (0415 - 1115) UTC 2) From 02 Nov - 29 Jan (0415 - 1015) UTC
8.	Fuelling	-
9.	Handling (Cargo)	-
10.	Security	H-24
11.	Remarks	-

\* WGS 84 Coordinates

**VNRB AD 2.4 HANDLING SERVICES AND FACILITIES**

1.	Cargo-handling facilities	-
2.	Fuel/Oil Types	-
3.	Fuelling facilities/capacity	-
4.	De-icing facilities	-
5.	Hangar space for visiting aircraft	-
6.	Repair facilities for visiting aircraft	-
7.	Remarks	-

**VNRB AD 2.5 PASSENGER FACILITIES**

1.	Hotels	In the city
2.	Restaurants	In the city
3.	Transportation	Taxi
4.	Medical Facilities	Hospital in the city
5.	Bank and Post Office	Bank and Post Office in the city
6.	Tourist Office	-
7.	Remarks	-

**VNRB AD 2.6 RESCUE AND FIRE FIGHTING SERVICE**

1.	AD category for fire fighting	Nil
2.	Rescue equipment	Nil
3.	Capability for removal of disabled aircraft	Nil
4.	Remarks	Fire Extinguishers (wheel type fire extinguishers also) Available.

**VNRB AD 2.7 SEASONAL AVAILABILITY**

Aerodrome available throughout the year
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**VNRB 2.8 APRONS, TAXIWAYS AND CHECK LOCATION DATA**

1.	Apron surface and strength	Asphalt Concrete
2.	Taxiway width, surface and strength	Width – 30m Surface – Asphalt Concrete,
3.	Altimeter check point location and elevation	-
4.	VOR/INS checkpoints	-
5.	Remarks	-

## VNRB 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	-
2.	RWY and TWY markings and LGT	-
3.	Stop bars	-
4.	Remarks	-

## VNRB AD 2.10 AERODROME OBSTACLES

S. No.	Obstacle Name	Obstacle ID	WGS-84 Coordinates		Elevation (m)
			Latitude	Longitude	
1	ATC Middle Antenna	RB0001	26°30'38.6"N	86°44'16.6"E	86.8
2	ATC Tall Antenna	RB0002	26°30'38.6"N	86°44'16.7"E	92.4
3	NDB	RB0003	26°30'40.1"N	86°44'12.6"E	97
4	NDB	RB0004	26°30'41"N	86°44'10.1"E	97.
5	Meteorological Antenna	RB0005	26°30'38.0"N	86°44'8.4"E	85.1
6	Wind Shock	RB0006	26°30'36.6"N	86°44'8.1"E	80.2
7	Tree	RB0011	26°30'41.3"N	86°43'38.2"E	83.9
8	House Top	RB0012	26°30'43.4"N	86°43'41.5"E	80.1
9	House Top	RB0013	26°30'44.2"N	86°43'41.8"E	82.4
10	Tree	RB0014	26°30'43.7"N	86°43'40.9"E	83.2
11	Tree	RB0015	26°30'44"N	86°43'42.9"E	83.3
12	Bamboo	RB0017	26°30'44.5"N	86°43'45.4"E	84.5
13	Tree	RB0020	26°30'34.1"N	86°43'44.4"E	85.1
14	Tree	RB0025	26°30'12.2"N	86°44'39.6"E	89.5
15	Tree	RB0028	26°30'13.5"N	86°44'41.8"E	86.6
16	Tree	RB0029	26°30'17.8"N	86°44'41.3"E	78.8
17	Tree	RB0030	26°30'17.9"N	86°44'42.5"E	80.5
18	Tree	RB0031	26°30'13.4"N	86°44'45.7"E	83.7
19	Tree	RB0032	26°30'17.7"N	86°44'43.5"E	81.5
20	Tree	RB0033	26°30'12.3"N	86°44'44.1"E	84.2
21	Tree	RB0034	26°30'18.7"N	86°44'46.2"E	82.4
22	Electric Pole	RB0035	26°30'18.2"N	86°44'50.3"E	81.1
23	Tree	RB0036	26°30'21.1"N	86°44'56.0"E	82.2
24	Tree	RB0037	26°30'23.9"N	86°44'46.2"E	87.6
25	Bamboo	RB0041	26°30'25.1"N	86°44'42.4"E	89.5
26	Tree	RB0045	26°30'23.8"N	86°44'40.2"E	78
27	Brick Chimney	RB0049	26°30'2.4"N	86°44'59.0"E	101.2
28	Brick Chimney	RB0050	26°29'55.8"N	86°45'2.6"E	99.5
29	Brick Chimney	RB0051	26°29'47.6"N	86°45'14.9"E	90.4
30	Brick Chimney	RB0052	26°29'55"N	86°45'9.0"E	101.2
31	Brick Chimney	RB0053	26°30'6.1"N	86°45'4.5"E	96.8
32	Brick Chimney	RB0054	26°30'4.9"N	86°45'14.5"E	95.5
33	Brick Chimney	RB0055	26°30'9.6"N	86°45'12.4"E	94.8
34	Brick Chimney	RB0056	26°29'37.2"N	86°45'11"E	100

