

**ROYAL GOVERNMENT OF BHUTAN**  
**Bhutan Civil Aviation Authority**  
**Paro, Bhutan**



**General Aviation**  
**Unmanned Aircraft System Operations**  
**01 May 2017**



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**BHUTAN CIVIL AVIATION AUTHORITY**  
Ministry of Information and Communications  
Royal Government of Bhutan  
Paro, Bhutan



### Foreword

Unmanned aircraft systems (UAS) are a new component of the aviation system, one which ICAO, States and the aerospace industry are working to understand, define and ultimately integrate. Hence, this UAS regulation is developed in line with Section 66(1) of the Civil Aviation Act of Bhutan, 2016 and applies to the operation of UAS within the airspace of Bhutan for the government purpose only.

This regulation and its applicability also based on Department of Law and Order, MoHCA letter no. MoHCA/BLO(3)-1/13014 dated 13/4/2017.

Therefore, in pursuance of the powers granted to Director General/Head of the Authority under the Civil Aviation Act of Bhutan, 2016, to make rules and regulations, the contents of the regulations shall come into effect from 1/5/2017, unless specified otherwise.

Inquiries about availability or content of the UAS regulations shall be directed to Director General, BCAA Headquarter.

  
Director General

Date: 01/05/2017

**BHUTAN AIR NAVIGATION REGULATIONS  
SECTION 4- GENERAL AVIATION  
Chapter 12-UAS operations**

**I. LIST OF AMENDMENTS**

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1 - 23	00	01 May 2017	01, 01 May 2017
1	01	22 September 2017	
7	01	22 September 2017	
9	01	22 September 2017	
10	01	22 September 2017	

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APPENDIX I	A I-1	Issue 01	01 May 2017
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**ABBREVIATIONS**

AGL	Above Ground Level
ATC	Air Traffic Controller
BCAA	Bhutan Civil Aviation Authority
BICMA	Bhutan Information, Communication & Media Authority
C2	Command and Control Link
MoIC	Ministry of Information & Communications
MoHCA	Ministry of Home and Culture Affairs
Drone	Formally known as Unmanned Aircraft System (UAS)
MTOW	Maximum Takeoff Weight
UAS	Unmanned Aircraft System
VLOS	Visual line of sight
RBP	Royal Bhutan Police
RBA	Royal Bhutan Army
DoAT	Department of Air Transport
RBHSL	Royal Bhutan Helicopter Services Limited
DRK	Druk Air Corporation Ltd
BTN	Bhutan Airlines
ICAO	International Civil Aviation Organization
UAOP	Unmanned Aircraft Operation Permit
VMC	Visual Meteorological Condition
PIA	Paro International Airport

**DEFINITIONS**

Bhutan Civil Aviation Authority	Is the Authority that has the responsibility as a regulatory body to set rules and regulations for safer airspace over the Kingdom of Bhutan.
Maximum Take-off Weight:	Is the total weight of the unmanned aircraft at the time of takeoff, including the weight of any payload such as camera, fuel and batteries
UAS operator	Is the person who has the responsibility throughout the duration of the UAS operation
Visual Line of Sight	Means unaided (corrective lenses and/or sunglasses exempted) visual contact with the unmanned aircraft sufficient to maintain operational control of the aircraft, know its location, and be able to scan the airspace to see and avoid traffic.
Beyond Visual Line of Sight	An operation in which the UA pilot or UA observer maintains not direct unaided visual contact with the Unmanned Aircraft System.
Aerial work:	An aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, filming and advertisement, etc.

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Command and Control Link	The C2 link connects the UA Station and the UA for the purpose of managing the flight. The link may be simplex or duplex. It may be in direct radio line-of-sight (RLOS) or beyond radio line-of-sight (BRLOS)
Controlled airspace	Airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification.
Commercial operation	The operation of Unmanned Aircraft for remuneration or hire
Detect and Avoid	The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action.
Local authority	Dzongkhags, Gewogs administration and other local communities as may be defined under the laws of the Kingdom of Bhutan.
Unmanned Aircraft (UA)	Means any aircraft operated without a pilot on board. It needs to be understood that this definition also includes machines normally not perceived by the general public as aircraft, such as flying toys, small tethered balloons or kites as mentioned in Annex 7 to the Chicago Convention.
Operator	A person, organization or enterprise engaged in or offering to engage in an Unmanned Aircraft operation
Safety management system (SMS)	A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.
Operations Specifications	The authorizations, conditions and limitations associated with the UAS operator certificate and subject to the conditions in the operations manual.
Unmanned Aircraft System (UAS)	An aircraft and its associated elements which are operated with no pilot on board.
Unmanned Aircraft Operation Permit (UAOP)	Aviation document required for flying UAS by operator/pilot in the Kingdom of Bhutan.
Visual meteorological condition (VMC)	Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, equal to or better than specified minima.
Heritage sites including archaeological sites	Includes Dzongs, Lhakhangs/Monastery, Palace/Nagtshang and any other structures specified by BCAA.
Hazard	Refers to “an object or condition that has the potential to induce an accident or incident.”

