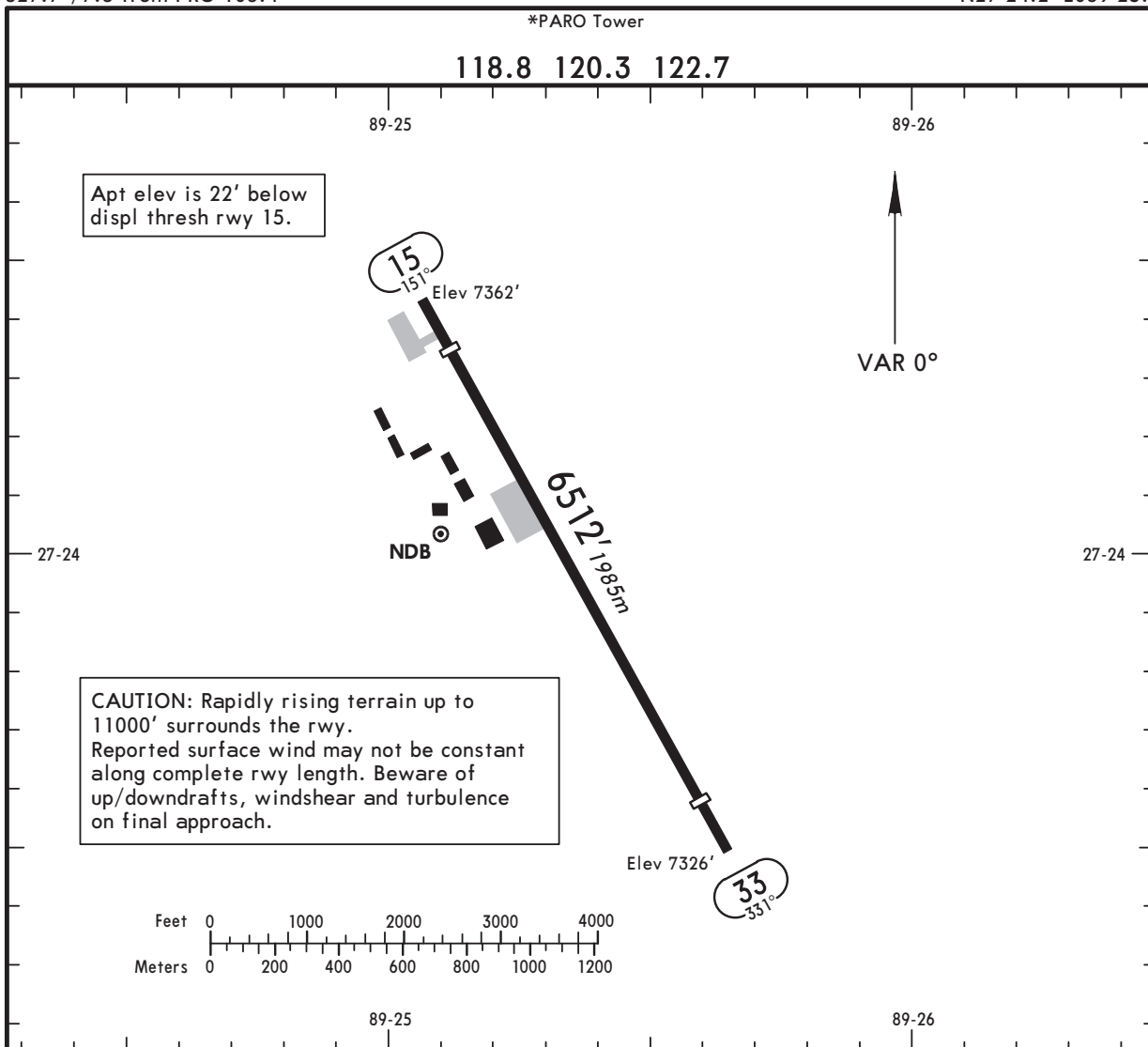


Apt Elev **7333'**
327.7°/7.3 from PRO 108.4

15 JAN 99

(13-1)

PARO
N27 24.2 E089 25.6



Apt elev is 22' below
displ thresh rwy 15.

CAUTION: Rapidly rising terrain up to
11000' surrounds the rwy.
Reported surface wind may not be constant
along complete rwy length. Beware of
up/downdrafts, windshear and turbulence
on final approach.

