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

AIRAC
AIP

Amendment 01/2021
30 Dec 2021

EFFECTIVE DATE: 30 DEC 2021

1. SIGNIFICANT INFORMATION AND CHANGES

- 1.1 Removal of coordinate symbols in accordance with PANS-AIM

2. HAND AMENDMENTS

| AIP Page Nr. | Para/Row/Column/Line Nr. | Hand Amendment |
|--------------|--------------------------|---|
| GEN 1.1-1 | Para | To read as <i>“related to Civil Aviation”</i> |
| GEN 2.2.3 | Row 19 Column 3 | Insert word <i>“Head of Authority”</i> under HO |
| GEN 1.2-2 | Para 4.1.1 line 3 | Replace word with <i>“HoA, BCAA”</i> in place of <i>Director General of Bhutan Civil Aviation Authority</i> |
| GEN3.3-1 | Para 1.1 line 1 | Delete <i>“1.2”</i> and insert word <i>“under paragraph 2 below”</i> |
| GEN3.6-1 | Para 4 line 3 | Replace <i>“Director General, of BCAA, Paro”</i> with word <i>“HoA, BCAA”</i> |
| AD 1.1-1 | Para 1.1 line 2 | Replace <i>“Director General, of BCAA, Paro”</i> with word <i>“HoA, BCAA”</i> |
| AD1.2-1 | Para1.1, row 1, column 2 | Replace <i>“17,800.00”</i> with <i>“7900”</i> |

3. RECORD ENTRY OF HAND AMENDMENT ON GEN 0.5-1

- 4. INSERT THE FOLLOWING ATTACHED PAGES. THESE ARE MARKED WITH ASTERISKS IN THE CHECKLIST OF PAGES GEN0.4-1 & 0.4-2**

| Pages to be removed | | Pages to be Inserted | |
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| Page Number | Date | Page Number | Date |
| GEN 0.4-1 & 0.4-2 | 16-Jun-20 | GEN 0.4-1 & 0.4-2 | 30-Dec-21 |
| GEN 1.1-1 | 01-Mar-18 | GEN 1.1-1 | 30-Dec-21 |
| GEN 1.6-1 & 1.6-2 | 23-Apr-20 | GEN 1.6-1 & 1.6-2 | 30-Dec-21 |
| GEN 1.7-1 & 1.7-2 | 23-Apr-20 | GEN 1.7-1 & 1.7-2 | 30-Dec-21 |
| GEN 1.7-3 | 23-Apr-20 | GEN 1.7-3 | 30-Dec-21 |
| GEN 2.1-1 & 2.1-2 | 01-Mar-18 | GEN 2.1-1 & 2.1-2 | 30-Dec-21 |
| ENR 1.1-1 & 1.1-2 | 01-Mar-18 | ENR 1.1-1 & 1.1-2 | 30-Dec-21 |
| ENR 1.1-3 | 01-Mar-18 | ENR 1.1-3 | 30-Dec-21 |
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| ENR 1.3-1 | 01-Mar-18 | ENR 1.3-1 | 30-Dec-21 |
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| ENR 1.13-1 | 01-Mar-18 | ENR 1.13 -1 | 30-Dec-21 |
| ENR 1.14-2 | 01-Mar-18 | ENR 1.14-2 | 30-Dec-21 |
| ENR 1.14-3 | 01-Mar-18 | ENR 1.14-3 | 30-Dec-21 |
| ENR 3.1-1 & 3.1-2 | 23-Apr-20 | ENR 3.1-1 & 3.1-2 | 30-Dec-21 |

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| ENR 3.3-1 | 23-Apr-20 | ENR 3.3-1 | 30-Dec-21 |
| ENR 4.1-1 | 01-Mar-18 | ENR 4.1-1 | 30-Dec-21 |
| AD 1.5-1 | 16-Jul-20 | AD 1.5-1 | 30-Dec-21 |
| AD 2.1-VQBT-3 & -4 | 01-Mar-18 | AD2.1-VQBT-3 & -4 | 30-Dec-21 |
| AD 2.1-VQGP-1 | 01-Mar-18 | AD 2.1-VQGP-1 | 30-Dec-21 |
| AD 2.1-VQGP-3 & -4 | 01-Mar-18 | AD 2.1-VQGP-3 & -4 | 30-Dec-21 |
| AD 2.1-VQPR-1 & -2 | 23-Apr-20 | AD 2.1-VQPR-1 & -2 | 30-Dec-21 |
| AD 2.1-VQPR-3 & -4 | 23-Apr-20 | AD 2.1-VQPR -3 & -4 | 30-Dec-21 |
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| AD 2.1-VQPR-7 | 23-Apr-20 | AD 2.1-VQPR-7 | 30-Dec-21 |

5. NEW OR REVISED INFORMATION IS INDICATED EITHER BY A HORIZONTAL ARROW OR A VERTICAL LINE.
6. RECORD ENTRY OF AMENDMENT ON GEN 0.2-1
7. THIS AMENDMENT INCORPORATES INFORMATION CONTAINED IN THE FOLLOWING AIP SUPPLEMENTS AND NOTAM WHICH ARE HEREBY SUPRESEDED:

NOTAM: NIL

GEN 0.4 CHECKLIST OF AIP PAGES

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GEN 0.4 CHECKLIST OF AIP PAGES

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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 Information and Communication
Paro: Bhutan
Tel: 975-8-271403
Fax: 975-8-271751
Email: doat@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 affair
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
- 5. Immigration**
Director
Department of Immigration
Ministry of Home & Cultural Affair
Thimphu: Bhutan
Tel: 975-2-327045/ PABX: 323127
Fax: 975-321078
- 6. Agricultural quarantine**
Executive Director
Bhutan Food & Agriculture Regulatory Authority,
Ministry of Agriculture,
Royal Government of Bhutan
Post Box No. 1071,
Thimphu : Bhutan
Tel : 975-2-327031/325790
Fax : 975-2-327032/335540
Email: -bafra@druknet.bt
- 7. Clearing Agent**
Bhutan Air Services
Paro Branch Office
Tel:- 975-8-272063
Fax:- 975-8-272053

Managing Director,
Bhutan Air Services
Head Office
Thimphu : Bhutan
Tel:- 975-2-333147
Fax- 975-2-326705
Email: bhutanair@yahoo.com/
bhutanair@hotmail.com
- 8. Royal Bhutan Helicopter Services Limited**
Chief Executive Officer
Post Box No. 1296
Paro International Airport
Paro : Bhutan
[Tel:-975-8-271369](tel:975-8-271369)
Fax:- 975-8-271397

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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://www.bcaa.gov.bt>
- 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 2018
- 1.5 BCAR-2, Rules of Air 2018
- 1.6 BCAR-3, Meteorological Service 2017
- 1.7 BCAR-4, Aeronautical Charts 2021
- 1.8 BCAR-5, Units of Measurement 2017
- 1.9 BCAR-11, Air Traffic Services 2017
- 1.10 BCAR-12, Search and Rescue 2017
- 1.11 BCAR-15, Aeronautical Information Services 2020
- 1.12 BCAR-19, Safety Management 2017
- 1.13 BCAR-10, Aeronautical Telecommunication (Volume- I, II, III, IV, V) 2017
- 1.14 BCAR- M, Continuing Airworthiness Requirements 2021
- 1.15 BCAR-Environmental Protection 2010
- 1.16 BCAR-Airworthiness of Aircraft 2020
- 1.17 BCAR-145, Approved Maintenance Organisations 2020
- 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 OPS ,1 Commercial Air Transport - Airplanes 2017
- 1.24 BCAR OPS 3, Commercial Air Transport - Helicopters 2017
- 1.25 BCAR OPS 18, Dangerous Goods Regulations 2017
- 1.26 BCAR-66 Aircraft Maintenance License 2020
- 2 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)
- 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 text of the Convention on International Civil Aviation

GEN 1.7 DIFFERENCES FROM ICAO STANDARDS RECOMMENDED PRACTICES AND PROCEDURES

NO DIFFERENCES EXIST FROM ICAO STANDARDS RECOMMENDED PRACTICES AND PROCEDURES CONTAINED IN THE UNDERMENTIONED DOCUMENTS EXCEPT WHERE SPECIALLY MENTIONED.