35	Brick Chimney	RB0057	26°30'39.9"N	86°45'20.0"E	88.1
36	Brick Chimney	RB0058	26°30'39"N	86°45'23.4"E	96.1
37	Brick Chimney	RB0059	26°30'37.4"N	86°45'33.2"E	96.1
38	Brick Chimney	RB0060	26°30'49.9"N	86°45'52.2"E	103.4
39	Brick Chimney	RB0061	26°30'42.5"N	86°45'44.1"E	102.2
40	Telecom Tower	RB0062	26°30'27.5"N	86°45'59.5"E	99.9
41	Telecom Tower	RB0063	26°30'11.3"N	86°43'32.3"E	96.0
42	WIFI Antenna	RB0064	26°30'11.6"N	86°43'34.3"E	90.5
43	Tree	RB0065	26°30'42.6"N	86°43'31.5"E	88.0
44	Tree	RB0066	26°30'43.8"N	86°43'32.5"E	88.9
45	Tree	RB0067	26°30'43.8"N	86°43'32.5"E	89.5
46	Tree	RB0068	26°30'44.6"N	86°43'32.2"E	88.5
47	Tree	RB0069	26°30'44.4"N	86°43'37.2"E	84.5
48	Tree	RB0070	26°30'46.2"N	86°43'39.3"E	90.4
49	Tree	RB0071	26°30'50"N	86°43'38.4"E	98.1
50	Tree	RB0072	26°30'45.8"N	86°43'40.1"E	87.4
51	Tree	RB0073	26°30'48.7"N	86°43'40.1"E	94.3
52	Tree	RB0074	26°30'50"N	86°43'38.4"E	97.7
53	Tree	RB0075	26°30'47.5"N	86°43'40.6"E	88.7
54	Tree	RB0076	26°30'52.1"N	86°43'39.9"E	98.9
55	Tree	RB0077	26°30'53.4"N	86°43'38.3"E	90.9
56	Tree	RB0078	26°30'43.5"N	86°43'25.9"E	94.0
57	Tree	RB0079	26°30'50"N	86°43'26.7"E	86.9
58	Telecom Tower	RB0080	26°32'18.7"N	86°44'53.6"E	110.9
59	Telecom Tower	RB0081	26°32'18.7"N	86°44'53"E	117.9
60	Telecom Tower	RB0082	26°32'11.4"N	86°44'50.6"E	121.3
61	Telecom Tower	RB0083	26°31'2.7"N	86°44'57.4"E	100.8
62	Telecom Tower	RB0084	26°31'30.3"N	86°44'1.7"E	106.8
63	Telecom Tower	RB0085	26°31'42.4"N	86°43'42.9"E	116.1
64	Telecom Tower	RB0086	26°32'42.8"N	86°44'55.5"E	219.0
65	Telecom Tower	RB0087	26°32'44.4"N	86°44'55.3"E	165.3
66	Telecom Tower	RB0088	26°32'42.8"N	86°44'55.5"E	159.3

#### VNRB AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	-
2	Hours of service MET office outside hours	-
3	Office responsible for TAF preparation periods of validity	-
4	Type of landing forecast interval of issuance	-
5	Briefing/Consultation provided	-
6	Flight documentation language(s) used	-
7	Charts and other information available for briefing or consultation	-
8	Supplementary equipment available for providing information	-
9	ATS units provided with information	-
10	Additional information (limitation of service, etc.)	-

\* WGS 84 Coordinates

**VNRB AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

Designation RWY NR	TRUE 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
11	113°	1590 ×30	Asphalt Concrete	263040.90N 0864349.88E	75.9m (249 ft.) AMSL
29	293°	1590 ×30	Asphalt Concrete	263022.02N 0864439.85E	73.4m (241 ft.) AMSL
Slope of RWY-SWY	SWY Dimensions (M)	CWY Dimensions (M)	Strip Dimensions (M)	OFZ	Remarks
7	8	9	10	11	12
.....	.....	.....	.....	.....	.....

