AIP

Amendment 02/25 29 SEP 2025

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# ROYAL GOVERNMENT OF BHUTAN DEPARTMENT OF AIR TRANSPORT AERONAUTICAL INFORMATION SERVICE Paro International Airport

# 1. This amendment contains:

- 1.1. Updated Designated Authorities' Details.
- 1.2. Updated Summary of National Regulation and International Agreements Convention.
- 1.3. Updated Contact Details.
- 1.4. Corrected Typographical errors.

# 2. Remove and insert the following pages:

	Remove			Insert		
	Page No.	Date		Page No.	Date	
GEN			GEN			
	0.1-2	23 Apr 20		0.1-2	29 Sep 25	
	0.2-1	04 Sep 25		0.2-1	29 Sep 25	
	0.3-1	01 Mar 18		0.3-1	29 Sep 25	
	0.4-1	04 Sep 25		0.4-1	29 Sep 25	
	0.4-2	04 Sep 25		0.4-2	29 Sep 25	
	1.1-1	29 Dec 22		1.1-1	29 Sep 25	
	1.6-1	29 Dec 22		1.6-1	29 Sep 25	
	3.1-1	29 Dec 22		3.1-1	29 Sep 25	
	3.1-3	29 Dec 22		3.1-3	29 Sep 25	
	3.2-1	29 Dec 22		3.2-1	29 Sep 25	
	3.3-1	29 Dec 22		3.3-1	29 Sep 25	
	3.4-1	29 Dec 22		3.4-1	29 Sep 25	
ENR						
	1.10-1	29 Dec 22		1.10-1	29 Sep 25	
	1.10-2	29 Dec 22		1.10-2	29 Sep 25	
AD						
	2.1-VQBT-1	01 Mar 18		2.1-VQBT-1	29 Sep 25	
	2.1-VQBT-4	30 Dec 21		2.1-VQBT-4	29 Sep 25	
	2.1-VQBT-6	01 Mar 18		2.1-VQBT-6	29 Sep 25	
	2.1-VQPR-1	30 Dec 21		2.1-VQPR-1	29 Sep 25	
	2.1-VQPR-7	21 Apr 22		2.1-VQPR-7	29 Sep 25	
	2.1-VQPR-9	23 Apr 20		2.1-VQPR-9	29 Sep 25	
	2.1-VQPR-10	23 Apr 20		2.1-VQPR-10	29 Sep 25	
	2.1-VQPR-11	23 Apr 20		2.1-VQPR-11	29 Sep 25	
	2.1-VQPR-12	23 Apr 20		2.1-VQPR-12	29 Sep 25	

2.1-VQTY-1	01 Mar 18	2.1-VQTY-1	29 Sep 25
2.1-VQTY-4	01 Mar 18	2.1-VQTY-4	29 Sep 25
2.1-VQTY-6	01 Mar 18	2.1-VQTY-6	29 Sep 25

- 3. Record entry of amendment on GEN 0.2
- 4. This amendment incorporates the following AIP Supplements and NOTAM which are hereby cancelled:

NOTAM: NIL

AIP Supplement: NIL

#### **GENERAL (GEN)**

#### GEN 0.

#### GEN 0.1 PREFACE

#### 1. Name of the publishing authority

1.1 Department of Air Transport is the designated entity for the provision of Aeronautical Information Service including publishing of Aeronautical Information Publication in Bhutan.

#### 2. Applicable ICAO Document

2.1 The AIP is prepared in accordance with the Standards and Recommended Practices (SARP) of Annex 15 to the Convention on International Civil Aviation and the *Aeronautical Information Services Manual* (ICAO Doc. 8126). Charts contained in the AIP are produced in accordance with the Annex 4 to the convention on International Civil Aviation and the *Aeronautical Chart Manual* (ICAO Doc. 8697). Difference from ICAO Standard, Recommended practices and Procedures are given in subsection GEN 1.7.

#### 3. The AIP structure and established regular amendment interval

#### 3.1 The AIP Structure

The AIP forms part of the Integrated Aeronautical Information Package, details of which are given in subsection GEN 3.1. The principal AIP structure is shown in graphic form on page GEN 0.1-3.

The AIP is made up of three Parts, General (GEN), En-route (ENR) and Aerodrome (AD), each divided into sections and subsections as applicable, containing various types of information subjects.

#### 3.1.1 *Part 1 - General (GEN)*

Part 1 consists of five sections containing information as briefly described hereafter.

- **GEN 0.** Preface; Record of AIP Amendments; Record of AIRAC Amendments; Record of AIP Supplements; Checklist of AIP pages; List of hand amendments to the AIP; and the Table of Contents to part 1.
- **GEN 1.** National Regulations and requirements Designated authorities; Entry and departure of aircraft; Entry and departure of passengers and crew; Entry and departure of cargo; Aircraft instruments, equipment and flight Documents; Summary of national regulations international agreements/conventions; and differences from ICAO Standards, Recommended Practices and Procedures.
- **GEN 2.** *Tables and codes* Measuring system, aircraft markings, holidays; Abbreviations used in AIS publications; Chart symbols; Location Indicators; List of radio navigation aids; Conversion tables; and Sunrise/Sunset tables.
- **GEN 3.** *Services* Aeronautical information services; Aeronautical charts; Air traffic services; Communication services; Meteorological services; and Search and rescue.
- **GEN 4.** Charges for aerodrome/heliports and air navigation services Aerodrome/heliport charges; and Air navigation services charges.

#### 3.1.2. *Part 2- En-route (ENR)*

Part 2 consists of seven sections containing information as briefly described hereafter.

- **ENR 0.** Table of Contents to part 2.
- **ENR 1.** General rules and procedures General rules; Visual flight rules; Instrument flight rules; ATS airspace classification; Holding, approach and departure procedures; Radar service and procedures; Altimeter setting procedures; Regional supplementary procedures; Air traffic flow management; Flight planning; Addressing of flight plan messages; Interception of civil aircraft; Unlawful interference; and Air traffic incidents.
- **ENR 2.** Air traffic services airspace Detailed description of Flight information regions (FIR); Upper flight information region (UIR); Terminal control areas (TMA); and other regulated airspace.
- **ENR 3.** ATS routes Detailed description of Lower ATS routes; Upper ATS routes; Area navigation routes; other routes; and En-route holding.

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**ENR 4.** *Radio navigation aids/systems* - Radio navigation aids - en-route; Special navigation systems; Name code designators for significant points; and Aeronautical ground lights - en-route.

- **ENR 5.** Navigational warnings Prohibited, restricted and danger areas; Military exercise and training areas; other activities of a dangerous nature; Air navigation obstacle en-route; Aerial sporting and recreational activities; and Bird migration and area with sensitive fauna.
- ENR 6. En-route charts En-route chart ICAO and index charts.
- 3.1.3 Part 3 Aerodromes (AD)

Part 3 consists of three sections containing information as briefly described hereafter.

- **AD 0.** Table of Contents to part 3.
- **AD 1.** Aerodrome Introduction Aerodrome availability; Rescue and fire fighting services and Snow plan; Index to aerodrome and grouping of aerodromes.
- **AD 2.** *Aerodromes* Detailed information about aerodromes, including helicopter landing areas, if located at the aerodromes, listed under 24 subsections.
- AD 3. Heliports Detailed information about heliports (not located at aerodromes), listed under 23 subsections.

#### 3.2 Regular amendment interval

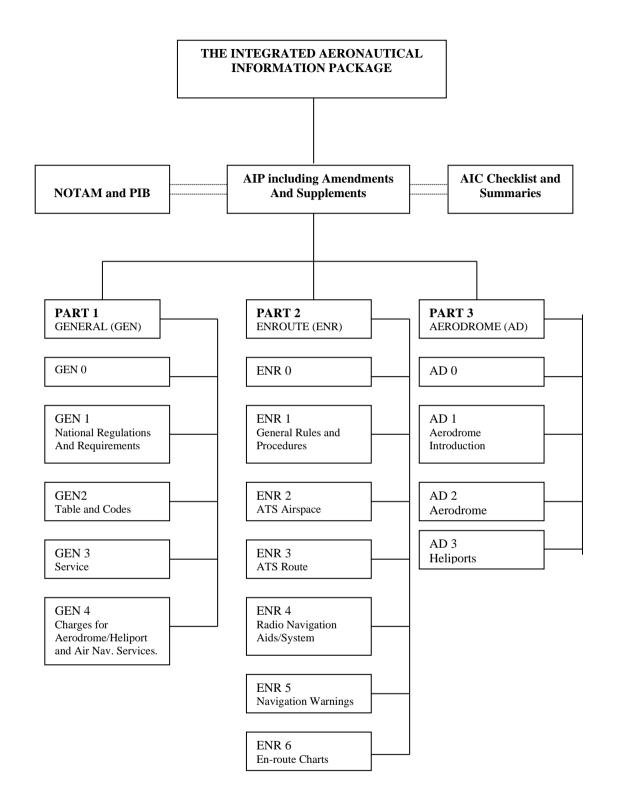
Regular amendments to the AIP will be issued as and when necessary. The publication date will be on the AIRAC cycle of each month.

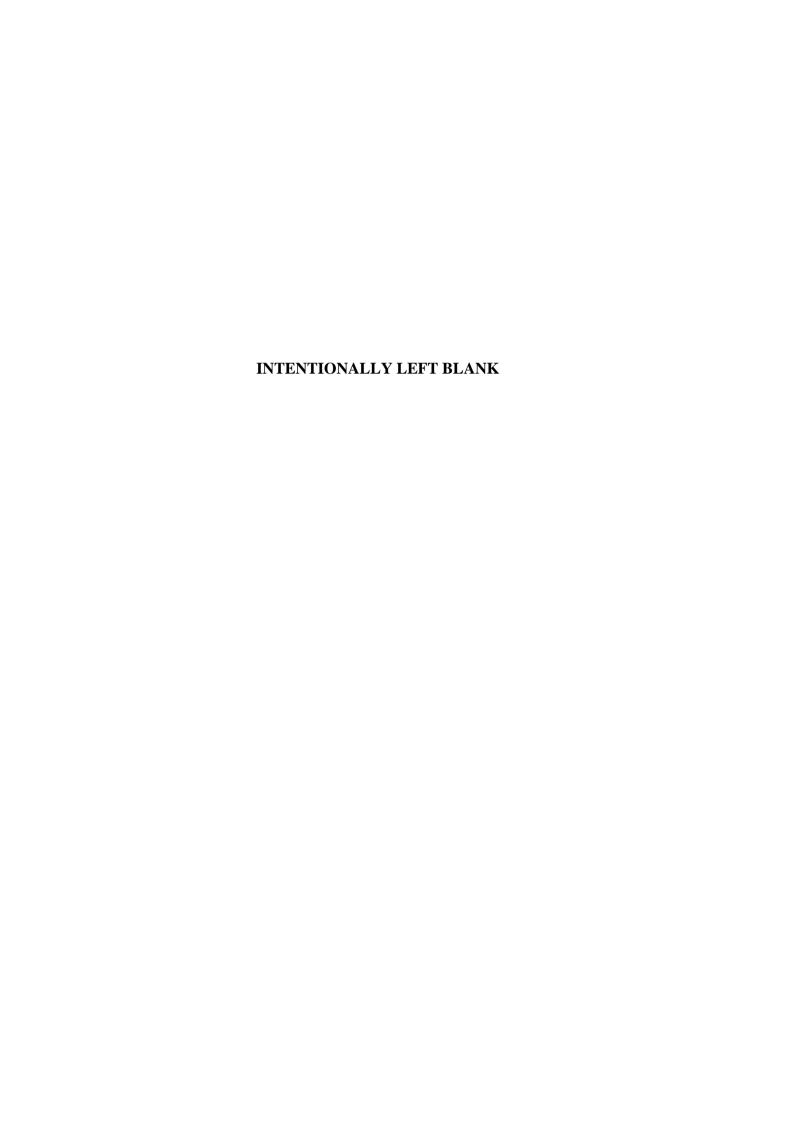
#### 4. Service to contact in case of detected AIP error or omission

4.1 In the compilation of the AIP, care has been taken to ensure that the information contained therein is accurate and complete. Any error and omission which may nevertheless be detected, as well as any correspondence concerning the Integrated Aeronautical Information Package, should be referred to:

Aeronautical Information Services Department of Air Transport Paro International Airport Paro, Bhutan Tel: 975-8-272760

Email: <a href="mailto:aim@doat.gov.bt">aim@doat.gov.bt</a>
Website: <a href="mailto:www.doat.gov.bt">www.doat.gov.bt</a>





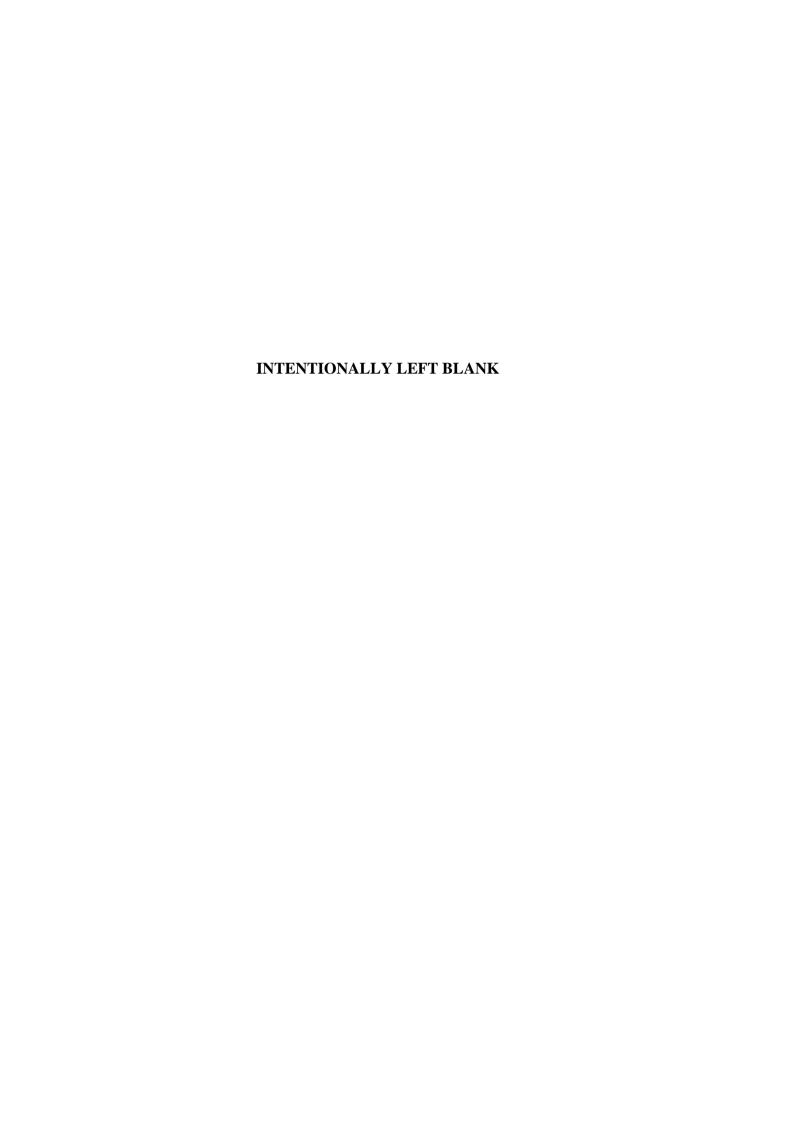
# **GEN 0.2 RECORD OF AIP AMENDMENTS**

AIP AMENDMENTS			A	IRAC AIP A	MENDMEN	ITS	
	Publication	Date	Inserted		Publication	Effective	Inserted
NR/Year	date	inserted	by	NR/Year	Date	Date	by
01/2025	17-Jan-25	17-Jan-25	RR	01/2018	06-Dec-18	06-Dec-18	AIS Officer
02/2025	29-Ѕер-25	29-Sep-25	TD	01/2020	27-Feb20	23-Apr-20	AIS Officer
				02/2020	12-Jun-20	16 -Jul-20	AIS Officer
				01/2021	02-Dec-21	30-Dec-21	AIS Officer
				02/2022	25-Nov-22	29-Dec-22	AIS Officer
				01/2023	27-Oct-23	28-Dec-23	AIS Officer
				01/2025	24-Jul-25	04-Sep-25	RR
				02/2023	21 9000 23	0 1 00p 23	1010



# GEN 0.3 RECORDS OF AIP SUPPLEMENTS

NR/Year	Subject	AIP section(s) affected	Period of validity	Cancellation record
001/2025	Concentration of birds at Paro Aerodrome (VQPR)		30/09/2025	
002/2025	Gelephu International Airport (VQGP) — Construction work west of runway		This AIP Supplement will remain in force until its contents have been incorporated into AIP.	



