

FREQUENTLY ASKED QUESTIONS REGARDING OPERATION OF RPAS

Glossary

AAI	Airports Authority of India
ADS-B	Automatic Dependent Surveillance - Broadcast
AGL	Above Ground Level
ATC	Air Traffic Control
BCAS	Bureau of Civil Aviation Security
CAR	Civil Aviation Requirements
DGCA	Directorate General of Civil Aviation
DGFT	Directorate General of Foreign Trade
FTO	Flying Training Organisation
GPS	Global Positioning System
IAF	Indian Air Force
ICAO	International Civil Aviation Organization
IPC	Indian Penal Code
MHA	Ministry of Home Affairs
MoCA	Ministry of Civil Aviation
MoD	Ministry of Defence
MTOW	Maximum Take-off Weight
NPNT	No Permission-No Take off
PPL	Private Pilot License
RF-ID	Radio Frequency Identification
RPA	Remotely Piloted Aircraft
RPAS	Remotely Piloted Aircraft System(s)
RPS	Remote Pilot Station(s)
SIM	Subscriber Identity Module
UA	Unmanned Aircraft
UAOP	Unmanned Aircraft Operator Permit
UAS	Unmanned Aircraft System(s)
UIN	Unique Identification Number
VFR	Visual Flight Rules
VLOS	Visual Line-Of-Sight
VMC	Visual Meteorological Conditions

1. What is a drone and UAS?

Drone is a layman terminology for Unmanned Aircraft (UA). There are three subsets of Unmanned Aircraft, a) Remotely Piloted Aircraft, b) Autonomous Aircraft and c) Model Aircraft.

An aircraft and its associated elements, which are operated with no pilot on board is called as Unmanned Aircraft System (UAS).

2. What is Remotely Piloted Aircraft System (RPAS) and its categories?

RPAS is one subset of UAS. A remotely piloted aircraft (RPA), its associated remote pilot station(s), the required command and control links and any other components, as specified in the type design.

Civil RPA is categorized in accordance with MTOW (including payload) as indicated below:

- i) Nano : Less than or equal to 250 grams.
- ii) Micro : Greater than 250 grams and less than or equal to 2 kg.
- iii) Small : Greater than 2 kg and less than or equal to 25 kg.
- iv) Medium : Greater than 25 kg and less than or equal to 150 kg.
- v) Large : Greater than 150 kg.

3. What does Civil Aviation Requirements (CAR) mean, and when the same on Remotely Piloted Aircraft System (RPAS) will be effective?

Civil Aviation Requirements (CAR) is a set of regulations issued by the Directorate General of Civil Aviation (DGCA). The CAR on RPAS shall be effective from 1st December, 2018.

4. What is Digital Sky Platform, and when it will be operational?

It is an online IT platform developed for handling UIN, UAOP applications, permission to fly drones in India. The link shall be available in Homepage of DGCA website www.dgca.nic.in, and it will be operational from 1st December, 2018.

5. What permissions are required to operate drones and from where?

Roles & responsibilities of govt. stakeholders on various aspects of operation of civil remotely piloted aircraft system

No.	Stakeholder	Responsibility
1.	Directorate General of Civil Aviation	<ul style="list-style-type: none"> • Import clearance • Issuance of UIN • Issuance & renewal of UAOP • Suspension / Cancellation of UIN & UAOP in case of violations of regulations.
2.	Directorate General of Foreign Trade	<ul style="list-style-type: none"> • Import license
3.	Ministry of Home Affairs	<ul style="list-style-type: none"> • Security clearance
4.	Ministry of Defence	<ul style="list-style-type: none"> • Permission for aerial survey/imageries/ videography/ still photography over the restricted/prohibited areas on case-to-case basis
5.	Indian Air Force	<ul style="list-style-type: none"> • Air Defence Clearance • Monitoring of RPA movements in the country
6.	Wireless Planning and Coordination Wing, DoT	<ul style="list-style-type: none"> • Equipment Type Approval (ETA) or License for drone
7.	Bureau of Civil Aviation Security	<ul style="list-style-type: none"> • Approval of Security Programme
8.	Airport Authority of India	<ul style="list-style-type: none"> • Flight Plan Approval • Monitoring of RPA movements in the country
9.	Local Police Office	<ul style="list-style-type: none"> • Enforcement of violators as per applicable IPCs