ADDITIONAL RUNWAY INFORMATION

RWY	USABLE LENGTHS		TAKE-OFF	WIDTH
	Threshold	LANDING BEYOND Glide Slope		
15 33	5922' 1805m			98' 30m

TAKE-OFF

	AIR CARRIER All Rwys	
A	400m	
B		
C	NOT APPLICABLE	
D		

PARO INTERNATIONAL AIRPORT BHUTAN

AERODROME INFORMATION

1) LOCATION	PARO
Location indicator	VQPR
Coordinates	27 24'12"N 89 25'36"E
<i>Coordinates in WGS-84</i>	27 24'31.75"N 89 25'14.09"E
Elevation	7333ft (2235 M)
<i>Elevation in WGS-84</i>	7340.14ft (2237.27 M)
2) OPERATIONAL HOURS	<i>During Operational Hours Only.</i>
3) PASSENGERS CHECK IN TIME	
Schedule flight	<i>2½ Hrs PRIOR ETD</i>
Chartered flight	<i>1½ Hrs PRIOR ETD</i>
4) AIR TRAFFIC SERVICES	
Type of Services	<i>ADVISORY SERVICE</i>
Airspace Classification	<i>E & G</i>
TOWER OPERATIONAL HOURS	
Schedule flight	<i>1 Hr prior ETD/ETA</i>
Chartered flight	<i>1Hr prior ETD/ETA</i>
Helicopters	<i>½ Hr prior ETD/ETA</i>
5) TIME DIFFERENCE	<i>+6 Hrs UTC</i>
6) AERODROME CATEGORY	<i>C</i>
7) RESCUE & FIRE FIGHTING	
Category	<i>6</i>
Amount of Water	<i>11,800 liters</i>
8) RUNWAY	
RWY Orientation	<i>15 & 33 (151 7331 °)</i>
RWY Dimension	<i>1985m X 30m</i>
RWY strength	<i>PCN 20 /F/C/W/T</i>
RWY Slope	<i>0.81% TO THE SOUTH EAST</i>
9) THRESHOLD COORDINATES & ELEVATION (*WGS-84)	
RWY15 -	<i>*27 24'39.09"N 89 25'11.54" E 2237.58M (7341.14ft)</i>
RWY33 -	<i>*27 23'43.41"N 89 25'47.01"E 2221.85M (7289.52ft)</i>

10) TEMPORARY DECLARED DISTANCE (Valid until July 2008)

RWY15 - TORA -1985M, TODA-1985M, ASDA-1985M, LDA 1985M
RWY33 - TORA -1985M, TODA-1985M, ASDA-1985M, LDA 1985M

11) FREQUENCY

VHF (MAIN)

TWR *TWR 120.3Mhz*
Call sign *PARO TOWER*
Range Coverage *150 NM towards Southeast i.e. via BOGOP (R598)*
35 NM toward s Southwest i.e. via SUBSU (G348)

VHF (EMERGENCY)

TWR *TWR 121.5Mhz*
Call sign *PARO TOWER*
Range Coverage *within 10 – 12 NM of radius only*

HF

Frequency *8921Khz & 13342Khz,*
Call Sign *PARO RADIO*

12) NAVIGATION AIDS:-

VOR/DME

Frequency *108.4Mhz "PRO"*
Radial & Distance *140°/7NM from ARP*
Coordinates- *27 18'30"N 89 30'30"E 350M*

NDB

Frequency & Location *410 Khz "PR" (500M SW of Paro Aerodrome)*
Coordinates (*WGS-84) *27 23'58"N 89 25'29"E*

13) SECTOR ALTITUDE:-

16,000ft (090 ° - 250 °) 17,500ft (255 ° - 150 °)
26,100ft (315 ° - 090 °)

14) ENTRY & EXIT ROUTE:-

a) R598 BOGOP Radial 161 °/37 NM 26 44'N 89 44'E
b) G348 SUBSU R240 °/38 NM 26 58'N 88 52'E
(Distance from Paro VOR/DME)

15) HOLDING POINTS:-

Geographical Location *TAKTHI*
Coordinates *27 03'N 89 29'E*
Distance *15 DME from PARO AD*
8.5 DME from VOR/DME

16) COMPULSORY REPORTING POINTS

BOGOP (Southeast sector)
SUBSU (Southwest sector)
TAKTI

CONFLUENCE

17) TRANSFER POINT:-

- a) *R598 BOGOP Radial 161 °/37 NM 26 °44'N 89 °44'E*
- b) *G348 SUBSU R240 °/38 NM 26 °58'N 88 °52'E*
(Distance from Paro VOR/DME)

18) SIGNIFICANT REFERENCE POINT

1. TOWARDS SOUTH OF AIRFIELD

**V-VICTOR
VOR RIDGES
ESUNA VALLEY**

2. TOWARDS NORTH OF AIRFIELD

**Mr. SMITH'S RIDGES
TURNING AREA OF RWY15
SANGCHEOKOR MONASTRY**

19) ADDRESSES & Tel No.