# GEN 0.4 CHECKLIST OF AIP PAGES

Page	Date	Page	Date	Page	Date
PART 1 - GF	ENERAL (GEN)	2.7-5	17 Jan 25	1.14-2	30 Dec 21
	Er(ErerE (GET))	2.7 3	17 0411 23	1.14-3	30 Dec 21
GEN 0		GEN 3		1.14-4	01 Mar 18
0.1-1	23 Apr 20	3.1-1	29 Sep 25	1.14-5	01 Mar 18
0.1-2	29 Sep 25	3.1-2	29 Dec 22	1.14-6	01 Mar 18
0.1-3	23 Apr 20	3.1-3	29 Sep 25		
0.2-1	29 Sep 25	3.2-1	29 Sep 25	ENR 2	
0.3-1	29 Sep 25	3.3-1	29 Sep 25	2.1-1	01 Mar 18
0.4-1	29 Sep 25	3.4-1	29 Sep 25	2.2-1	01 Mar 18
0.4-2	29 Sep 25	3.4-2	29 Dec 22		
0.5-1	01 Mar 18	3.4-3	29 Dec 22	ENR 3	
0.6-1	01 Mar 18	3.4-4	01 Mar 18	3.1-1	29 Dec 22
0.6-2	01 Mar 18	3.5-1	29 Dec 22	3.1-2	29 Dec 22
		3.5-2	01 Mar 18	3.3-1	30 Dec 21
GEN 1		3.6-1	29 Dec 22		
1.1-1	29 Sep 25			ENR 4	
1.2-1	29 Dec 22	GEN 4		4.1-1	30 Dec 21
1.2-2	23 Apr 20	4.1-1	01 Mar 18	4.2-1	01 Mar 18
1.3-1	29 Dec 22	4.1-2	01 Mar 18	4.3-1	01 Mar 18
1.3-2	29 Dec 22	4.2-1	01 Mar 18	4.4-1	29 Dec 22
1.3-3	29 Dec 22				
1.3-4	29 Dec 22			ENR 5	
1.4-1	23 Apr 20	<b>PART 2 – E</b>	NROUTE (ENR)	5.1-1	01 Mar 18
1.4-2	23 Apr 20			5.2-1	01 Mar 18
1.5-1	29 Dec 22	ENR 0		5.6-1	01 Mar 18
1.5-2	29 Dec 22	0.6-1	01 Mar 18		
1.6-1	29 Sep 25				
1.6-2	20 Dec 21	ENR 1		PART 3 -AERODI	ROME (AD)
1.7-1	30 Dec 21	1.1-1	30 Dec 21		
1.7-2	30 Dec 21	1.1-2	29 Dec 22	AD 0	
1.7-3	30 Dec 21	1.1-3	29 Dec 22	0.6-1	04 Sep 25
		1.1-4	29 Dec 22	0.6-2	04 Sep 25
GEN 2		1.1-5	29 Dec 22		
2.1-1	29 Dec 22	1.1-6	01 Mar 18	AD 1	
2.1-2	30 Dec 21	1.1-7	01 Mar 18	1.1-1	01 Mar 18
2.2-1	01 Mar 18	1.1-8	29 Dec 22	1.1-2	01 Mar 18
2.2-2	01 Mar 18	1.2-1	30 Dec 21	1.2-1	01 Mar 18
2.2-3	01 Mar 18	1.3-1	30 Dec 21	1.3-1	28 Dec 23
2.2-4	01 Mar 18	1.3-2	01 Mar 18	1.4-1	01 Mar 18
2.2-5	01 Mar 18	1.4-1	29 Dec 22	1.5-1	28 Dec 23
2.2-6	01 Mar 18	1.5-1	01 Mar 18		
2.2-7	01 Mar 18	1.6-1	01 Mar 18	AD 2 - VQBT	
2.2-8	01 Mar 18	1.7-1	01 Mar 18	<b>AD 2.1-VQBT-1</b>	29 Sep 25
2.2-9	01 Mar 18	1.7-2	01 Mar 18	AD 2.1-VQBT-2	01 Mar 18
2.3-1	01 Mar 18	1.8-1	01 Mar 18	AD 2.1-VQBT-3	30 Dec 21
2.3-2	01 Mar 18	1.9-1	01 Mar 18	AD 2.1-VQBT-4	29 Sep 25
2.4-1	01 Mar 18	1.10-1	29 Sep 25	AD 2.1-VQBT-5	01 Mar 18
2.5-1	01 Mar 18	1.10-2	29 Sep 25	<b>AD 2.1-VQBT-6</b>	29 Sep 25
2.6-1	01 Mar 18	1.11-1	01 Mar 18	AD 2.1-VQBT-7	01 Mar 18
2.6-2	01 Mar 18	1.12-1	29 Dec 22	AD 2.2-VQBT-1	01 Mar 18
2.7-1	17 Jan 25	1.12-2	29 Dec 22	AD 2.3-VQBT-1	01 Mar 18
2.7-2	17 Jan 25	1.12-3	01 Mar 18	AD 2.3-VQBT-2	01 Mar 18
2.7-3	17 Jan 25	1.13-1	29 Dec 22		
2.7-4	17 Jan 25	1.14-1	01 Mar 18		

Page	Date	Page	Date	Page	Date
AD 2-VQGP				AD 2-VQTY	
AD 2.1-VQGP-1	30 Dec 21	AD 2.1-VQPR-4	30 Dec 21	<b>AD 2.1-VQTY-1</b>	29 Sep 25
AD 2.1-VQGP-2	01 Mar 18	AD 2.1-VQPR-5	30 Dec 21	AD 2.1-VQTY-2	01 Mar 18
AD 2.1-VQGP-3	28 Dec 23	AD 2.1-VQPR-6	30 Dec 21	AD 2.1-VQTY-3	01 Mar 18
AD 2.1-VQGP-4	30 Dec 21	AD 2.1-VQPR-7	29 Sep 25	<b>AD 2.1-VQTY-4</b>	29 Sep 25
AD 2.1-VQGP-5	01 Mar 18	AD 2.1-VQPR-8	21 Apr 22	AD 2.1-VQTY-5	01 Mar 18
AD 2.1-VQGP-6	28 Dec 23	AD 2.1-VQPR-9	29 Sep 25	<b>AD 2.1-VQTY-6</b>	29 Sep 25
AD 2.2-VQGP-1	01 Mar 18	AD 2.1-VQPR-10	29 Sep 25	AD 2.1-VQTY-7	01 Mar 18
AD 2.3-VQGP-1	01 Mar 18	<b>AD 2.1-VQPR-11</b>	29 Sep 25	AD 2.2-VQTY-1	01 Mar 18
		AD 2.1-VQPR-12	29 Sep 25	AD 2.3-VQTY-1	01 Mar 18
AD 2-VQPR		AD 2.1-VQPR-13	04 Sep 25	_	
AD 2.1-VQPR-1	29 Sep 25	AD 2.2-VQPR-1	06 Dec 18	AD 3	
AD 2.1-VQPR-2	30 Dec 21	AD 2.3-VQPR-1	01 Mar 18	3.1-1	01 Mar 18
AD 2.1-VOPR-3	30 Dec 21	AD 2.3-VQPR-2	01 Mar 18		

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BHUTAN
GEN 1.1-1
29-Sep-25

# GEN 1. NATIONAL REGULATIONS AND REQUIREMENTS

#### **GEN 1.1 DESIGNATED AUTHORITIES**

The addresses of the designated authorities concerned with facilitation of international air navigation are as follows:

#### 1. Department of Air Transport

Director

Department of Air Transport

Ministry of Infrastructure and Transport

Paro, Bhutan Tel: 975-8-271403 Fax: 975-8-271751 Email: sdorji@doat.gov.bt Website: www.doat.gov.bt

#### 2. Bhutan Civil Aviation Authority

Director

Bhutan Civil Aviation Authority

Paro, Bhutan

Tel: 975-8-271910/ 271347 Fax: 975-8-271909 Email: bcaa@bcaa.gov.bt

#### 3. Health

Secretary Ministry of Health Thimphu, Bhutan Tel: 975-2-326626 Fax: 975-2-324649

#### 4. Foreign Affairs

Director

Ministry of Foreign affairs and External Trade

Thimphu, Bhutan Tel: 975-2-322781/322118 Fax: 975-2-323240

#### 5. Customs

Director,

Department of Revenue & Customs

Ministry of Finance Thimphu, Bhutan Tel: 975-2-323057 Fax: 975-2-323608

#### 6. Immigration

Director General

Department of Immigration Ministry of Home Affair

Thimphu, Bhutan

Tel: 975-2-327045/ PABX: 323127

Fax: 975-321078

#### 7. Agricultural quarantine

**Executive Director** 

Bhutan Food and Agriculture Regulatory Authority

Ministry of Agriculture and Livestock

Royal Government of Bhutan

Post Box No. 1071 Thimphu, Bhutan

Tel: 975-2-327031/325790 Fax: 975-2-327032/335540 Email: bafra@druknet.bt

#### 8. Clearing Agent

Manager

Bhutan Air Services Branch Office Paro Int. Airport

Tel: 975-8-272063/975 17617383

Fax: 975-8-272053

Email: <a href="mailto:bhutanair@yahoo.com">bhutanair@yahoo.com</a> /
<a href="mailto:ops@bas.bt">ops@bas.bt</a> /
<a href="mailto:bhutanairsvc@gmail.com">bhutanairsvc@gmail.com</a>

Website: www.bas.bt

#### 9. Royal Bhutan Helicopter Services Limited

Chief Executive Officer Post Box No. 1296 Paro International Airport

Paro, Bhutan Tel: 975-8-271369 Fax: 975-8-271397

#### 10. National Centre for Hydrology and Meteorology

Director

National Center for Hydrology & Meteorology

Thimphu, Bhutan Tel: 975-2-328280 Fax: 975-2-327202

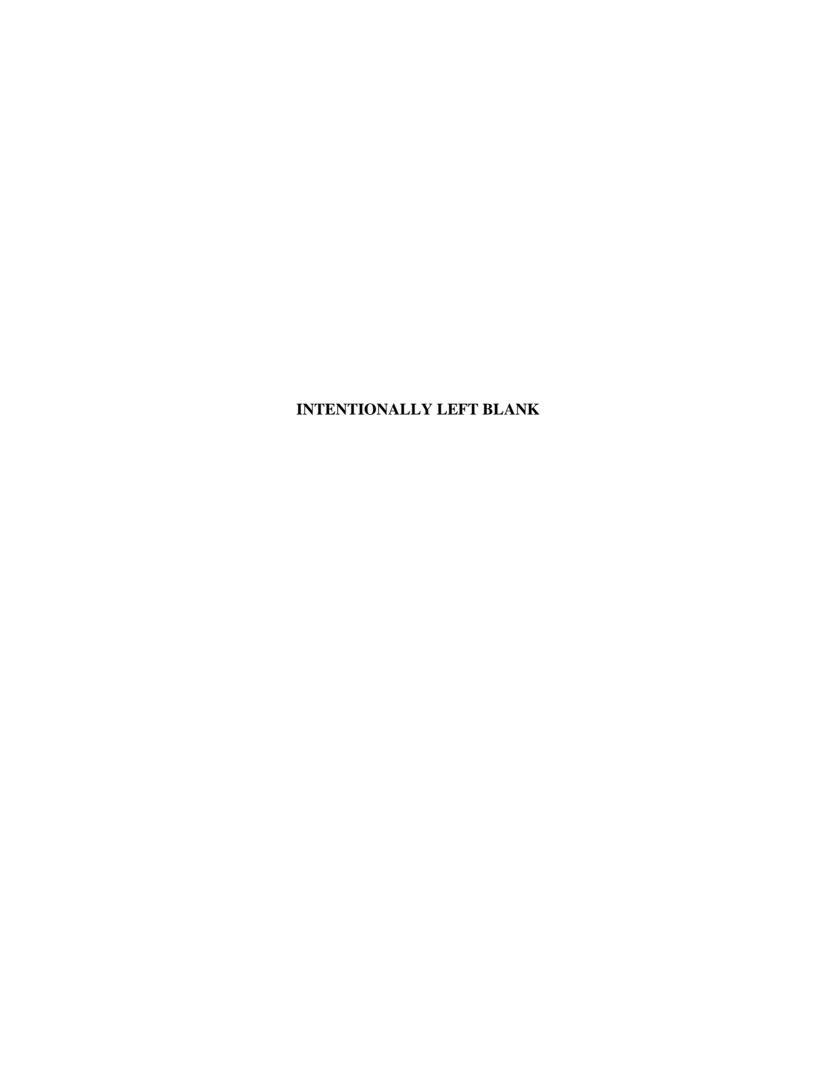
Email: kdupchu@nchm.gov.bt

## 11. Air Accident Investigation Unit

Ministry of Infrastructure and Transport

Thimphu, Bhutan Tel: 975 77600169

Email: dphuntsho@moit.gov.bt



# GEN 1.6 SUMMARIES OF NATIONAL REGULATIONS AND INTERNATIONAL AGREEMENTS/CONVENTIONS.

1. Following is a list of Civil Aviation legislation in force in Bhutan. It is essential that any one engaged in air operations be acquainted with the relevant regulations. Electronic version of legislation may be freely accessed at https: <a href="www.bcaa.gov.bt">www.bcaa.gov.bt</a>

1.1	Civil Aviation Act of Bhutan 2016
1.2	Bhutan Air Navigation Regulations (BANRs) 2021
1.3	Bhutan Aerodrome Standards 2021
1.4	BCAR-Instrument Flight Procedure Approval 2023
1.5	BCAR-2, Rules of Air 2022
1.6	BCAR-3, Meteorological Service 2024
1.7	BCAR-4, Aeronautical Charts 2024
1.8	BCAR-5, Units of Measurement 2017
1.9	BCAR-11, Air Traffic Services 2024
1.10	BCAR-12, Search and Rescue 2017
1.11	BCAR-15, Aeronautical Information Services 2024
1.12	BCAR-19, Safety Management 2017
1.13	BCAR-10, Aeronautical Telecommunication (Volume- I) 2024, (Volume- II, III, IV, V) 2017
1.14	BCAR-M, Continuous Airworthiness Requirements 2022
1.15	BCAR-147, Approved Maintenance Training Organization 2022
1.16	BCAR-66, Aircraft Maintenance License 2022
1.17	BCAR-145, Approved Maintenance Organisations 2022
1.18	BCAR-Aircraft Nationality and Registration Marks 2010
1.19	BCAR-21, Initial Airworthiness 2010
1.20	Bhutan Aviation Requirements-Airworthiness Procedures 2012
1.21	BCAR-Minimum Equipment List 2017
1.22	BCAR-Facilitation 2010
1.23	BCAR ORO, Organization Requirements for Air Operations
1.24	BCAR OPS 3, Commercial Air Transport - Helicopters 2017
1.25	BCAR OPS 18, Dangerous Goods Regulations 2017
1.26	BCAR SPA, Specific Approval
1.27	BCAR SPO, Specialized Operations 2021
1 28	BCAR-Air Traffic Management/Air Navigation Services (ATM/ANS) 2020

- In exercise of the powers granted under Section 27,28, 29 and 30 of Civil Aviation Act of Bhutan 2016, the Bhutan Civil Aviation Authority has revised and promulgated the Bhutan Air Navigation Regulations (BANRs) 2021.
- 2.1 The Bhutan Civil Aviation Requirements/Standards (BCARs), The Manuals and Technical Guidance Materials are developed in line with the BANRs 2021 and ICAO SARPs.