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**4.12.1 Scope**

- 4.12.1.1 This Regulation is developed in line with section 66(1) of Civil Aviation Act of Bhutan 2016 and shall apply to the Unmanned Aircraft System (UAS):
- a) Having maximum Take-off Weight (MTOW) up to 6 kg.
  - b) Flying outdoors.
  - c) Operating in Visual line of sight (VLOS) and Beyond Visual Line of Sight (BVLOS)
  - d) Operating during daytime (after sunrise and before sunset - as per Aeronautical Information Publication).
  - e) Having MTOW above 6kg and below 25kgs - under special circumstances.
  - f) Shall be permitted only for Government organizations.

**4.12.2 Applicability**

- 4.12.2.2 This regulation shall apply to operation of Unmanned Aircraft System within the airspace of Bhutan.

**4.12.3 Purpose of UAS**

- 4.12.3.1 For Filming, Photography, Surveying, Tele-medicine, Cabling, Agriculture and Monitoring.

**4.12.4 Oversight and Enforcement**

- 4.12.4.1 The BCAA shall have the overall responsibility of oversight and implementation of this regulation.
- 4.12.4.2 Royal Bhutan Police, Royal Bhutan Army and Dzongkhag Administrations concerned shall have the authority to monitor and ensure proper operation of UAS and impound the unauthorized UAS, if required.
- 4.12.4.3 Department of Forest and Park Services (DoFPS) shall have the authority to monitor and ensure proper UAS operation in protected areas i.e. parks and wildlife sanctuaries.
- 4.12.4.4 The operator shall immediately produce the UAS operation permit and other documents when asked for by the authorized officials.
- 4.12.4.5 Impounded UAS shall be handed over to the BCAA. The unmanned aircraft and any of its components shall be seized without warrant if the authorized person believes on reasonable grounds that the unmanned aircraft is operated illegally without the approval from BCAA.
- 4.12.4.6 Any lost and found UAS within Bhutan must be surrendered to BCAA.



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- 4.12.4.7 The UAS operator shall indemnify the BCAA against any judicial process, litigation, or any other action and liabilities due to technical failure and/or contravention of any rules and regulations and the laws of the Kingdom of Bhutan.
- 4.12.4.8 This regulation does not exempt any person/agency operating UAS from complying with the provisions of any other relevant acts, rules and regulations or laws of the Kingdom of Bhutan.
- 4.12.4.9 Import of UAS in the country shall need the prior approval of BCAA and must follow the import procedures as per Customs Act/rules and regulations/norms.

**4.12.5 UAS Registration**

- 4.12.5.1 Every person/agency lawfully entitled to the possession of UAS must register their UAS with BCAA.
- 4.12.5.2 The UAS is eligible for registration if it is owned by a person or a government entity of Bhutan.
- 4.12.5.3 The applicant must complete Appendix I of this Regulation and submit it to the Director General with a payment of appropriate registration fee prescribed under Clause 4.12.20 of this Regulation and appropriate liability insurance.
- 4.12.5.4 BCAA shall maintain record of registered UAS.

**4.12.6 Infringement of Personal Privacy and Properties of others**

- 4.12.6.1 Infringement of personal privacy or properties of others by a person operating UAS shall be strictly prohibited.

**4.12.7 Restricted Areas, Military Operation Areas and Danger Areas**

- 4.12.7.1 UAS operator shall not operate an unmanned aircraft, within a restricted area designated under Appendix V of this Regulation, unless the person has approval to do so from the authority responsible for the restricted areas.
- 4.12.7.2 The UAS operator shall not operate an unmanned aircraft, within a military operating area designated under Appendix V of this Regulation, unless the person has approval to do so from the authority responsible for the military operating area.