**VNRB AD 2.13 DECLARED DISTANCES**

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
11	1590	1590	1590	1590	
29	1590	1590	1590	1500	

**VNRB AD 2.14 APPROACH AND RUNWAY LIGHTING**

RWY Designator	APCH LGT type LEN INTST	THR LGT color WBAR	VASIS PAPI	TDZ LGT LEN	RWY Center Line LGT Length, spacing color, INTST	RWY edge LGT LEN, spacing color INTST	RWY End LGT color	SWY LGT LEN (M) color	Remarks
1	2	3	4	5	6	7	8	9	10
11			PAPI 3.00°						
29			APAPI 3.00°						

**VNRB AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

1.	ABN Location, characteristics and hours of operation	-
2.	LDI Location and LGT Anemometer Location and LGT	-
3.	TWY edge and Centre line lighting	-
4.	Secondary power supply / switch over time	-
5.	Remarks	-

## VNRB AD 2.16 HELICOPTER LANDING AREA

Not specified
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## VNRB AD 2.17 ATS AIRSPACE

1. Designation and lateral limits	<b>Rajbiraj CTR</b> : An area bounded by Kathmandu FIR(VNSM) boundary from point 263554N 0862245E to 262726N 0865246E then along clockwise arc 20NM radius centered at point 262858N 0871458E (BRT VOR) to point 263747N 0865458E, 26 42 19N 0864459 E , 265031N, 0864109E then along anti-clockwise arc of 20 NM radius centered at 263038N 0864417E (ARP) to 263554N 0862245E.	
2. Vertical Limits	CTR:	ATZ:
	<u>7000' AMSL</u> GND	
3. Airspace classification	C	
4. ATS units call sign/languages(s)	Rajbiraj Tower/English	
5. Transition Altitude	13500 ft. AMSL	
6. Remarks		

## VNRB AD 2.18 ATS COMMUNIOICATION FACILITIES

Service Designation	Call Sign	Frequency	Hours of Operation	Remarks
1	2	3	4	5
TWR	Rajbiraj Tower	VHF 122.5 MHZ	As ATS	

## VNRB AD 2.19 RADIO NAVIGATION AND LANDING AID

Type of Aid	Identification	Frequency	OPR Hours	Coordinates	Remarks
1	2	3	4	5	6
VOR/DME	-	-	-	-	-

