

AD 2.1 AERODROMES
VQBT AD 2.1 AERODROME LOCATION INDICATOR AND NAME
VQBT – Bumthang, Bathbalathang/Domestic

VQBT AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	<i>ARP co-ordinates and site at AD</i>	273343.92N 904449.72E Centre of RWY
2	<i>Direction and distance from(city)</i>	2 Km NE from Chamkhar Town
3	<i>Elevation/Reference temperature</i>	2580.2M (8 465.22 ft) MSL/ 19.53°C
4	<i>MAG VAR/Annual changes</i>	0.01° West 2015
5	<i>AD Administration, address, telephone, telefax, telex. AFS</i>	Department of Air Transport, Bumthang Domestic Airport, Bhutan. Tel: (975)-03-630490 AFTN: VQBTZTZX Email: ddema@doat.gov.bt
6	<i>Type of traffic permitted (IFR/VFR)</i>	Only VFR is permitted due to high terrain
7	<i>Remarks</i>	AD PPR

VQBT AD 2.3 OPERATIONAL HOURS

1	<i>AD Administration</i>	Available MON - FRI 0300 – 1100 (UTC)
2	<i>Customs and immigration</i>	Not Available
3	<i>Health and sanitation</i>	Not Available
4	<i>AIS Briefing Office</i>	Not Available
5	<i>ATS Reporting Office</i>	Not Available
6	<i>MET Briefing Office</i>	Available during operations
7	<i>ATS</i>	During Operational Hrs
8	<i>Fuelling</i>	Not Available
9	<i>Handling</i>	Available during sked operations
10	<i>Security</i>	As and when required
11	<i>De-icing</i>	Not available
12	<i>Remarks</i>	Out side those hours, service available O/R. Request to be submitted to the AD 24hrs before intended operation.

VQBT AD 2.4 HANDLING SERVICES AND FACILITIES

1	<i>Cargo-handling facilities</i>	Available with airline operator, Druk-air
2	<i>Fuel/oil types</i>	Not Available
3	<i>Fuelling facilities/capacity</i>	Not Available
4	<i>De-icing facilities</i>	Manual by sweeping
5	<i>Hanger space for visiting aircraft</i>	Not Available
6	<i>Repair facilities for visiting A/C</i>	Not Available
7	<i>Remarks</i>	NIL

VQBT AD 2.5 PASSENGER FACILITIES

1	<i>Hotels</i>	Near AD and in the city
2	<i>Restaurants</i>	in city
3	<i>Transportation</i>	On request
4	<i>Medical facilities</i>	First aid at Hospital, 5Km from Airport
5	<i>Bank and Post Office</i>	Bank & Post office in city
6	<i>Tourist Office</i>	Not Available
7	<i>Remarks</i>	Nil

VQBT AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	<i>AD category for fire fighting</i>	Within AD HR: CAT 4
2	<i>Rescue equipment</i>	Rescue Tools with CFT
3	<i>Capability for removal of disabled aircraft</i>	Not Available
4	<i>Remarks</i>	NIL

VQBT AD 2.7 SEASONAL AVAILABILITY – CLEARING

1	<i>Type of clearing equipment</i>	Manually Sweeping
2	<i>Clearance priorities</i>	1. RWY 14/32
3	<i>Remarks</i>	

VQBT AD 2.8 APRON, TAXIWAYS AND CHECK LOCATION DATA

1	<i>Apron surface and strength</i>	Not Available
2	<i>Taxiway width, surface and strength</i>	Not Available
3	<i>ACL location and elevation</i>	Not Available
4	<i>VOR checkpoints</i>	NOT ESTABLISHED
5	<i>INS check points</i>	-
6	<i>Remarks</i>	NIL

VQBT AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	<i>Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands</i>	Not Available
2	<i>RWY and TWY markings and LGT</i>	RWY Markings Available
3	<i>Stop bars</i>	Not Available
4	<i>Remarks</i>	NIL.