6. What are the requirements for import of Drones (with or without camera) in India?

- Any entity intending to import RPAS in India shall obtain Equipment Type Approval (ETA) from WPC Wing, Department of Telecommunication for operating in de-licensed frequency band(s). Such approval shall be valid for a particular make and model.
- The applicant, other than Nano category, shall apply to DGCA along with ETA for import clearance. Based upon the import clearance issued by DGCA, DGFT shall issue license for import of RPAS.

7. What is NPNT and how do I comply with that?

NPNT or 'No Permission – No Take-off' is a software programme that enables every RPA (except Nano) to obtain a valid permissions through digital sky platform before operating in India. Please contact your OEM/ Manufacturer for complying with this requirement.

8. What is controlled and uncontrolled airspace?

Controlled airspace is **airspace** of defined dimensions within which ATC services are provided.

Uncontrolled airspace is **airspace** where an Air Traffic Control (ATC) service is not necessary or cannot be provided for practical reasons.

9. I am intending to locally purchase one drone operating in de-licensed frequency band, should I still require ETA from WPC Wing, DoT?

ETA from WPC Wing is required for all wireless equipment working in de-licensed frequency band(s) in India. Ensure to get ETA from the seller or manufacturer of RPA which is required to be uploaded while applying for UIN.

10. Whether drones fall under the category of restricted items for carrying in hand baggage in aircrafts?

Drones are restricted items and can't be carried in hand baggage.

11. Where can I find the filing instructions for UIN/ UAOP etc.?

Instructions for filing all applications online shall be available in Digital Sky Manual. The Manual will be available in DGCA website homepage www.dgca.nic.in, and also in the Digital Sky portal homepage. The Digital sky manual shall be available in the above mentioned website from 1st December, 2018.

12. I am a foreigner and want to fly drones in India. What are the permission do I require?

Foreigners are currently not allowed to fly drones in India. For commercial purpose, they need to lease RPAS to an Indian entity who in-turn will obtain Unique Identification Number (UIN) and UAOP from DGCA.

13. What is UIN?

UIN is unique identification number issued by DGCA for a particular RPA (except Nano).

14. How much is the fees for UIN & UAOP?

- **For UIN:** - One thousand Indian Rupees (Rs.1000/-).
- **For fresh UAOP :-** Twenty Five Thousand Rupees (Rs.25,000/-)
- **For Renewal of UAOP:-** Ten Thousand Rupees (Rs.10,000/-)

15. Where do I pay fees for UIN and UAOP for drone?

You will be prompted for payment through payment Gateway in the Digital Sky Platform.

Or

The link for paying the fees is <https://bharatkosh.gov.in/>. You need to mention the transaction receipt number and upload copy of the payment receipt in Digital Sky Platform at the time of your application.

16. How do I mark my unmanned aircraft with my UIN?

After you have been issued with UIN for a particular drone; engrave it on a fire resistant plate and firmly affix on your drone. Ensure the number remains affixed to the aircraft during routine handling and all operating conditions and is readily accessible and legible upon close visual inspection.

17. If I'm just flying my UAS inside a building, do I have to register it?

For Nano, no UIN is required. However, for micro category and above, UIN is required.

18. What is UAOP?

UAOP is Unmanned Aircraft Operator Permit

19. Who all are required to obtain UAOP?

All operators other than exempted categories mentioned below are required to obtain UAOP from DGCA:-

- Operators of Nano & Micro category in uncontrolled airspace/ enclosed premises upto 50ft and 200ft respectively
- RPA operated by NTRO, ARC, and Central Intelligence Agencies.