ANNEX 1 PERSONNEL LICENCING 11th Edition

- NIL Differences

ANNEX 2 RULES OF THE AIR 10th Edition

Right Hand Traffic rule

An aircraft which is flying in sight of the ground and is following a line feature shall keep such line feature on its left (Clause 8.9.8 under Section 8 of BANRs 2021)

3.2.3.1 By day or night an aircraft fitted with an anti –collision light shall display such light from immediately before engine start to immediately after engine shut down. (Clause 8.10.1 under Section 8 of BANRs 2021)

3.2.4 An aircraft shall not be flown in simulated instrument conditions unless no passengers are carried (Clause 8.11.1 (a) under Section 8 of BANRs 2021)

3.2.4 Within Bhutan an aircraft shall not carry out instrument approach practice when flying in Visual Meteorological Conditions (VMC) unless

- a) the appropriate Air Traffic Control Unit has previously been informed that the flight is to be made for the purpose of instrument approach practice, and
- b) if the flight is being carried out in simulated instrument conditions, a safety pilot and if required, a competent observer is carried (Clause 8.12 under section 8 of BANRs 2021)

4.3 *VFR flights are not permitted between Sunset and Sunrise* (Clause 8.26 under section 8 of BANRs 2021)

4.4 *VFR flights shall not be operated above FL 290* (Clause 8.27 under section 8 of BANRs 2021)

ANNEX 3 METEOROLOGY 20th Edition

- NIL Differences

ANNEX 4 AERONAUTICAL CHARTS 11th Edition

- NIL Differences

ANNEX 5 UNIT OF MEASUREMENT TO BE USED IN AIR AND GROUND OPERATIONS 5th Edition

- NIL Differences

ANNEX 6 OPERATION OF AIRCRAFT

Part I International Commercial Air Transport - Aeroplanes 11th Edition

- NIL Differences

Part II International General Aviation - Aeroplane 10th Edition

- NIL Differences

Part III International Operations - Helicopter 10th Edition

- NIL Differences

ANNEX 7 AIRCRAFT NATIONALITY AND REGISTRATION MARKS 6th Edition

- NIL Differences

-
- ANNEX 8 AIRWORTHINESS OF AIRCRAFT 11th edition**
- NIL Differences
- ANNEX 9 FACILITATION 13th edition**
- NIL Differences
- ANNEX 10 AERONAUTICAL TELECOMMUNICATIONS**
- Volume I Part I – Radio Navigation Aids 7th edition**
- NIL Differences
- Volume II Communication Procedures including those with PANS Status 7th edition**
- NIL Differences
- Volume III Communication System – 2nd Edition**
Part I – Digital Communication System
Part II – Voice Communication System
- Volume IV Surveillance and Collision Avoidance System 5th Edition**
- NIL Differences
- Volume V Aeronautical Radio Frequency Spectrum Utilization 3rd Edition**
- NIL Differences
- ANNEX 11 AIR TRAFFIC SERVICES, 15th edition**
- NIL Differences
- ANNEX 12 SEARCH AND RESCUE 8th edition**
TO BE DEVELOPED
- ANNEX 13 AIRCRAFT ACCIDENT INVESTIGATION 12th edition**
- NIL Differences
- ANNEX 14 AERODROMES.**
- Volume I Aerodrome Designs and Operations 8th Edition**
- NIL Differences
- Volume II Heliports 5th Edition**
- NIL Differences
- ANNEX 15 AERONAUTICAL INFORMATION SERVICE 16th edition**
- NIL Differences
- ANNEX 16 ENVIRONMENT PROTECTION**
- Volume I Aircraft noise 8th Edition**
- NIL Differences
- Volume II Aircraft Engine Emissions 4th Edition**
- NIL Differences
- Volume III Aeroplane CO₂ Emission 1st Edition**
- NIL Difference
- Volume IV Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) 1st Edition**
- NIL Difference
- ANNEX 17 SECURITY-SAFEGUARDING INTERNATIONAL CIVIL AVIATION AGAINST ACT OF UNLAWFUL INTERFERENCE 11th edition**
- NIL Differences
- ANNEX 18 THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR, 4th edition**
- NIL Differences

ANNEX 19 SAFETY MANAGEMENT SYSTEM 2nd Edition

- NIL Differences

ICAO Doc. 7030 Regional supplementary procedures

- NIL Differences

ICAO Doc. 4444 Procedures for air navigation services- rules of the air and air traffic service

- NIL Differences

ICAO Doc. 8400 ABC - ICAO Abbreviation and codes

- NIL Differences

ICAO Doc.8168 Procedure for Air Navigation Services – Aircraft Operation (PANS-OPS)

Volume I – Flight Procedures

- NIL Differences

Volume II – Construction of Visual and Instrument Flight Procedures

- NIL Differences

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GEN 2. TABLES AND CODES**GEN 2.1 MEASURING SYSTEM, AIRCRAFT MARKINGS, and HOLIDAYS.****1. Unit of measurement**

The table of units of measurement shown below will be used by aeronautical station within Bhutan for air and ground operations.

| <i>For measurement of</i> | <i>Unit used</i> |
|--|--|
| Distance used in navigation, position reporting, etc.- Generally in excess of 2 nautical miles. | Nautical Miles and tenths |
| Relatively short distance such as those relating to aerodromes (e.g. runway lengths) | Metres |
| Altitudes, elevations and heights | Feet |
| Horizontal speed including wind speed | Knots |
| Vertical Speed | Feet per minute |
| Wind direction for landing and taking takeoff | Degrees Magnetic |
| Wind direction except for landing and takeoff | Degrees True |
| Visibility including runway visual range | Kilometres or metres |
| Altimeter setting | Hactopascal |
| Temperature | Degrees Celsius |
| Weight | Metric tonnes /Kilograms/lbs |
| Time | Hours and minutes, beginning at midnight UTC |

2. Temporal reference System**2.1 General**

Co-ordinated Universal Time (UTC) and Gregorian calendar are used by air navigation services and in publications issued by the Aeronautical Information Service. Reporting of time is expressed to the nearest minutes, e.g. 10:25:35 is reported as 1026.

The Local time in Bhutan is UTC plus 6 hours and Daylight saving hours are not employed

3. Horizontal reference system**3.1 Name/designation of system**

All published geographical co-ordinates indicating latitude and longitude are expressed in World Geodetic System – 1984 (WGS-84) geodetic reference datum.

3.2 Identification and parameters of the projection

Universal Transverse Mercator (UTM) projection is used.

3.3 Identification of the ellipsoid used

Geodetic Reference system-1980 (GRS-80) ellipsoid is used.

3.4 Identification of the datum used

International Terrestrial Reference Frame 2008 (ITRF 2008) is used.

3.5 Area of application

The area of application for the published geographical co-ordinate coincides with the area of responsibility of the Aeronautical Information Service. i.e. the entire territory of Bhutanese airspace .

3.6 Use of asterisk

- 3.6.1 An asterisk (*) will be used to identify those published geographical coordinates which have been transformed into WGS-84 coordinates but whose accuracy of original field work does not meet the requirements in ICAO Annex 11, Chapter 2 and ICAO Annex 14, Volume I, Chapter 2. Specifications for determination and reporting of WGS-84 coordinates are given in ICAO Annex 11, Chapter 2 and ICAO Annex 14, Volume I, Chapter 2.

4. Vertical Reference system

4.1 Name/designation of system

The Vertical Reference system corresponds to mean sea level (MSL).

4.2 Geoid model

The geoid model used is the Earth Gravitational Model-1996 (EGM-96).

5. Aircraft nationality and registration marks

The nationality mark for aircraft registered in Bhutan is the letter A5. The nationality mark is followed by a hyphen and a registration mark consisting of 3 letters, e.g. A5- RGD

6. Public Holidays

| <i>Name/ Occasion</i> | <i>Date/Month</i> |
|---|---|
| 1. Birth Anniversary of 5 th King of Bhutan. | 21 st – 23 rd Feb |
| 2. Birth Anniversary of 3 rd King of Bhutan | 2 nd May |
| 3. Coronation day of 5 th King of Bhutan | 1 st November |
| 4. Birth Anniversary of 4 th King of Bhutan | 11 November |
| 5. National Day of Bhutan | 17 December |
| 7.*Lord Buddha's Parinirvana | - |
| 8.*Bhutanese Year (Losar) | - |
| 9.*Birth Anniversary of Guru Rimpoche | - |
| 10.*The 1st Sermon of Lord Buddha | - |
| 11.*Death Anniversary of Zhabdrung (Zhabdrung Kunchoe) | - |
| 12.*Blessed Rainy Day | - |
| 13.*Winter Solstice (Nyinlog) | - |
| 14.*Traditional Day of Offerings | - |
| 15.*Descending Day of Lord Buddha for Heaven | - |
| 16.*Dasain | - |
| 17.* Local Annual Festivals (Tshechu) | - |

**Note:- The actual Date/Month are not fixed but observed as per the Bhutanese calendar which is announced at the beginning of the each year*

ENR 1. GENERAL RULES AND PROCEDURES

ENR 1. 1 GENERAL RULES

The air traffic rules and procedure applicable to air traffic over Bhutan territory confirm to Annex 2 and Annex 11 to the Convention on International Civil Aviation and to those portion of the *Procedures for Air Navigation Service – Air Traffic Management (PANS-ATM)* to the aircraft and of the Regional Supplementary Procedures applicable to the South East Asia Region.