VQBT AD 2.10 AERODROME OBSTACLES

RWY/Area affected	<i>In approach/TKOF areas</i>			<i>In Circling area ad at AD</i>			<i>Remarks</i>	
	<i>Obstacle type Elevation</i>			<i>Obstacle type Elevation</i>				
	<i>Markings/LGT</i>	<i>Coordinates</i>	<i>Markings/LGT</i>	<i>Coordinates</i>				
a	b	c	a	b				
RWY 14	SEE AD 2 – VQBT 3-1			TO BE DEVELOPED				
RWY32	SEE AD 2 – VQBT 3-2							

VQBT AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	<i>Associated MET Office</i>	Bumthang Airport
2	<i>Hours of service MET Office outside hours</i>	During Flight operations only
3	<i>Office responsible for TAF preparation Periods validity</i>	TO BE DEVELOPED
4	<i>Type of landing forecast Interval of issuance</i>	Current Weather half hourly during flight operations (in Plain Language)
5	<i>Briefing/consultation provided</i>	Personal consultation During flight operation(on demand)
6	<i>Flight documentation Language (s) used</i>	TO BE DEVELOPED, English
7	<i>Charts and other information available for briefing or consultation</i>	TO BE DEVELOPED
8	<i>Supplementary equipment available for providing information</i>	NIL
9	<i>ATS unit provided with information</i>	Control Tower
10	<i>Additional information (limitation of service, etc.)</i>	Presently limited to providing METAR and local current valley WX in plain language only during flight operations.

VQBT AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE & MA 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
14	142.78°	1200 X 30 M	(14-16)F/C/Y/T	273358.42N 0904437.37E 273329.42N 0904502.08E	2 580 M AMSL
32	322.78°	1200 X 30 M			2 571 M AMSL
Slope of RYW-SWY	SWY Dimensions (M)	CWY Dimensions (M)	Strip Dimensions (M)	OFZ	Remarks
7	8	9	10	11	12
0.83%	NIL	NIL	1 200 M X 30 M	NIL	BGN RWY14 273359.24N 0904436.66E BGN RWY32 273328.26N 0904503.07E

VQBT AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
14	1 172	1 172	1 172	1 172	
32	1 172	1 196	1 196	1 127	NIL

VQBT AD 2.14 APPROACH RUNWAY LIGHTNING

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	RWY edge LGT LEN, spacing colour INTST	RWY END LGT colour INTST	RWY END LGT Colour WBAR	Remarks
NIL									

VQBT AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	Not established
2	LDI location and LGT Anemometer location and LGT	Anemometer: 150 M from THR 14
3	TWY edge and centre line lighting	NIL
4	Secondary power supply/switch-over time	NIL
5	Remarks	NIL

VQBT AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF of THR of FATO	TO BE DEVELOPED
2	TLOF and/or FATO elevation M/FT	TO BE DEVELOPED
3	TLOF and FATO are dimensions, surface, strength, marking	TO BE DEVELOPED
4	True and MAG BRG of FATO	TO BE DEVELOPED
5	Declared distance available	TO BE DEVELOPED
6	APP and FATO lightning	TO BE DEVELOPED
7	Remarks	

VQBT AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	NOT ESTABLISHED
2	Vertical limits	NOT ESTABLISHED
3	Airspace classification	NOT ESTABLISHED

4	<i>ATS unit call sign Language(s)</i>	BUMTHANG Tower, English
5	<i>Transition altitude</i>	
6	<i>Remarks</i>	Two ways communication

VQBT AD 2.18 ATS COMMUNICATION FACILITIES

Service Designation	Callsign	Frequency	Hours of operation	Remarks
TWR	Bumthang Tower	122.55 MHz (EXTN) 122.55 MHz (STBY) 121.5 EMER. Freq.	HO	As per sked flight operations
RADIO	Bumthang	8921 KHz 13342 KHz	HO	-do-

VQBT 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	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
NDB	BT	355 KHz		700 M East of RWY 273357.61N 0904442.42E	2 586.254M	NIL

VQBT 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

- 1.1 At Bumthang Airport a number of local regulations apply, in accordance with ICAO Annex 2,11,14 Doc. 4444. See GEN 1.2.
- 1.2 Marshaller assistance can be requested.
- 1.3 When a local regulation is of importance for the safe operation of aircraft on the apron, the information will be given to each aircraft by the TWR on VHF R/T.

