

GOVERNMENT OF INDIA OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION TECHNICAL CENTRE, OPP. SAFDURJUNG AIRPORT, NEW DELHI

FLYING TRAINING CIRCULAR 2 OF 2020

E-File No. DGCA-16017/4/2020-DFT Dated 04th June 2020

Subject: Guidelines for Remote Pilot training Organization (RPTO)

This circular lays down detailed guidelines for approval as Remote Pilot Training Organization (RPTO)

1. Eligibility

RPTO approval can be granted to:

- a) Central or State Government or their undertaking or Autonomous Bodies,
- b) Government approved universities,
- c) DGCA approved FTOs, NSOPs, SOPs, Domestic CAR-147 approved Maintenance Training Organizations, CAR-145 approved CAMOs and CAR 21 approved Design Organizations,
- d) RPA manufacturers

2. Issue of No Objection Certificate (NOC)

a) Any person /organization meeting the eligibility criteria and intend to setup RPTO, shall apply to DGCA for issue of NOC in prescribed proforma as per **Annexure I**

NOC shall be valid for a period of two years from the date of issue. On grant of NOC, the applicant is required to establish and obtain approval of RPTO within a period of two years. Application for extension of NOC may be submitted one month in advance.

b) The application for NOC shall be accompanied with the following supporting documents:

i) Memorandum of Article of Association duly registered with the competent authority.

ii) Particulars of Chief Executive Officer / Accountable Manager, as on website https://esahaj.gov.in/ for necessary security clearance.

iii) Evidence of having sufficient fund of at least Rupees Ten Lakhs in the form of paid up capital duly certified by the chartered Accountant.

iv) Project report containing details of the proposed set-up including three years business plan, proposed financial structure, ownership pattern, time frame in which the applicant proposes to operationalize the various stages of the project, RPA types to be used and its suitability for flying training, human resource and maintenance support.

v) No Objection Certificate from the aerodrome operator for use of airport (Subject to requirement of Aerodrome for a specific variant of RPA) for setting up the training institute including allocation of parking space

or

No Objection Certificate from the land owner of proposed base of operation.

vi) No objection certificate from Airports Authority of India from air traffic point of view.

vii) Any other relevant information required to support issuance of NOC.

c) Before processing for grant of NOC, security clearances of the Company, Society, Trust, Board of Directors, Shareholders, trustee and members in case of trusts and society and Chairman/CEO of the organization shall be required as per Ministry of Home Affair's guidelines, currently in force.

Note: Any change in Board of Director/ Share holder/ CEO at any stage during validity of approval shall be intimated to DGCA along with the details. Board of Director/ Share holder/ CEO shall be changed only after a specific prior approval of DGCA.

Application will be examined by a Committee approved by the Director General/ Joint Director General to assess financial soundness of the project, capacity, suitability of the proposed RPA type, human resource including maintenance support.

Applicants whose proposals are found satisfactory by the Committee will be granted NOC subject to any condition as may be considered necessary.

Note: - DGCA approved FTOs, NSOPs, SOPs are not required to obtain NOC for approval as RPTO.

3. Application for approval of RPTO

Organization shall submit completed application, 90 days prior to expected date of commencement of operations as per **Annexure 2**. The application shall be accompanied with the following:

- a) The proposed location of each training facility and any other operation base, the proposed courses to be taught at each location, and the equipment at each location including Simulators, RPAs and any aerodromes or sites to be used
- b) Two copies of its proposed Training and Procedures manual;
- c) Documentation of the training organization's quality assurance and quality system;
- d) A statement of the maximum number of students it expects to teach at any one time;
- e) Documentation of the training organization's Safety Management System;
- f) A statement of compliance to all applicable CARs and Aircraft Rules 1937 for the proposed training.
- g) Receipt of Prescribed fees. Submitted on https://bharatkosh.gov.in in accordance with Rule 133C of the Aircraft Rule, 1937.
- h) Any additional information required by DGCA.

4. General Requirements

(i) Facilities and Equipment

RPTO shall establish facility appropriate to the size and scope of the operation. It shall provide physical environment conducive to the learning. This shall include:

a) General:

1. Adequate Office Space for operational and administrative staff

- 2. Storage area including secure area for training and personnel records.
- 3. Classrooms and training aids:
- 4. Adequate and well equipped class rooms.