- 1. TOWER *9758272859 – for Tower observation & Flight Information*
- 2. ARO/AIS Office *9758272760 – for Flight Plan, NOTAM & Aerodrome condition*
Email :- aisection@druknet.bt
- 3. MET Office *975271404/271233 for Weather update*
- 4. AFTN address:- *VQPRZTZX/VQPRYFYT – for Flight plan, NOTAM and departure information*

20) HANDLING SERVICE & FACILITIES

- *FUEL/OIL:- *Aviation Turbine Fuel only – Jet A1*
**(Service available prior intimation only)*

***HANDLING FACILITIES:-** *Ground Operation Manager,
Druk Air Corporation Ltd.
Paro Airport.
Tel # 975 8272722
Fax#9758271259
Email Add.*

21) REQUIREMENTS:-

- (1) PRIOR OPERATING INTO PARO AIRPORT THE PILOT IN- COMMAND SHOULD BE BRIEFED AND VISIT THE AERODROME AS AN OBSERVER.
OR SHOULD
UNDERTAKE INSTRUCTION IN A SIMULATOR APPROVED BY THE AUTHORITY FOR THAT PURPOSE.
OR

Paro Aerodrome Information.

REQUEST GUIDE PILOT(NAVIGATOR) FROM DRUK AIR CORPORATION LTD. ON FOLLOWING ADDRESS:-

**Capt Karma Dupchu, FOM
Druk Air Corporation ltd.
Tele No. 975 8271415/271218
Fax No.9758272040
Email Add:- drukops@druknet.bt**

- (2) ALL NON SCHEDULED CIVIL/MILITARY AIRCRAFT ARE TO OBTAIN RELEVANT CLEARANCE PRIOR OPERATING INTO BHUTAN AIRSPACE FROM THE DIRECTOR OF DEPARTMENT OF CIVIL AVIATION.

TO OBTAIN CLEARANCES ON BEHALF OF PRIVATE AIRLINES AND FOR ADDITIONAL LOGISTICS CONTACT:-

**Mr. Dorji Wangdi
Bhutan Air Service
Paro Airport.
Tele # 975 8272063 (o)
Fax # 975 8272053
Mobile:- 975 17617383
Email: bhutanair@yahoo.com/bhutanair@hotmail.com**

Note:- *Bhutan air services (BAS) is the authorized agent for coordinating and assisting in clearance of private aircraft/helicopter that fly to Bhutan. All fees and charges at Paro Aerodrome will be collected by the Bhutan Air Services.*

- (3) IN ORDER TO AVOID UNNECESSARY DELAY WHILE DEPARTING FROM PARO, RELEVANT CLEARANCES (**YANKEE ALPHA NUMBER**) FROM INDIAN DGCA AND OTHER CLEARANCES FROM THE RESPECTIVE AUTHORITY MUST BE OBTAINED TO OVER FLY/TRANSITING THROUGH THE RESPECTIVE AIRSPACES.
- (4) SPECIFIC DATE & TIME OF ARRIVAL/ DEPARTURE OR OVER FLYING/TRANSITING SHOULD BE CLEARLY MENTIONED WHILE OBTAINING SUCH CLEARANCES.
- (5) LAST MINUTE CHANGE IN FLIGHT PLAN SHALL BE SUBJECT TO **DELAY THE FLIGHT TO OBTAIN NEW ADC/FIC**, THEREFORE ALL FLIGHTS ARE TO ADHERE WITH PLANNED FLIGHT PLAN OR INFORM TO ARO REGARDING THE CHANGES IN FLIGHT PLAN AT LEAST ONE DAY PRIOR. **DCA BHUTAN SHALL NOT BE RESPONSIBLE FOR THE DELAY OF FLIGHT.**
- (6) FLIGHT WISHING TO DEPART EARLY IN THE MORNING FROM PARO (BTN 0000Z-0400Z), PRIOR FLIGHT PLAN SHOULD BE FILED AT LEAST ONE DAY PRIOR DEPARTURE FROM PARO, IN ORDER TO AVOID DELAY IN OBTAINING ADC/FIC FROM INDIA FIR/FIC.

Paro Aerodrome Information.

- (7) FLIGHT PLAN CAN BE FILED DURING OPERATIONAL HOURS OR DURING OFFICE HOURS (09:00 – 16:00 Hrs BST) AT THE FOLLOWING ADDRESS.