2. Taxiing to and from stands.

TO BE DEVELOPED

3. Parking for small aircraft (General aviation)

TO BE DEVELOPED

4. Parking area for helicopters

No designated parking area for helicopter is available at the Bumthang airport, it will be guided on R/T from TWR.

5. Apron Taxiing during winter conditions

Apron not available.

6. Taxiing Limitations

Taxiway not available.

7. School and Training Technical test flight – use of runways

Subject to permission from DGCA & tower.

8 Helicopter traffic

- 8.1 Request prior approval from DoAT and inform to Airport Office during the hours of service and, if possible, not later than 24 hrs before the flight is to be carried out.
- 8.2 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)
 - d) Purpose of operation.
- 8.3 Furthermore, other details relevant to the evaluation of the request shall be given as required.

9. Removal of disable aircraft from runways

- 9.1 When an aircraft is wrecked on a runway, it is the duty of the owner or user of such aircraft to have it removed from the runway as quickly as possible. If a wrecked aircraft is not removed from the runway as quickly as possible by the owner or user, the aircraft will be removed by the DoAT at owner's or user's expense.

VQBT AD 2.21 NOISE ABATEMENT PROCEDURES

TO BE DEVELOPED

VQBT AD 2.22 FLIGHT PROCEDURES

1 General

Flight within Bumthang air traffic circuit shall be in accordance with the Visual Meteorological Conditions (VMC).

- a) Prior operating into Bumthang airport the pilot in- command should be briefed and visit the aerodrome as an observer.
 - or Request guide pilot(navigator) from the Authorised Clearing Agent.
 - Clearances on behalf of private airlines and for additional logistics can arrange by the Local Clearing Agent. For contact see GEN 1.1 para 7

Note: - Bhutan Air Services (BAS) is the authorized Clearing agent on behalf of Department of Air Transport responsible in coordinating and collecting document for onward submission to the DG BCAA for seeking approval of clearances for private aircraft/helicopter that fly to Bhutan. All fees and charges for Private flight operated at Bumthang Aerodrome are also collected by the Bhutan Air Service on Behalf of DoAT.

- b) relevant clearances from DG BCAA and other relevant clearances from the respective authority must be obtained.
- c) Specific date & time of arrival/ departure should be clearly mentioned while obtaining such clearances.
- d) Flight plan can be filed during operational hours or during office hours (03:00 – 10:00 UTC) at the following address.

2 Radar Procedures

No Radar facilities are available at Bumthang Aerodrome.

3 Communication failure

In the event of a communication failure, the pilot shall act in accordance with the communication failure procedures in ICAO Annex 10 Vol. II and Annex 2 general rules para 3.6.52.

-
- 4 **Procedures for IFR flights with in Bumthang air traffic circuit**
Due to high terrain and steep mountains adjacent to the aerodrome, only flight in VMC is permitted.
- 5 **Procedures for flights to/from Bumthang AD**
- 5.1 ATC clearance for flights will be given under the conditions described below:
- a) A flight plan containing items 7 to 18 and indicating the purpose of the flight, shall be submitted to Bumthang ATC.
 - b) Position reports shall be submitted in accordance with 3.6.3 of ICAO Annex 2.
 - c) Deviation from the ATC clearance may only be made when prior permission has been obtained.
 - d) Two-ways radio communication shall be maintained on the frequency 122.55 MHz.
- 5.2 With the high terrain and rapid phenomenon change of weather in and around the Bumthang aerodrome, all flights are operated in VMC, therefore any aircraft operating in Bhutan territory are required to obtain weather information from Bumthang aerodrome at least one hour prior to departure.
- 5.3 Bumthang weather will available on HF Radio on freq. **8921 KHz** and **13342 KHz**, call sign Bumthang or can be requested on AFTN VQBTZTZX or Land line 975 03631718/03630490