1.1 Application of Rules to Aircraft. These Rules shall apply to :

- a) All aircraft within the boundaries of Bhutan, and
- b) All aircraft registered in Bhutan wherever they may be to the extent that they do not conflict with the rules published by the State having jurisdiction over the territory over flown.

1.2 Compliance with the Rules of the air : The operation of an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with the general rules and, in addition, when in flight, either with:

- a) The visual flight rules; or
- b) The instrument flight rules.

2.1 Responsibility for compliance with the Rules of the Air

2.1.1 Responsibility of the pilot-in-command

The pilot-in-command of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the pilot-in-command may depart from these rules in circumstance that render such departure absolutely necessary in the interest of safety.

2.1.2 Pre-flight action

Before beginning a flight, the pilot-in-command of an aircraft shall become familiar with all available information appropriate to the intended operation. Pre-flight action for flights away from the vicinity of an aerodrome, and for all IFR flights, shall include a careful study of available current weather reports and forecasts, taking into consideration fuel requirement and an alternative course of action, if the flight cannot be completed as planned.

3. Authority of Pilot-in-command of an Aircraft.

The pilot-in-command of an aircraft shall have final authority as to the disposition of the aircraft while in command

4. Reporting hazardous condition.

The commander of an aircraft shall, on meeting with hazardous condition in the course of a flight, or as soon as possible thereafter, send to the appropriate air traffic control unit by quickest means available, information containing such particulars of hazardous conditions as may be pertinent to the safety of other aircraft.

5. Misuse of signal and markings.

5.1 A signal or marking to which a meaning is given by these Rules, or which is required by these Rules to be used in circumstances, or for a purpose therein specified, shall not be used except with that meaning, or for that purpose.

5.2 A person in an aircraft or on an aerodrome or at any place at which an aircraft is taking off or landing shall not make any signal which may be confused with a signal specified in these Rules.

6. Problematic use of Psychoactive Substance.

No person whose function is critical to the safety of aviation (safety-sensitive personnel) shall undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired. No such person shall engage in any kind of problematic use of substance.

7. Protection of Persons and Property

7.1 Negligent or reckless operation of aircraft

An aircraft shall not be operated in a negligent or reckless manner so as to endanger life or property of others.

- 7.2 *Minimum Heights.*
Except when necessary for take-off or landing, or except by permission from the Director General of BCAA, aircraft shall not be flown over the congested areas of cities, towns or settlements or over an open-air assembly of persons unless:
- a) At such a height as will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface; or
 - b) At a height of 1500ft above the highest fixed object within 2000ft of the aircraft, whichever is higher.
- 7.2.1 An aircraft shall not fly, except with the permission in writing of the HoA, BCAA and in accordance with any conditions therein specified:
- a) Over, or within 3000ft of, any assembly in the open air of persons assembled for the purpose of witnessing or participating in any organised event, and with the consent in writing of the organisers of the event; or
 - b) Below such height as would enable it to alight clear of the assembly in the event of failure of a power unit and if such an aircraft is towing a banner such height shall be calculated on the basis that the banner shall not be dropped within 3000ft of the assembly;
 - c) Closer than 500ft to any person, vessel, vehicle or structure;
 - d) Below 3000ft over the yellow or red roofs, heritage and archaeological sites.
- 7.2.2 A helicopter shall not fly, except with the permission in writing of the HoA, BCAA and in accordance with any conditions therein specified,:
- a) Below such height as would enable it to alight without danger to persons or property on the surface, in the event of failure of a power unit;
 - b) Over a congested area of a city, town or settlement below a height of 1500ft above the highest fixed object within 2000ft of the helicopter;
 - c) Over the yellow or roof, heritage and archaeological sites.
- 7.2.3 Nothing in this Rule shall prohibit an aircraft from flying in such a manner as is necessary for the purpose of saving life.
- 7.2.4 Nothing in this Rule shall prohibit an aircraft from flying in accordance with normal aviation practice, for the purpose of taking off from, landing at or practising approaches to landing at, or checking the navigational aids or procedures at an aerodrome owned or managed by DoAT or a licensed aerodrome in Bhutan.
- 7.2.5 Nothing in this Rule shall apply to any captive balloon or kite.
- 7.3 *Cruising Levels.*
The cruising levels at which a flight or portion of a flight is to be conducted shall be in terms of:
- a) Flight levels, for flights at or above the lowest usable flight level or, where applicable, above the transition altitude;
 - d) Altitudes, for flights below the lowest usable flight level or, where applicable, at or below the transition altitude.
- 7.4 *Dropping or Spraying.*
Nothing shall be dropped or sprayed from an aircraft in flight except under conditions prescribed by HoA, BCAA and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.
- 7.5 *Towing*
No aircraft or other object shall be towed by an aircraft, except in accordance with requirements prescribed by the HoA, BCAA and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.
- 7.6 *Parachute Descents.*
Parachute descents, other than emergency descents, shall not be made except under conditions prescribed by the HoA, BCAA and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.

- 7.7 *Aerobatic Flight.*
No aircraft shall be flown aerobatically except under conditions prescribed by the HoA, BCAA and as indicated by relevant information, advice, and/or clearance from the appropriate air traffic services unit.
- 7.8 *Formation Flights.*
Aircraft shall not be flown in formation except under conditions prescribed by the HoA, BCAA and by pre-arrangement among the pilots-in-command of the aircraft taking part in the flight.
- 7.9 *Unmanned Free Balloons.*
An unmanned free balloon shall be operated in such a manner as to minimise hazards to persons, property or other aircraft and in accordance with the conditions specified in Appendix A to Annex 2 to the Convention on International Civil Aviation.
- 7.10 *Prohibited and Restricted Areas.*
Aircraft shall not be flown in a prohibited area, or in a restricted area, the particulars of which have been duly published, except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.
- 8. Avoidance of Collisions.**
Notwithstanding that the flight is being made with air traffic control clearance it shall remain the duty of the commander for an aircraft to take all possible measures to ensure that this aircraft does not collide with any other aircraft.
- 8.1 *Proximity.*
An aircraft shall not be flown in such proximity to other aircraft as to create a collision hazard.
- 8.2 *Right of Way.*
The aircraft that has the right-of-way shall maintain its heading and speed but nothing in these rules shall relieve the pilot-in-command of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment, as will best avert collision.
- 8.3 An aircraft that is obliged by these Rules to keep out of the way of another shall avoid passing over, under or in front of the other, unless it passes well clear and takes into account the effect of aircraft wake turbulence.
- 8.4 *Approaching head-on.*
When two aircraft are approaching head-on or approximately so in air and there is danger of collision, each shall alter its heading to the right.
- 8.5 *Converging.*
When two aircraft are converging at approximately the same level, the aircraft that has the other on its right shall give way, except as follows:
- a) Power-driven heavier-than-air aircraft shall give way to airships, gliders and balloons;
 - b) Airships shall give way to gliders and balloons;
 - c) Gliders shall give way to balloons;
 - d) Power-driven aircraft shall give way to aircraft which are seen to be towing other aircraft or objects.
- 8.6.1 *Overtaking.*
An overtaking aircraft is an aircraft which approaches another from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter, i.e. is in such a position with reference to the other aircraft that at night it should be unable to see either of the aircraft's left (port) or right (starboard) navigation lights. An aircraft that is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear.