20. What is the validity of UAOP?

Five years

21. What format do I use for renewal of UAOP?

Same format is used for issue /renewal of UAOP through Digital Sky app. However, please note you will need fresh security clearance from MHA.

22. How do I report an incident or accident?

The operator of all RPA except Nano RPA will notify any incident/accident involving RPA to the Director of Air Safety, DGCA through Digital Sky Platform.

23. I was travelling and lost my bag along with my drone. Whom should I contact now?

Please lodge FIR immediately in local police and report occurrence in Digital Sky along with a copy of FIR.

24. My drone is completely broken. Can I use its UIN for another drone of same make and model?

No. The operator has to apply for fresh UIN.

25. I want to sell my used drone to someone. What is the procedure?

RPAS if issued with UIN, cannot be transferred or disposed-off without permission from DGCA. You are required for cancellation of UIN and the buyer has to apply for fresh UIN through Digital Sky Platform.

26. We are a company registered elsewhere than in India and we have a remote pilot who is licensed by our civil aviation authority. We want to lend our services to an Indian Organisation. What permissions do we require?

Foreign Entity has to lease their RPAS to the Indian Entity. The Indian entity shall apply for UIN and UAOP. Remote Pilot (if a foreign national) should be security cleared. Foreigners are currently not allowed to fly drones in India.

27. Where should I apply for security clearance?

For Security clearance, apply as per the form available in the CAR on RPAS or Use “E-Sahaj – Online portal for processing security clearance applications” available in DGCA homepage www.dgca.nic.in

28. I have a Nano drone. What permissions to I require?

Nano RPA (less than 250 gm) is exempted from obtaining UIN and UAOP. Please ensure not to fly it beyond 50 ft (15m) AGL. Also, ensure you are not flying in controlled airspace and no other manned or unmanned aircraft is flying nearby. If operations to be done in controlled airspace you need to apply for UIN, UAOP and your RPA shall be NPNT complaint. It is recommended to fly in uncontrolled airspace/ enclosed premises and go through Do's and Don'ts every time before you fly.

29. I have a micro drone engaged in wedding photography, what permission do I need to keep doing it legally.

- You need to obtain UIN.
- You will not require an UAOP if you are flying your drone below 200 ft (60m) AGL in uncontrolled airspace/ enclosed premises. However, you shall intimate the local police office at least 24 hours prior to conduct of actual operations.
- Your drone needs to NPNT compliant and you have to obtain permission through digital sky before flying.

30. I am an individual want to film my friend's marriage using drones. What permission do I need?

If you have a micro drone, flying within enclosed premises and below 200ft then; you need to apply for UIN and to intimate local police before operating your drone. You will require UAOP and NPNT if you are flying in controlled airspace.

Also ensure, no other manned or unmanned aircraft is flying nearby.

31. Is delivery of items allowed under the DGCA CAR on UAS?

Not allowed as of now.

32. I want to deliver foods using drones and it will be fully autonomous and fly below 50 ft. whom should I contact for necessary permission.

Not allowed as of now.

33. Do I require remote pilot license to fly drone?

No, as of now but you need to undergo minimum training requirements specified in the Civil Aviation Requirements on "Requirements for Operation of Civil RPAS".

34. What are the minimum requirements and eligibility for becoming a remote pilot for flying drones?

You should have attained 18 years of age, having passed 10th exam in English, and undergone training at DGCA approved flying training organisation (FTO).

35. Should I maintain flying log when and where I am flying?

All individuals / operators (except Nano), shall maintain records of each RPA flight records and should be produced on demand by DGCA.

36. Should I maintain maintenance log for the repair/maintenance carried out on RPAS?

All RPA holders shall maintain maintenance records and, should be able to produce on demand by DGCA.