5.4 Arrival Instruction

- 5.4.1 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.
- 5.4.2 **Airborne call is must** as soon as the aircraft departs from the departure aerodrome with the **ATD and ETA over Bumthang. Airborne time & ETA should be informed to Bumthang radio on HF.**
- 5.4.3 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., available on final.
- 5.4.4 Surface winds increase in intensity usually in the afternoon hours.
- 5.4.5 Severe turbulence may experience when entering the valley.
- 5.4.6 Strong anabatic wind in the afternoon may give raise to moderate to severe turbulence; it is recommended to restrict flight movement to the morning.
- 5.4.7 Only one aircraft at a time is permitted to Descend in a valley.
- 5.4.8 Helicopters operating as a domestic flight/mountain flight within Bhutan territory shall contact Bumthang tower on fixed line/mobile for Bumthang weather and the departure information (ETA/ETD). This shall be applied only to those helicopters not equipped with **HF radio facilities** on board

5.5 Departure Instruction

- 5.5.1 **No SIDS** (Standard Instrument Departure) is established for Bumthang airport. Therefore, all aircraft shall strictly follow in visual meteorological conditions (VMC).
- 5.5.2 After departure climb initially 18 000ft on QNH maintaining visual to terrain/obstacle and report over r designated compulsory reporting points.
- 5.5.3 departing aircraft may be contact with the destination aerodrome for their position report after establishing contact, aircraft shall report back to Bumthang tower with their assigned level and position.

6 RESTRICTION-

- a) Only Day operations in visual meteorological conditions (VMC) is permitted

-
- b) No night landing/bad weather facilities
 - c) Altitudes to be maintained as per ICAO Annex 2 - Rules of the Air.
 - d) Avoid flying over yellow rooftop i.e., (*dzongs, monastery, temples*)
 - e) Flight shall be permitted *to take-off and land between sunrise and sunset for all types of flight operations.*

VQBT AD 2.23 ADDITIONAL INFORMATION

1. Bird concentrations in the vicinity of the airport

As far as practicable, Aerodrome Control will inform pilots of the bird activity and the estimated heights AGL, when situation warrants.

VQBT AD 2.24 CHARTS RELATED TO AN AERODROME

page

Aerodrome chart.....	AD 2.1-VQBT-1
Aerodrome Obstacle Chart - ICAO Type- A runway 14.....	AD 2.2-VQBT-1
Aerodrome Obstacle Chart - ICAO Type -A runway 32.....	AD 2.2-VQBT-2