These regulations shall apply to fixed wing aircraft, helicopter, personnel engaged in commercial aerial work, and general aviation aircraft registered in Bhutan and engaged in flight operations elsewhere. For the purpose of these regulations, an aircraft registered in another state and operated by the holder of an Air operator certificate issued in Bhutan shall be deemed to be registered in Bhutan and regulations relating to maintenance of airworthiness of aircraft and regulation relating to airworthiness licensing and qualifications shall be as applicable in the state of Registry of the aircraft provided there exists a current agreement between Bhutan and the State of Registry of the aircraft.

2.2 Regulation relating to Aircraft Nationality Registration and Marks (Section 2 of BANRs 2021).

BCAR-Air Traffic Controllers-Personnel Licensing (ATCO-PEL) 2021

1.29

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2.3 No person, other than a patient under qualified medical supervision, shall enter an aircraft while under the influence of psychoactive substance or intoxicating liquor. (Clause 3.1.6 under Sec 3 of BANRs 2021).

- 2.4 Narcotic Drugs mood changing or hallucinogenic drops, depressant or stimulant drugs shall not be carried in an aircraft, except as a medicament prescribed for the individual use of a passenger by a qualified medical practitioner or as part of the approved emergency medical kit or as part of air cargo authorised by HoA for medical purposes. (Clause 3.17 under section 3 of BANRs 2021).
- 2.5 Regulations relating to aircraft performance and operating limitations shall be in accordance with its airworthiness documentation and all related operating procedures and limitations as expressed in its approved flight manual or equivalent documentation, as the case may be. The flight manual or equivalent documentation must be available to the crew and kept up to date for each aircraft. (Clause 3.4 under section 3 of BANRs 2021).
- 2.6 Regulation relating to requirement of aircraft instruments and equipment (Clause 3.5 under section 3 of BANRs 2021).
- 2.7 Regulation regarding Airworthiness of aircraft (Section 10 of BANRs 2021).
- 2.8 Regulation regarding Crew Members (Clause 3.7 under section 3 of BANRs 2021).
- 2.9 Regulation regarding Flight Crew and Flight Operation Officers (Clause 3.8 under section 3 of BANRs 2021).
- 2.10 Transport of Dangerous goods by (Section 5 of BANRs 2021).
- 2.11 Regulations regarding documents to be carried in aircraft (BCAR OPS 1 Commercial Air Transport-Aeroplanes).
- 2.12 Regulations regarding Aerodromes/heliports (Section 14 of BANRs 2021).
- 2.13 Regulation regarding Investigation of accident, Notification of accident etc. (Section 6 of BANRs 2021).
- 2.14 Regulation regarding personnel licensing (Section 11 of BANRs 2021).
- 2.15 Section 66(1) of the Civil Aviation Act of Bhutan 2016 empowers BCAA to develop rules and regulations concerning balloons and Paragliding regulations (Clause 4.9.1 under section 4 of BANRS 2021).

#### 3 International agreements/conventions

Bhutan is party to the following conventions:

- a) Convention on International Civil Aviation (The Chicago Convention).
- b) Convention on Offences and Certain Other Acts Committed on Board Aircraft (The Tokyo Convention).
- c) Convention for the Suppression of Unlawful Seizure of Aircraft (The Hague Convention).
- d) International Agreement on the Procedure for the Establishment of Tariffs for the Scheduled Air Services.
- e) Convention for the suppression of unlawful acts against the Safety of Civil Aviation (the Montreal Convention).
- f) Multilateral Agreement relating to Certificate of Airworthiness for Imported aircraft.
- g) Convention on the Marking of Plastic Explosive for the Purpose of Detection.
- h) Protocol relating to an amendment to Convention on International Civil Aviation Article 83bis.
- i) Protocol on the authentic trilingual test of the Convention on International Civil Aviation.

# GEN 3 SERVICE GEN 3.1 AERONAUTICAL INFORMATION SERVICE.

#### 1. Responsible service

1.1 Department of Air Transport is the responsible for provision of Aeronautical Information Services to ensure the flow of information necessary for the safety, regularity and efficiency of international and national air navigation within the area of its responsibility as indicated under GEN 3.1.2. It consists of AIS office and International NOTAM Office (NOF) established at Paro aerodrome.

#### 1.2 AIS Officer

Aeronautical Information Services Department of Air Transport Paro International Airport Paro, Bhutan

Tel: 975-8-272760 AFTN: **VQPRYNYX** Email: <u>aim@doat.gov.bt</u>

#### 1.3 International NOTAM office (NOF)

AIS section
Department of Air Transport
Paro International Airport
Paro, Bhutan

Tel: 975-8-272760 AFTN: **VQPRYNYX** Email: aim@doat.gov.bt

- 1.4 The service is provided in accordance with the provision contained in Annex 15 Aeronautical Information Services.
- 1.5 The service is available during operational hours only.

#### 2. Area of responsibility

2.1 The Aeronautical Information Service is responsible for the collection and dissemination of information for the entire territory of Bhutan and for the airspace over Bhutan.

#### 3. Aeronautical publications

- 3.1 The Aeronautical Information is provided in the form of Aeronautical Information Products in standardized presentation consisting of the following elements:
  - a) Aeronautical Information Publication (AIP)
  - b) Amendment service to the AIP (AIP AMDT)
  - c) Supplement to the AIP (AIP SUP)
  - d) NOTAM and Pre-flight Information Bulletins (PIB)
  - e) Aeronautical Information Circular (AIC) and
  - f) Aeronautical Charts

NOTAM and the related monthly checklist are issued via the Aeronautical Fixed Service (AFS).

- 3.2 Aeronautical Information Publication (AIP)
- 3.2.1 The AIP is the basic aviation document intended primarily to satisfy international requirements for the exchange of permanent aeronautical information and long duration temporary changes essential for air navigation.
- 3.2.2 AIP Bhutan is published in ONE volume in English only.

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#### 3.3 Amendment service to the AIP (AIP AMDT)

- 3.3.1 Regular amendments to the AIP will be issued once a year. The publication date will be on the Last AIRAC cycle of each year.
- 3.3.2 A brief description of the subject affected by the amendment is given on the AIP Amendments cover sheet. New information included on the reprinted AIP pages in annotated or identified by a vertical line in the left margin (or immediately to the left) of the change/addition.
- 3.3.3 Each AIP page and each AIP replacement pages introduced by an amendment are dated. The date consists of the day, month (by name) and year of the publication date. AIP amendment cover sheet includes reference to the serial number of those elements, if any, of the integrated Aeronautical Information Package which have been incorporated in the AIP by the amendment and are consequently cancelled.
- 3.3.4 Each AIP AMDT are allocated separate serial number which are consecutive and based on the calendar year. The year, indicated by two digits, is a part of the serial number of the amendment, e.g. AIP AMDT 01/2022.
- 3.3.5 A checklist of AIP pages containing page number/chart title and the publication or effective date (day, month by name and year) of the information is reissued with each amendment and is an integral part of AIP.
- 3.4 Supplement to the AIP (AIP SUP)
- 3.4.1 Temporary changes of long duration (three months and longer) and information of short duration which consist of extensive text and or/graphics, supplementing the permanent information contained in the AIP, are published as AIP Supplements (AIP SUP). Operationally significant temporary changes to the AIP, are published in accordance with AIRAC system and its established effective dates and identified clearly by the acronym AIRAC.
- 3.4.2 AIP Supplements are separated by information subject (General GEN., En-route ENR and Aerodromes AD) and are placed accordingly in the beginning of each AIP part. Each AIP supplement (regular or AIRAC) is allocated a serial number which is consecutive and based on the calendar year, i.e. AIP SUP 01/2022 or AIRAC SUP 01/2022
- 3.4.3 An AIP Supplements is kept in the AIP as long as all or some of its contents remain valid. The period of validity of the information contained in the AIP Supplement will normally be given in the supplement itself. Alternatively, NOTAM may be used to indicate changes to the period of validity or cancellation of the supplement.
- 3.4.4 The check list of AIP Supplement currently in force is issued in the monthly printed plain-language summery of NOTAM in force.
- 3.5 *NOTAM*
- 3.5.1 NOTAM contains information concerning the establishment, condition or changes in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential for personnel concerned with flight operations. The text of each NOTAM contains the information in the order shown in the ICAO NOTAM Format and is composed of the significant/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifier, designators, callsigns, frequencies, figures and plain language. NOTAM is originated and issued for Bhutan airspace and are distributed in one series identified by the letter A.
- 3.5.2 Each NOTAM is assigned a four-digit serial number preceded by an appropriate letter indicating the series and followed by stroke and two digits indicating the year of issuance. The serial number starts with 0001 at 0000 UTC on 1st January every year. A checklist of NOTAM currently in force is issued every month over the AFS. Additionally, a printed plain language summery of NOTAM in force is sent by airmail to those who had originally received the NOTAM over the AFS, as well as to other on request.
- 3.5.3 Series S (SNOWTAM) comprises information concerning the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing wate or water associates with snow, slush, ice or frost on the movement area. SNOTAM are prepared in accordance with PANS-AIM (Doc 10066), Appendix 4, and are issued by the International NOTAM Office (NOF).
- 3.6 Aeronautical Information Circular (AIC)

The Aeronautical Information Circulars (AIC) contain information on the long-term forecast of any major change in legislation, regulations, procedures or facilities; information of a purely explanatory or advisory nature liable to affect flight safety; and information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters.

Each AIC is numbered consecutively within each series on a calendar year basis. The year, indicated by two digits, is a part of the serial number of the AIC, e.g. AIC 01/2022. A checklist of AIC currently in force is issued as an AIC once a year.

#### 3.7 Aeronautical Charts

Aeronautical charts area visual representation of a portion of the Earth specifically designated to meet the needs of air navigation.

#### 3.8 Sale of publications

The Aeronautical Information Products can be accessed freely via: https://www.doat.gov.bt/aip/

#### 4. AIRAC System

- 4.1 In order to control and regulate the operationally significant changes requiring amendments to chart, route manual etc., such changes, whenever possible, will be published as an AIRAC SYSTEM. This type of information will be published as an AIP AIRAC AMDT. If an AIP AIRAC AMDT cannot be produced due to lack of time, NOTAM clearly marked AIRAC will be issued. Such NOTAM will immediately be followed by an AMDT or SUP.
- 4.2 The table below indicates AIRAC effective dates for the coming years. AIRAC information will be issued so that the information will be received by the user not later than 28 days, and for major changes not later than 56 days, before the effective date.

2023	2024	2025	2026	2027
26 January	25 January	23 January	22 January	21 January
23 February	22 February	20 February	19 February	18 February
23 March	21 March	20 March	19 March	18 March
20 April	18 April	17 April	16 April	15 April
18 May	16 May	15 May	14 May	13 May
15 June	13 June	12 June	11 June	10 June
13 July	11 July	10 July	09 July	08 July
10 August	08 August	07 August	06 August	05 August
07 September	05 September	04 September	03 September	02 September
05 October	03 October	02 October	01 October	30 September
02 November	31 October	30 October	29 October	28 October
30 November	28 November	27 November	26 November	25 November
28 December	26 December	25 December	24 December	23 December

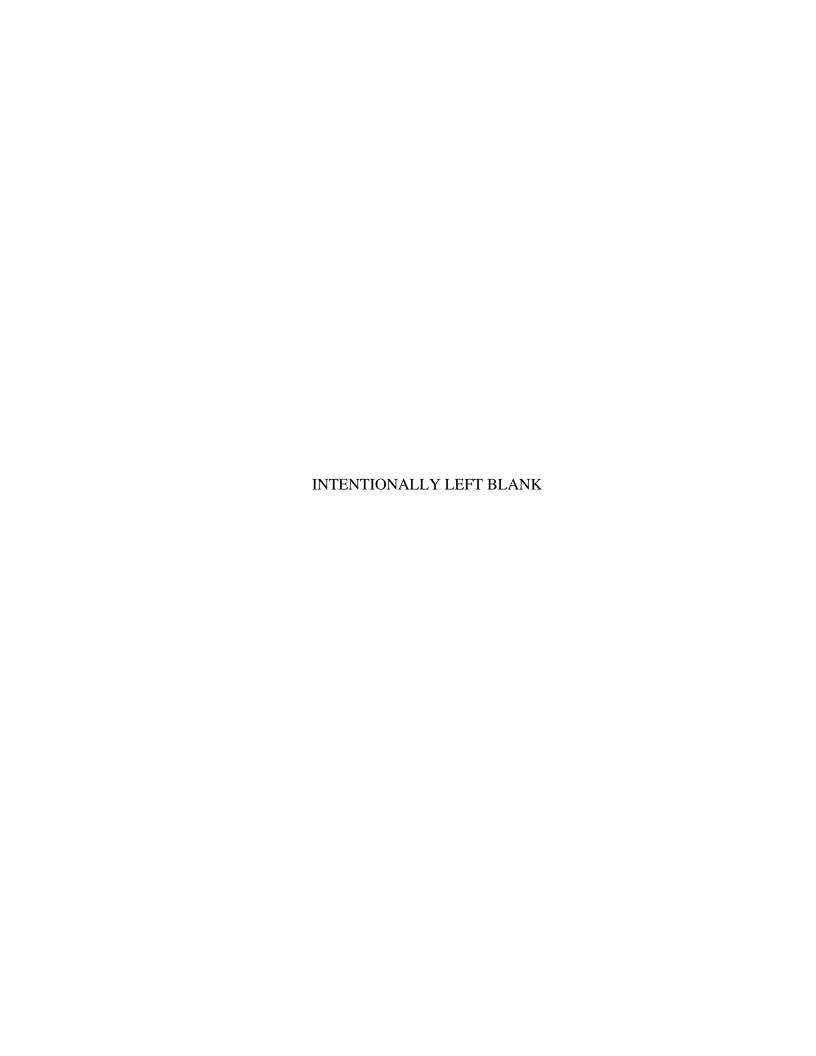
- 4.3 A TRIGGER NOTAM will be issued 10 days before the effective date of the AIRAC AIP Supplement giving a brief description of the contents of the AIP Supplement, the effective date and the reference number of the AIRAC AIP Supplement. This trigger NOTAM will come into force on the same effective date as the AIRAC AIP Supplement and will remain in force until 14 days after the effective date.
- 4.4 A NIL AIRAC NOTAM will be issued one cycle before the AIRAC effective date if no information is submitted for publication of an AIRAC AIP Supplement for an AIRAC effective date. The NIL AIRAC NOTAM will remain current for a duration of 14 days.

#### 5. Pre-flight information service at aerodrome

5.1 Pre-flight Information Bulletins (PIB), which contains a recapitulation of current NOTAM and other information of urgent character for the operator/flight crews, are available at the aerodrome AIS unit.

#### 6. Digital data sets

TO BE DEVELOPED



#### **GEN 3.2 AERONAUTICAL CHARTS**

#### 1. Responsible service

1.1 The Department of Air Transport of Bhutan provides aeronautical charts for use by all types of civil aviation. The Aeronautical Information Service section produces the charts which are part of AIP. The charts are produced in accordance with the provisions contained in ICAO Annex 4.

#### 2. Maintenance of charts

- 2.1 The aeronautical charts included in the AIP are kept up to date by amendments to the AIP.
- 2.2 If incorrect information detected on published charts is of operational significance, it is corrected by NOTAM.