\* WGS 84 Coordinates

**VNRB AD 2.20 LOCAL TRAFFIC REGULATIONS**

To be developed

**VNRB AD 2.21 NOISE ABATEMENT PROCEDURES**

NIL

## **VNRB AD 2.22 FLIGHT PROCEDURES**

NIL



## **VNRB AD 2.23 ADDITIONAL INFORMATION**

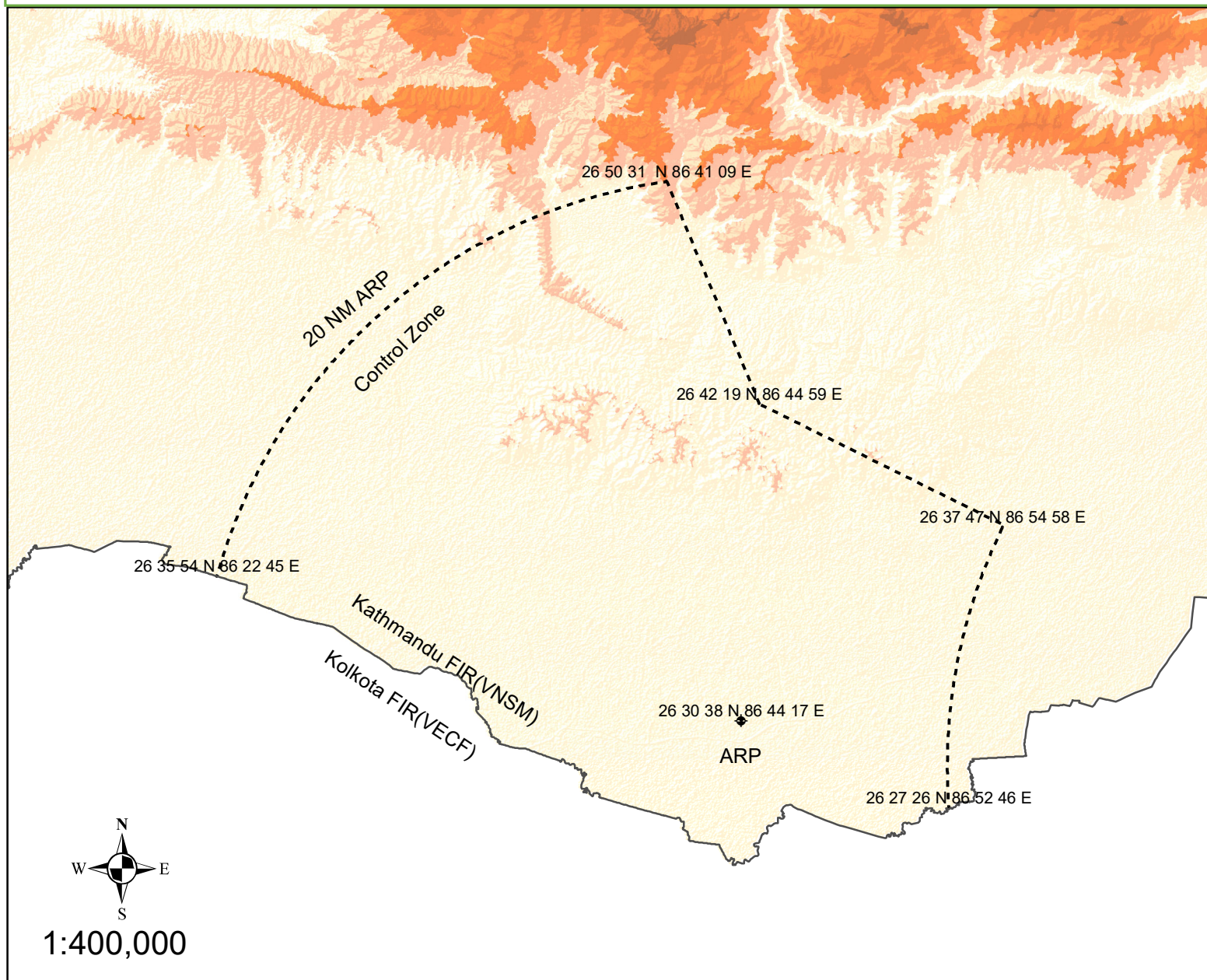
### **1. Bird Activity**

- a) Sometimes cases of bird concentrations in the vicinity of aerodrome may be encountered.
- b) No Special procedures have been adopted to control these bird concentrations except driving them through guards and security personnel.

## **VNRB AD 2.24 CHARTS RELATED TO RAJBIRAJ AIRPORT**

<b>Control Zone (CTR)</b>	<b>VNRB AD 2-11</b>
<b>RNAV GNSS approach procedure at Rajbiraj Airport</b>	<b>VNRB AD 2-12 - VNRB AD 2-16</b>
<b>Rajbiraj Airport Runway Chart</b>	<b>VNRB AD 2-17</b>

## Control Zone(CTR) Rajbiraj Airport



AIRSPACE	IDENT.	LATERAL LIMIT	VERTICAL LIMIT
Control Zone	CTR	An area bounded by Kathmandu FIR(VNSM) boundary from point 263554N 0862245E to 262726N 0865246E then along clockwise arc 20NM radius centered at point 262858.2N 0871458.2E (BRT VOR) to point 263747N 0865458E, 26 42 19N 0864459 E , 265031N, 0864109E then along anti-clockwise arc of 20 NM radius centered at 263038N 0864417E (ARP) to 263554N 0862245E	7000 ft AMSL GND

## RNAV GNSS flight procedures at Rajbiraj Airport (VNRB)

### 1. NAMING OF PROCEDURES

There are one RNP1 STAR, two RNP1 SIDs and one RNP APCH procedures to Rajbiraj Runway 11/29 and are named in accordance with the ICAO naming convention as tabulated below.

RWY	SIDs	STARs	APPROACH
11	KHOPU 1A	AHALE 1A	RNP RWY 11
29	KHOPU 1B		

### 2. RNP CAPABILITY LOST

If the RNP Approach capability is lost, ATC shall be informed as soon as possible the alternate course of action from the pilots of the concerned aircraft.