- 8.7 *Landing.*
8.7.1 An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land.
- 8.7.2 When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in in front of another which is in the final stages of an approach to land, or to overtake that aircraft. Nevertheless, power-driven heavier-than-air aircraft shall give way to gliders.
- 8.8 *Emergency Landing.*
An aircraft that is aware that another is compelled to land shall give way to that aircraft.
- 8.9 *Taking Off.*
An aircraft taxiing on the manoeuvring area of an aerodrome shall give way to aircraft taking off or about to take off.
- 8.10 *Right-hand Traffic Rule.*
An aircraft which is flying in sight of the ground and is following a line feature shall keep such line feature on its left.
- 8.11 *Surface Movement of Aircraft.*
8.11.1 In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome the following shall apply:
- a) When two aircraft are approaching head on, or approximately so, each shall stop or, where practicable, alter its course to the right so as to keep well clear;
 - b) When two aircraft are on a converging course, the one which has the other on its right shall give way;
 - c) An aircraft which is being overtaken by another aircraft shall have the right-of-way and the overtaking aircraft shall keep well clear of the other aircraft.
- 8.11.2 An aircraft taxiing on the manoeuvring area shall stop and hold at all taxi-holding positions unless otherwise authorised by the aerodrome control tower.
- 8.11.3 An aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars and may proceed further only when the lights are switched off.
- 9. Lights to be displayed by Aircraft**
- 9.1 By day or night an aircraft fitted with an anti-collision light shall display such a light from immediately before engine start to immediately after engine shut-down.
- 9.2 From sunset to sunrise, or during any other period which may be prescribed by the appropriate authority, all aircraft in flight shall display:
- a) Anti-collision lights intended to attract attention to the aircraft; and
 - b) Navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights;
 - c) Lights fitted for other purposes, such as landing lights and airframe floodlights, may be used in addition to the lights specified above to enhance aircraft conspicuity.
- 9.4 From sunrise to sunset, or during any other period prescribed by the appropriate authority:
- a) All aircraft moving on the movement area of an aerodrome shall display navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights;
 - b) Unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome shall display lights intended to indicate the extremities of their structure;
 - c) All aircraft operating on the movement area of an aerodrome shall display lights intended to attract attention to the aircraft; and

ENR 1.2 VISUAL FLIGHT RULES

1. VFR flights shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in Table 1.
2. Except when a clearance is obtained from an air traffic control unit, VFR flights shall not take off or land at an aerodrome within a control zone, or enter the aerodrome traffic zone or traffic pattern:
 - a) When the ceiling is less than 450 m (1500 ft); or
 - b) When the ground visibility is less than 5 km.
3. VFR flights are not permitted between sunset and sunrise. (Ref. AD2 for Local sunrise and sunset time restriction)
4. Except when necessary for take-off or landing, or except by permission from the appropriate authority, a VFR flight shall not be flown:
 - a) Over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 300 m (1 000 ft) above the highest obstacle within a radius of 600 m from the aircraft;
 - b) Elsewhere than as specified in a), at a height less than 150 m (500 ft) above the ground or water.
5. VFR flights shall comply with the provisions of 3.6 of ICAO Annex 2:
 - a) when operated within Classes B, C and D airspace
 - b) when forming part of aerodrome traffic at controlled aerodromes; or
 - c) when operated as special VFR flights
6. An aircraft operated in accordance with visual flight rules which wishes to change to compliance with the instrument flight rules shall:
 - a) if a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan, or
 - b) when so required by 3.3.2 of ICAO Annex 2, submit a flight plan to the Paro Air Traffic Services unit and obtain a clearance prior to departure.

Table 1

(See para. 1 above on page 1.2.1)

| Altitude band | Airspace Class | Flight visibility | Distance from cloud |
|---|-----------------|-------------------|---|
| At and above 3 050 m (10 000 ft) AMSL | A***B C D E F G | 8km | 1 500 m horizontally 300 m (1 000 ft) vertically |
| Below 3 050 m (10 000 ft) AMSL and above 900 m (3 000 ft) MSL, or above 300 m (1 000 ft) above terrain, whichever is the higher * | A***B C D E F G | 5 km | 1 500 m horizontally 300 m (1 000 ft) vertically |
| At and below 900 m (3 000 ft) AMSL, or 300 m (1 000 ft) above terrain, whichever is the higher | A***B C D E | 5 km | 1 500 m horizontally 300 m (1 000 ft) vertically |
| | F G | 5 km** | Clear of cloud and with the surface in sight |
| * When the height of the transition altitude is lower than 3 050 m (10 000 ft) AMSL, FL 100 should be used in lieu of 10000 ft. ** When so prescribed by the appropriate ATS authority: <ol style="list-style-type: none"> a) flight visibilities reduced to not less than 1 500 m may be permitted for flights operating: <ol style="list-style-type: none"> 1) At speeds that, in the prevailing visibility, will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or 2) In circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels. b) HELICOPTERS may be permitted to operate <i>in less than 1 500 m</i> flight visibility, if maneuvered at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision. ***The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace. | | | |

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ENR 1.3 INSTRUMENT FLIGHT RULES

1. Rules applicable to all IFR flights

1.1 *Aircraft equipment*

Aircraft shall be equipped with suitable instruments and with navigation equipment appropriate to the route to be flown.

1.2 *Minimum levels*

Except when necessary for take off or landing or except when specifically authorised by the appropriate authority an IFR flight shall be flown at a level that is not below the minimum flight altitude established by the STATE whose territory is overflown, or when no such minimum flight altitude has been established:

- a) over high terrain or in mountainous areas, at which is at least 2 000 ft (600 m) above the highest obstacle located within 5 nautical miles (8 Km) of estimated position of the aircraft;
- b) elsewhere, at a level which is at least 1,000 ft (300 m) above the highest obstacle located within 5 nautical miles (8 Km) of the estimated position of the aircraft.

1.3 *Change from IFR flight to VFR flight*

1.3.1 An aircraft electing to change the conduct of its flight from compliance with the instrument flight rules to compliance with the visual flight rules shall, if a flight plan was submitted, notify the appropriate air traffic services unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

1.3.2 When an aircraft operating under the instrument flight rules is flown in or encounters visual meteorological conditions, it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

2. Rules applicable to IFR flights outside controlled airspace

2.1 *Cruising levels*

IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in table below 1.4.1.

2.2 *Position reports*

An IFR flight operating outside controlled airspace and required by the appropriate ATS authority to:

- a) Submit a flight plan,
- b) Maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication as necessary, with the air traffic services unit providing information service.

Shall report position as specified in BANRs 2021 Section 8, clause 8.21 for controlled flight

2.3 *Communications*

An IFR flight operating outside controlled airspace but within or into areas, or along routes, designated by appropriate ATS authority and in accordance with BANRs section 8, para 8.13.2 c) or d), shall maintain air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the air traffic services unit providing flight information service.

| Magnetic Track | | | | | | | | | | |
|---------------------------------|---------|--|-------------|---------|--|---------------------------------|---------|--|-------------|---------|
| From 000 degrees to 179 degrees | | | | | | From 180 degrees to 359 degrees | | | | |
| IFR Flights | | | VFR Flights | | | IFR Flights | | | VFR Flights | |
| FL | Feet | | FL | Feet | | FL | Feet | | FL | Feet |
| N/A * | N/A * | | N/A * | N/A ** | | N/A * | N/A ** | | N/A * | N/A ** |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 11 000 | | | 11 500 | | | 12 000 | | | 12 500 |
| | 13 000 | | | 13 500 | | | 14 000 | | | 14 500 |
| | 15 000 | | | 15 500 | | | 16 000 | | | 16 500 |
| | 17 000 | | | 17 500 | | | 18 000 | | | - |
| 190 | N/A (3) | | 195 | N/A (3) | | 200 | N/A (3) | | 205 | N/A (3) |
| | | | | | | | | | | |
| 210 | | | 215 | | | 220 | | | 225 | |
| 230 | | | 235 | | | 240 | | | 245 | |
| 250 | | | 255 | | | 260 | | | 265 | |
| 270 | | | 275 | | | 280 | | | 285 | |
| 290 | | | N/A (4) | | | 310 | | | N/A (4) | |
| | | | | | | | | | | |
| 330 | | | | | | 350 | | | | |
| 370 | | | | | | 390 | | | | |
| 410 | | | | | | 430 | | | | |
| etc | | | | | | etc | | | | |
| etc | | | | | | etc | | | | |

Notes:

- Notes:
- * Transition Altitude in Bhutan is 18 000 ft. Flight levels not authorised below this height.
 - ** Terrain in Bhutan precludes allocation of cruising levels below 11 000 ft.
 - (3) Transition Altitude in Bhutan is 18 000 ft. Altitudes not authorised above this height.
 - (4) VFR flights in Bhutan not authorised above FL 290.

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
 - c) 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
- Except for repetitive flight plans, a flight plan shall be submitted at least two hours prior to departure, taking into account the requirements of ATS units in the airspace along the route to be flown for timely information, for obtaining ADC and FIC clearances. 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.
- 18 **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:

- a) Director, Department of Air Transport, Ministry of Information & Communications, Paro : Bhutan;
- b) ATC Reporting Office (ARO), Control Tower, Paro Intl. Airport, Paro, Bhutan. Tel: 975-8-272859/272306, Fax: 975-8-272307, AFS: VQPRZPZX

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 than 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 at the earliest possible moment after landing to the airport office of the arrival aerodrome by any flight for which a flight plan has been submitted except when the arrival has been acknowledged by the local ATS unit. After landing at an aerodrome which is not the destination aerodrome (diversionary landing), the local ATS unit shall be specifically informed accordingly. In the absence of a local ATS unit at the aerodrome of diversionary landing, the pilot is responsible for passing the arrival report to the destination aerodrome.

3.4.2 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) Time of arrival.