The classrooms shall properly be lighted and furnished. The size of the rooms shall be appropriate to accommodate the batch of students. (at least 4ft x 4 ft per student)

(b) Radio telephony training and testing facility.

(c) Library with adequate number of text books/ e-books for ground subjects, regulations and Remote flying techniques; DGCA circulars, CARs, AICs, Aircraft Manual; AIP and its supplement and route maps for training. Books catalogue, register or list of books to track the revisions and stock position.

(d) Training aids – computer, projector/suitable monitor, multimedia aids etc

(ii) Practical training areas:

(a) Flight Operation, planning and briefing room/ area.

(b) Office facility for instructors and Trainers

(c) Adequate telephone connection and internet connection shall be made available.

(d) Suitable and adequate space for parking, mooring and maintenance of RPA. The place shall be well lighted and suitable for maintenance.

(e) Office space for the engineering and maintenance personnel

- (f) Properly marked bays, tracks and takeoff/ landing area.
- (g) An alarm bell and manually operated Siren in operational area.

(iii) Flight Simulator

As per CAR Section 3 Series X Part 1

(iv) Remotely Piloted Aircraft

- (a) The intake of students in the RPTO shall commensurate with the number of flying instructors and RPAs. The RPAs: flying instructor: trainee ratio shall not exceed 1:1:10
- (b) RPTO must have atleast three serviceable RPAs of one type at any given time

5. Approval / Renewal RPTO

- a) Upon satisfactory compliance of all requirements, DGCA may grant approval as RPTO initially for a period of Five Years.
- b) RPTO approval may be renewed for a period of Five years subject to satisfactory compliance of requirements. An application for RPTO renewal shall be submitted at least 60 days before the expiry along with following documents :
- i) Receipt of Prescribed fees. Submitted on <u>https://bharatkosh.gov.in</u> in accordance with Rule 133C of the Aircraft Rule, 1937.
- > Copy of latest internal audit report.
- > Compliance of all pending observations since last renewal/approval.
- c) In case, approval of RPTO is expired by more than three years, it will not be deemed as RPTO and the organization has to apply fresh for approval as RPTO.
- d) The foreign investments in the RPTO shall be within the framework of laid down policy on the subject.

6. Training and Procedures Manual for Remote Pilot Training

a) Introduction

The Training and Procedures Manual describes the policy & procedure of the Remote Pilot Training Organization. It is a document which is essential for the organization as it provides the management and accountable personnel with a clear guidance on the policy of the organization as well as the procedures and processes which are used to provide RPA training in RPTO.

During the approval process, it helps the DGCA to assess whether the procedures developed by the organization are in line with the existing requirements. Once the RPTO is functioning, DGCA will ensure that the organization is functioning in line with the Training and Procedures Manual, through surveillance. This training and procedure manual is applicable to all RPTO imparting training.

b) General Consideration

In preparing the Training and Procedures Manual, it is important for the RPTO to ensure that the Training and Procedures Manual is consistent with regulations, manufacturer requirements, other guide lines issued by the RPTO and in line with human factors principles. It is also necessary to ensure consistency across all departments within the organization.

c) Contents

The content of the Training and Procedures Manual spelt out in Annexure-3 provides a detailed list which expands on the structure expected for the manual. Depending on the size and scope of training provided by the organisation, some of the elements contained in the Annexure- 3 can be combined / subdivided further as determined by RPTO and acceptable to DGCA.

d) Design

- The structure of the manual should be easy to understand, appropriate for the information documented and clearly identified through headings and other formatting devices. The document structure should be identified at its beginning by explaining organising elements such as headings, the numbering scheme, and main parts of the document and other sources of coding or grouping.
- Precise language should be used wherever possible. Significant terms for common items and actions should be maintained throughout the manual. Terms must be clear and easily understood.
- Writing style, terminology, formatting, and use of graphics and symbols should be consistent throughout the document. This includes the location of specific types of information and consistent use of units of measurement and codes.
- The manual should include a glossary of terms, acronyms, abbreviations and associated definitions. The glossary should be updated on a regular basis to ensure access to the most recent terminology.