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4.12.7.3 The UAS operator shall not operate an unmanned aircraft within a danger area designated under Appendix V of this Regulation, unless the person has special approval of BCAA upon considering that the activity associated with the danger area will not affect the safety of the person, property or aircraft.

**4.12.8 Populated Areas**

4.12.8.1 The UAS operator shall not operate over heavily populated areas or over open air assemblies of people unless approved by the BCAA upon considering the following:

- a) Altitudes for safe operation;
- b) Consequences of uncontrolled landing;
- c) Obstructions;
- d) Proximity to airports/emergency landing fields;
- e) Local restrictions regarding UAS operations over heavily populated areas; and
- f) The emergency termination of UAS flight.

**4.12.9 Responsibilities of the UAS Operator**

4.12.9.1 The UAS operator shall be responsible for the safe conduct of all operations and shall establish and implement a safety management system (SMS), if the proposed operation is in excess of 3 months.

4.12.9.2 The UAS operator shall not operate in such a reckless or negligent manner that may endanger or likely endanger the life or property of any other person.

4.12.9.3 The UAS operator shall obtain permission from the owner(s) of the property on which a UAS intends to take-off/launch from and/or land/recover on.

4.12.9.4 The UAS operator shall comply with all procedures/requirements established by the BCAA regarding its operation.

4.12.9.5 The UAS operator, or a designated representative, shall have responsibility for operational control.

4.12.9.6 The UAS operator shall be also responsible for contracting services from service providers, as necessary, to carry out its operations.

4.12.9.7 The UAS operator shall ensure that all employees are familiar with the laws, regulations

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and procedures applicable to the performance of their duties.

4.12.9.8 The UAS operator shall ensure that a UAS is in good operating condition prior to take-off/launch.

4.12.9.9 The UAS operator shall operate only one UAS at any one time.

4.12.9.10 The UAS operator shall establish means for communications with the local ATC unit before and after the operations and/or during emergency situations.

**4.12.10      **Airspace****

4.12.10.1 The UAS operator shall operate UAS at a minimum lateral distance of 150ft (50m) from a building structure, vehicle, animal or person unless the building, structure, vehicle or animal is the subject of the aerial work and only persons inherent to the operation are present.

4.12.10.2 The UAS operator shall operate at a lateral distance of at least 600ft (200m) from heritage and archaeological sites.

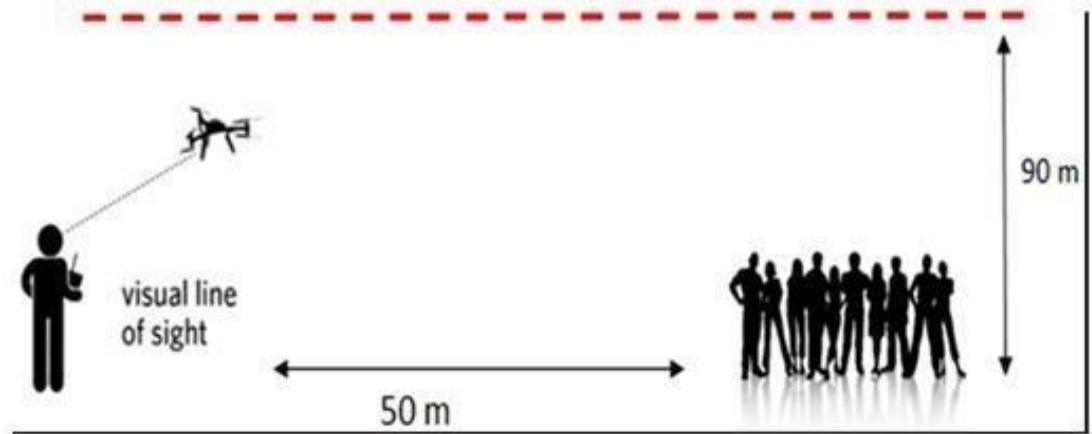
4.12.10.3 The UAS operator shall:

- a) Observe the surrounding airspace to ensure that no other aircrafts are operating; and
- b) Not operate the UAS at any height above 300 feet (90m) above ground level;
- c) Shall not operate the UAS within 5 km of a controlled aerodrome, unless it is operated in accordance with authorization from the ATC Section, DoAT.