ARO,
AIS OFFICE,
CONTROL TOWER,
1ST FLOOR,
PARO AIRPORT.
Tel No. 975-8-272760/272895
Email:- *aissection@druknet.bt*

22) RESTRICTION:-

- (1) ONLY DAY OPERATIONS IN VMC (DAY VFR FLTS ONLY)
- (2) NO NIGHT LANDING/BAD WEATHER FACILITIES
- (3) ALTITUDES TO BE MAINTAINED AS PER ICAO RULES OF THE AIR.
- (4) AVOID FLYING OVER YELLOW ROOFTOP i.e., (*Dzongs, Monastery, Temples*)
- (5) FLIGHT SHALL BE PERMITTED TO FLY ONLY **AFTER/BEFORE 15 MINUTES OF SUNRISE /SUNSET.**

23) PROCEDURES

- (1) WITH THE HIGH TERRAIN AND RAPID PHENOMENON CHANGE OF WEATHER IN AND AROUND THE PARO AERODROME, ALL FLIGHTS ARE OPERATED AS **DAY VFR AERODROME**, THEREFORE ANY AIRCRAFT OPERATING IN BHUTAN TERRITORY ARE REQUIRED TO OBTAIN WEATHER INFORMATION FROM PARO AERODROME AT LEAST ONE HOUR PRIOR TO DEPARTURE.
- (2) PARO WEATHER WILL AVAILABLE ON HF RADIO ON FREQ. **8921KHZ** AND **13342KHZ**, CALL SIGN PARO RADIO OR CAN BE REQUESTED ON AFTN i.e. On **VQPRZTZX, VQPRYFYT**
- (3) FLIGHT PLAN SHOULD BE FILED ON AFTN/FAX PRIOR ONE HOUR DEPARTURE FOLLOWED BY STATUS OF FLIGHT, IN THE EVENT OF ANY DELAY OR CANCELLATION OF FLIGHT LIKELY TO OCCUR.
- (4) **AIRBORNE CALL IS MUST** AS SOON AS THE AIRCRAFT DEPARTS FROM THE DEPARTURE AERODROME WITH THE **ATD AND ETA OVER PARO. AIRBORNE TIME & ETA SHOULD BE INFORMED TO PARO RADIO ON HF.**
- (5) ENTRY/EXIT FROM/TO BHUTAN TO INDIAN AIRSPACE IS ON POSITIVE R/T CONTACT WITH HASIMARA (IAF 130.4Mhz) BAGDOGRA (IAF 131.2Mh) AND GUWAHATI (Civil ACC 120.5 Mhz or Civil APP 123.9Mhz) AS APPLICABLE.
- (6) ENTRY/EXIT INTO CIRCUIT AREA IS VIA **CONFLUENCE** (*Confluence Of Rivers Paro-Thimphu*) AT SAFETY ALTITUDE. DESCEND BELOW SAFETY ALTITUDE

Paro Aerodrome Information.

ONLY IN VMC. ALL ARRIVING AIRCRAFT TO CONTACT PARO TOWER ATLEAST 38 NM BEFORE REACHING CONFLUENCE.

- (7) TA-18,000, TL WILL BE PASSED BY ATC
 - (a) CIRCUIT AREA/PATTERN IS GENERALLY TO THE WEST OF AIRFIELD. AIRCRAFT ON CIRCUIT MAY NOT BE VISIBLE TO ATC, DUE TO HILLS, DESCENDING CIRCUIT.
 - (b) TO THE NORTH/NORTH EAST OF THE AIRFIELD THE DUPSHARE VALLEY IS **UNSAFE AND NOT ALLOWED FOR** CIRCUIT.
- (8) FINAL APPROACH TRACK FOR BOTH RUNWAY IS CURVED DUE TO HILLY TERRAIN, "**EXERCISE CAUTION**". APPROACH ON FINAL IS ABOVE 3°GP. NO VISUAL GUIDANCE LIKE VASI. PAPI. ILS, RUNWAY LIGHTS ETC ON FINAL.
- (9) SURFACE WINDS PASSED ON R/T IS THE TOWER OBSERVATION AND MAY NOT BE INDICATIVE OF ACTUAL WIND CONDITIONS AT DIFFERENT POSITIONS ON RUNWAY. SURFACE WINDS INCREASE IN INTENSITY USUALLY IN THE AFTERNOON HOURS.
- (10) SEVERE TURBULENCE MAY EXPERIENCE WHEN ENTERING THE VALLEY.
- (11) STRONG ANABATIC WIND IN THE AFTERNOON (FEB – MAY) MAY GIVE RAISE TO MODERATE TO SEVERE TURBULENCE; IT IS RECOMMENDED TO RESTRICT FLIGHT MOVEMENT TO THE MORNING.
- (12) ONLY ONE AIRCRAFT AT A TIME IS PERMITTED TO DESCEND IN A VALLEY.
- (13) HOLDING POINT IS OVER TAKTI 180°/15 NM FROM VOR/DME AT ALTITUDE CLEARED BY PARO ATC. MINIMUM 16 000ft.
- (14) HELICOPTERS OPERATING AS A DOMESTIC FLIGHT/MOUNTAIN FLIGHT WITHIN BHUTAN TERRITORY CAN CONTACT PARO TOWER ON FIXED LINE/MOBILE (*Numbers provided above on item no. 19*). WHILE ON GROUND AT HELIPAD FOR PARO WEATHER AND THE DEPARTURE INFORMATION (ETA/ETD). THIS SHALL BE APPLIED ONLY TO THOSE HELICOPTER NOT EQUIPPED WITH **HF RADIO FACILITIES** ON BOARD