- The revision process should be considered when designing the manual for ease of amendment and distribution.
- The training and procedures manual should comply with the requirements of the training organization's quality assurance system.

e) Deployment

The RPTO should have a system in place to monitor use of the Training and Procedures Manual after it is published. This will ensure appropriate and realistic use of the manual, based on the operational environment, in a way that is operationally relevant and beneficial to the personnel for whom it is intended. The monitoring system should include formal feedback to obtain inputs from the principal users of the manual and other persons who would be affected by a new or revised policy, procedure or practice.

f) Amendment

(i) The Remote Pilot Training Organisation should develop an effective information gathering, review, and distribution and revision control system to process information obtained from all sources relevant to the organisation. Sources include, but are not limited to the DGCA safety regulations, manufactures and equipment vendors.

Note. — Manufacturers provide information for the operation of RPA that emphasizes the RPA systems and procedures under conditions that may not fully match the requirements of the RPTO. RPTO should ensure that such information meets their specific needs and those of the DGCA.

(ii) The Remote Pilot Training Organisation should develop an information review, distribution and revision control system to process information resulting from changes that originate within the organisation. This includes changes:

- (a) in the organisation's policies, procedures and practices;
- (b) in response to operating experience;
- (c) to the scope of training provided;
- (d) to the content of training programs;
- (e) resulting from the installation of new equipment;
- (f) to an approval document or operating certificate; and
- (g) For the purpose of maintaining standardization.

(iii)The training and procedures manual should be reviewed in association with other operational documents that form the organisation's flight safety documents system:

- (a) on a regular basis (at least once a year);
- (b) After major events such as mergers, acquisitions, rapid growth, downsizing, etc.;
- (c) After technology changes, e.g.: the introduction of new equipment; and
- (d) After changes in safety regulations.

(iv)Permanent changes to the training and procedures manual shall be communicated

through a formal amendment process. The manual should be amended or revised as necessary to ensure that the information contained is kept up to date.

(v) Distribution of amendments and revisions should include a tracking system. The tracking system should include some form of log combined with a procedure to ensure that all amendments are furnished promptly to all organisation or persons to whom the manual has been issued.

(Pradeep Pathak) Joint Director General

ANNEXURE 1

APPLICATION FOR GRANT OF N.O.C. FOR APPROVAL OF

RPTO

1.	Applicant's details		
	Please identify yourself from the necessary information:-	following and provide the	Please tick below
А.	A citizen of India/ Group of Indian nation	onals	
В.	A trust/society registered under the so (enclose copy of registration)	ocieties registration act 1860	
C.	A Non Resident Indian or Overseas C	orporate Body	
D.	Central or Sate Government or it undertakings	ts partially or fully owned	
E.	Government approved universities		
F.	DGCA approved FTOs, NSOPs, SOP	s, CAR-147 Organizations	
G.	A Company or corporate registered (Attach a copy of the certificate of inco and Articles of Association)		
Н.	Others		
a)	Name(s)		
b)	Address in India with Telephone, E mail, Fax numbers		
In cas	se of 'G' please also provide followin	g information	
c)	Address of principal office of business in India, including operations and maintenance bases		
d)	Full details of any other business the company is engaged in		
e)	of Director/ CEO	1. 2.	

		3.
		4.
		4.
f)	Details of the share holding of the company	
g)	Percentage share of foreign nationals or company, if any, in the capital of the company	
2.	Fee details: Receipt of fee as per Rule 133C via Bharatkosh on https://bharatkosh.gov.in	
3.	Flying Area/ Aerodrome proposed as base of the RPTO.	
4.	No objection certificate from owned for use of aerodrome for setting up parking and hanger space(subject to of RPA) . (PI. attach)	of RPTO and for provision of
5.	No objection certificate from Airpor of Defense (as applicable). (Pl. attack	
6.	Project report containing details of the proposed three year business plan of project and time line for implementation of various phases of project. (Pl. attach)	
7.	Details of RPAs proposed to be operated	
a)	Total Number and type of RPA(s)	
b)	Payload capacity of each type of RPA	
c)	Maximum all up weight of each RPA	

d)	Whether the RPA is approved as per CAR Section 3 Series X Part I	
8.	Statement showing compliance with the Civil Aviation Requirements (CAR Section 3 Series X Part I)	
9.	Details of RPA Simulators	
10.	Details of proposed organization (Ple	ease attach separate sheet, if required.)
a)	Overall set up of the organization including ground training infrastructure.	
b)	Proposed maintenance facilities with details of organisation, equipment and approved programme.	
C)	Organisaiton structure with details of Accountable Manager/ Trainers	
11.	Estimated date of starting of training activity.	
12.	Name and contact details of Accountable Manager.	
13.	Any other relevant information.	