4.12.10.4 The UAS operator approved for operating within controlled airspace under BVLOS condition shall ensure that the aeronautical information service provider is informed at least 24 hours prior to the operation, for the issue of a NOTAM, with the following information:

- a) Name, address, and telephone number of the operator;
- b) Location of the proposed operation;
- c) Date, time and duration of the proposed operation; and
- d) Maximum height above ground level proposed for the aircraft operation.

Fig.1



#### 4.12.11 Visual Line-Of-Sight (VLOS) Operations

4.12.11.1 The UAS operator shall maintain a continuous unobstructed view of the UA, allowing the operator to monitor the UA flight path in relation to other aircraft(s), person(s), obstacle(s) (e.g. Vehicles, vessels, structures, terrain, etc.), for the purpose of maintaining separation and avoiding collisions.

4.12.11.1 The direct visual contact shall be ensured without visual aids (e.g. telescope, binoculars, and electro-optical reproduced/enhanced vision) other than corrective lenses.

4.12.11.2 VLOS operations shall be conducted during daylight hours and in Visual Meteorological Conditions (VMC) to avoid conflicting traffic and other safety risks related to hazards that may be present in the operating environment.

#### 4.12.12 Beyond Visual Line-Of-Sight (BVLOS) Operations

4.12.12.1 The UAS operator shall avoid traffic and all other risks such as hazardous meteorological conditions, terrain, and other obstacles.

4.12.12.2 Prior to conducting a controlled BVLOS operation, UAS operator shall coordinate with the ATC unit(s) regarding:

- a) Any operational performance limitations or restrictions unique to the UA such as inability to perform standard rate turns; and

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- b) Direct telephone communication between the UA Station and the ATC unit(s) - for contingency use, unless otherwise approved by the ATC unit(s) involved.
- 4.12.12.3 Communication between the UA Station and the ATC unit(s) shall be required, and shall utilize standard ATC communications equipment and procedures, unless otherwise approved by the ATC unit(s) involved.
- 4.12.12.4 BVLOS operations shall meet following conditions:
- a) The BCAA shall approve the operation;
  - b) The UAS shall remain in VMC throughout the flight;
  - c) A DAA capability or other mitigation is used to assure the UAS remains well clear of all other traffic;
  - d) The area is void of other traffic; or
  - e) The operation occurs in specifically delimited or segregated airspace.

#### **4.12.13 Night Operations**

- 4.12.13.1 The UAS operator shall not operate the UAS at night.

#### **4.12.14 Right of Way**

- 4.12.14.1 The UAS operator shall be responsible for the safe operation and separation from other air space users.
- 4.12.14.2 The UAS operator shall maintain continuous unaided visual contact with the UAS sufficient to be able to maintain operational control of the UAS, know its location and be able to visually scan the airspace in which it is operating to decisively see and avoid other air traffic or objects.
- 4.12.14.3 The UAS operator shall ensure that the person operating gives way to, and remains clear of, all UAS and all manned aircraft(s) on the ground and in flight.
- 4.12.14.4 If at any time the operation is deemed to be a risk to other airspace users or people and property on the ground, the person operating the UAS shall cease the operation until the unsafe conditions are addressed/remedied.

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**4.12.15 Hazard and Risk Minimization**

4.12.15.1 The UAS operator shall take all practical steps to minimize hazards to persons, property and other aircraft(s).

**4.12.16 Dangerous Goods and Payloads**

4.12.16.1 The UAS operator shall not allow any object to be dropped in flight if such action creates a hazard to other persons or property.

4.12.16.2 Transportation of dangerous goods by UAS shall be strictly prohibited.

**4.12.17 Command and Control Link (C2)**

4.12.17.1 Following issuance of the Permit by BCAA, the UAS operator shall obtain clearance for the radio frequency spectrum from BICMA for the C2 link.

4.12.17.2 The UAS operator shall ensure that only the radio frequency spectrum approved by BICMA for the C2 link issued.

4.12.17.3 The UAS operator shall not conduct a take-off/launch of a UA unless the risk involved with loss of C2 link circumstances has been assessed and a proper contingency procedure has been established for the recovery of the UAS in case of a lost C2 link situation.