24) DEPARTURE INSTRUCTION

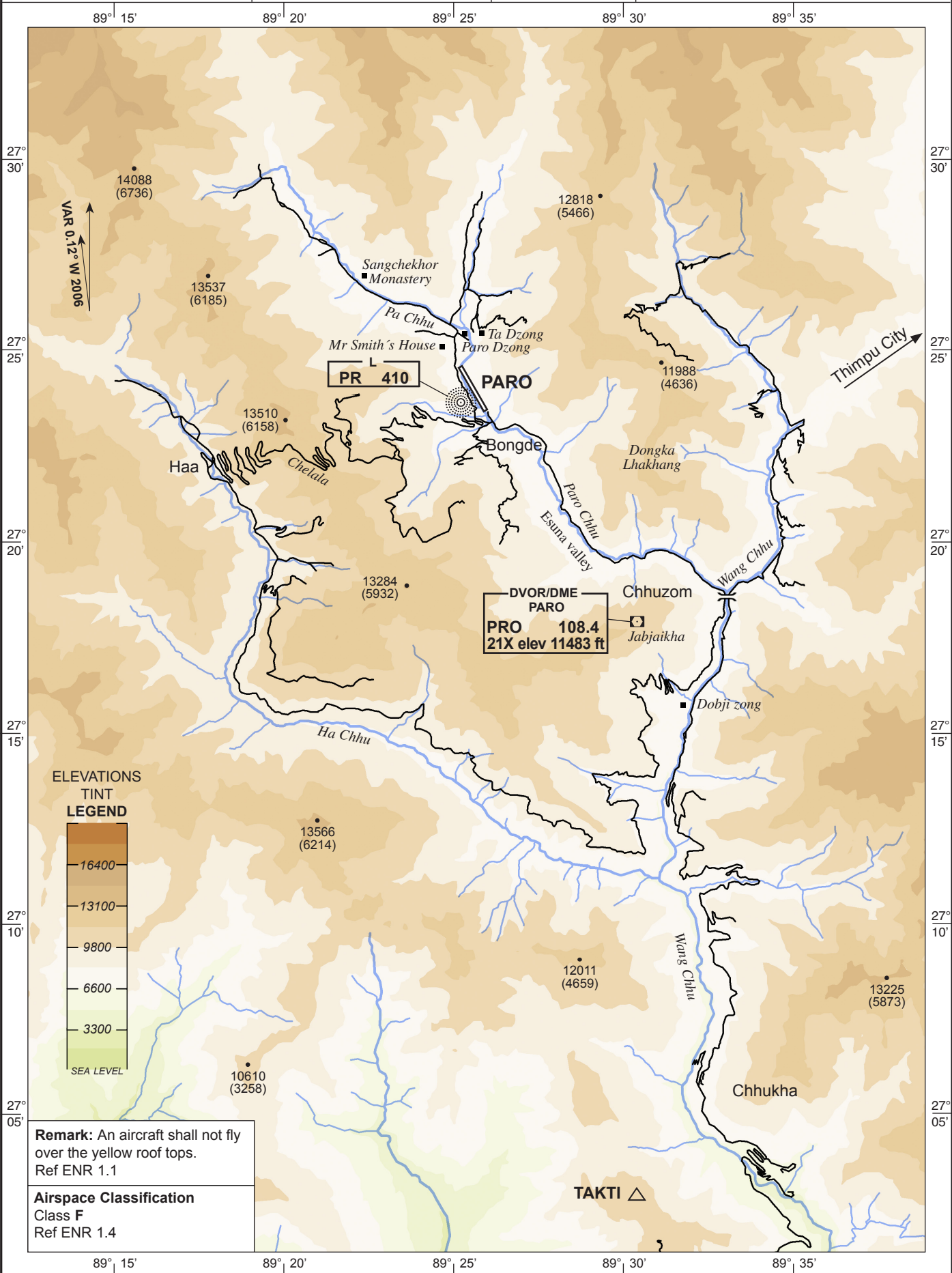
1. **NO SIDs** (*Standard instrument Departure*) IS ESTABLISHED FOR PARO AIRPORT. THEREFORE, ALL AIRCRAFT SHALL STRICTLY FOLLOW VISUAL FLIGHT RULES (VFR) AND IN VISUAL METEOROLOGICAL CONDITIONS (VMC).