(Note:-please do not leave any column blank, in case not applicable write N/A. Applicant is advised to ensure that the proposed facility, equipment etc. shall be able to comply the requirements of Aircraft Rules, CAR on the date of approval)

Certified that the statements made/information given in this application is true.

(Signature of the applicant/authorised signatory.)

Annexure 2

APPLICATION FOR APPROVAL OF REMOTE PILOT TRAINING ORGANIZATION

This application form shall be used as RPTO compliance statement and DGCA inspector checklist for verification. Each page shall be initialed and last page shall be signed by Accountable Manger and Approved RPA Trainer Jointly.

1. General

SI.	Contents	Data/information	remarks
1.1	Name and address of the flying training institute with Telephone (landline/mobile) Email, Fax numbers		
1.2	Name of the President, (if elected Managing Committee is functioning)		
1.3	Are the Board of Directors, Shareholders, trustee and members in case of trusts and society and Chairman/CEO of the organization same, which were at the time of grant of NOC / last renewal of the Institute?		
	If no, please attach security clearance.		
1.4	Name of the Accountable Manager		
1.5	Name of the RPA trainer (s)		
1.6	Proposed Scope of training i.e. category and Type of RPAs.		
1.7	Principal base of operation/aerodrome		
1.8	Other base of operation aerodrome specifically demarcated for RPA operations, if any		
1.9	Whether NOC is valid		

2. Remotely Piloted Aircraft Details (Attach Separate Sheet, if required)

S/No RPA	Type of RPA	Owned/ Leased	UID	Manufacturer

3. Documentation (Tech. & Operational)

S/NO	DOCUMENTATION				STATUS	COMMENTS
1.	Whether	Training	and	Procedure		

	Manual (TPM) has been submitted	
2.	Whether SOP/Operational Manual for RPA Submitted	
3.	Whether list of RPA emergencies and Contingency plan for RPA loss/incident/accident, recovery of RPA, list of emergency telephones. Submitted	

(Note: Attach all the documents as stated above. The information submitted shall be verified before submission)

It is certified that the information submitted vide this application has been verified and is true

(Accountable Manager) Signature with Date:

For official use Remarks/ Action Required:

Annexure 3

Checklist for Training and Procedures Manual for RPTO

This form shall be used as RPTO's compliance statement and DGCA inspector checklist for acceptance of Training and Procedures Manual for RPA. RPTO shall fill up checklist after ensuring each item (column 'A', 'U' & 'Remarks' be left blank). Each page shall be initialed and last page shall be signed by Accountable Manger.

Name of RPTO:
Date:
Address of RPTO:
Website & e-mail of RPTO:
Name of Accountable manager Tel.
Name of approved RPA Trainers with email address and phone numbers: Tel
Tel
Tel
Variants of RPAs used in Training
(A = Acceptable, U = Unacceptable) T & PM = Training & Procedure Manual

No.	-	Page & Para no. of T&PM	Α	U	Rem- arks
1.	GENERAL				ans

1.1	Preamble relating to use and authority of the Training and Procedures Manual.		
1.2	Table of contents.		
1.3	Amendment, revision and distribution.		
	a) Procedures for amendment;		
	b) Amendment record page;		
	c) Distribution list; and		
	d) List of effective pages.		
1.4	Glossary of significant terms and definitions.		
1.5	Description of the structure and layout of the manual, including:		
	a) Various parts, sections, their contents and use;		
	b) The paragraph numbering system.		

2.	Scope of Training and Organization	

2.1	Scope of training i.e. category and Type of RPAs.		
2.2	UAOP reference number		
2.3	Organisation chart (of management organisation)		
2.4	Qualifications, responsibilities and succession of command of management and key operational personnel, including but not limited to:		

a) Accountable manager		
b) RPA instructor and training coordinator		

3. Facilities

3.1 RPA details –(at least with following details)			
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#	RPAs			Remarks
a)	Type of RPA with Mode and Serial Number			
b)	Unique Identification Number			
C)	Cat. of RPA- Fixed wing/ Rotary Wing/ Others			
d)	Owned/ leased			
e)	New /Used			
f)	Name of lesser			
g)	Validity of lease			
h)	Date of manufacturing			
i)	Payload Details and Payload Capability and interface Fan Out/ Fan in etc.			