#### 3. Purchase Arrangement

3.1 The charts listed under Para 4 may be obtained from:

Aeronautical Information Service Department of Air Transport Paro International Airport Paro, Bhutan

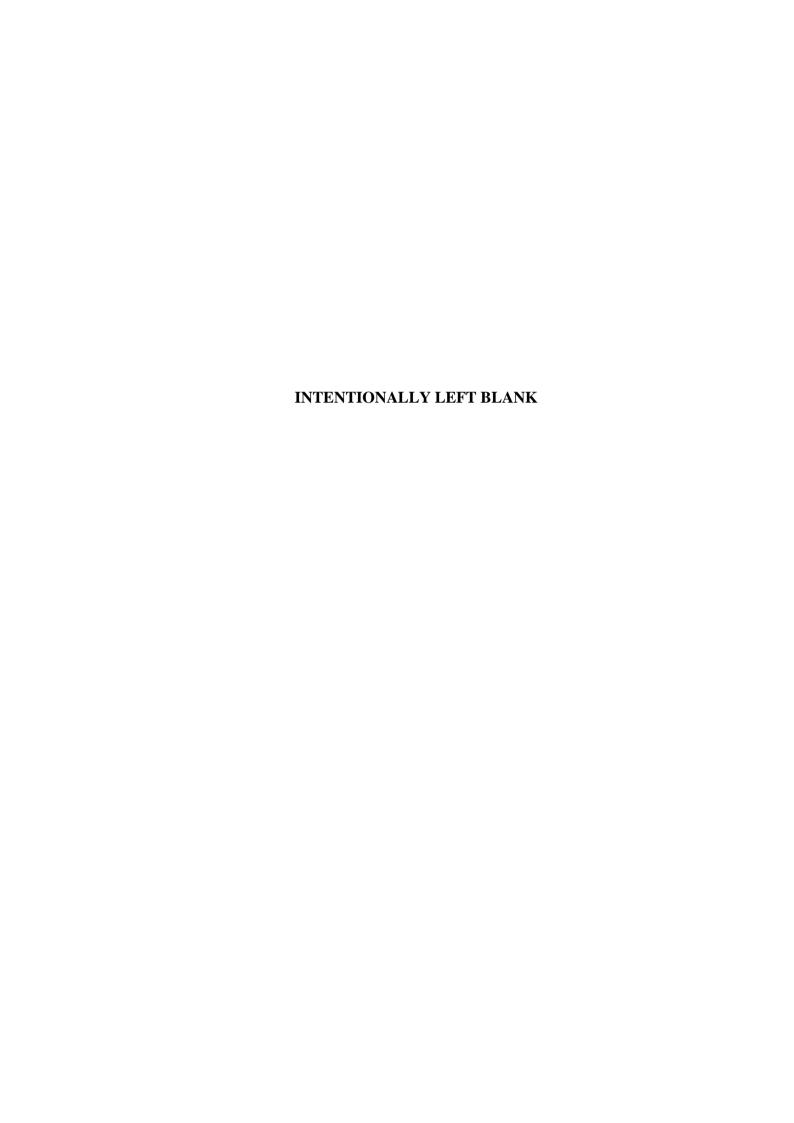
Tel: 975-8-272760 Email: <u>aim@doat.gov.bt</u>

#### 4. Aeronautical Chart series available

- 4.1 The following series of aeronautical charts are produced:
  - a) Aerodrome Chart- ICAO
  - b) Aerodrome obstacle chart ICAO Type A
- 4.2 General Description of each series.
  - a) Aerodrome chart ICAO. The chart contains detailed aerodrome data to provide flight crews with information that will facilitate the ground movement of aircraft:
    - From the aircraft stand to the runway; and
    - From the runway to the aircraft stand
  - b) Aerodrome Obstacle chart ICAO Type A (operating limitations) This chart contains detailed information on obstacle in the take-off flight path areas of aerodrome. It is shown in plan and profile view. This obstacle information, in combination with an obstacle Chart ICAO Type C, Provides the data necessary to enable an operator to comply with the operating limitations of ICAO Annex 6, Parts I and II, chapter 5.

# 5. Topographical Charts

To supplement the aeronautical charts, wide range of Topographical charts are available from Department of Survey, Ministry of Agriculture, Thimphu Bhutan, Tel: 975-2-322798.



#### GEN 3.3 AIR TRAFFIC SERVICES

#### 1. Responsible service.

- 1.1 Department of Air Transport is the responsible for the provision of Air traffic services within the area indicated under paragraph 2 below.
- 1.2 The services are provided in accordance with the provision contained in the following ICAO documents:
  - a) ICAO Annex 2 Rules of the Air;
  - b) ICAO Annex 11 Air Traffic Service;
  - c) ICAO Doc 4444 Procedure for Air Navigation Services;
    - Air Traffic Management
  - d) ICAO Doc.8168 Procedures for Air Navigation Services;
    - Aircraft Operations (PANS-OPS)
  - e) ICAO Doc 7030 Regional Supplementary Procedures.

Difference to these provisions is detailed in subsection GEN 1.7.

#### 2. Area of responsibility

2.1 Air traffic services are provided for the entire airspace over the territory of Bhutan.

#### 3. Types of services

- 3.1 The following types of services are provided:
  - Aerodrome Control Service
  - Aerodrome Flight Information Service (AFIS) and Alerting Service
  - Flight Information Service (FIS) outside CTR

#### 4. Co-ordination between the operator and ATS

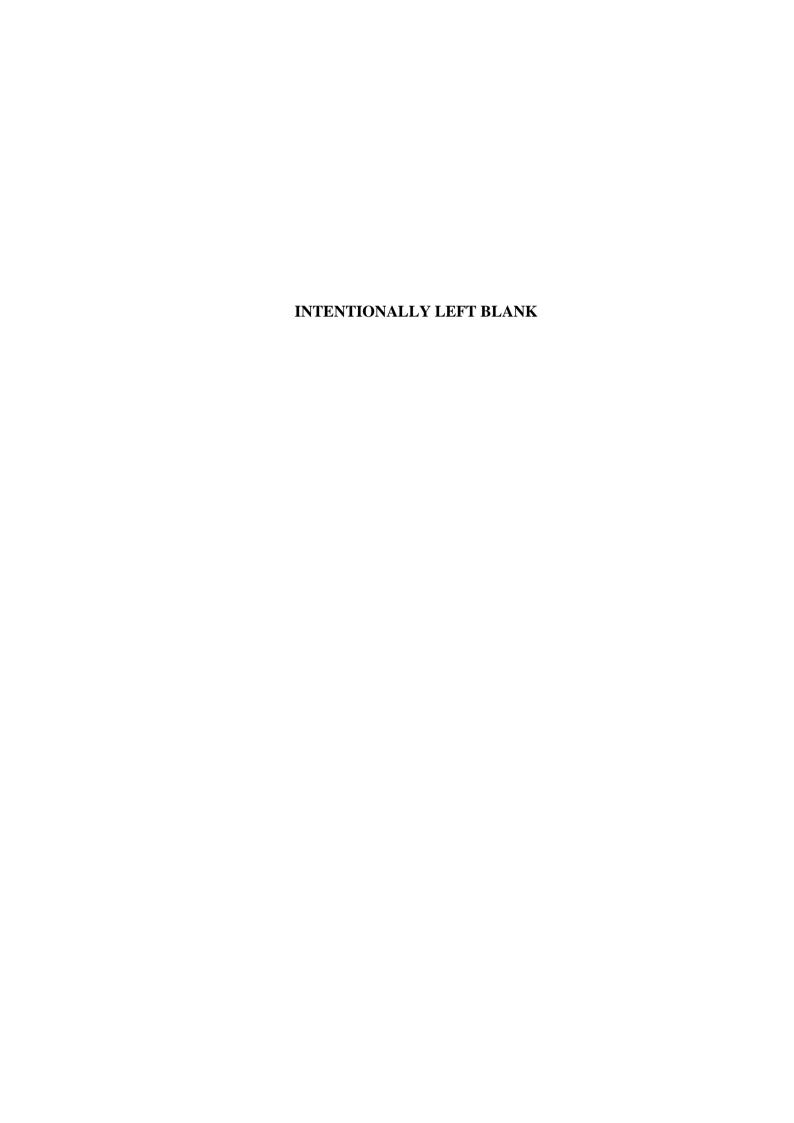
4.1 Co-ordination between the operator and air traffic services is affected in accordance with 2.17 of ICAO Annex 11 15<sup>th</sup> Edition.

#### 5. Minimum flight altitude

5.1 The minimum flight altitude on the ATS routes, as presented in section ENR 3, have been determined so as to ensure at least 300 m (1 000 ft) and 600 m (2 000 ft) in mountain areas vertical clearance above the highest obstacle within 4 km on each side of the centre line of the route.

#### 6. ATS unit address list

Unit name	Postal Address	Telephone NR	Telefax NR	E-mail	AFS address
1	2	3	4	5	6
Paro Control Tower	-	975-8-272859 975-8-271945	975-8-272307	vqpr.aro@gmail.com	VQPRZTZX
Bumthang Control Tower	-	975-3-631718	975-3-631715	vqbt.twr@gmail.com	VQBTZTZX
Gelephu Control Tower	-	975-6-251354 975-6-251355		vqgp.twr@gmail.com	VQGPZTZX
Yonphula Control Tower	-	975-4-535802		vqty.twr@gmail.com	VQTYZTZX



# **GEN 3.4 COMMUNICATION SERVICES**

#### 1. Responsible service.

1.1 Department of Air Transport is the responsible for the provision of telecommunication and navigation facility services in Bhutan.

Chief of Air Navigation Service Division (ANSD)

Department of Air Transport

Ministry of Infrastructure and Transport

Paro International Airport

Paro, Bhutan Tel: 975-8-272760

Email: kyonten@doat.gov.bt

- 1.2 The services are provided in accordance with the provision contained in the following ICAO documents:
  - a) Annex 10 Aeronautical Telecommunications;
  - b) Doc 8400- Procedures for Air Navigation Services

ICAO Abbreviations and Codes (PANS-ABC)

c) Doc 8585 - Designators for the aircraft Operating Agencies,

Aeronautical Authorities and Services;

- d) Doc 7030- Regional Supplementary Procedures;
- e) Doc 7910 Location Indicators.

#### 2. Area of responsibility

2.1 A Communication service is provided for the entire airspace over the territory of Bhutan. Arrangements for such services on a continuing basis should be made with the Chief of ANSPD, DoAT. Responsibility for the day-to-day operation of these services is vested in Dy. Chief Communication Officer located at Paro international aerodrome. Inquiries, suggestion or complaints regarding any telecommunication service should be referred to the Dy. Chief Communication Officer or to the Chief of ANSD as appropriate.

Dy. Chief Com Officer Communication & Navigation Section Department of Air Transport Paro International Airport Paro, Bhutan

Tel: 975-8-272511

Email: dmadhikari@doat.gov.bt

#### 3. Type of services

#### 3.1 Radio navigation services

The following types of radio aids to navigation are available:

- a) LF/MF non-directional beacon (NDB)
- b) Doppler VHF omni directional radio range (DVOR)
- c) Distance Measuring Equipment (DME)

#### 3.2 Voice/data link service

Voice Service

The aeronautical station maintains a continuous watch on their stated frequencies during the published hours of service unless otherwise notified.

An aircraft should normally communicate with the air-ground control radio station that exercise control in the area in which the aircraft is flying. Aircraft should maintain continues watch on the appropriate frequency of the control station and should not abandon watch, except in an emergency, without informing the control radio station.

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Data link Service

The message to be transmitted over the Aeronautical Fixed Services (AFS) are accepted only if:

- a) They satisfy the requirement of ICAO Annex 10, Vol. II, Chapter 3,3.3
- b) they are prepared in the form specified in ICAO Annex 10
- c) the text of an individual message does not exceed 200 groups
- 3.3 **Broadcasting Service**

VOLMET TO BE DEVELOPED

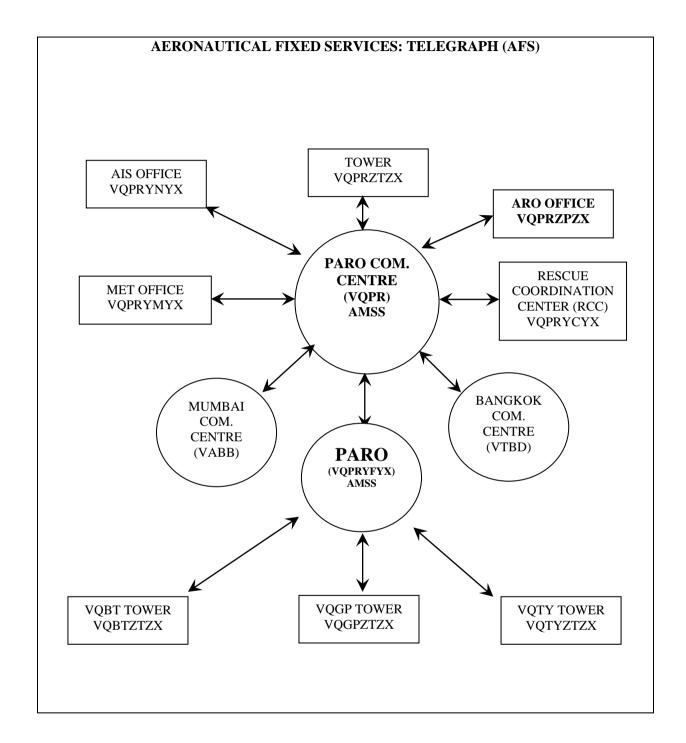
- 3.4 Language used: ENGLISH
- 3.5 Where detailed information can be found
- 3.5.1 Details of the various facilities available for the en-route traffic can be found in Part 2.ENR 4. Details of the facilities available at the individual aerodromes can be found in the relevant section of Part 3 (AD). In case where a facility is serving both en-route traffic and the aerodrome, details are given in the relevant sections of Part 2 (ENR) and Part 3 (AD)

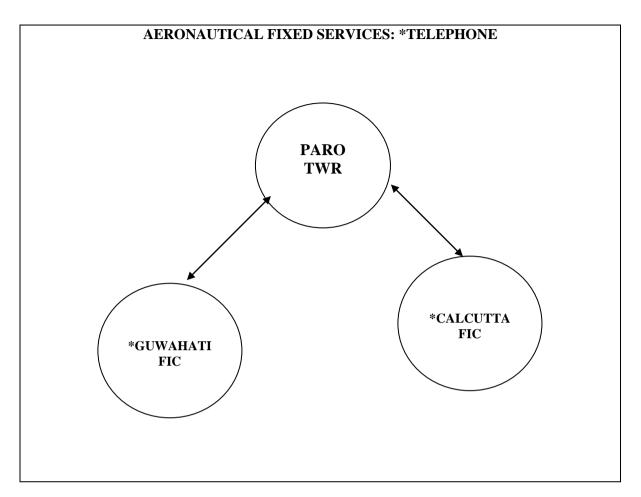
#### 4. Requirements and conditions.

The requirements of the communication service and the general conditions under which the communication service is available for international use, as well as the requirement for the carriage of radio equipment are contained in the BCAR-10, Volume I, II, III, IV and V.

#### 5. Miscellaneous

NIL





<sup>\* 1.</sup> Provided with a direct telephone on International Subscriber Dialling System (ISD) to contact any adjoining ACC/FIC \*2. Dedicated Hotline between adjoining FIC/ACC to be developed

#### **ENR 1.10 FLIGHT PLANNING**

#### 1. Procedures for the submission of a flight plan

- 1.1 A flight plan shall be submitted in accordance with ICAO Annex 2, 3.3.1, prior to operating:
  - a) Any flight or portion thereof to be provided with air traffic control service; or
  - b) Any IFR flight within advisory airspace; or
  - Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate the provision of flight information, alerting and search and rescue services; or
  - d) Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate co-ordination with appropriate military units or with air traffic service units in adjacent States in order to avoid the possible need for interception for the purpose of identification; or
  - e) Any flight across international borders.
- 1.2 A flight plan shall be submitted before departure to an air traffic services reporting office or, during flight, transmitted to the appropriate air traffic services unit or air-ground control radio station, unless arrangements have been made for submission of repetitive flight plans.