Paro Aerodrome Information.

2. AFTER DEPARTURE CLIMB INITIALLY 18000FT ON QNH MAINTAINING VISUAL TO TERRAIN/OBSTACLE AND REPORT OVER CONFLUANCE/VOR"PRO" WITH THE ESTIMATES TIME OVER DESIGNATED COMPULSORY REPORTING POINTS AND DESTINATION.
3. AS SOON AS REACHING ALTITUDE 18000 FT AND/OR BEFORE CROSSING BHUTAN AIRSPACE, AIRCRAFT SHALL CONTACT THE FOLLOWING ADJACENT ACC/APP FOR HIGHER LEVEL AND POSITION REPORT.
 - a) **AIRCRAFT DEPARTING FOR SOUTHEAST SECTOR** i.e. via **BOGOP(R598)** AIRCRAFT SHALL CONTACT **HASHIMARA ON FREQ 130.4Mhz & ALSO WITH GUWHATI ON FREQ 120.5 Mhz (approach) 123.9 Mhz (area)**
 - b) **AIRCRAFT DEPARTING FOR SOUTHWEST SECTOR** i.e. via **SUBSU(G348)**, AIRCRAFT SHALL CONTACT **BAGHDORA ON FREQ 131.2Mhz & ALSO WITH GUWHATI ON FREQ 120.5 Mhz (approach) 123.9 Mhz (area)**
4. AFTER ESTABLISHING CONTACT WITH THE ADJACENT ACC, AIRCRAFT SHALL REPORT BACK TO PARO TOWER WITH THEIR ASSIGNED LEVEL AND POSITION UNTIL LEAVING BHUTAN AIRSPACE/CROSSING TRANSFER POINT.
5. AIRCRAFT SHALL ALSO REPORT BACK TO PARO TOWER AFTER VACATING BHUTAN AIR SPACE i.e. OVER **BOGOP/SUBSU**.

Wish you a very SAFE & Pleasant Flight.

TRANSITION ALTITUDE 18000 MSL	AD ELEV 7352 FEET ELEV and ALT in ft MSL 14088 HGT in ft above AD ELEV (6736)	PARO RADIO 8921 Khz 13342 Khz	1:250 000 1 0 1 2 3 4 5 6 7 8 9 10 km 1 0 1 2 3 4 5 6 NM
THR -ELEV RWY 15: 7350 ft RWY 33: 7297 ft			