3.2	RPA Simulators details – (with followin	1

details)

#	RPA Simulator			
a)	Туре			
b)	Registration			
C)	RPV Mode Details			
d)	Manufactures			
e)	RPA Supported Types (Rotary/ Fixed wing/Others)			

#	•	Page no. & Para of T&PM	AL	J Rem -arks
3.3	System to ensure proper functioning of simulators and serviceable RPAs.			
3.4	Procedure to utilize the RPAs and Simulators of other RPTO/ Organizations			

3.5 etc.	Space for waiting, Operations, flight planning	T&PM ref.	A	U	
a)	Office space for operation and admin				
b)	Storage area including secure area for trg. and personnel record				
C)	Space for the students waiting for their training.				
d)	Flight Operation room or area.				
e)	Flight Planning room or area.				
f)	Space for pilot briefing/ debriefing.				

	plan.		
b)	Training aids such as computer, projector/suitable monitor, multimedia aids etc.		
3.8	Library		
a)	Library with system of ready access to trainee pilots.		
b)	System to track the revisions and stock position of books / study material.		
c)	Adequate number of text books for ground subjects specific to RPSs as specified in CAR Section 3 Series X Part 1.		
3.9	Radio Telephony		
a)	Arrangement for Radio telephony training and testing with facilities for Radio Telephony basic training for RPAs as specified in CAR Section 3 Series X Part 1		

4.	THE TRAINING PLAN		
4.1	 Aim of the course - A statement of what the student is expected to do as a result of the training on RPA as per CAR. 		
	 The level of performance on specific category of RPA- Fixed Wing/ Rotary Wing/ others 		
	The training constraints to be observed		

4.2	Pre-entry requirements -		
	Minimum age		
	Educational requirements		
	Language requirements		
	Medical requirements		
	Other Requirements as specified in CAR		
4.3	Training curricula/ Training Plan -		
	Training schedule and End of Course report		
	 The flying curriculum and Training Methodology (Fixed Wing RPAs) 		
	The flying curriculum and Training Methodology (Rotary Wing PRAs)		
	The flying curriculum and Training Methodology (Other RPAs)		
	The RPA Simulator training curriculum		
	The Ground training Curriculum		
4.4	Programmed curriculum times -		
	Arrangements of the course and the integration of curricula time		
4.5	Training programme -		
	 The general arrangements of daily and weekly programs for RPA flying, ground and Simulator training. 		
	 Program constraints in terms of maximum student training times, (flying, theoretical knowledge, simulator) e.g. per day/week/month 		
	 Restrictions in respect of duty periods for students 		
	 Duration of solo and instructor assisted flights at various stages 		
	Maximum flying hours in any day		
	 Maximum number of training flights in any day 		

4.6	Training records -		
	 Training Certificate/Card Format and Flight Log records 		
	• De Briefing, Evaluation Sheets, Flight		
	Training Progress Report and End of Course		
	RPA Pilot Training Report		
	• Procedure for maintaining integrity of record and documents i.e. protection from alteration		
	and removal etc.		
	Attendance records.		
	• The form of training records to be kept e.g. dossier.		
	Persons responsible for checking.		
	• The nature and frequency of records checks.		
	 Standardization of entries in training records. Rules concerning training log entries. 		
4.7	Safety training		
	Individual responsibilities.		
	 Battery Changing procedures, emergencies and Maintenance of Battery Changing Log Book 		
	Essential exercises.		
	• Emergency drills including GPS fail safe landing, Communication fail, Wind drift procedure and Low battery etc.		
	Checks		
	Requirement before first RPA training flight		
4.8	Checks and tests –		
	Flying: Progress checks and skill tests.		
	 Knowledge: Progress tests and knowledge tests. 		
	Authorization for test.		
	Rules concerning refresher training before retest.		
	Test reports and records.		