37. What are the mandatory equipment required to fly upto 400 ft. AGL?

Flying drone upto 400 ft. AGL and visual line of sight are allowed. However, you need to have the following equipment installed on your drones:

- a) GNSS (GPS) for horizontal and vertical position fixing
- b) Autonomous Flight Termination System or Return Home (RH) option
- c) Flashing anti-collision strobe lights
- d) RFID and GSM SIM Card/ NPNT compliant for APP based real time tracking
- e) Fire resistant identification plate inscribed with UIN
- f) Flight Controller with flight data logging capacity.
- g) SSR transponder (Mode 'C' or 'S') or ADS-B OUT equipment
- h) Barometric equipment with capability for remote sub-scale setting
- i) Geo-fencing capability
- j) Detect and Avoid capability

38. What is an SOP?

SOP or standard operating procedure is a catalogue of procedures that is agreed between prospective UAOP holder and DGCA for safe operation of drones in India.

39. What is the visual line of sight for flying a drone?

Generally 450m (unaided) in Visual Meteorological Conditions (VMC) with a minimum ground visibility of 5 km.

40. I am a wedding photographer and I have a micro drone. Most of the marriages in Northern India happen after sunset. Can I use my drone for covering marriages at night?

All drone operations are restricted to day light and within visual line of sight. However, if you are shooting in well-lit enclosed premises using micro drone upto 200 ft. AGL is allowable. Ensure your drone is NPNT compliant and issued with UIN. Also, you need to inform local police before flying.

Ensure that you follow Do's and Don'ts and respect individuals' privacy.

41. I have a Nano drone, should I also intimate local police each time before I fly?

No. But there is no harm in keeping your local police office informed. In addition, please go through Do's and Don'ts before flying your Nano drone each time.

42. Can I use my small drone for agricultural purpose?

RPAS can be used for agricultural purpose except for the purpose of spraying pesticides until specifically cleared.

43. I have developed a drone that can carry passenger, where can I test it?

Carriage of explosives, animal or human payload are not allowed at this instance. Nevertheless, you can test your drones with dummy on any of the test sites specified in the CAR.

44. What are no-drone zones?

Areas over which flying a drone is prohibited/ restricted. Please go through the list of no-drone zones in Civil Aviation Requirements.

45. What is the minimum distance to fly drones from the border areas?

You need to keep at least 25 km distance from international border which includes Line of Control (LoC), Line of Actual Control (LAC) and Actual Ground Position Line (AGPL).

46. What if I require to fly over a no-drone zone for a genuine purpose? How do I obtain special authorisation for the same?

Flying drone over no-drone zone is prohibited. However, DGCA may authorize such operations on case-to-case basis subject to approval of MoD.

47. What if I want to test my drone that built for night operation and beyond meteorological conditions, will I be permitted by DGCA?

DGCA may authorise such operation on case-to-case basis subject to adequate justification is provided by you for safe conduct of RPAS operation. Please note, DGCA may impose additional conditions for permitting such operations.

In addition, you may test your drone in the test sites specified in the Civil Aviation Requirements.

48. What is the minimum amount of insurance should I require for my drone?

DGCA has not stipulated any requirement on minimum amount of insurance for any category of drone. It should be of an adequate amount to cover the risks, damages or other factors that is posed by operation of drone. Further, it is an agreement between the insurance company and you (the policy holder).

49. What will be the enforcement action on violation of the rules and regulations for drones?

In case of violation of the rules and regulations for drones, the UIN/UAOP issued by DGCA shall be suspended/cancelled.

Violation of compliance to any of the requirements and falsification of records/documents shall attract penal action including imposition of penalties as per applicable IPCs (such as 287, 336, 337, 338 or any relevant section of IPC) or Aircraft Act 1934 or Aircraft Rules 1937 or any statutory provisions.

50. Where can I lodge my grievance regarding Drones?

You can lodge your grievance in www.pgportal.gov.in

51. Where do I file flight plan? What is the procedure for filing flight plan?

You can file flight plan online through Digital Sky Platform. Procedure for filing flight plan is available in Digital Sky Manual. The link for the Digital Sky Platform/ Manual shall be available in Homepage of DGCA website www.dgca.nic.in, and it will be operational from 1st December, 2018.