**4.12.18 Competency of the Person Operating UAS**

4.12.18.1 The UAS operator shall be no less than 18 years of age.

4.12.18.2 The UAS operator shall submit license or documentary evidence indicating that the operator has adequate experience or demonstrate the ability to:

- a) Identify and manage hazards and threats;
- b) Operate the UA within its limitations or those limitations imposed by the regulations;
- c) Complete all maneuvers with smoothness and accuracy;
- d) Exercise good judgment and airmanship;
- e) Apply aeronautical knowledge; and
- f) Maintain control of the UAS at all times in a manner such that the successful outcome of a procedure or maneuver is assured.

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- 4.12.18.3 The UAS operator shall:
- a) Ensure that before each flight, he/she is aware of the airspace designation under Appendix V of this Regulation, and any other applicable airspace restrictions in the area of intended operation; or
  - b) Conduct the operation under the direct supervision of a person who is aware of the airspace designation and any other applicable airspace restrictions in the area of the intended operations.

**4.12.19 Procedure for Registration of UAS and Issuance of UA Operation Permit**

- 4.12.19.1 An application for registration of UAS in Bhutan shall be made by the person, or by authorized representative of the person, who is lawfully entitled to the possession of the unmanned aircraft.
- 4.12.19.2 To register the UAS the applicant shall complete the Appendix I of this Regulation and submit it to the Director General with a payment of appropriate Registration fee prescribed under Clause 4.12.20 of this Regulation.
- 4.12.19.3 The operator having registered its UAS and intending to perform civil operation in Bhutanese airspace shall complete Appendix II of this Regulation and submit his/her application to the Director General with a payment of appropriate UA Operation Permit fee prescribed under Clause 4.12.20 of this Regulation for Unmanned Aircraft Operation Permit (UAOP). This application shall be accompanied by the clearances from following agencies, or as recommended by BCAA:
- a) Clearance from MoHCA and other relevant agencies if the UAS operation area involves heritage and archaeological sites;
  - b) Clearance from DoFPS if the UAS operation area involves protected areas of nature and wildlife sanctuaries;
  - c) Security Clearance from RBP if the UAS operation area involves security-sensitive locations;
  - d) Security Clearance from RBA if the UAS operation area falls within “No fly Zone’ of RBA; and
  - e) Other clearances as recommended by BCAA

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- 4.12.19.4 Submit technical specifications of the UAS to BCAA.
- 4.12.19.5 Submit documentary evidence and/or practical demonstration indicating that the operator has adequate experience and competence.
- 4.12.19.6 Submit liability insurance details covering risks of public liability for UAS, which exceeds 6 kilograms.
- 4.12.19.7 Shall sign the undertaking (Appendix III of this Regulation), bearing the accountability for any liabilities occurring during the operation of UAS.
- 4.12.19.8 The applicant shall make a payment of Nu. 500/- as an Application review fee prescribed under Clause 4.12.20 of this Regulation.
- 4.12.19.9 The applicant shall make a payment of Nu. 250/- for the Permit replacement fee, if it's for the Replacement as prescribed under Clause 4.12.20 of this Regulation.
- 4.12.19.10 The Application for Unmanned Aircraft Operations Permit (UAOP) shall be submitted to the Director General at least 30 days prior to the actual operation.
- 4.12.19.11 The issuance of the Unmanned Aircraft Operation Permit (UAOP) by BCAA shall be subject to fulfillment of all the requirements of this regulation by the applicant.
- 4.12.19.12 The BCAA shall not process the application until full set of required documents and the applicable fees and charges are received from the operator.
- 4.12.19.13 The BCAA shall withdraw the application after 60 days of its initial submission if the operator fails to comply with provision 4.12.19.11 and 4.12.19.12. Fees and charges shall not be refundable.

#### **4.12.20 Fees and Charges**

- 4.12.20.1 UAS Registration fee: Nu. 1000.
- 4.12.20.2 UA Operation Permit fees:
  - a) One week to three weeks: Nu. 2000;
  - b) One to two months: Nu. 4000;
  - c) More than two months and less than six months: Nu. 6000;
- 4.12.20.3 Permit replacement fee: Nu. 250; and
- 4.12.20.4 Application review fee: Nu. 500.