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	Test/retest procedures.		
4.9	Training effectiveness -		
	 Individual responsibilities. 		
	General Assessment.		
	Liaison between departments.		
	Identification of unsatisfactory progress (individual students).		
	Actions to correct unsatisfactory progress.		
	Procedure for changing RPA Trainer.		
	 Maximum number of instructor changes per student. Internal feedback system for detecting training deficiencies. 		
	 Procedure for suspending a student from training. 		
	 Standards and level of performance at various stages. 		
	Individual responsibilities.		
	Standardization.		
	• Standardization requirements and procedures.		
4.10	Procedure for Transfer of Trainee to other RpTO		
4.10	Procedure for Transfer of Trainee to other		

5.	BRIEFING AND AIR EXERCISES		
5.1	Air exercise -		
	• A detailed statement of the content specification of all the air exercises to be taught, arranged in the sequence to be flown with main and sub-titles.		
5.2	Air exercise reference list		
	• An abbreviated list of the above exercises giving only main and sub-titles for quick reference, preferably in flip-card form to facilitate daily use by instructors.		

3.3 Course structure training prace • A statement of how the course will be divided into phases, inclication of how the above air exercises will be divided between the phases and how they will be arranged to ensure that they are completed in the most suitable learning sequence and that essential (emergency) exercises are repeated at the correct frequency. • The curriculum hours for each phase and for groups of exercises within each phase shall be stated and when progress tests are to be conducted, etc. 5.4 Course structure integration of curricula • The manner in which theoretical knowledge, simulator training and flying training will be integrated so that as the flying training exercises are carried out students will be able to apply the knowledge gained from the associated theoretical knowledge instruction and simulator training. 5.5 Student progress • The requirement for student progress and include a brief but specific statement of what a student is expected to be able to do and the standard of proficiency he or she must achieve before progressing from one phase of exercise to the next. • Include minimum experience requirements in terms of hours, satisfactory exercise completion, etc. As necessary before significant exercises/ maneuvers/emergency handling. 5.6 Instructional methods - • The RpTO requirements, particularly in respect of pre and post flying briefing, adherence to curricula and training specifications, authorization and supervisions	5.3	Course structure, training phase		
divided into phases, indication of how the above air exercises will be divided between the phases and how they will be arranged to ensure that they are completed in the most suitable learning sequence and that essential (emergency) exercises are repeated at the correct frequency. • The curriculum hours for each phase and for groups of exercises within each phase shall be stated and when progress tests are to be conducted, etc. 5.4 Course structure integration of curricula • The manner in which theoretical knowledge, simulator training and flying training wexercises are carried out students will be able to apply the knowledge gained from the associated theoretical knowledge instruction and simulator training. 5.5 Student progress • The requirement for student progress and include a brief but specific statement of what a student is expected to be able to and the standard of proficiency he or she must achieve before progressing from one phase of exercises or he next. • Include minimum experience requirements in terms of hours, satisfactory exercise completion, etc. As necessary before significant exercises/maneuvers/emergency handling. 5.6 Instructional methods - • The RpTO requirements, particularly in respect of pre and post flying briefing, adherence to curricula and training specifications, authorization and supervisions	5.5	Course structure- training phase		
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The RpTO requirements, particularly in respect of pre and post flying briefing, adherence to curricula and training specifications, authorization and supervisions		in terms of hours, satisfactory exercise completion, etc. As necessary before significant exercises/ maneuvers/emergency handling.		
respect of pre and post flying briefing, adherence to curricula and training specifications, authorization and supervisions	5.6	Instructional methods -		
5.7 Progress tests -		respect of pre and post flying briefing, adherence to curricula and training specifications, authorization and		
	5.7	Progress tests -		

	The instructions given to examining staff in respect of the conduct and document of all progress tests.
5.8	Glossary of terms
	Definition of significant terms as necessary.
5.9	Annexures -
	Progress test report forms.
	Skill test report forms.
	RPTO certificates of experience, competence, etc. as required.

-			
5.10	Standardized check-lists for normal, abnormal and emergency procedures?		
5.11	Maps and charts and other equipment's required to be carried for RPA flights.		
5.12	Check-list to show the documents required to be carried?		
5.13	Digi Sky flight planning/ approval procedures.		
5.14	Procedures to ensure stability of training RPA.		
5.15	Procedures briefing/ debriefing.		