INTENTIONALLY LEFT BLANK

AERODROME CHART - ICAO

AERODROME ELEVATION 2580.2 m. ARP 27° 33' 43.92" N
090° 44' 49.73" E

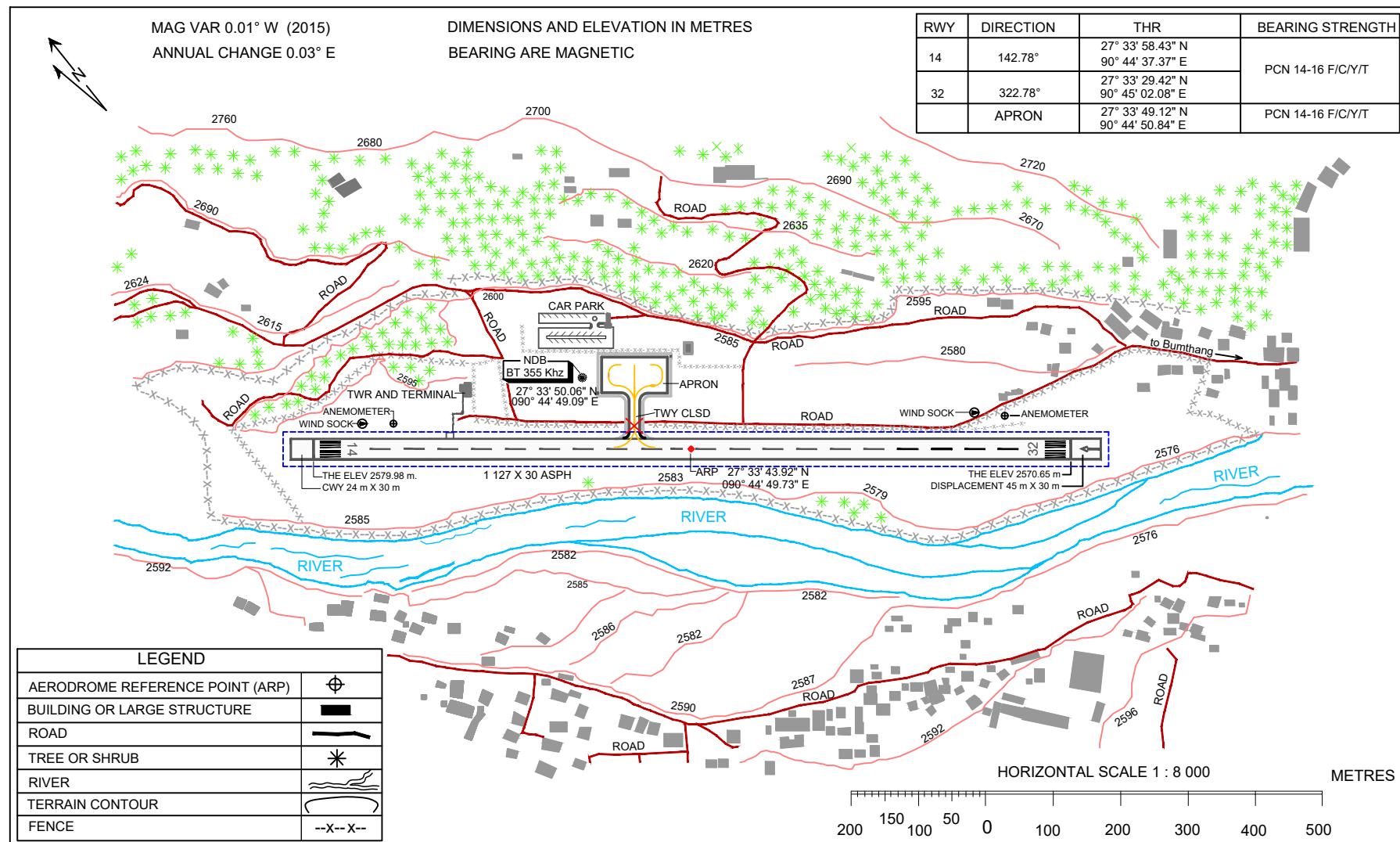
TWR 122.55 Mhz
EMER 121.5 Mhz

BUMTHANG / Bathpalathang Airport

MAG VAR 0.01° W (2015)
ANNUAL CHANGE 0.03° E

DIMENSIONS AND ELEVATION IN METRES
BEARING ARE MAGNETIC

RWY	DIRECTION	THR	BEARING STRENGTH
14	142.78°	27° 33' 58.43" N 90° 44' 37.37" E	PCN 14-16 F/C/Y/T
32	322.78°	27° 33' 29.42" N 90° 45' 02.08" E	PCN 14-16 F/C/Y/T
	APRON	27° 33' 49.12" N 90° 44' 50.84" E	PCN 14-16 F/C/Y/T



INTENTIONALLY LEFT BLANK

AERODROME OBSTACLE CHART - ICAO

TYPE A (OPERATING LIMITATIONS)