### 3. LIST OF WAYPOINTS:

Waypoint Identifier	Coordinates	
AHALE	27°11'48.0"N	086°07'05.0"E
HAPTE	27°03'52.6"N	086°06'41.5"E
MUKAR	26°49'59.6"N	086°25'24.7"E
LANOB	26°43'23.4"N	086°28'53.7"E
BHANA	26°40'04.6"N	086°39'54.9"E
KHOPU	26°42'04.8"N	086°39'31.1"E
SASRA	27°01'48.9"N	086°23'07.4"E
RB101	26°34'56.8"N	086°32'30.8"E
RB102	26°32'37.9"N	086°38'39.5"E
MAPt	26°30'40.9"N	086°43'49.9"E

### 4. CODING TABLE: AHALE 1A ARRIVAL

Serial No.	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track (°M/°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kts)	VPA/TCH	Navigation Specification
001	IF	AHALE	-	-	-	-	-	+11500	-	-	RNP-1
002	TF	HAPTE	-	183°	-	7.9	L	+9500	-	-	RNP-1
003	TF	MUKAR	-	130°	-	21.7	R	+7000	-	-	RNP-1
004	TF	LANOB	-	155°	-	7.3	-	+4500	-	-	RNP-1

## 5. CODING TABLE: RNP RWY 11

<i>Serial No.</i>	<i>Path Descriptor</i>	<i>Waypoint Identifier</i>	<i>Fly-over</i>	<i>Course/Track (°M/°T)</i>	<i>Magnetic Variation</i>	<i>Distance (NM)</i>	<i>Turn Direction</i>	<i>Altitude (ft)</i>	<i>Speed (kts)</i>	<i>VPA/TCH</i>	<i>Navigation Specification</i>
001	IF	LANOB (IAF)	-	-	-	-	-	+4500	-	-	RNP APCH
002	TF	RB101 (IF)	-	159°	-	9.0	L	@2500	-	-	RNP APCH
003	TF	RB102 (FAF)	-	113°	-	5.9	-	+1900	-	-	RNP APCH
004	TF	RW11 (MAPt)	Y	113°	-	5.0	-	@570	-	3.00/50	RNP APCH
005	CA	RW11 (MAPt)	-	113°	-	-	L	@ 700	-	-	RNP APCH
006	DF	BHANA (MAHF)	-	-	-	-	-	+2300	-	-	RNP APCH
007	MH	BHANA (MAHF)	-	-	-	-	R	-5000 +3000	-160	-	-