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**4.12.21 Offence and Penalty**

- 4.12.21.1 Any person operating Unmanned Aircraft without the prior approval of BCAA shall be liable for a fine of Nu. 20,000 to Nu. 50,000 as determined by BCAA and seizure of UAS. In case of Tourist, UAS shall be seized while the Local Tour operator shall be liable for a fine of Nu 20,000 to Nu. 50,000 for failure to inform the Tourist of restrictions.
- 4.12.21.2 The operator infringing personal privacy or properties of others shall be liable for a fine of Nu. 10,000 to Nu. 20,000.
- 4.12.21.3 The person/designated representative operating in unauthorized/restricted areas shall be liable for a fine of Nu. 50,000.
- 4.12.21.4 The Unmanned Aircraft when in flight drop or discharge any item or substance (whether gaseous, liquid or solid), the person operating the Aircraft shall be guilty of an offence and shall be liable on conviction to a fine not exceeding Nu. 50,000 depending on the severity of the case.
- 4.12.21.5 Contravention of any other provisions of this regulation, or any rules, directives or orders issued pursuant to this regulation shall be punishable with imprisonment up to one year or a fine equal to Nu. 50,000.
- 4.12.21.6 Notwithstanding 4.12.21 above, seized UAS shall be returned to Foreigners, on a case by case basis, when advised by the Government.

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**Appendix I – Registration Form**

**Application for Registration of Unmanned Aircraft System**

**Instructions for completing this Application Form**

<p>1. Entries should be typed or printed in BLOCK LETTERS. Full model and component designations are required (refer to the manufacture’s data plates).</p> <p>2. Complete appropriate sections of this application form as follows:</p> <p>a. Registration and Grant of permit: <input type="checkbox"/></p> <p>b. Change of possession of Unmanned Aircraft System: <input type="checkbox"/></p> <p>3. The completed application should be forwarded to Director General of Bhutan Civil Aviation Authority, Paro, Bhutan</p>
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**Section A: Unmanned Aircraft Particulars**

UAS Name:			
Model/Type:			
Serial No:		Manufacturer:	

**Section B: History of Unmanned Aircraft**

The Unmanned Aircraft is: New <input type="checkbox"/>	Used <input type="checkbox"/>
Previously registered in Bhutan: Yes/No	Existing registration mark.....
State of Registry.....	
Note: The BCAA requires notification of de-registration from the foreign state of registry before entering the aircraft on the Bhutan Register.	

**Section C: Registration Mark Allocation**

Registration mark for the UAS will be a Sequential Number (ex. UA-001) as may be decided by the BCAA.
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**Section D: Notification of change of a government agency having right of possession of Unmanned aircraft**

This section is to be completed by the Agency losing right of possession of the Unmanned aircraft	
Unmanned Aircraft registration:	
Name of the agency losing possession:	
Address of the agency losing possession:	
Date of change:	The registration and transfer fee are enclosed Date..... Name (Print):
Signature:	

**Section E: Particulars of the Organization of a UAS holder and details of Legal Ownership**

(a) Full Name of the UAS holder:

.....  
.....

(b) UAS holder's postal service address:

.....  
.....

(c) Telephone Number ..... Facsimile .....

(d) Name of Legal Owner of Unmanned aircraft.....

.....  
.....

(e) Legal Owner's postal service address:

.....  
.....

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**Section F: Applicant's Declaration**

I hereby declare that to the best of my knowledge and belief the particulars entered on this application are accurate in every respect and show compliance with the UAS regulations and the associated requirements for the time being in force. The registration fee prescribed under this regulation is enclosed herewith.

Signature(s):.....Date:.....

Name:.....Title/Position:.....

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**Appendix II – Application Form**

**Application for Operation of an Unmanned Aircraft (UA) in the Airspace of Bhutan**

**Please complete in BLOCK LETTERS using black or dark blue ink**

**FALSE REPRESENTATION STATEMENT**

It is an offence to make, with intent to deceive, any false representation for the purpose of procuring the grant, issue, renewal or variation of any certificate, license, approval, permission or other documents for which shall be punishable with misdemeanor.

**1. TYPE OF APPLICATION: (tick applicable box)**

Issue of UA Operation Permit:

Previous Permit (if any) Reference:.....

Validity:.....