**BUMTHANG / Bathpalathang Airport
RUNWAY 14**

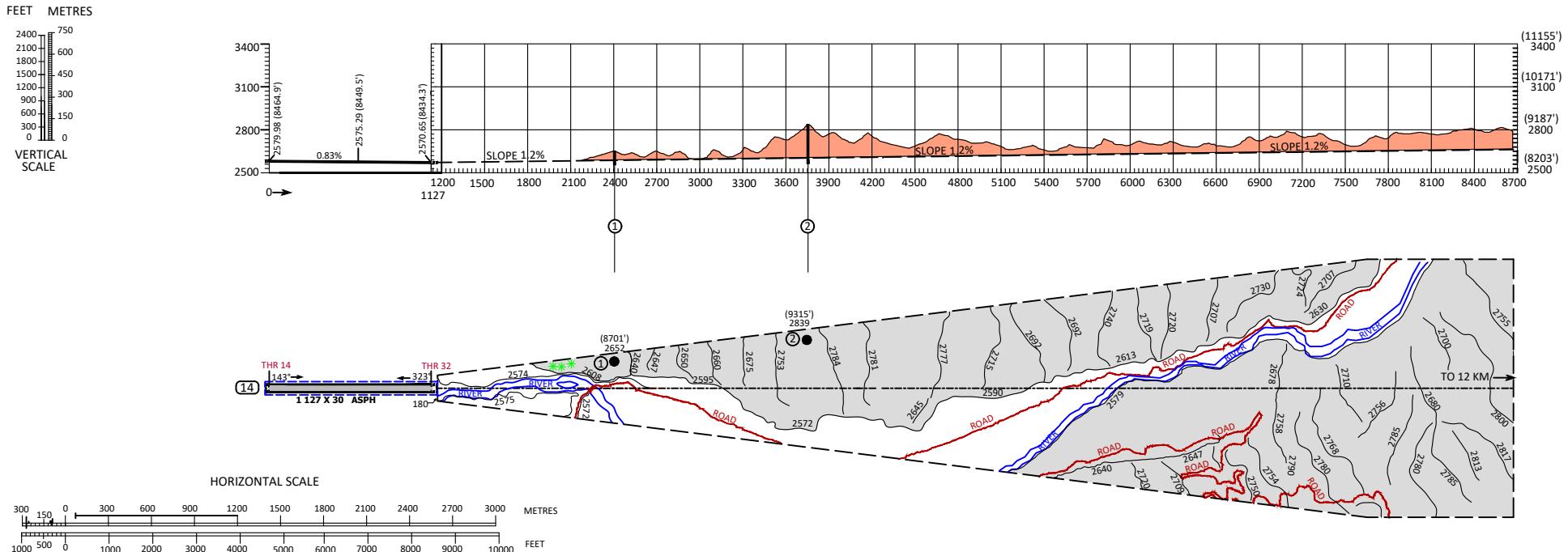
DIMENSIONS AND ELEVATION IN METRES ABOVE MEAN SEA LEVEL

MAGNETIC VARIATION 0.01° W (2015)
ANNUAL RATE OF CHANGE 0.03° E

DECLARED DISTANCES		
RWY 14		RWY 32
1172	TAKE-OFF RUN AVAILABLE	1172
1172	TAKE-OFF DISTANCE AVAILABLE	1196
1172	ACCELERATE STOP DISTANCE AVAILABLE	1196
1172	LANDING DISTANCE AVAILABLE	1127

SCALE 1 : 30 000

LEGEND	
IDENTIFICATION NUMBER	(1)
TREE OR SHRUB	*
POLE, TOWER, SPIRE, ANTENNA, ETC	●
TERRAIN PENETRATING OBSTACLE PLANE (TERRAIN CONTOUR)	
ROAD	
RIVER, GULLY	