#### 1.3 Time of submission

Unless otherwise prescribed by the appropriate ATS authority, a flight plan for a flight to be provided with air traffic control service or air traffic advisory service shall be submitted at least sixty minutes before departure, or, if submitted during flight, at a time which will ensure its receipt by the appropriate air traffic services unit at least ten minutes before the aircraft is estimated to reach:

- a) The intended point of entry into a control area or advisory area; or
- b) The point of crossing an airway or advisory route

#### 1.4 Place of submission

Flight plans shall be submitted at *ATC Reporting Office (ARO)*, at the departure aerodrome.

#### 1.5 VFR flight plan for alerting service only

An alerting service is, in principle, provided to flights for which a flight plan has been submitted.

#### 1.6 Contents and form of a flight plan

- a) ICAO flight plan forms are available at ATC Reporting Office (ARO). The instructions for completing those forms shall be followed;
- b) Flight plans concerning IFR flights along ATS routes need to include FIR boundary estimates.

#### 1.7 Adherence to ATS route structure

No flight plans shall be filed for routes deviating from the published ATS route structure.

#### 1.8 Authorisation for special flights

Flights of a specific character, such as survey flights, scientific research flights, etc. may be exempted from the restriction specified above. A request for exemption shall be mailed so as to be received at least one week before the intended day of operation to the HoA, BCAA

#### 2. Repetitive flight plan system

#### 2.1 General

The Procedures concerning the use of Repetitive Flight Plans (RPL) conform to ICAO Doc 7030 and the PANS-ATM.

RPL lists relating to flights in and to flights overflying the Bhutan airspace shall be submitted at least two weeks in advance, in duplicate, to the following address:

DirectorDepartment of Air Transport

Ministry of Infrastructure and Transport

Paro, Bhutan

b) ATC Reporting Office (ARO) Control Tower Paro Intl. Airport Paro, Bhutan

Tel: 975-8-272306/272307 AFS: VOPRZPZX

RPL lists shall be replaced in their entirety by new lists prior to the introduction of the summer and winter schedules.

2.2 Incidental changes and cancellations of RPL

Incidental changes to and cancellations of RPL relating to departure shall be notified as early as possible and not later then 30 minutes before departure to the ATC.

2.3 Delay

When a specific flight is likely to encounter delay of one hour or more in excess of the departure time stated in the RPL, the ATS unit serving the departure aerodrome shall be notified immediately.

Note: Failure to comply with this procedure may result in the automatic cancellation of the RPL for that specific flight at one or more of the ATS units concerned.

2.4 ATS messages

For a flight operated on an RPL, no flight plan message (FPL) will be transmitted. Departure message (DEP) or delay message (DLA) relating to such flights will be transmitted to ATS unit outside Bhutan.

#### 3. Changes to the submitted flight plan

- 3.1 All changes to a flight plan submitted for an IFR flight or a controlled VFR flight and significant changes to a flight plan submitted shall be reported as soon as possible to the appropriate ATS unit. In the event of a delay in departure of 30 minutes or more for a flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan shall be submitted after the old plan has been cancelled.
- 3.2 Whenever a flight, for which a flight plan has been submitted, is cancelled, the appropriate ATS unit shall be informed immediately.
- 3.3 Change to a current flight plan for a controlled flight shall be reported or requested, subject to the provisions in ICAO Annex 2, 3.6.2. (Adherence to flight plan). Significant changes to a flight plan include changes in endurance or in the total number of persons on board and changes in time estimates of 30 minutes or more.
- 3.4 Arriving report (closing a flight plan).
- 3.4.1 A report of arrival shall be made in person, by a radiotelephony or via data link at the earliest possible moment after landing, to the appropriate air traffic services unit at the arrival aerodrome, by any flight for which a flight plan has been submitted covering the entire flight or the remaining portion of a flight to the destination aerodrome.
- 3.4.2 When a flight plan has been submitted only in respect of a portion of a flight, other than the remaining portion of a flight to destination, it shall, when required, be closed by an appropriate report to the relevant air traffic services unit.
- 3.4.3 When no air traffic services unit exists at the arrival aerodrome, the arrival report, when required, shall be made as soon as practicable after landing and by the quickest means available to the nearest air traffic services unit.
- 3.4.4 When communication facilities at the arrival aerodrome are known to be inadequate and alternate arrangements for the handling of arrival reports on the ground are not available, the following action shall be taken. Immediately prior to landing the aircraft shall, if practicable, transmit to the appropriate air traffic services unit, a message comparable to an arrival report, where such a report is required. Normally, this transmission shall be made to the aeronautical station serving the air traffic services unit in charge of the flight information region in which the aircraft is operated.
- 3.4.5 Arrival reports shall contain the following elements of information:
  - a) Aircraft identification
  - b) Departure aerodrome
  - c) Destination aerodrome (only in the case of a diversionary landing)
  - d) Arrival aerodrome
  - e) Time of arrival.

# **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	ARP co-ordinates and site at AD	273343.92N0 904449.72E Centre of RWY
2	Direction and distance from(city)	2 Km NE from Chamkhar Town
3	Elevation/Reference temperature	2580.2M (8 465.22 ft) MSL/ 19.53°C
4	MAG VAR/Annual changes	0.01° West 2015
5	AD Administration, address, telephone, telefax, telex. AFS	Department of Air Transport, Bumthang Domestic Airport, Bhutan. Tel: (975)-03-630490 AFTN: VQBTZTZX Email: ddema@doat.gov.bt
6	Type of traffic permitted (IFR/VFR)	Only VFR is permitted due to high terrain
7	Remarks	AD PPR

#### **VQBT AD 2.3 OPERATIONAL HOURS**

1	AD Administration	Available MON - FRI 0300 – 1100 (UTC)
2	Customs and immigration	Not Available
3	Health and sanitation	Not Available
4	AIS Briefing Office	Not Available
5	ATS Reporting Office	Not Available
6	MET Briefing Office	Available during operations
7	ATS	During Operational Hrs
8	Fuelling	Not Available
9	Handling	Available during sked operations
10	Security	As and when required
11	De-icing	Not available
12	Remarks	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	Cargo-handling facilities	Available with airline operator, Druk-air
2	Fuel/oil types	Not Available
3	Fuelling facilities/capacity	Not Available
4	De-icing facilities	Manual by sweeping
5	Hanger space for visiting aircraft	Not Available
6	Repair facilities for visiting A/C	Not Available
7	Remarks	NIL

# **VQBT AD 2.5 PASSENGER FACILITIES**

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

# **VQBT AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

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

#### **VQBT AD 2.7 SEASONAL AVAILABILITY - CLEARING**

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

#### **VQBT AD 2.8 APRON, TAXIWAYS AND CHECK LOCATION DATA**

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

## VQBT AD 2.9 SURFACE MOVEMENT GUIDANCE ANDCONTROL SYSTEM AND MARKINGS

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

#### **VQBT AD 2.10 AERODROME OBSTACLES**

	In approach/TKOF areas			area ad at AD	Remarks
	Obstacle type		Obstacle type		
	Elevation		Elevation		
RWY/Area affe	cted Markings/LGT	Coordinates	Markings/LGT	Coordinates	
a	b	c	a	b	
RWY 14	<b>SEE AD 2 – VQBT 3-1</b>	•	TO BE DE	EVELOPED	
RWY32	<b>SEE AD 2 – VQBT 3-2</b>				

#### **VQBT AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

1	Associated MET Office	Bumthang Airport
2	Hours of service	During Flight operations only
	MET Office outside hours	
3	Office responsible for TAF preparation	TO BE DEVELOPED
	Periods validity	
4	Type of landing forecast	Current Weather half hourly during flight operations (in Plain
	Interval of issuance	Language)
5	Briefing/consultation provided	Personal consultation During flight operation(on demand)
6	Flight documentation	TO BE DEVELOPED, English
	Language (s) used	·
7	Charts and other information available for	TO BE DEVELOPED
	briefing or consultation	
8	Supplementary equipment available for providing	NIL
	information	
9	ATS unit provided with information	Control Tower
10	Additional information (limitation of service, etc.)	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		273358.42N	2 580 M AMSL
32	322.78°	1200 X 30 M	(14-16)F/C/Y/T	0904437.37E 273329.42N 0904502.08E	2 571 M AMSL
	SWY	CWY	Strip		
Slope of	Dimensions	Dimensions	Dimensions		
RYW-SWY	(M)	(M)	(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**

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

#### **VQBT AD 2.14 APPROACH RUNWAY LIGHTNING**

						RWY edge			
	APCH					LGT	RWY	RWY	
	LGT				RWY Centre	LEN,	END	END	
RWY	Type	THR LGT	VASIS	TDZ,	Line LGT	spacing	LGT	LGT	
Designator	LEN	Colour	(MEHT)	LGT	Length, spacing,	colour	colour	Colour	
	INTST	WBAR	PAPI	LEN	Colour, INTST	INTST	INTST	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,	TO BE DEVELOPED
	strength, marking	
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	ATS unit call sign Language(s)	BUMTHANG Tower, English
5	Transition altitude	
6	Remarks	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)	НО	As per sked flight
		122.55 MHz (STBY)		operations
		121.5 EMER. Freq.		
RADIO	Bumthang	8921 KHz	НО	-do-
		13342 KHz		

#### **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	ВТ	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.

#### **VOBT 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.
- 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.

# **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 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-VOBT-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



ARP 27° 33' 43.92" N TWR 122.55 Mhz **BUMTHANG / Bathpalathang Airport AERODROME CHART - ICAO** AERODROME ELEVATION 2580.2 m. 090° 44' 49.73" E EMER 121.5 Mhz RWY DIRECTION BEARING STRENGTH MAG VAR 0.01° W (2015) **DIMENSIONS AND ELEVATION IN METRES** THR 27° 33' 58.43" N ANNUAL CHANGE 0.03° E BEARING ARE MAGNETIC 14 142.78° 90° 44' 37.37" E PCN 14-16 F/C/Y/T 27° 33' 29.42" N 90° 45' 02.08" E 32 322.78° 27° 33' 49.12" N PCN 14-16 F/C/Y/T **APRON** 2760 90° 44' 50.84" E CAR PARK 44444 2580 BT 355 Khz TWR AND TERMINAL 27° 33' 50.06" N 090° 44' 49.09" E ANEMOMETER WIND SOCK ( ROAD 2583 ARP 27° 33' 43.92" N 090° 44' 49.73" E THE ELEV 2570.65 m = DISPLACEMENT 45 m X 30 m = 1 127 X 30 ASPH LTHE ELEV 2579.98 m. -CWY 24 m X 30 m **RIVER** 2585 2582 2582 LEGEND <del>Ф</del> AERODROME REFERENCE POINT (ARP) BUILDING OR LARGE STRUCTURE ROAD ROAD TREE OR SHRUB \* HORIZONTAL SCALE 1:8 000 **METRES** RIVER TERRAIN CONTOUR 150 100 50 FENCE --X-- X--200 500 100 300 400

DEPARTMENT OF AIR TRANSPORT BHUTAN

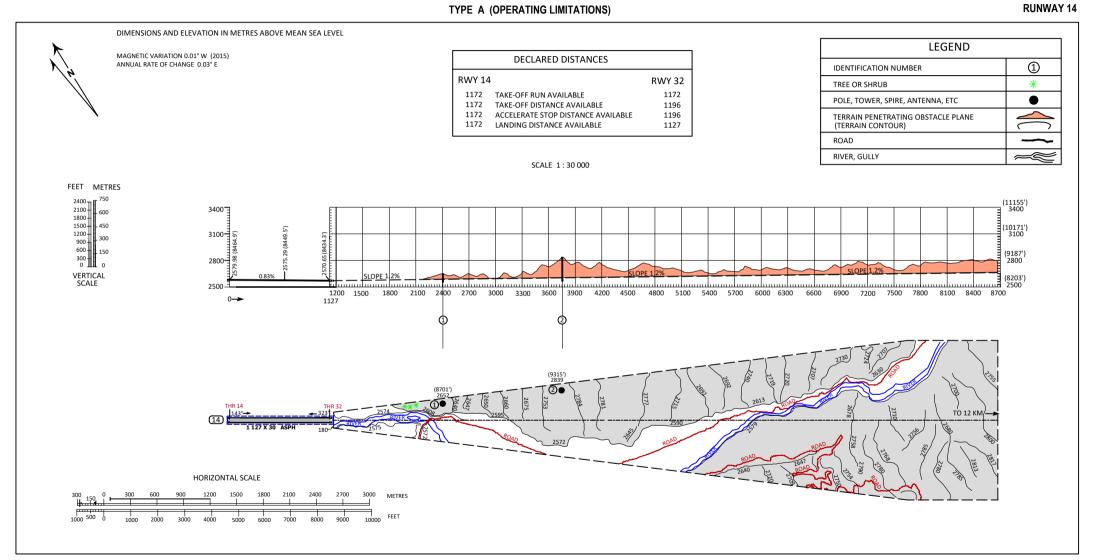
2nd Edition



# **AERODROME OBSTACLE CHART - ICAO**

# BUMTHANG / Bathpalathang Airport

TYPE A (OPERATING LIMITATIONS)



DEPARTMENT OF AIR TRANSPORT **BHUTAN** 

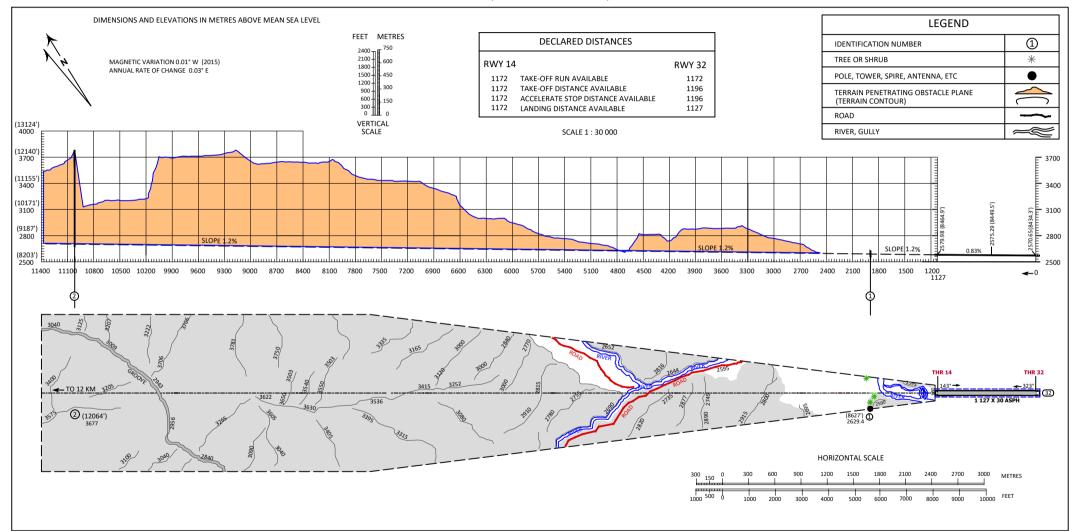
2nd Edition



# **AERODROME OBSTACLE CHART - ICAO**

BUMTHANG / Bathpalathang Airport RUNWAY 32

TYPE A (OPERATING LIMITATIONS)