In the case of diversion, insert the “arrival aerodrome” between “destination aerodrome: and “time of arrival”

ENR 1.13 UNLAWFUL INTERFERENCE

1. General

- 1.1 The following procedures are intended for use by aircraft when unlawful interference occurs and the aircraft is unable to notify an ATS unit of this fact.

2. Procedures

- 2.1 Unless considerations aboard the aircraft dictate otherwise, the pilot-in-command should attempt to continue flying on the assigned track and at the assigned cruising level at least until notification to an ATS unit is possible.
- 2.2 When an aircraft is subjected to an act of unlawful interference must depart from its assigned track or its assigned cruising level without being able to make radiotelephony contact with ATS, the pilot-in-command should, whenever possible:
- a) Attempt to broadcast warnings on the VHF channel in use or the VHF emergency frequency and other appropriate channels, unless considerations aboard the aircraft dictate otherwise. Other equipment such as on-board transponders and data links should also be used when it is advantageous to do so and circumstances permit; and
 - b) if no applicable regional procedures have been established, proceed at a level which differs from cruising levels normally used for IFR flight by:
 - 1) 150 m (500 ft) in an area where a vertical separation minimum of 300 m (1 000 ft) is applied; or
 - 2) 300 m (1 000 ft) in an area where a vertical separation minimum of 600 m (2 000 ft) is applied.

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ENR 1.14 AIR TRAFFIC INCIDENT

1. Definition of air traffic incidents

1.1 “Air traffic incident” is used to mean a serious occurrence related to the provision of air traffic services, such as:

- a) Aircraft proximity (AIRPROX);
- b) Serious difficulty resulting in a hazard to aircraft caused, for example, by:
 - 1) Faulty procedures;
 - 2) Non-compliance with procedures; or
 - 3) Failure of ground facilities.

1.1.1 Definitions for aircraft proximity and AIRPROX.

Aircraft proximity. A situation in which, in the opinion of the pilot or the air traffic services personnel, the distance between aircraft, as well as their relative positions and speed, has been such that the safety of the aircraft involved may have been compromised. Aircraft proximity is classified as follows:

Risk of collision: The risk classification of aircraft proximity in which serious risk of collision has existed.

Safety not assured: The risk classification of aircraft proximity in which the safety of the aircraft may have been compromised.

No risk of collision: The risk classification of aircraft proximity in which no risk of collision has existed.

Risk not determined: The risk classification of aircraft proximity in which insufficient information was available to determine the risk involved, or inconclusive or conflicting evidence precluded such determination.

AIRPROX. The code word used in an air traffic incident report to designate aircraft proximity.

1.2 Air traffic incidents are designated and identified in reports as follows:

| <i>Type</i> | <i>Designation</i> |
|-----------------------|------------------------------|
| Air traffic incident | Incident |
| as a) above | AIRPROX (Aircraft proximity) |
| as b) 1) and 2) above | Procedure |
| as b) 3) above | Facility |

**2. Use of the Air Traffic Incident Report Form
(See model on pages ENR 1.14-3 to 1.14-6)**

The Air Traffic Incident Report Form is intended for use:

- a) By a pilot for filing a report on an air traffic incident after arrival or for confirming a report made initially by radio during flight.

Note: The form, if available on board, may also be of use in providing a pattern for making the initial report in flight.

- b) By an ATS unit for recording an air traffic incident report received by radio, telephone or teleprinter.

Note: The form may be used as the format for the text of a message to be transmitted over the AFS network.

3. Reporting procedures (including in-flight procedures)

3.1 The following are the procedures to be followed by a pilot who is or has been involved in an incident:

- a) During flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft so as to permit the facts to be ascertained immediately;
- b) As promptly as possible after landing, submit a completed Air Traffic Incident Report Form

- 1) For confirming a report of an incident made initially as in a) above, or for making the initial report on such an incident if it had not been possible to report it by radio;
- 2) For reporting an incident which did not require immediate notification at the time of occurrence.
- 3.2 An initial report made by radio should contain the following information:
 - a) Aircraft identification;
 - b) Type of incident, e.g. aircraft proximity;
 - c) The incident; 1.a) and b); 2.a), b), c), d), n); 3.a) ,b) ,c) ,i); 4.a), b);
 - d) Miscellaneous: 1.e).
- 3.3 The confirmatory report on an incident of major significance initially reported by radio or the initial report on any other incident should be submitted to the HoA, BCAA. The pilot should complete the Air Traffic Incident Report Form, supplementing the details of the initial reports as necessary.

4. Purpose of reporting and handling of the form

- 4.1 The purpose of the reporting of aircraft proximity incidents and their investigation is to promote the safety of aircraft. The degree of risk involved in an aircraft proximity incident should be determined in the incident investigation and classified as “risk of collision”, “safety not assured”, “no risk of collision” or “risk not determined”.
- 4.2 The purpose of the form is to provide investigatory authorities with as complete information on an air traffic incident as possible and to enable them to report back, with the least possible delay to the pilot or operator concerned, the result of the investigation of the incident and, if appropriate, the remedial action taken.

AIR TRAFFIC INCIDENT REPORT FORM

| | | |
|--|-----------------------------|--|
| <i>For use when submitting and receiving reports on air traffic incidents. In an initial reported by radio, bolded items should be included</i> | | |
| A- AIRCRAFT IDENTIFICATION | B - TYPE OF INCIDENT | |
| AIRPROX/PROCEDURE/FACILITY* | | |
| C- THE INCIDENT | | |
| 1. General | | |
| a) Date / Time of incident _____ UTC b) Position _____ | | |
| 2. Own aircraft | | |
| a) Heading and route _____ b) True air speed _____ measured in () kt () km/h _____ c) Level and altimeter setting _____ d) Aircraft climbing or descending () Level flight () Climbing () Descending e) Aircraft bank angle () Wings level () Slight bank () Moderate bank () Steep bank () Inverted () Unknown f) Aircraft direction of bank () Left () Right () Unknown g) Restrictions to visibility (select as many as required) () Singular () Windscreen pillar () Dirty windscreen () Other cockpit structure () None h) Use of aircraft lighting (select as many as required) () Navigation lights () Strobe lights () Cabin Lights () Red anti-collision lights () Landing / taxi lights () Logo (tail fin) lights () Other () None I) Traffic avoidance advice issued by ATS () Yes, based on radar () Yes, based on visual sighting () Yes, based on other inf. () No j) Traffic information issued () Yes, based on radar () Yes, based on visual sighting () Yes, based on other inf. k) Airborne collision avoidance system – ACAS () Not carried () Type () Traffic advisory issued () Resolution advisory issued () Traffic advisory or resolution not issued l) Radar identification () No radar available () Radar identification () No radar identification () No m) Other aircraft sighted () Yes () No () Wrong aircraft sighted n) Avoidance action taken () Yes () No o) Type of flight plan IFR/VFR/none* | | |
| 3. Other aircraft | | |
| a) Type and call sign / registration (if known) _____ b) if a) above not known, describe below () High wing () mid wing () Low wing () Rotorcraft () 1 engine () 2 engine () 3 engine () 4 engine () More than 4 engine Marking, colour or other available details _____ _____ _____ | | |

| | | |
|--|---|--|
| <p>c) Aircraft climbing or descending <input type="checkbox"/> Level flight <input type="checkbox"/> Unknown</p> <p>d) Aircraft bank angle <input type="checkbox"/> Wings level <input type="checkbox"/> Steep bank</p> <p>e) Aircraft direction of bank <input type="checkbox"/> Left</p> <p>f) lighting displayed <input type="checkbox"/> Navigation lights <input type="checkbox"/> Red anti-collision lights <input type="checkbox"/> Other</p> <p>g) Traffic avoidance advice issued by ATS <input type="checkbox"/> Yes, based on radar <input type="checkbox"/> No</p> <p>h) Traffic information issued <input type="checkbox"/> Yes, based on radar <input type="checkbox"/> No</p> <p>i) Avoidance action taken <input type="checkbox"/> Yes</p> | <p><input type="checkbox"/> Climbing</p> <p><input type="checkbox"/> Slight bank <input type="checkbox"/> Inverted</p> <p><input type="checkbox"/> Right</p> <p><input type="checkbox"/> Strobe lights <input type="checkbox"/> Landing / taxi lights <input type="checkbox"/> None</p> <p><input type="checkbox"/> Yes, based on visual sighting <input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Yes, based on visual sighting <input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> No</p> | <p><input type="checkbox"/> Descending</p> <p><input type="checkbox"/> Moderate bank <input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Cabin Lights <input type="checkbox"/> Logo (tail fin) lights <input type="checkbox"/> Unknown</p> <p><input type="checkbox"/> Yes, based on other inf.</p> <p><input type="checkbox"/> Yes, based on other inf.</p> <p><input type="checkbox"/> Unknown</p> |
| <p>4. Distance</p> <p>a) Closest horizontal distance _____</p> <p>b) Closest vertical distance _____</p> | | |
| <p>5. Flight weather condition</p> <p>a) IMC /VMC</p> <p>b) Above / below* / cloud / fog / haze or between layers</p> <p>c) Distance vertically from cloud _____m / ft* below _____m / ft* above</p> <p>d) In cloud/rain/snow/sleet/fog/haze*</p> <p>e) Flying into / out of* sun</p> <p>f) Flight visibility _____m/km*</p> | | |
| <p>6 Any other information considered important by the pilot-in-command</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> | | |
| <p>D - MISCELLANEOUS</p> <p>1. Information regarding reporting aircraft</p> <p>a) Aircraft registration _____</p> <p>b) Aircraft type _____</p> <p>c) Operator _____</p> <p>d) Aerodrome of departure _____</p> <p>e) Aerodrome of first landing _____ destination _____</p> <p>f) Reported by radio other means to _____ (name of ATS unit) at time _____ UTC</p> <p>g) Date / time / place of completion of form _____</p> | | |
| <p>2. Function, address and signature of person submitting report</p> <p>a) Function _____</p> <p>b) Address _____</p> <p>c) Signature _____</p> <p>d) Telephone number _____</p> | | |