## 6. CODING TABLE: SID KHOPU 1A RWY 11

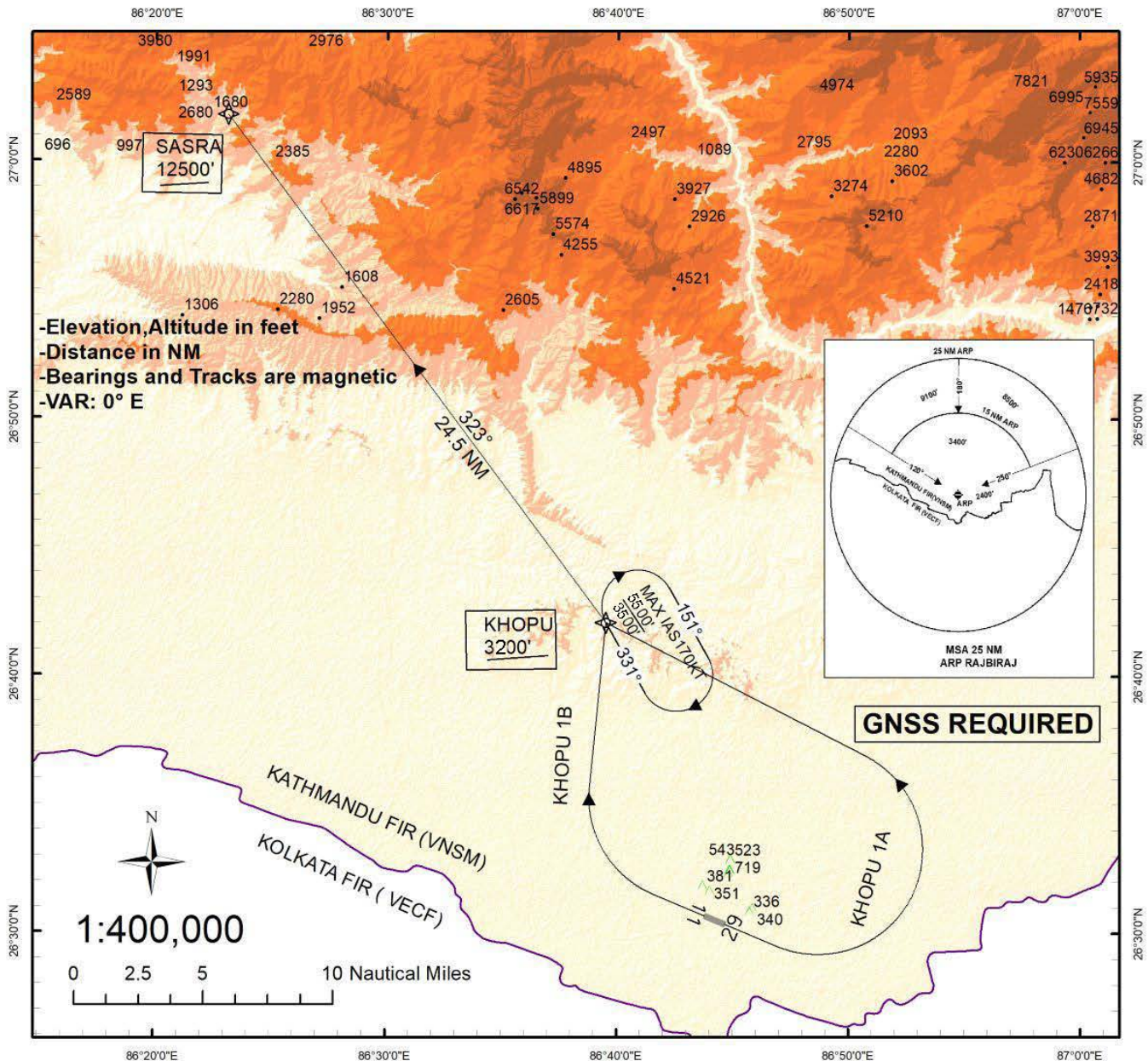
<i>Serial No.</i>	<i>Path Descriptor</i>	<i>Waypoint Identifier</i>	<i>Flyover</i>	<i>Course/Track (°M/°T)</i>	<i>Magnetic Variation</i>	<i>Distance (NM)</i>	<i>Turn Direction</i>	<i>Altitude (ft)</i>	<i>Speed (kts)</i>	<i>VPA/TCH</i>	<i>Navigation Specification</i>
001	CA	-	-	113°	-	-	L	@700	-	-	RNP-1
002	DF	KHOPU	-	-	-	-	-	+3200	-	-	RNP-1
003	TF	SASRA	-	323°	-	24.5	-	+12500	-	-	RNP-1

## 7. CODING TABLE: SID KHOPU 1B RWY 29

<i>Serial No.</i>	<i>Path Descriptor</i>	<i>Waypoint Identifier</i>	<i>Flyover</i>	<i>Course/Track (°M/°T)</i>	<i>Magnetic Variation</i>	<i>Distance (NM)</i>	<i>Turn Direction</i>	<i>Altitude (ft)</i>	<i>Speed (kts)</i>	<i>VPA/TCH</i>	<i>Navigation Specification</i>
001	CA	-	-	293°	-	-	R	@700	-	-	RNP-1
002	DF	KHOPU	-	-	-	-	-	+3200	-	-	RNP-1
003	TF	SASRA	-	323°	-	24.5	-	+12500	-	-	RNP-1