# AD 2.1 AERODROMES VQPR AD 2.1 AERODROME LOCATION INDICATOR AND NAME VQPR - PARO/International

# VQPR AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP co-ordinates and site at AD	272411.23N 0892529.30E Centre of RWY		
2	Direction and distance from(city)	5 Km SE from Paro town		
3	Elevation/Reference temperature	2 244.479M (7363.776ft) MSL/ 28°C		
4	MAG VAR/Annual changes	0.10° East changing by 0.04 °E		
5	AD Administration, address, telephone, telefax,	Department of Air Transport, Paro, Bhutan		
	telex. AFS	Tel: (975)-8-271403		
		Email: sdorji@doat.gov.bt		
6	Type of traffic permitted (IFR/VFR)	VFR & IFR in VMC		
7	Remarks	AD PPR		

#### **VQPR AD 2.3 OPERATIONAL HOURS**

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

#### **VQPR AD 2.4 HANDLING SERVICES AND FACILITIES**

1	Cargo-handling facilities	Available with airline operator, Druk-air		
2	2 Fuel/oil types Aviation Turbine Fuel only – Jet A1			
3	Fuelling facilities/capacity	1 truck, 9000 litres, 500ltrs/Sec.		
4	De-icing facilities	Manual by sweeping		
5	Hanger space for visiting aircraft	Limited, by prior arrangement with operator, Druk-air.		
6	Repair facilities for visiting A/C	Available by prior arrangement with operator, Druk-air.		
7	Remarks	NIL		

#### **VQPR AD 2.5 PASSENGER FACILITIES**

1	Hotels	Near AD and in the city.
2	Restaurants	At AD and in city.
3	Transportation	Taxi from the AD to Thimphu
4	Medical facilities	First aid at AD. Hospital in the Paro town 8 Km.
5	Bank and Post Office	Bank & Post office at AD. Open within AD HR
6	Tourist Office	Office in the city, Tel: 975 – 2- 323251, fax: 975-2- 323695
7	Remarks	Nil

# **VQPR AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

1	AD category for fire fighting	Within AD HR: CAT 6
2	Rescue equipment	Rescue Tools with CFT
3	Capability for removal of disabled	NIL
	aircraft	
4	Remarks	NIL

#### **VQPR AD 2.7 SEASONAL AVAILABILITY - CLEARING**

1	Type of clearing equipment	Manually Sweeping	
2	Clearance priorities	1. RWY 33/15 and associated TWY to Apron	
	-	-	
3	Remarks	Information on snow clearance published from November - April	
		through NOTAM. See also snow plan in section AD 1.2.2	

VQPR AD 2.8 APRON, TAXIWAYS AND CHECK LOCATION DATA

	VQ1 R 71D 2:0 711 RO11; 171	AIWAIS AND CHECK LOCATION DATA				
1	Apron surface and strength	1. Apron A Surface: Concrete, Strength: PCN 56/R/C/X/T				
		Parking Bay No. 1 - 2				
		2. Apron <b>B</b> Surface: Concrete, Strength: PCN 60/R/C/X/T				
		Parking Bay No.3 - 5				
		3. Apron C Surface: Concrete, Strength: PCN 56/R/C/X/T				
		Parking Bay No. 6 - 8				
2	Taxiway width, surface and strength	1. Taxiway: A Width:15 M Surface: Concrete				
		Strength: PCN 56/R/C/X/T				
		2. Taxiway <b>B</b> Width: 18 M Surface: Concrete				
		Strength: PCN 60/R/C/X/T				
		3. Taxiway N Width: 18 M Surface: Asphalt				
		Strength: PCN 50/F/B/W/T				
		4. Taxiway S Width: 18 M Surface: Asphalt				
		Strength: PCN 50/F/B/W/T				
		5. Taxiway T Taxiway running parallel to runway				
		Width: 18 M Surface: Asphalt.				
		Length: 1993.6M Strength: PCN 50/F/B/W/T				
		Strip: 1460 X 26 M (till ceremonial lounge)				
		Longitudinal slope 0.65%				
		Transverse slope: 1.5%				
3	ACL location and elevation	Location: At Apron				
		Elevation: 2 243.69M				
4	VOR checkpoints	Point A – Taxiway A Holding Points				
		272420.97N 0892520.84E				
		DVOR 324.4° DME 7.7NM				
		Point B – Threshold RWY15				
		272439.00N 0892511.00E				
		DVOR 325.1° DME 8.2NM				
5	INS check points	-				
6	Remarks	NIL				

VQPR AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY	Nose-in guidance at aircraft stand
	guide lines and visual docking/parking	-
	guidance system of aircraft stands	
2	RWY and TWY markings and LGT	Markings Available
3	Stop bars	Stop bars where appropriate.
4	Remarks	NIL.

**VQPR AD 2.10 AERODROME OBSTACLES** 

In Approach/TKOF Areas						
RWY/Area affected	Obstacle reference name	Obstacle type	altitude (ft)	Coordinates	Marking/LGT	Remarks
RWY 33	PR8000	Tree	7401.6	272438.31N 0892515.64E	NIL	
RWY 33	PR9044	Tree	7406	272445.11N 892511.39E	NIL	
RWY 33	PR9095	Tree	7409.4	272451.42N 0892503.74E	NIL	
RWY 33	PR9103	Building	7451.3	272508.04N 0892502.48E	NIL	
RWY 33	PR102	Building	7455.7	272510.16N 0892501.50E	NIL	
RWY 33	PR8001	Building	7460.6	272521.81N 0892506.34E	NIL	
RWY 33	PR8002	Building	7473.8	272522.72N 0892504.35E	NIL	
RWY 33	PR8004	Building	7585.3	272547.38N 08924.58.75E	NIL	
RWY 33	PR2022	Terrain	7742.8	272620.21N 0892426.74E	NIL	
RWY 33	PR2035	Terrain	7821.5	272621.36N 0892424.73E	NIL	

RWY 33	PR9099	Pole	7967.9	272506.04N 0892448.62E	NIL	
RWY 33	PR8015	Terrain	8146.3	272656.26N 892306.24E	NIL	
RWY 33	PR8016	Terrain	8251.3	272620.71N 0892132.80E	NIL	
RWY 33	PR8017	Terrain	8415.4	272605.50N 0892143.14E	NIL	
RWY 33	PR8018	Terrain	8553.1	272558.46N 0892146.48E	NIL	
RWY 33	PR8019	Terrain	8694.2	272549.21N 0892155.09E	NIL	
RWY 15	PR9014	Tree	7343.8	272338.53N 0892551.99E	NIL	
RWY 15	PR1001	Building	7355.6	272338.13N 0892553.13E	NIL	
RWY 15	PR1002	Building	7365.5	272337.21N 0892554.11E	NIL	
RWY 15	PR1003	Building	7381.9	272334.19N 0892555.07E	NIL	
RWY 15	PR1004	Building	7385.2	27233316N 892557.03E	NIL	
RWY 15	PR9069	Building	7403.5	272325.408 0892600.90E	NIL	
RWY 15	PR1007	Tree	7598.4	272247.23N 0892702.15E	NIL	
RWY 15	PR9002	Building	7669.5	272323.52N 0892611.89E	NIL	
RWY 15	PR1014	Tree	7821.5	272212.00N 0892752.94E	NIL	
RWY 15	PR2076	Tree	8179.1	272052.68N 0892734.13E	NIL	
RWY 15	PR2090	Terrain	8353	272027.28N 892728.55E	NIL	

In Circling Area at AD						
Obstacle reference name	Obstacle Type	Coordinates	Altitude (m)	Marking/LGT	Remarks	
PR9000	Antenna Tower	272339.74N 0892529.98E	2306.027	NIL		
PR9001	Antenna Tower	272338.49N 0892522.51E	2352.833	NIL		
PR9002	Building	272323.52N 08926'11.89E	2337.665	NIL		
PR9003	Tree	272324.57N 0892613.60E	2357.651	NIL		
PR9004	Antenna Tower	272304.42N 0892554.23E	2323.565	NIL		
PR9005	Tree	272352.40N 0892500.41E	2573.614	NIL		
PR9006	Power Pole	272340.15N 0892513.74E	2392.788	NIL		
PR9007	Tree	272348.156 0892657.03E	2839.702	NIL		
PR9009	Building	272347.64N 08925'50.55E	2242.738	NIL		
PR9010	Building	272355.57N 0892555.45E	2295.709	NIL		
PR9012	Building	272350.89N 0892606.84E	2350.535	NIL		
PR9013	Building	272336.31N 0892606.38E	2283.729	NIL		
PR9014	Tree	272338.53N 0892551.99E	2238.379	NIL		
PR9015	Building	272332.87N 0892558.71E	2257.886	NIL		

PR9016	Tree	272315.28N 0892541.67E	2306.574	NIL	
PR9018	Tree	272315.24N 0892520.96E	2406.614	NIL	
PR9019	Tree	272340.63N 0892545.38E	2239.023	NIL	
PR9020	Windsock	272346.76N 0892542.48E	2238.494	NIL	
PR9022	Tree	272412.19N 0892600.88E	2610.327	NIL	
PR9027	Building	272331.97N 0892551.04E	2238.385	NIL	
PR9031	Building	272341.96N	2251.653	NIL	
PR9032	Building	0892554.25E 272431.59N	2347.113	NIL	
PR9033	Building	0892451.24E 272439.85N	2321.109	NIL	
PR9034	Building	0892451.76E 272443.76N	2269.468	NIL	
PR9035	Power Pole	0892501.56E 272426.62N	2391.219	NIL	
		0892450.89E 272443.26N			
PR9036	Power Pole	0892447.37E 272452.32N	2349.757	NIL	
PR9040	Tree	0892437.31E	2583.205	NIL	
PR9041	Tree	272458.21N 0892442.20E	2534.400	NIL	
PR9042	Building	272459.13N 0892527.15E	2304.051	NIL	
PR9043	Building	272456.80N 0892540.69E	2409.117	NIL	
PR9044	Tree	272445.11N 0892511.39E	2257.339	NIL	
PR9045	Building	272450.64N 0892531.64E	2333.328	NIL	
PR9046	Building	272439.39N 0892515.60E	2257.777	NIL	
PR9052	Tree	272457.41N 0892529.18E	2368.773	NIL	
PR9055	Building	272522.60N 0892507.36E	2273.714	NIL	
PR9057	Building	272527.51N 0892447.23E	2325.012	NIL	
PR9058	Building	2725'35.96N 0892523.18E	2357.676	NIL	
PR9059	Building	2725'43.28N 08925'31.58E	2447.703	NIL	
PR9060	Tree	2725'21.05N 0892539.16E	2549.848	NIL	
PR9062	Tree	272527.86N 0892448.03E	2342.520	NIL	
PR9063	Tree	272319.64N	2267.320	NIL	
PR9064	Building	0892552.72E 272330.46N	2239.915	NIL	
PR9066	Tree	0892553.07E 272323.57N	2337.339	NIL	
PR9067	Tree	0892611.01E 272316.28N	2339.160	NIL	
PR9068	Building	0892536.65E 272320.73N	2244.324	NIL	
PR9069	Building	0892559.31E 272325.48N	2256.580	NIL	
		0892600.96E 272326.50N			
PR9070	Building	0892603.41E 272255.48N	2260.669	NIL	
PR9072	Power Pole	0892625.05E	2295.882	NIL	

PR9073	Power Pole	272251.87N 0892618.33E	2295.029	NIL	
PR9074	Power Pole	272248.81N 0892617.33E	2321.398	NIL	
PR9075	Power Pole	272250.67N 0892607.87E	2306.296	NIL	
PR9076	Tree	272219.58N 0892628.05E	2564.196	NIL	
PR9077	Tree	272248.17N 0892616.03E	2322.301	NIL	
PR9079	Power Pole	272241.26N 0892659.78E	2348.821	NIL	
PR9080	Power Pole	272239.09N 0892700.83E	2375.411	NIL	
PR9081	Power Pole	272242.45N 0892651.44E	2325.051	NIL	
PR9082	Power Pole	272241.02N 0892650.90E	2344.257	NIL	
PR9083	Tree	272238.47N 0892650.34E	2375.345	NIL	
PR9084	Tree	272245.56N 0892701.28E	2327.537	NIL	
PR9085	Tree	272249.83N 0892702.00E	2283.264	NIL	
PR9086	Tree	272309.99N 0892705.34E	2315.659	NIL	
PR9087	Building	272305.52N 0892651.13E	2239.651	NIL	
PR9088	Power Pole	272225.11N 0892711.66E	2325.449	NIL	
PR9089	Antenna Tower	272229.63N 08927'18.71E	2278.901	NIL	
PR9090	Power Pole	272230.47N 0892716.08E	2307.551	NIL	
PR9091	Power Pole	272230.71N 0892710.62E	2356.341	NIL	
PR9092	Power Pole	272234.62N 0892712.01E	2299.188	NIL	
PR9093	Power Pole	272240.30N 0892703.39E	2363.815	NIL	
PR9094	Antenna Tower	272219.32N 0892731.52E	2258.061	NIL	
PR9095	Tree	272451.42N 0892503.74E	2258.375	NIL	
PR9096	Power Pole	272459.85N 0892458.27E	2277.524	NIL	
PR9097	Tree	272500.44N 0892457.77E	2287.295	NIL	
PR9098	Power Pole	272452.68N 0892450.57E	2399.396	NIL	
PR9099	Power Pole	272506.04N 0892448.62E	2428.634	NIL	
PR9100	Tree	272457.91N 0892442.78E	2521.492	NIL	
PR9101	Building	272515.92N 0892454.57E	2336.178	NIL	
PR9102	Building	272510.16N 0892501.50E	2272.486	NIL	
PR9103	Building	272508.04N 0892502.48E	2271.154	NIL	
PR9104	Building	272459.94N 0892521.24E	2269.219	NIL	
PR9105	Building	272455.55N 0892515.46E	2263.914	NIL	

# **VQPR AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

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

# **VQPR 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 c	oordinates	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4		5	6
15	150.38°	2265 X 30 M	PCN 56/F/C/X/T		72439.27N 392511.44E	2 243.759 M AMSL
33	331.50°	2265 X 30 M			72343.20N 892547.14E	2 227.812 M AMSL
Slope of RYW-SWY	SWY Dimensions (M)	CWY Dimensions (M)	Strip Dimensions (M)	OFZ	Displaced THR Dimensions (M)	Remarks
7	8	9	10	11	12	13
0.81%	NIL	NIL	2385 M X 30 M	NIL	160M X 30M 120M X 30M	End of RWY15 272443.78N 0892508.56E (2244.479 M) End of RWY33 272339.80N 0892549.30E (2226.805 M) RWY Turn pad available at the both end of RWY

# **VQPR AD 2.13 DECLARED DISTANCES**

RWY Designator	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6
15 33	2265 2265	2265 2265	2265 2265	2105 2145	NIL

# **VQPR 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								

# **VQPR AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

1	ABN/IBN location, characteristics and	Not established
	hours of operation	
2	LDI location and LGT	LDI: 50 M NW and 700 M SW of ARP, unlighted
	Anemometer location and LGT	Anemometer: 300 M from THR 15 and THR 33, unlighted
3	TWY edge and centre line lighting	NIL
4	Secondary power supply/switch-over time	Secondary power supply to all lighting at AD 500KVA
		Switch-over time: 60 sec
5	Remarks	NIL

# VQPR 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,	TO BE DEVELOPED
	strength, marking	
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	

# **VQPR AD 2.17 ATS AIRSPACE**

1	Designation and lateral limits	Paro CTR: An area of a circle 10NM in radius of ARP (272411.23N 0892529.30E)
2	Vertical limits	14 500 <del>0</del> ft AMSL GND
3	Airspace classification	Class "D" and outside CTR Class "G"
4	ATS unit call sign Language(s)	PARO Tower English
5	Transition altitude	18 000 ft AMSL
6	Remarks	Two ways communication

# **VQPR AD 2.18 ATS COMMUNICATION FACILITIES**

Service Designation	Callsign	Frequency	Hours of operation	Remarks
TWR	Paro Tower	120.3 MHz (EXTN) 120.3 MHz (STBY) 121.5 EMER. Freq.	НО	As per sked flight operations
RADIO	Paro Radio	8921 KHz 13342 KHz	НО	-do-

# **VQPR AD 2.19 RADIO NAVIGATION AND LANDING AIDS**

Type of aid, CAT of ILS/MLS (forVOR/ILS/ML S, give VAR)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
DVOR/DME	PRO	108.4 MHz	НО	7.7 NM south of aerodrome 271801.93N 0893018.19E	3 469M	DME Channel 21X

#### **VQPR 2.20 LOCAL TRAFFIC REGULATIONS**

#### 1. Airport regulations

- 1.1 At Paro 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.