ENR 3 ATS ROUTES

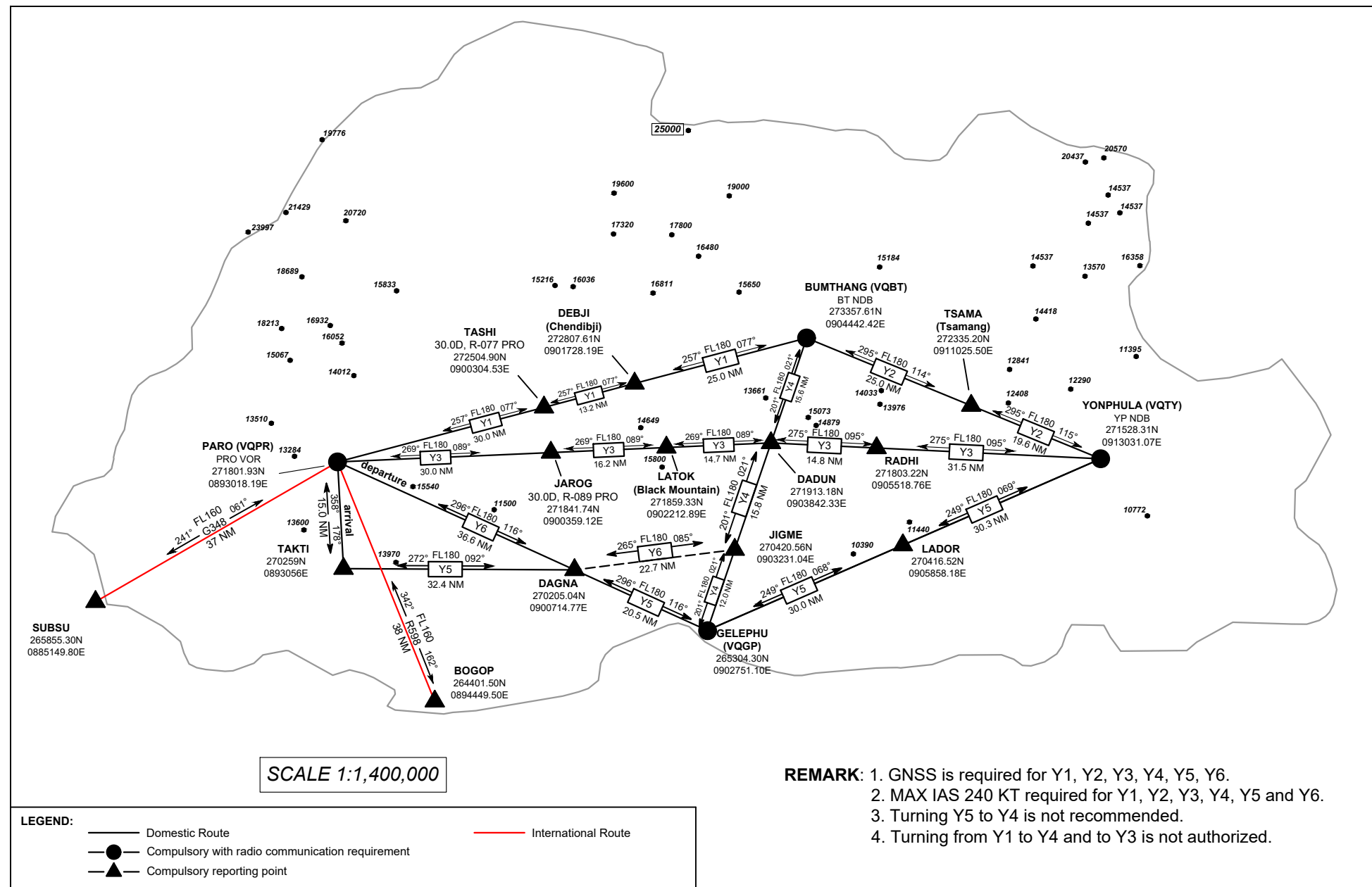
ENR 3.1 AREA NAVIGATION (RNAV) ROUTE

| Route designator (RNAV 5 ^{1 2}) Name of the significant points Co-ordinates (WGS-84) | Track MAG (GEO) VOR RDL DIST (COP) | Upper limits Lower limits Minimum flight altitude Airspace classification | Lateral limits KM | Direction of Cruising levels | | Remarks Controlling Unit Frequency |
|--|--|--|----------------------|------------------------------|------|--|
| | | | | odd | Even | |
| 1 | 2 | 3 | 4 | 5 | | 6 |
| G348 PARO VOR (PRO) 271801.93N 0893018.19E SUBSU 265855.30N 0885149.80E | <u>241</u> 061 37 NM | <u>FL 460</u> 16 000 Class F | - | ↑ | ↓ | For further information Refer AIP India |
| R598 PARO VOR (PRO) 271801.93N 0893018.19E BOGOP 264401.50N 0894449.50E | <u>162</u> 342 38 NM | <u>FL 460</u> 16 000 Class F | - | ↑ | ↓ | For further information Refer AIP India |
| Y1 ▲ PARO (VQPR) VOR (PRO) 271801.93N 0893018.19E ▲ TASHI 272504.90N 0900304.53E ▲ DEBJI (Chendibji) 272807.61N 0901728.19 E ▲ BUMTHANG (VQBT) NDB (BT) 273357.61N 0904442.42E | <u>077</u> 257 30.0 NM <u>077</u> 257 13.2 NM <u>077</u> 257 25.0 NM | <u>FL 290</u> 18 000 Class F | 12 | ↓ | ↑ | MAX IAS 240 KT. |
| Y2 ▲ BUMTHANG (VQBT) NDB (BT) 273357.61N 0904442.42E ▲ TSAMA (Tsamang) 272335.20 N 0911025.50 E ▲ YONPHULA (VQTY) NDB (YP) 271528.31N 0913031.07E | <u>114</u> 295 25.0 NM <u>115</u> 295 19.6 NM | <u>FL 290</u> 18 000 Class F | 12 | ↓ | ↑ | MAX IAS 240 KT. |
| Y3 ▲ PARO (VQPR) VOR (PRO) 271801.93N 0893018.19E ▲ JAROG 271841.74N 0900359.12E ▲ LATOK (Black Mountain) 271859.33N 0902212.89E ▲ DADUN 271913.18N 0903842.33E ▲ RADHI 271803.22N 0905518.76E ▲ YONPHULA (VQTY) NDB (YP) 271528.31N 0913031.0E | <u>089</u> 269 30.0 NM <u>089</u> 269 16.2 NM <u>089</u> 269 14.7 NM <u>095</u> 275 14.8 NM <u>095</u> 275 31.5 NM | <u>FL 290</u> 18 000 Class F | 12 | ↓ | ↑ | MAX IAS 240 KT. |