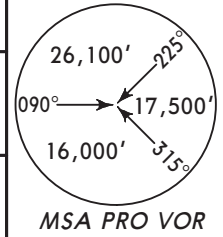
VQPR
PARO

15 JAN 99 (13-1)

CAT A & B
CLOUD BREAK PROCEDURE VOR DME

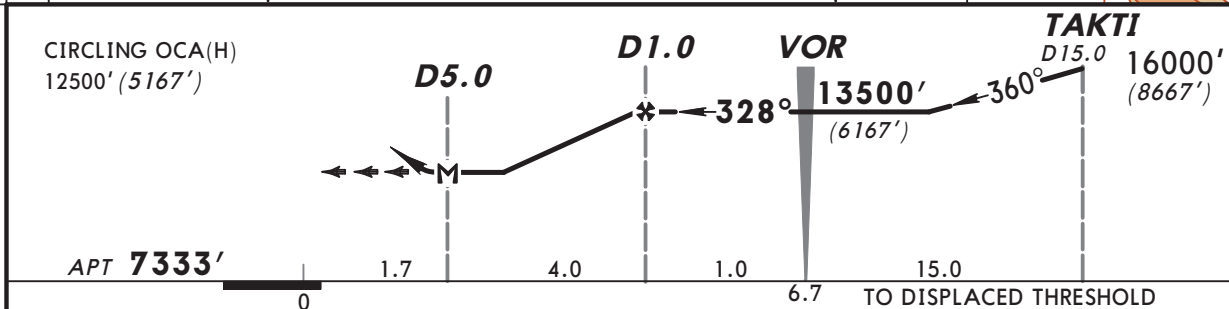
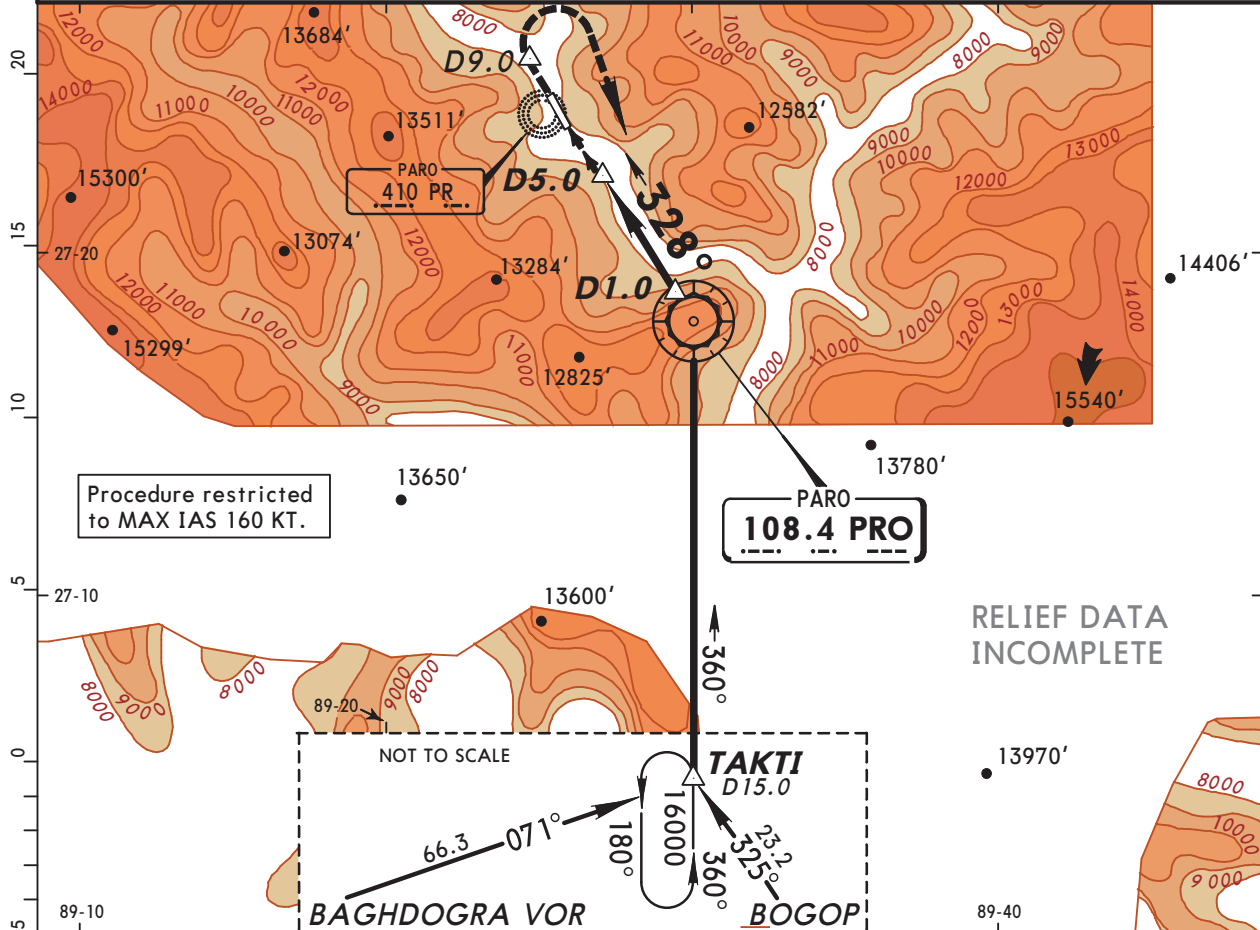
PARO, BHUTAN

*PARO Tower 118.8 120.3 122.7				
VOR PRO 108.4	Final Apch Crs 328°	Minimum Alt D1.0 13500' (6167')	MDA(H) 12500' (5167')	Apt Elev 7333'