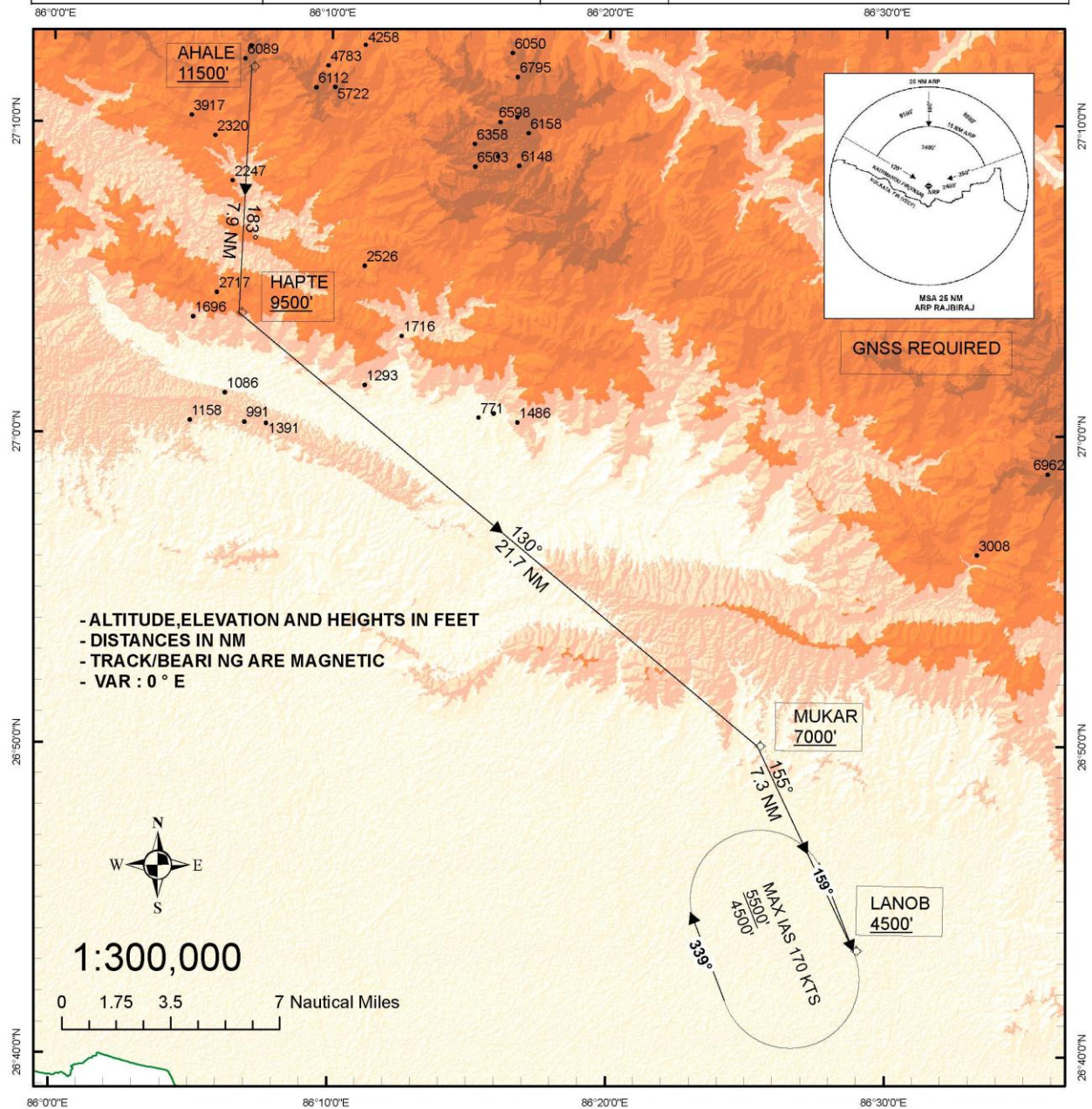
STANDARD DEPARTURE CHART- INSTRUMENT(SID)- ICAO	AERODROME ELEV:249' TRANSITION LEVEL: F150' TRANSITION ALT:13500'	TWR 122.5	RAJBIRAJ/RABIRAJ AIRPORT(VNRB) RWY 11/29 RNP 1 SID KHOPU 1A (RWY11) KHOPU 1B (RWY29)
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<b>KHOPU 1A RWY 11( Climb Gradient 3.4 %)</b>
Climb RWY heading to 700 ft then turn left direct to KHOPU at or above 3200 ft.
<b>KHOPU 1B RWY 29( Climb Gradient 3.4 %)</b>
Climb RWY heading to 700 ft then turn right direct to KHOPU at or above 3200 ft.
<b>Transition to route to R344</b>
From KHOPU track 323° to SASRA at or above 12500ft