**2. APPLICABLE CLEARANCE CERTIFICATE (attach depending upon the proposed area of operation): (tick applicable box)**

Security clearance from RBA

Clearance from MoHCA

Clearance from BICMA

Recommendation from TCB

Security clearance from RBP

Clearance from DoFPS

Other agencies (mention agency name):.....

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**3. APPLICANT DETAILS (The Applicant is an Organization responsible for payment of applicable fees and charges to the BCAA)**

Name of the Organization:.....

Address.....

Postcode.....

Telephone:.....Facsimile.....

E-mail:.....

Trading Name: (if applicable).....

Trading Address (primary site): .....

Country:.....Postcode: .....

Website address:

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**4. ADDRESS FOR CORRESPONDENCE (if different from above)**

**Authorized Representative**

This application is to be signed by either a head of agency or authorized person.

Title:.....Forename:.....Surname.....

Position in Company.....

Telephone No:.....E-mail:.....

If you are not a head of agency and have been authorized to sign the application form on behalf of the agency, proof of that authority must be provided with the completed application form.

Postal Address (if different from above).....

Postcode.....

**5. UAS PILOT(S)**

UAS Pilot's Name:.....

C.I.D./Passport No.....Mobile No.....

UAS Pilot's license/certificate/flying experience.....

**6. Technical specifications of the UAS**

**AIRCRAFT**

UAS Name/Type/Manufacturer.....

Maximum Take-off Mass (Battery & Propellers Included).....

Diagonal Size (Propellers Excluded).....

Max Ascent Speed.....

Max Descent Speed.....

Max Speed.....

Max Service Ceiling Above Sea Level.....

Max Flight Time.....

Operating Temperature Range.....

Satellite Positioning Systems.....

**REMOTE CONTROLLER**

Operating Frequency.....

Max Transmission Distance.....

Operating Temperature Range.....

Battery.....

Video Output Port.....

Mobile Device Holder.....



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<b>7. FLYING ACTIVITY DETAILS</b>	
Area(s) of Activity.....	
Date of Operation.....	
Purpose of the Operation.....	
Range: VLOS within 90m (vertically) and 50m (horizontally) from UAS Pilot	<input type="checkbox"/>
Type of operation: General Commercial Imagery	<input type="checkbox"/>
Research and Development	<input type="checkbox"/>
Security/Emergency Services	<input type="checkbox"/>
Other (please specify).....	

<b>8. DECLARATION</b>	
<p><b>I, ....., applicant, agree that the UA will be operated in accordance with the UAS Operations 2017 and as amended.</b></p> <p><b>I hereby state on solemn affirmation that the contents of this application are true and correct to the best of my knowledge and belief, and so I have signed hereunder.</b></p> <p><b>I hereby certify that the pilot has an adequate experience and competence.</b></p>	
<p><b>Signature: .....Date: .....</b></p>	
<p>I have enclosed following supporting documentations:</p>	
<p>Documentary evidence of UA Pilot's experience and competence (i.e. one of the following):</p> <p>UAS Pilot license or certificate or an assurance of previous flying experience</p>	<input type="checkbox"/>
<p>Copy of Insurance Details (where applicable)</p>	<input type="checkbox"/>
<p>Applicable clearance certificate. (where applicable)</p>	<input type="checkbox"/>

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**9. FEES AND CHARGES**

The fees and charges are to be paid as per UAS Operations Regulation 2017 (Clause 4.12.20 Fees and charges).

***NB: This application will not be processed until the applicable fees and charges are received.***

Total fees and charges payable for the permit: Nu:.....

**IMPORTANT NOTES:**

**Additional Charges:** Where the cost of the BCAA investigations exceeds the application charge payable, the applicant shall pay additional charges to recover those excess costs incurred by the BCAA.

**Overseas Visits:** If a Member or employee of the BCAA is required to travel overseas in respect of this application, all expenses incurred in pursuance of this application by virtue of travelling overseas will be payable by the applicant on demand.

**Withdrawal/Cancellation of Application:** In the event that this application is withdrawn or cancelled by the applicant/BCAA, the fees and charges shall not be refunded.

**10. SUBMISSION INSTRUCTIONS**

Return the completed form, associated documents and payment, to arrive at least 30 days before any operations are due to commence, to:

Bhutan Civil Aviation Authority  
Ministry of Information & Communications  
Paro : Bhutan  
Post Box No. 1299  
Tel: (+975)-8-271347  
Fax: (+975)-8-271909  
[www.bcaa.gov.bt](http://www.bcaa.gov.bt)

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**Appendix III**

**UNDERTAKING**

I, (Name of the Head of the Agency) .....hereby accept to be cautious to carry out the UAS activities for the (purpose).....for a duration of.....