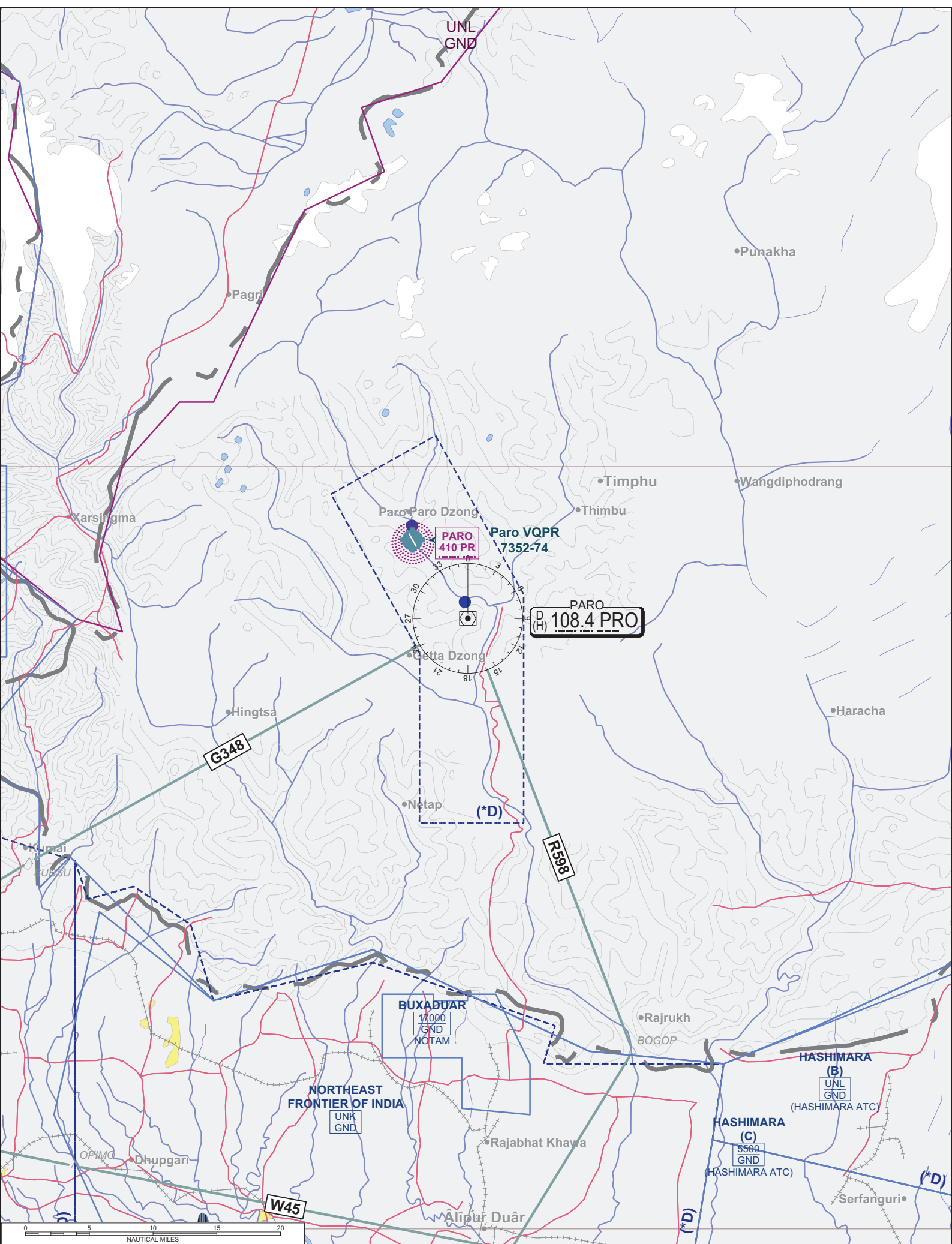
MISSED APCH: Climb STRAIGHT AHEAD on R-328 to D9.0. Turn RIGHT (MIM 25° bank, MAX IAS 160 KT) and climb to VOR. Continue on R-180 to TAKTI and climb to 16000'.

Alt Set: MB (IN on req) Apt Elev: 241 MB Trans level: By ATC Trans alt: 18000' (10667')
Pilots to confirm with ATC that both turning areas are clear before commencing approach.



				D9.0	PRO
				↑	via 108.4
MAP at D5.0					R-328

		CIRCLE-TO-LAND	
	Max Kts	MDA(H)	
A	100	12500' (5167')	3100m
B	135		
C		NOT APPLICABLE	
D			



UNL
GND

•Punakha

•Pagri

•Timphu

•Wangdiphodrang

•Thimbu

Xarsingma

Paro Paro Dzong

PARO
410 PR
7352-74

PARO
D (H) 108.4 PRO

•Getta Dzong

•Hingtsa

•Haracha

G348

•Netap

(*D)

R598

BUXABUAR
17000
GND
NOTAM

•Rajrukh

BOGOP

HASHIMARA

(B)
UNL
GND
(HASHIMARA ATC)

**NORTHEAST
FRONTIER OF INDIA**

UNK
GND

HASHIMARA
(C)
3500
GND
(HASHIMARA ATC)

•Rajabhat Khawa

•Dhupgari

W45

Alipur Duar

•Serfanguri

(*D)