| Route designator (RNAV 5 ^{1 2}) Name of the significant points Co-ordinates (WGS-84) | Track MAG (GEO) VOR RDL DIST (COP) | Upper limits Lower limits Minimum flight altitude Airspace classification | Lateral limits KM | Direction of Cruising levels | | Remarks Controlling Unit Frequency |
|---|---|--|----------------------|------------------------------|--|--|
| | | | | odd | Even | |
| 1 | 2 | 3 | 4 | 5 | | 6 |
| Y4 ▲ BUMTHANG (VQBT) NDB (BT) 273357.61N 0904442.42E ▲ DADUN 271913.18N 0903842.33E ▲ JIGME 270420.56N 0903231.04E ▲ GELEPHU (VQGP) (ARP) 265304.30N 0902751.10E | <div><div>021</div><div>201</div><div>15.6 NM</div></div> <div><div>021</div><div>201</div><div>15.8 NM</div></div> <div><div>021</div><div>201</div><div>12.0 NM</div></div> | <div><div>FL 290</div><div>18 000</div><div>Class F</div></div> | 12 | <div>↓</div> <div>↑</div> | <div>1. MAXIAS 240 KT.</div> <div>2. Aircraft shall be operated within Bhutanese airspace due to close proximity to Indian airspace.</div> | |
| Y5 ▲ YONPHULA (VQTY) NDB (YP) 271528.31N 0913031.07E ▲ LADOR 270416.52N 0905858.18E ▲ GELEPHU (VQGP)(ARP) 265304.30N 0902751.10E ▲ DAGNA 270205.04N 0900714.77E ▲ TAKTI 270259N 0893056E ▲ PARO (VQPR) VOR (PRO) 271801.93N 0893018.19E | <div><div>069</div><div>249</div><div>30.3 NM</div></div> <div><div>068</div><div>249</div><div>30.0 NM</div></div> <div><div>116</div><div>296</div><div>20.5 NM</div></div> <div><div>092</div><div>272</div><div>32.4 NM</div></div> <div><div>178</div><div>358</div><div>15.0 NM</div></div> | <div><div>FL 290</div><div>18 000</div><div>Class F</div></div> | 12 | <div>↓</div> <div>↑</div> | <div>1. MAXIAS 240 KT.</div> <div>2. Aircraft shall be operated within Bhutanese airspace due to close proximity to Indian airspace</div> | |
| Y6 ▲ PARO (VQPR) VOR (PRO) 271801.93N 0893018.19E ▲ DAGNA 270205.04N 0900714.77E ▲ JIGME 270420.56N 0903231.04E | <div><div>116</div><div>296</div><div>36.6 NM</div></div> <div><div>085</div><div>265</div><div>22.7 NM</div></div> | <div><div>FL 290</div><div>18 000</div><div>Class F</div></div> | 12 | <div>↓</div> <div>↑</div> | MAX IAS 240 KT. | |
| <div>1. RNAV = area navigation specification.</div> <div>2. RNAV 5 represents aircraft and operating requirements, including a 9.26 KM (5 NM) lateral performance.</div> | | | | | | |

RNAV ROUTE CHART

Bhutan



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ENR 4. RADIO NAVIGATION AIDS/SYSTEMS

ENR 4.1 RADIO NAVIGATION AIDS - EN-ROUTE

| <i>Name of station (VOR/VAR)</i> | <i>ID</i> | <i>Frequency (CH)</i> | <i>Hour of operation</i> | <i>Coordinates</i> | <i>ELEV DME antenna</i> | <i>Remarks</i> |
|--------------------------------------|-----------|---------------------------|------------------------------|---------------------------|-----------------------------|----------------|
| DVOR/DME | PRO | 108.4 Mhz (CH 21X) | HS | 271801.93N 0893018.19E | 11 383 ft (3 469.72 M) | Coverage 38 NM |

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AD 1.5 STATUS OF CERTIFICATION OF AERODROME

| Sl. Nr. | Aerodrome Name | ICAO Location Indicator | Certificate Number | Validity of Certificate | | Remarks |
|---------|----------------------------------|-------------------------|---------------------|-------------------------|---------------------------------------|---------|
| | | | | From | to | |
| 1 | Paro International Airport, Paro | VQPR | BCAA/AGA/17-18/ 006 | 15/03/2018 | Until Revoked, Suspended or Cancelled | |

| | Name of Aerodrome | Exemption | Exemption granted up to |
|---|-----------------------------------|---|-------------------------|
| 1 | Paro International Airport (VQPR) | 1. RESA at RWY 33 does not comply to the requirement set forth in Subsection 14.3 under Section 14 of BANRs 2021 | 31/12/2025 |
| | | 2. The extend of RWY Strip toward east of airfield does not comply to the requirement set forth in Subsection 14.3 under Section 14 of BANRs 2021 | 31/12/2025 |
| | | 3. Provision of RESA at RWY15 does not comply to the requirement set forth in Bhutan Air Navigation Regulations (BANRs) -14.3 | 31/12/2020 |
| | | 4. Parallel taxiway strip slope does not comply to the requirement set forth in Bhutan Air Navigation Regulations (BANRs) -14.3 | 31/12/2020 |

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VQBT AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations RWY NR | TRUE & MA BRG | Dimensions of RWY (M) | Strength (PCN) and surface of RWY and SWY | THR coordinates | THR elevation and highest elevation of TDZ of precision APP RWY |
|---------------------------|--------------------------|--------------------------|---|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 14 | 142.78° | 1200 X 30 M | (14-16)F/C/Y/T | 273358.42N | 2 580 M AMSL |
| 32 | 322.78° | 1200 X 30 M | | 0904437.37E 273329.42N 0904502.08E | 2 571 M AMSL |
| Slope of RYW-SWY | SWY Dimensions (M) | CWY Dimensions (M) | Strip Dimensions (M) | OFZ | Remarks |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 0.83% | NIL | NIL | 1 200 M X 30 M | NIL | BGN RWY14 273359.24N 0904436.66E BGN RWY32 273328.26N 0904503.07E |

VQBT AD 2.13 DECLARED DISTANCES

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

VQBT AD 2.14 APPROACH RUNWAY LIGHTING

| RWY Designator | APCH LGT Type LEN INTST | THR LGT Colour WBAR | VASIS (MEHT) PAPI | TDZ, LGT LEN | RWY Centre Line LGT Length, spacing, Colour, INTST | RWY edge LGT LEN, spacing colour INTST | RWY END LGT colour INTST | RWY END LGT Colour WBAR | Remarks |
|-------------------|-------------------------------------|---------------------------|-------------------------|--------------------|---|---|--------------------------------------|-------------------------------------|---------|
| NIL | | | | | | | | | |

VQBT AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

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

VQBT AD 2.16 HELICOPTER LANDING AREA

| | | |
|---|--|-----------------|
| 1 | Coordinates TLOF of THR of FATO | TO BE DEVELOPED |
| 2 | TLOF and/or FATO elevation M/FT | TO BE DEVELOPED |
| 3 | TLOF and FATO are dimensions, surface, strength, marking | TO BE DEVELOPED |
| 4 | True and MAG BRG of FATO | TO BE DEVELOPED |
| 5 | Declared distance available | TO BE DEVELOPED |
| 6 | APP and FATO lighting | 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) 122.55 Mhz (STBY) 121.5 EMER. Freq. | HO | As per sked flight operations |
| RADIO | Bumthang | 8921 Khz 13342 Khz | HO | -do- |

VQBT AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid, CAT of ILS/MLS (for VOR/ILS/MLS, give VAR) | ID | Frequency | Hours of operation | Site of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|---|----|-----------|--------------------|--|---------------------------------------|---------|
| NDB | BT | 355 Khz | | 700 M East of RWY 273357.61N 0904442.42E | 2 586.254M | NIL |

VQBT 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

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

2. Taxiing to and from stands.

TO BE DEVELOPED

3. Parking for small aircraft (General aviation)

TO BE DEVELOPED

4. Parking area for helicopters

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

5. Apron Taxiing during winter conditions

Apron not available

6. Taxiing Limitations

Taxiway not available

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

Subject to permission from DGCA & tower

8 Helicopter traffic

AD 2.1 AERODROMES
VQGP AD 2.1 AERODROME LOCATION INDICATOR AND NAME
VQGP – Sarpang, Gelephu/Domestic**VQGP AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

| | | |
|---|--|---|
| 1 | ARP co-ordinates and site at AD | 265304.46N 0902750.98E Centre of RWY |
| 2 | Direction and distance from(city) | 2 Km NW from Gelephu town |
| 3 | Elevation/Reference temperature | 300.9M (987.204 ft) MSL/ 29°C |
| 4 | MAG VAR/Annual changes | 0.18° West 2010 |
| 5 | AD Administration, address, telephone, telefax, telex. AFS | Department of Air Transport, Gelephu Airport: Sarpang. Bhutan. Tel No.(975)-6- 535152/53135 Email: sphuntsho@doat.gov.bt AFTN: VQGPZTZX |
| 6 | Type of traffic permitted (IFR/VFR) | Only VFR is permitted |
| 7 | Remarks | AD PPR |

VQGP 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. |

VQGP AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|------------------------------------|---------------|
| 1 | Cargo-handling facilities | Not available |
| 2 | Fuel/oil types | Not Available |
| 3 | Fuelling facilities/capacity | Not Available |
| 4 | De-icing facilities | Not required |
| 5 | Hanger space for visiting aircraft | Not Available |
| 6 | Repair facilities for visiting A/C | Not Available |
| 7 | Remarks | NIL |