- 2.1 Arriving aircraft will be allocated a stand number by the TWR
- 2.2 Assistance from the "FOLLOW ME" vehicle can be requested from the TWR.
- 2.3 Departing flights shall contact the TWR to obtain ATC and ADC clearance before commencing Pushback & Start up. Request for ATC clearance may take place at the earliest 5 minutes prior to Pushback & start-up. Frequency 120.3Mhz is to be used. Departing aircraft shall obtain taxi instruction from Paro TWR on 120.3 Mhz.
- 2.4 Aircraft shall perform pushback & start up on Taxiway "T" facing either North or South depending on the runway in use.
- 2.6 In order to maintain Runway Occupancy Time (ROT), aircraft shall not be permitted to pushback & start up on runway.

#### 3. Parking for small aircraft (General aviation)

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

#### 4. Parking area for helicopters

The parking area for helicopters will always be guided by a marshaller on the stand or on R/T from TWR.

# 5. Apron Taxiing during winter conditions

"Follow me" vehicle can be provided on request.

#### 6. Taxiing Limitations

No limitations

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

Subject to permission from tower

#### 8 Helicopter traffic

- 8.1 Request ARO 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).

# 8.3 Helicopter Holding Area

Sl.	Radial from VQPR ARP	Visual reference point	Distance from VQPR ARP	Routing via	Holding Area Name
1	010	Shari	5 NM	Thimphu and Linzhi	PAPA 1
2	320	Drugyel Dzong	10 NM	Gunitshawa, Damthang, seo,	PAPA 2
3	248	Haa	7 NM	Haa, Damthang	PAPA 3
4	150	Abeam Chapcha & Dawakha	9 NM	Chuka	PAPA 4
5	105	Abeam Sisina	7 NM	Thimphu	PAPA 5

#### 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.

#### **VQPR AD 2.21 NOISE ABATEMENT PROCEDURES**

#### TO BE DEVELOPED

#### **VQPR AD 2.22 FLIGHT PROCEDURES**

#### 1 General

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

- a) 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 Request guide pilot (navigator) from the Authorized Clearing Agent.
  - Clearances on behalf of private airlines and for additional logistics can be 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 for 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 Paro Aerodrome are also collected by the Bhutan Air Service on Behalf of DoAT.

- b) In order to avoid unnecessary delay while departing from Paro, relevant clearances (YANKEE ALPHA NUMBER) from DGCA India and other relevant clearances from the respective authority must be obtained to over fly/transiting through the respective airspaces.
- Specific date & time of arrival/departure or over flying/transiting should be clearly mentioned while obtaining such clearances.
- d) Last minute change in flight plan could lead to DELAY OF FLIGHT TO OBTAIN NEW ADC/FIC. Therefore, it is recommended that all flights are to adhere with planned flight plan or inform to ARO regarding the changes in flight plan at least one day prior. DoAT Bhutan shall not be responsible for the delay of flight.
- e) Flight wishing to depart early morning from Paro (BTN 0000–0400 UTC), is recommended to file the flight plan at least one day prior to departure from Paro to avoid delay in obtaining ADC/FIC from INDIA FIR/FIC.
- f) Flight plan can be filed during operational hours or during office hours (03:00 10:00 UTC) at the following address.

ARO
CONTROL TOWER

1st FLOOR
PARO INTERNATIONAL AIRPORT
Tel: 975-8-272306/272307

Fax: 975-272307 Email: <u>vqpr.aro@gmail.com</u> AFTN: VQPRZPZX

# 2 Radar Procedures

No Radar facilities are available at Paro 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 Paro 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 Paro AD

- 5.1 ATC clearance for flights will be given under the conditions described below:
  - A flight plan containing items 7 to 18 and indicating the purpose of the flight, shall be submitted to Paro ATC.
  - b) ATC and ADC/FIC clearance number shall be obtained before the aircraft Taxi out.
  - c) Position reports shall be submitted in accordance with 3.6.3 of ICAO Annex 2.
  - d) Deviation from the ATC clearance may only be made when prior permission has been obtained.
  - e) Two-ways radio communication shall be maintained on the frequency 120.3 MHz.
- 5.2 With the high terrain and rapid phenomenon change of weather in and around the Paro aerodrome, all flights are operated in VMC, therefore any aircraft operating in Bhutanese territory are required to obtain weather information from Paro aerodrome at least one hour prior to departure.
- 5.3 Paro weather will available on HF Radio on freq. **8921 KHz** and **13342 KHz**, call sign Paro radio or can be requested on AFTN i.e. On *VQPRYMYX*, VQPRZTZX, *VQPRZPZX*.

#### 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 Paro. Airborne time & ETA should be informed to Paro radio on HF.**
- 5.4.3 Entry/Exit from/to Bhutan to Indian airspace is on positive R/T contact with Hashimara (IAF 130.4 MHz) Bagdogra (IAF 131.2 MHz) and Guwahati (Civil ACC 120.5 MHz or Civil APP 123.9 MHz) as applicable (See AIP India for latest Frequency).
- 5.4.4 Entry/Exit into circuit area is via **Chhuzom** (*confluence of rivers Paro Thimphu*) at safety altitude. Descend below safety altitude only in VMC. All arriving aircraft to contact Paro tower at least 38 NM before reaching confluence.
- 5.4.5 TA18,000, 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) Towards North/North East of the airfield the *Dopshari* valley is **unsafe and not Permitted for** circuit
- 5.4.6 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.
- 5.4.7 Surface winds conditions at different positions of runway can be requested. Surface winds increase in intensity usually in the afternoon hours.
- 5.4.8 Severe turbulence may experience when entering the valley.
- 5.4.9 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.

- 5.4.10 Holding point is over TAKTI 180°/15 NM from VOR/DME at altitude cleared by Paro ATC. Minimum *altitude* 16 000ft.
- 5.4.11 Helicopters operating as a domestic flight/mountain flight within Bhutan territory shall contact Paro tower on fixed line/mobile for Paro 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 Paro 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 Confluence/VOR"PRO". An estimates time over designated compulsory reporting points and destination shall be passed to TWR.
- 5.5.3 When reaching altitude 18 000 ft and/or before crossing Bhutan airspace, aircraft shall contact the following adjacent ACC/APP for higher level and position report.
  - a) BOGOP (R598)
    Contact Hashimara on freq 130.4 MHz & also with Guwahati on freq 120.5 MHz (Approach)
    123.9 MHz (Area).
  - b) SUBSU (G348)
    Contact Bagdogra on freq 131.2 MHz & also with Guwahati on freq 120.5 MHz (Approach) 123.9 MHz (Area).
  - c) For further Information and other Frequency see India AIP.
- 5.5.4 After establishing contact with the adjacent ACC, aircraft shall report back to Paro tower with their assigned level and position before leaving Bhutan airspace/crossing transfer point i.e. Over **BOGOP/SUBSU**.

#### 3 Communication failure

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- 5.4.8 Severe turbulence may experience when entering the valley.
- 5.4.9 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.
- 5.4.10 Holding point is over TAKTI 180°/15 NM from VOR/DME at altitude cleared by Paro ATC. Minimum *altitude* 16 000ft.
- 5.4.11 Helicopters operating as a domestic flight/mountain flight within Bhutan territory shall contact Paro tower on fixed line/mobile for Paro weather and the departure information (ETA/ETD). This shall be applied only to those helicopters not equipped with **HF radio facilities** on board.
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    123.9 MHz (Area)
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    Contact Bagdogra on freq 131.2 MHz & also with Guwahati on freq 120.5 MHz (Approach)
    123.9 MHz (Area)
  - c) For further Information and other Frequency see India AIP.

5.5.4 After establishing contact with the adjacent ACC, aircraft shall report back to Paro tower with their assigned level and position before leaving Bhutan airspace/crossing transfer point i.e. Over **BOGOP/SUBSU** 

#### 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 & land between sunrise & sunset for all types of flight operations.

#### **VQPR AD 2.23 ADDITIONAL INFORMATION**

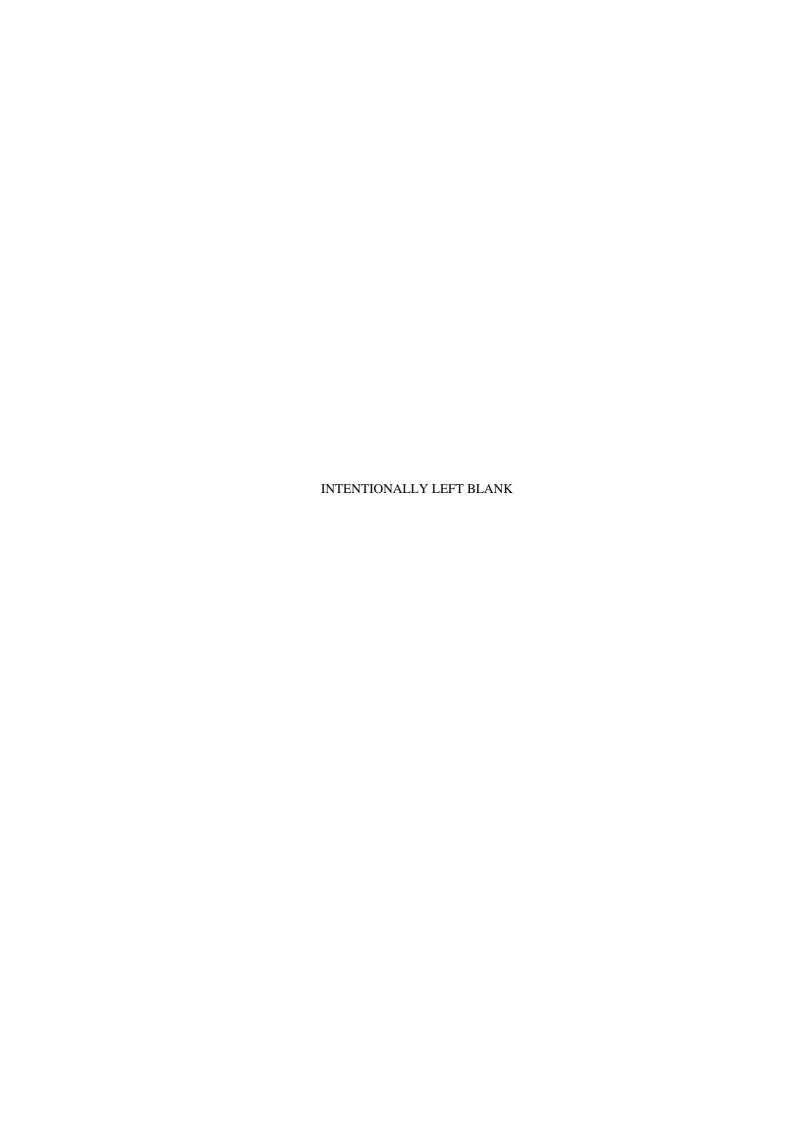
# 1. Bird concentrations in the vicinity of the airport

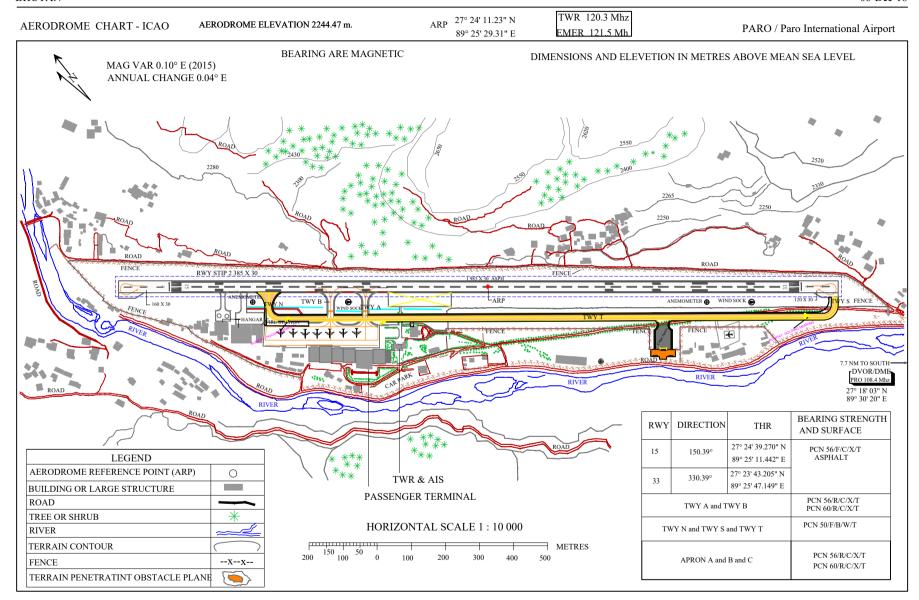
As far as practicable, Aerodrome Control will inform pilots of the bird activity and the estimated heights AGL, when situation warrants.

#### **VQPR AD 2.24 CHARTS RELATED TO AN AERODROME**

page

Aerodrome chart.	AD 2.2-VOPR-1
Aerodrome Obstacle Chart - ICAO Type- A runway 15	AD 2.3-VOPR-1
Aerodrome Obstacle Chart - ICAO Type -A runway 33	_





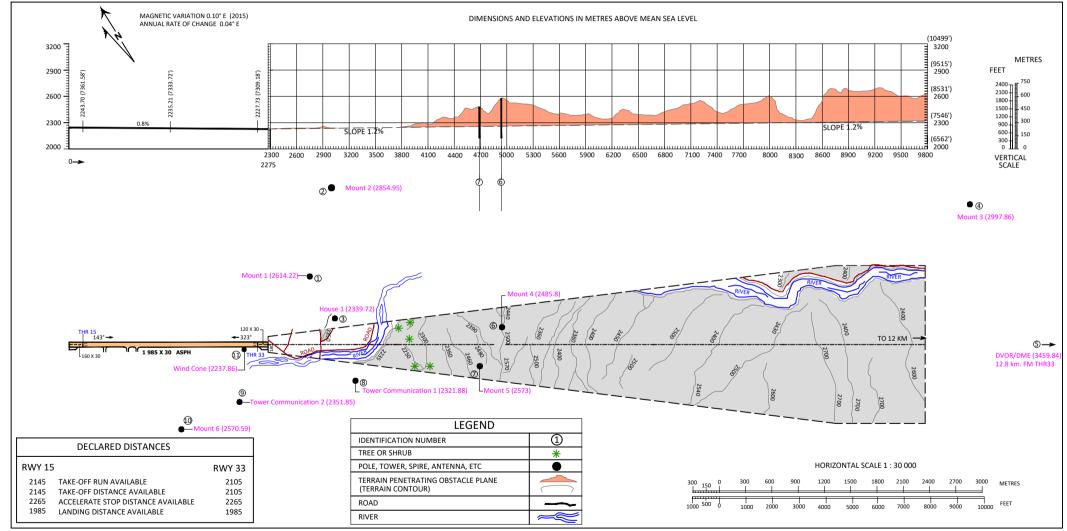


# **AERODROME OBSTACLE CHART - ICAO**

#### PARO / Paro International Airport

TYPE A (OPERATING LIMITATIONS)