I hereby undertake to:

1. Operate the UAS as per the operation specification and UA Operation Permit within the approved time.
2. The unmanned aircraft shall be operated in VLOS within the radio frequency spectrum provided by BICMA.
3. Shall not carry any hazardous materials during the operation of the UAS.
4. Shall abide by this Regulation and other laws of the kingdom of Bhutan.
5. Shall indemnify the authority against any judicial process, litigation, or any other action and liabilities due to any technical failure and contraventions of any rules and regulations and the laws of the Kingdom of Bhutan.

I/agency hereby do confirm that I have been briefed on all rules governing the operation of UAS and I have understood them, including the implications and consequences of deviating from them. In particular, I understand that in the event that I do not adhere to any one of the above stated conditions, I shall be liable for legal action by the BCAA.

sd

(Affix Legal Stamp)

Name & the Position Title:.....

Date:.....

Office address.....



**Caution:** This is an important legal document and therefore, should be executed after clearly understanding all the responsibilities, liabilities and implications.

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**Appendix IV – Permit Form**

<b>UNMANNED AIRCRAFT OPERATION PERMIT(UAOP)</b>		
	<p><b>KINGDOM OF BHUTAN</b></p> <hr/> <p><b>BHUTAN CIVIL AVIATION AUTHORITY</b></p>	
<p><b>UAOP Number</b> .....</p> <p><b>Validity</b> .....</p>	<p><b>ADDRESS OF THE UAS OPERATOR:</b></p> <p>Telephone.....</p> <p>Fax.....</p> <p>E-mail.....</p>	<p>Contact details, at which operational personnel/management can be contacted without undue delay:</p> <p>.....</p>
<p>In pursuant of power vested in me under Section 4.12.19 of Unmanned Aircraft System Regulation 2017,.....is hereby authorized to perform UAS Operation as specified in the attached Operations Specifications in conformity with the applicable requirements of the of UAS Regulations 2017. The nature and the scope of the UAS Operations together with the terms and the conditions governing the exercise of such rights and privileges shall be as specified in the UAOP issued to aforementioned Organization. This permit is not transferable and remains in effect unless varied, suspended or revoked.</p>		
<p>Issued at: Paro Bhutan</p> <p><b>Date of issue</b>.....</p>	<p>Name and signature: .....</p> <p>Title: <b>DIRECTOR GENERAL</b></p>	

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**ROYAL GOVERNMENT OF BHUTAN  
BHUTAN CIVIL AVIATION AUTHORITY**  
Telephone: + 975-08-271347 Fax:+975-08-271909 E-mail:[bcaa@bcaa.gov.bt](mailto:bcaa@bcaa.gov.bt)

**OPERATIONS SPECIFICATIONS**

UAOP No.....

Accountable Manager (Head of the Agency/Representative).....

Competent UA Pilot(s).....C.I.D. No.....

Aircraft Type.....

Maximum take-off weight.....

Type/purpose of operation: General Commercial  Research and Development   
Security/Emergency Services  Others

Area(s) of operation.....

Special limitations:

SPECIAL AUTHORIZATIONS	YES	NO	SPECIFIC APPROVALS	REMARKS
Visual Line of Sight(VLOS)				
Beyond visual line of sight				
Visual Meteorological conditions (VMC)				
Extended visual line of sight				
Transportation/delivery of goods				

Name and signature: .....  
Title: **DIRECTOR GENERAL**

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**Appendix V – Prohibited Areas**

**1. Restricted Area**

- a. Controlled airspace (all flight paths)
- b. Heritage sites including archeological sites (includes palace)
- c. Near the aerodrome areas

**2. Military areas (no-fly zone submitted by RBA)**

- a. All RBA wings
- b. All RBA independent coys
- c. All RBA border outpost/outposts
- d. Amn Depot, Taba
- e. All IMTRAT locations
- f. All RBG locations

**3. Danger areas**

- a. Forest fire
- b. Landslides
- c. Power Stations

**4. Populated areas**

- a. Schools
- b. Hospitals
- c. Towns
- d. Market areas