VQGP AD 2.5 PASSENGER FACILITIES

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

VQGP 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 aircraft | Not Available |
| 4 | Remarks | NIL |

VQGP AD 2.7 SEASONAL AVAILABILITY - CLEARING

| | | |
|---|----------------------------|-------------------|
| 1 | Type of clearing equipment | Manually Sweeping |
| 2 | Clearance priorities | 1. RWY 11/29 |
| 3 | Remarks | N/A |

VQGP 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 |

VQGP AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

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

VQGP AD 2.10 AERODROME OBSTACLES

| In approach/TKOF areas | | | In Circling area ad at AD | | Remarks |
|--------------------------|--------------|-------------|---------------------------|-------------|---------|
| Obstacle type | Elevation | | Obstacle type | Elevation | |
| RWY/Area affected | Markings/LGT | Coordinates | Markings/LGT | Coordinates | |
| a | b | c | a | b | |
| See AD2.2 –VQGP-1 | | | TO BE DEVELOPED | | |

VQGP AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|----|---|---|
| 1 | Associated MET Office | Gelephu 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 |
| 8 | Supplementary equipment available for providing information | NIL |
| 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. |

VQGP 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 |
| 11 | 118° | 1 500 X 30 M | (10-12)F/C/Y/T | 265315.93N 0902727.04E | 300.944 M AMSL |
| 29 | 297° | | | 265252.99N 0902814.90E | 2 66.434 M AMSL |
| Slope of RWY-SWY | SWY Dimensions (M) | CWY Dimensions (M) | Strip Dimensions (M) | OFZ | Remarks |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 2.29% | NIL | NIL | 1500 M X 40 M | NIL | |

VQGP AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (M) | TODA (M) | ASDA (M) | LDA (M) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 11 | 1 506 | 1 506 | 1 506 | 1 506 | |
| 29 | 1 506 | 1 506 | 1 506 | 1 506 | |

VQGP 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 | | | | | | | | | |

VQGP 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 : TDZ 11/29 |
| 3 | TWY edge and centre line lighting | NIL |
| 4 | Secondary power supply/switch-over time | NIL |
| 5 | Remarks | NIL |

VQGP AD 2.16 HELICOPTER LANDING AREA

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

VQGP 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 signLanguage(s) | GELEPHU Tower English |
| 5 | Transition altitude | |
| 6 | Remarks | Two ways communication |

VQGP AD 2.18 ATS COMMUNICATION FACILITIES

| Service Designation | Callsign | Frequency | Hours of operation | Remarks |
|---------------------|---------------|----------------------------------|--------------------|-------------------------------|
| TWR | Gelephu Tower | 122.950 Mhz 121.5 EMER. Freq. | HO | As per sked flight operations |
| RADIO | Gelephu | 8921 Khz 13342 Khz | HO | -do- |

VQGP 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 |
|---|----|-----------|--------------------|--|---------------------------------------|---------|
| NOT AVAILABLE | | | | | | |

1. Airport regulations

- 1.1 At Gelephu 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 Gelephu 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 DoAT & tower

8 Helicopter traffic

- 8.1 Request prior approval 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)

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, telex. AFS | Department of Air Transport, Paro: Bhutan. Tel No.(975)-8- 271403,271751 Email: kwangchuk@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 | Out side 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 | 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 aircraft | NIL |
| 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

| | | |
|---|--|--|
| 1 | <i>Apron surface and strength</i> | <p>1. Apron A Surface : Concrete, Strength: PCN 56/R/C/X/T Parking Bay No. 1 - 2</p> <p>2. Apron B Surface : Concrete, Strength: PCN 60/R/C/X/T Parking Bay No.3 - 5</p> <p>3. Apron C Surface : Concrete, Strength: PCN 56/R/C/X/T Parking Bay No. 6 - 8</p> |
| 2 | <i>Taxiway width, surface and strength</i> | <p>1. Taxiway: A Width:15 M Surface: Concrete Strength: PCN 56/R/C/X/T</p> <p>2. Taxiway B Width: 18 M Surface: Concrete Strength: PCN 60/R/C/X/T</p> <p>3. Taxiway N Width: 18 M Surface: Asphalt Strength: PCN 50/F/B/W/T</p> <p>4. Taxiway S Width: 18 M Surface: Asphalt Strength: PCN 50/F/B/W/T</p> <p>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%</p> |
| 3 | <i>ACL location and elevation</i> | Location: At Apron Elevation: 2 243.69M |
| 4 | <i>VOR checkpoints</i> | <p>Point A – Taxiway A Holding Points 272420.97N 0892520.84E DVOR 324.4° DME 7.7NM</p> <p>Point B – Threshold RWY15 272439.00N 0892511.00E DVOR 325.1° DME 8.2NM</p> |
| 5 | <i>INS check points</i> | - |
| 6 | <i>Remarks</i> | NIL |

VQPR AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

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

VQPR AD 2.10 AERODROME OBSTACLES

| <i>In Approach/TKOF Areas</i> | | | | | | |
|-------------------------------|--------------------------------|----------------------|----------------------|---------------------------|--------------------|----------------|
| <i>RWY/Area affected</i> | <i>Obstacle reference name</i> | <i>Obstacle type</i> | <i>altitude (ft)</i> | <i>Coordinates</i> | <i>Marking/LGT</i> | <i>Remarks</i> |
| 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 0892458.75E | 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 | 272333.16N 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 | |

| <i>In Circling Area at AD</i> | | | | | |
|--------------------------------|----------------------|----------------------------|---------------------|--------------------|----------------|
| <i>Obstacle reference name</i> | <i>Obstacle Type</i> | <i>Coordinates</i> | <i>Altitude (m)</i> | <i>Marking/LGT</i> | <i>Remarks</i> |
| 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 0892554.25E | 2251.653 | NIL | |
| PR9032 | Building | 272431.59N 0892451.24E | 2347.113 | NIL | |
| PR9033 | Building | 272439.85N 0892451.76E | 2321.109 | NIL | |
| PR9034 | Building | 272443.76N 0892501.56E | 2269.468 | NIL | |
| PR9035 | Power Pole | 272426.62N 0892450.89E | 2391.219 | NIL | |
| PR9036 | Power Pole | 272443.26N 0892447.37E | 2349.757 | NIL | |
| PR9040 | Tree | 272452.32N 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 0892552.72E | 2267.320 | NIL | |
| PR9064 | Building | 272330.46N 0892553.07E | 2239.915 | NIL | |
| PR9066 | Tree | 272323.57N 0892611.01E | 2337.339 | NIL | |
| PR9067 | Tree | 272316.28N 0892536.65E | 2339.160 | NIL | |
| PR9068 | Building | 272320.73N 0892559.31E | 2244.324 | NIL | |
| PR9069 | Building | 272325.48N 0892600.96E | 2256.580 | NIL | |
| PR9070 | Building | 272326.50N 0892603.41E | 2260.669 | NIL | |
| PR9072 | Power Pole | 272255.48N 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 0892718.71E | 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 coordinates | | 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 | 272439.27N 0892511.44E | | 2 243.759 M AMSL |
| 33 | 331.50° | 2265 X 30 M | | 272343.20N 0892547.14E | | 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 | 2265 | 2265 | 2265 | 2105 | NIL |
| 33 | 2265 | 2265 | 2265 | 2145 | |

VQPR AD 2.14 APPROACH RUNWAY LIGHTING

| 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 hours of operation | Not established |
| 2 | LDI location and LGT Anemometer location and LGT | LDI: 50 M NW and 700 M SW of ARP, unlighted 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, strength, marking | TO BE DEVELOPED |
| 4 | True and MAG BRG of FATO | TO BE DEVELOPED |
| 5 | Declared distance available | TO BE DEVELOPED |
| 6 | APP and FATO lightning | TO BE DEVELOPED |
| 7 | Remarks | |

VQPR AD 2.17 ATS AIRSPACE

| | | |
|---|--------------------------------|------------------------|
| 1 | Designation and lateral limits | Paro |
| 2 | Vertical limits | |
| 3 | Airspace classification | Class F |
| 4 | ATS unit call sign Language(s) | PARO Tower English |
| 5 | Transition altitude | 18 000 ft |
| 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. | HO | As per sked flight operations |
| RADIO | Paro Radio | 8921 Khz 13342 Khz | HO | -do- |

VQPR 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 |
|---|-----|-----------|--------------------|--|---------------------------------------|-----------------|
| DVOR/DME | PRO | 108.4 MHz | HO | 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 marshalls 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 Furthermore, other details relevant to the evaluation of the request shall be given as required.

9. Removal of disabled 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.