RUNWAY 15



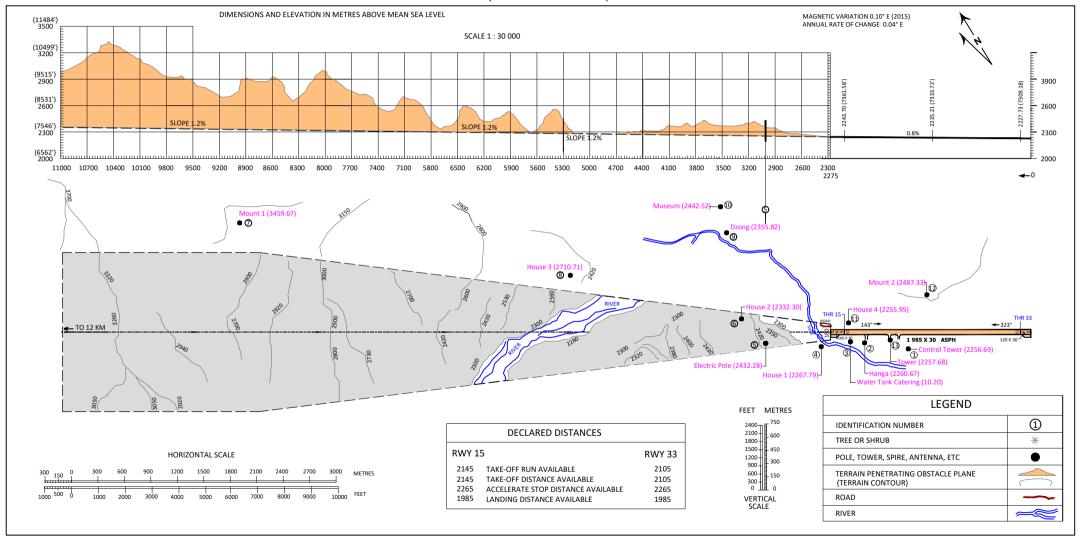


# **AERODROME OBSTACLE CHART - ICAO**

PARO / Paro International Airport

**RUNWAY 33** 







# **AD 2.1 AERODROMES**

# VQTY AD 2.1 AERODROME LOCATION INDICATOR AND NAME VQTY – Trashigang, Yonphula/Domestic

# VQTY AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP co-ordinates and site at AD	271523.29N 0913052.76E Centre of RWY	
2	Direction and distance from(city)	33 Km SE from Trashigang town	
3	Elevation/Reference temperature	2 562M (8 405 ft) MSL/ 18°C	
4	MAG VAR/Annual changes	0.10° West 2015	
5	AD Administration, address, telephone, telefax, telex. AFS		
6	Type of traffic permitted (IFR/VFR)	Only VFR is permitted due to high terrain	
7	Remarks	AD PPR	

#### **VQTY AD 2.3 OPERATIONAL HOURS**

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

# **VQTY AD 2.4 HANDLING SERVICES AND FACILITIES**

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

# **VQTY AD 2.5 PASSENGER FACILITIES**

1	Hotels	Near AD and in the city.	
2	Restaurants	in city.	
3	Transportation	On request	
4	Medical facilities	First aid at Basic Hospital Unit, 9 Km from Airport.	
5	Bank and Post Office	Bank & Post office in satellite Town	
6	Tourist Office	Not Available	
7	Remarks	Nil	

# **VQTY AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

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

#### **VQTY AD 2.7 SEASONAL AVAILABILITY - CLEARING**

1	Type of clearing equipment	Manually Sweeping
2	Clearance priorities	1. RWY 30/12
3	Remarks	Information on snow clearance published from December- March Bard
		cast through HF Radio

# VQTY AD 2.8 APRON, TAXIWAYS AND CHECK LOCATION DATA

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

# VQTY AD 2.9 SURFACE MOVEMENT GUIDANCE ANDCONTROL SYSTEM AND MARKINGS

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

#### **VQTY AD 2.10 AERODROME OBSTACLES**

RWY/Area affected	Markings/LGT	Coordinates	Elevation Markings/LGT	Coordinates	
a RWY 12 /30	b SEE AD 2.2 – VQTY -1	<u> </u>	a TO BE DE	b EVELOPED	

# VQTY AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

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

# **VQTY 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
12	122.89°	1 200 X 30 M	(10-12) F/C/Y/T	271533.827N 0913034.549E	2 541M AMSL
30	302.90°	1 200 X 30 M	(======================================	271512.764N 0913110.982E	2 562 M AMSL
	SWY	CWY	Strip		
Slope of	Dimensions	Dimensions	Dimensions		
RWY-SWY	(M)	(M)	(M)	OFZ	Remarks
7	8	9	10	11	12
2.0%, 1.17%- 2.0%	NIL	NIL	1 340 M X 60 M	NIL	RWY 12 slope 2.0% MID RWY slop 1.17% RWY30 slope 2.0%

# **VQTY AD 2.13 DECLARED DISTANCES**

	TORA	TODA	ASDA	LDA	
RWY Designator	(M)	(M)	(M)	(M)	Remarks
1	2	3	4	5	6
12	NU	NU	NU	1 200	One direction Landing
30	1 200	1 260	1 260	NU	One direction takeoff

#### **VQTY 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				

# **VQTY 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: THR 12
3	TWY edge and centre line lighting	NIL
4	Secondary power supply/switch-over time	NIL
5	Remarks	NIL

# **VQTY 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,	TO BE DEVELOPED
	strength, marking	
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	

# **VQTY AD 2.17 ATS AIRSPACE**

1	Designation and lateral limits	NOT ESTABLISHED
2	Vertical limits	NOT ESTABLISHED
3	Airspace classification	NOT ESTABLISHED
4	ATS unit call sign Language(s)	Yonphula Tower English
5	Transition altitude	
6	Remarks	Two ways communication

#### **VOTY AD 2.18 ATS COMMUNICATION FACILITIES**

Service				
Designation	Callsign	Frequency	Hours of operation	Remarks
TWR	Yonphula Tower	118.20 MHz (EXTN)	НО	As per sked flight
		118.20 MHz (STBY)		operations
		121.5 EMER. Freq.		
RADIO	Yonphula	8921 KHz	НО	-do-
		13342 KHz		

#### **VQTY 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	YP	367 KHz		200 M SW of THR12 271528.31N 0913031.076E	8 248.71 M	NIL

#### **VQBT 2.20 LOCAL TRAFFIC REGULATIONS**

#### 1. Airport regulations

- 1.1 At Yonphula Airport a number of local regulations apply, in accordance with Annex 2,11,14 Doc. 4444. See GEN
- 1.2 One direction of landing and take-off is permitted. All aircraft shall land from RWY12 and take-off from RWY30 due high obstacle toward RWY30.
- 1.3 Marshaller assistance can be requested.
- 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.

- 2.1 Assistance from the "FOLLOW ME" vehicle can be requested from the TWR.
- 2.2 Departing flights shall contact the TWR to obtain ATC clearance before commencing Pushback & Start up. Request for ATC clearance may take place at the earliest 5 minutes prior to start-up. Frequency 118.20 MHz is to be used. Departing aircraft shall obtain taxi instruction from TWR on 118.20 MHz.

#### 3. Parking for small aircraft (General aviation)

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

#### 4. Parking area for helicopters

The parking area for helicopters will always be guided by a marshaller on the stand or on R/T from TWR.

#### 5. Apron Taxiing during winter conditions

"Follow me" vehicle can be provided on request.

#### 6. Taxiing Limitations

One at a time

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

Subject to permission from DoAT & 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.

#### **VQTY AD 2.21 NOISE ABATEMENT PROCEDURES**

#### TO BE DEVELOPED

#### **VOTY AD 2.22 FLIGHT PROCEDURES**

#### 1 General

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

- a) Prior operating into Yonphula 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 Yonphula Aerodrome are also collected by the Bhutan Air Service on Behalf of DG BCAA.
- Relevant clearances from DG BCAA and other relevant clearances from the respective authority must be obtained.
- c) Specific date & time of arrival/ departure or over flying/transiting 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 Yonphula 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 within Yonphula 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 Yonphula AD
- 5.1 ATC clearance for flights will be given under the conditions described below:
  - A flight plan containing items 7 to 18 and indicating the purpose of the flight, shall be submitted to Yonphula ATC.
  - c) Position reports shall be submitted in accordance with 3.6.3 of ICAO Annex 2.
  - d) Deviation from the ATC clearance may only be made when prior permission has been obtained.
  - e) Two-ways radio communication shall be maintained on the frequency 118.20 MHz.
- 5.2 With the high terrain and rapid phenomenon change of weather in and around the Yonphula aerodrome, all flights are operated in VMC, therefore any aircraft operating in to Yonphula are required to obtain weather information from Yonphula aerodrome at least one hour prior to departure.
- 5.3 Yonphula weather will be available on HF Radio on freq. **8921 KHz** and **13342 KHz**, call sign Yonphula or can be requested on Land line 975-4-535802 or VQTYZTZX.
- 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 Yonphula. Airborne time & ETA should be informed to Yonphula on HF.**
- 5.4.3 Strictly one direction of landing i.e. landing from RWY12 only, due to hilly terrain on opposite side of RWY. No visual guidance like VASI. PAPI. ILS, Runway lights etc., available on final. Runway slope ranges from 2.0 % from beginning of RWY at MID of RWY slop is 1.17% and again inclined slope to 2.0 %.
- 5.4.4 Pilots to "**EXERCISE CAUTION**" as the Surface winds conditions on final and while landing are expected to be mostly cross wind. 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 After landing, aircraft shall make right hand turn out on turn pad RWY30.
- 5.4.9 Helicopters operating as a domestic flight/mountain flight within Bhutan territory shall contact Yonphula tower on fixed line/mobile for Yonphula 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 Strictly one directional take off i.e. takeoff from RWY30 only due high obstacles towards departure RWY12.
- 5.5.2 Aircraft shall make standard turn on turn pad RWY30 while lining up for departure.
- 5.5.3 **No SIDS** (Standard Instrument Departure) is established for Yonphula airport. Therefore, all aircraft shall strictly follow in visual meteorological conditions (VMC).

- 5.5.4 After departure climb initially 18 000ft on QNH maintaining visual to terrain/obstacle and report over designated compulsory reporting points.
- 5.5.5 departing aircraft may be contact with the destination aerodrome for their position report after establishing contact, aircraft shall report back to Yonphula tower with their assigned level and position.

#### 6 RESTRICTION-

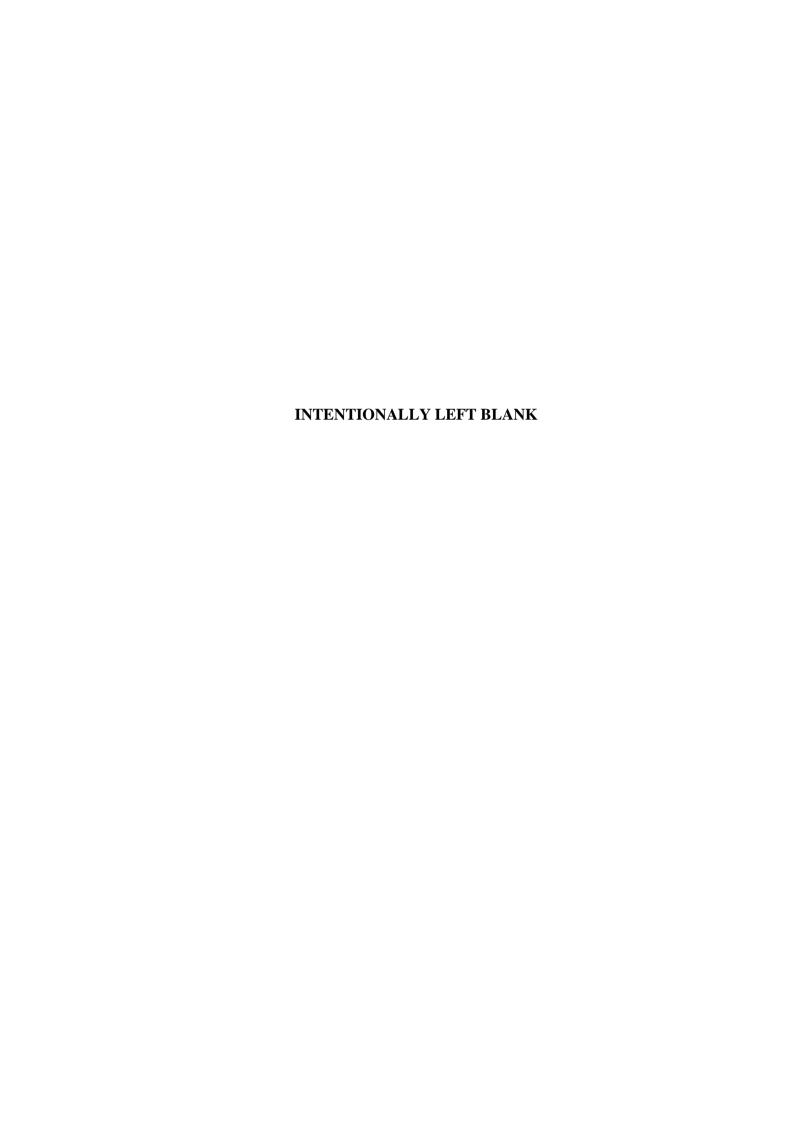
- a) Only Day operations in visual meteorological conditions (VMC) is permitted
- b) No night landing/bad weather facilities
- c) Altitudes to be maintained as per ICAO Annex 2 Rules of the Air.
- d) Avoid flying over yellow rooftop i.e., (dzongs, monastery, temples)
- e) Flight shall be permitted to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

#### **VQTY 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.

#### **VQTY AD 2.24 CHARTS RELATED TO AN AERODROME**



AERODROME CHART - ICAO

AERODROME ELEVATION 2562 m.

AERODROME ELEVATION 2562 m.

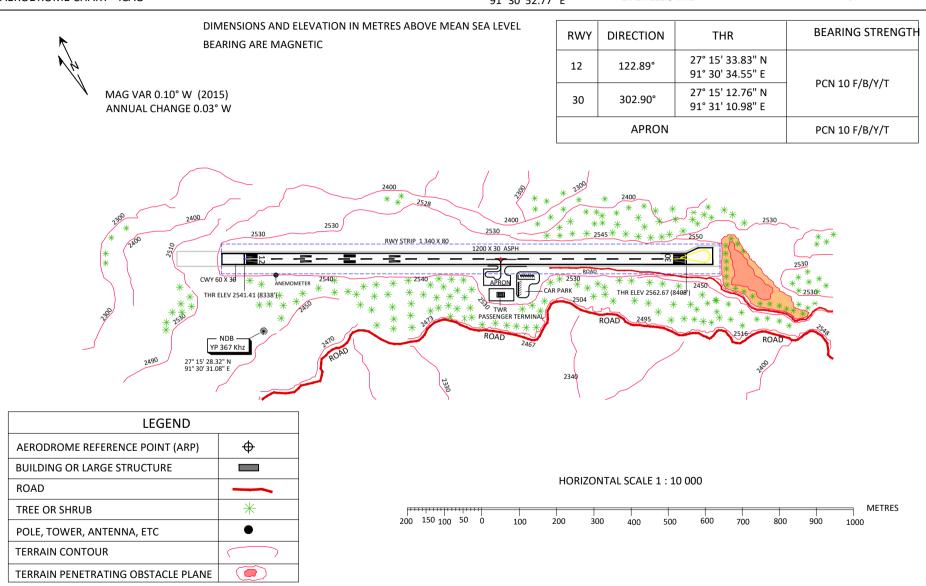
ARP

27° 15' 23.30" N

TWR 118.2 Mhz

EMER 121.5 Mhz

Tashigang / Yongphula Airport



DEPARTMENT OF AIR TRANSPORT BHUTAN

2nd Edition



# AERODROME OBSTACLE CHART - ICAO TYPE A (OPERATING LIMITATIONS)

TRASHIGANG / Yonphula Airport