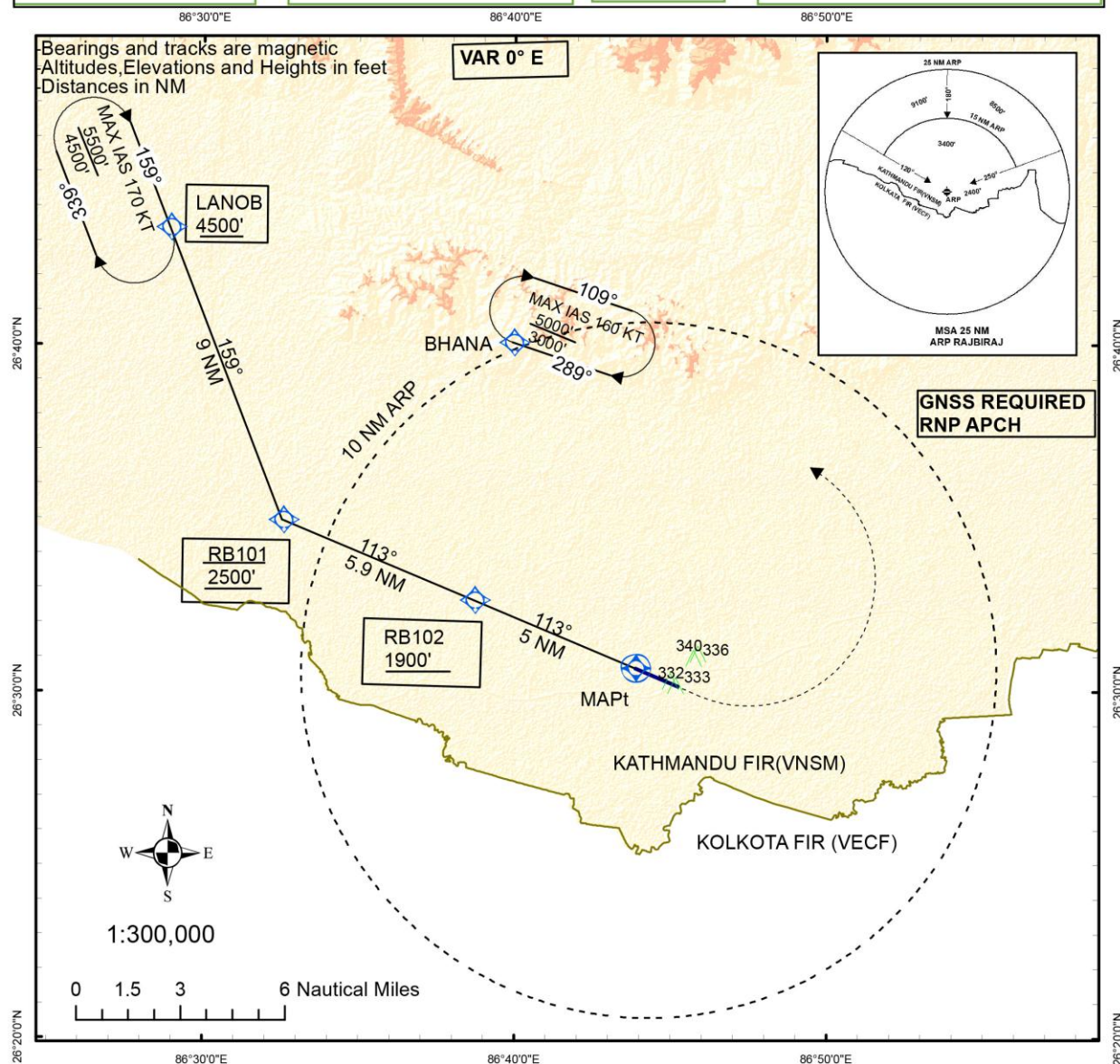


STANDARD ARRIVAL CHART- INSTRUMENT(STAR)- ICAO	AERODROME ELE:249' TRANSITION LEVEL:F150 TRANSITION ALTITUDE:13500FT	TWR 122.5	RAJBIRAJ/ RAJBIRAJ AIRPORT (VNRB) RNP 1 STAR AHALE 1A
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RNP 1STAR	ROUTING
AHALE 1A	From AHALE descend to 9500 ft or above at HAPTE then descend to MUKAR at or above 7000 ft then descend to LANOB at or above 4500ft.

<b>INSTRUMENT APPROACH CHART- ICAO</b>	<b>AERODROME ELEV 249' HEIGHTS RELATED TO THR RWY 11-ELEV 249'</b>	<b>TWR 122.5</b>	<b>RAJBIRAJ/RAJBIRAJ AIRPORT RNP RWY 11</b>
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TRANSITION LEVEL : FL 150

TRANSITION ALT : 13500 FT

LNAV	Aircraft Category					
	A	B	C	D	E	F
	OCA (OCH)	Visibility	OCA (OCH)	Visibility	OCA (OCH)	Visibility
Straight-in	570' (321')	2000m	570' (321')	2000m	570' (321')	2000m
Circling	650' (401')	2500m	760' (511')	3000m	860' (611')	3600m
NOT AUTHORIZED AT NIGHT						
FAF TO MAPt : 5.0 NM						
GS	60	90	120	150	180	
Min:Sec	5:02	3:22	2:31	2:01	1:41	
Feet/Minute@5.2%	320	480	640	790	960	

#### MISSED APPROACH:

Climb straight to 700 ft then turn left direct to BHANA at or above 2300 ft and climb to 3000 ft to establish hold or as instructed by ATC