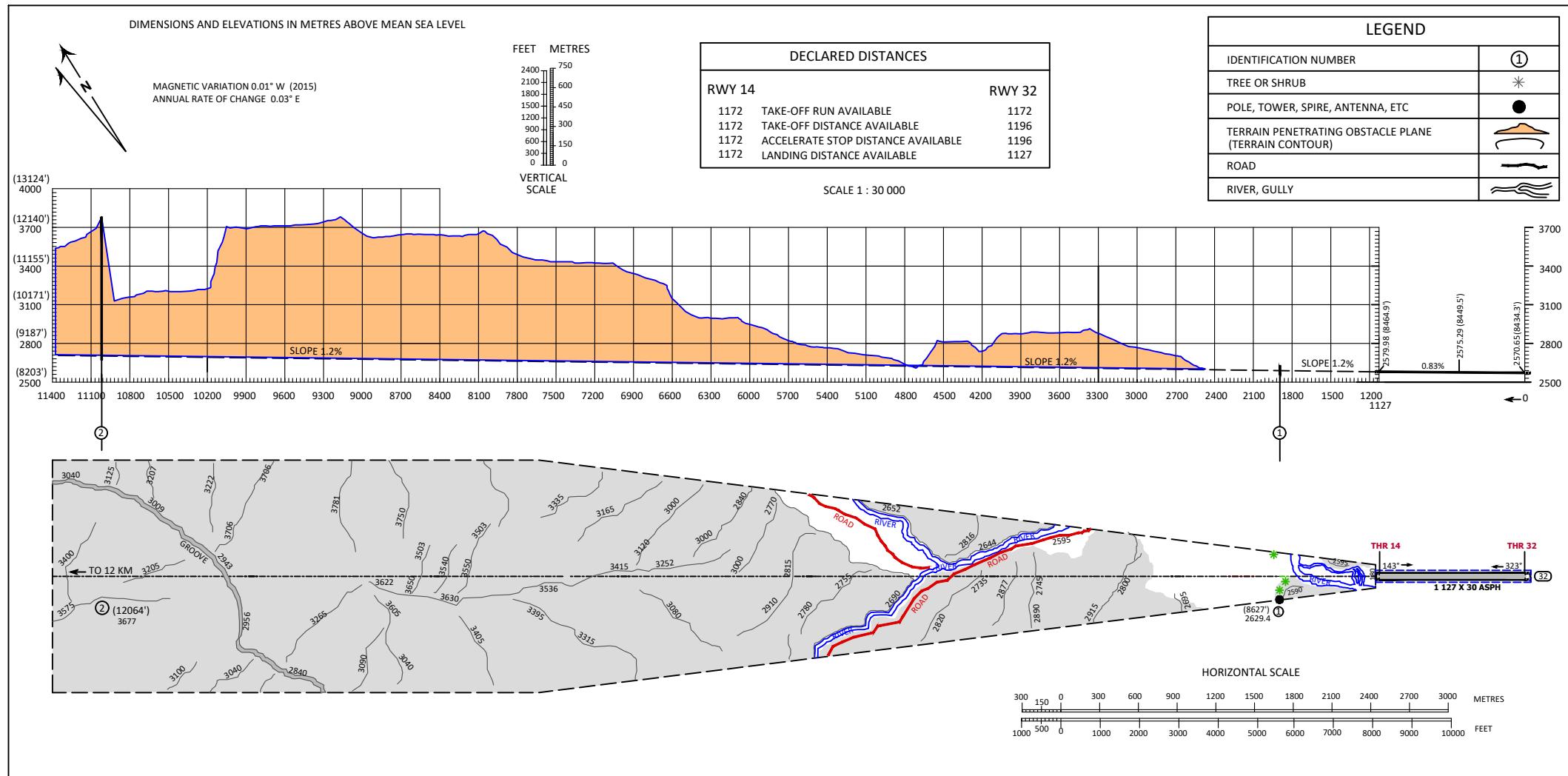


INTENTIONALLY LEFT BLANK

AERODROME OBSTACLE CHART - ICAO

TYPE A (OPERATING LIMITATIONS)

**BUMTHANG / Bathpalathang Airport
RUNWAY 32**



INTENTIONALLY LEFT BLANK