5.16	Procedures have been established under which the trainee pilots can carry out their first RPA flight.		
5.17	Procedures for carrying out flying check of trainees		
5.18	System of keeping of certificates and logs for ready reference.		
5.19	Occurrence reporting procedure for RPAs.		
5.20	Procedure for disposing off damaged RPA		
6.	RPA Simulator Training		

6.1	Exercise Details				
6.2	Exercise reference list				
6.3	Course structure-phase of training				
6.4	Course structure integration of curricula				
6.5	Student progress				
6.6	Instructional methods				
6.7	Progress tests				
6.8	Glossary of terms				
6.9	Annexures				

7.	ADMINISTRATIVE PROCEDURES		
7.1	Administration (function and management)		
7.2	Responsibilities (all management and administrative staff)		
7.3	Student discipline and disciplinary		
7.4	Authorization and Supervision of flights		
7.5	Preparation of flying programmer		
7.6	Responsibilities of instructor		
7.7	Retention of documents		
7.8	Instructor and students qualification records		
7.9	Revalidation (Certificates , medical and other documents)		
7.10	Rest periods (instructors)		
7.11	Rest periods (students)		
7.12	Flying logs		
7.13	Flight planning (general)		
7.14	Safety (general: equipment, radio listening watch, hazards, accidents and incidents,		

	including reports, safety of trainee pilots, etc.)		

8.	RPA OPERATING INFORMATION		
8.1	RPA descriptive notes		
8.2	RPA handling (including checklists, limitations, maintenance and technical logs, in accordance with relevant requirements, etc.)		
8.3	Emergency procedures		
8.4	Radio and radio navigation		
8.5	Allowable deficiencies		
8.6	Flight Log Book ,Battery Charging Log Book / Log Card , Line Replaceable Units (LRUs) cannibalization Record and Firmware/Software Version Records		

			1 1
9.	STAFF TRAINING		
9.1.	Appointments of persons responsible for standards/ competence of staff		
9.2.	Initial training		
9.3.	Refresher training		
9.4.	Standardization training		
9.5.	Proficiency checks		
9.6.	Upgrading training		
9.7.	RPTO staff standards		

PART-II

10.	Flying Area/Aerodrome (Requirements & Procedures) (Subject to availability of RPA requiring Aerodromes)		
10.1.	Proper airport perimeter fencing and/ or watch and ward for preventing runway incursion during aircraft operations.		
10.2.	Procedure for runway inspection (if Fixed wing RPA is operational).		
10.3.	Check availability of smooth runway of adequate length for the type of a/c.		
10.4.	Check availability of sufficient length of runway for type of a/c for clearing all obstacles in the take-off flight path by at least 50 feet.		
10.5.	Proper communication arrangements with ATC.		
10.6.	Proper and adequate safety services are provided by the training institute or by ATC (as applicable).		
10.7.	Visibility of wind sock or wind direction indicator from each end of the runway at ground level.		
10.8.	Proper traffic pattern for carrying out the flying training.		
10.9.	Proper drills for RPA emergency during flying at airport.		
10.10	Airport perimeter fencing with adequate watch and ward for preventing runaway incursion during aircraft operation?		
10.11	Proper air ground communication to supervise the flying training activities.		
10.12	Alarm bell and siren facilities at a suitable location.		
10.13	Sufficient number of fire extinguishers.		

10.14	First-aid room with proper kits and validity.		
10.15	Trained manpower to handle safety services.		
10.16	Proper coordination procedure with local fire station.		
10.17	Display of 'No-Smoking' sign at prominent places.		
10.18	Suitable and adequate hangar space for parking, mooring and maintenance of aircraft. The hangar shall be well lighted and suitable for aircraft maintenance.		
10.19	Separate demarcated area for Rotary wing RPA considering GPS error.		

11.	Maintenance aspects and checklist for audit	
11.1.	Office space for the engineering and maintenance personnel	
11.2.	Responsibility of MOM	
11.3.	Procedure to keep institute's approval maintenance valid.	
11.4.	Location for display of the approval certificate.	
11.5.	Procedures to set-up equipped/ Battery maintenance facility.	
11.6.	System of adhering to approved standard maintenance programme.	
11.7.	System of recording of any deviation to the approved standard maintenance programme.	
11.8.	Procedure for approval of maintenance schedules and amendment to maintenance schedules as per latest version of maintenance manual.	
11.9.	Procedure for dissemination of information to	

	working engineers.		
11.10	Procedure to complete the records in respect of periodic inspection, replacement of parts/ Batteries etc.		
11.1	Procedure to determine adequacy of qualified engineers/ technicians proportional to the activity of the institute.		
11.12	Training record and adequacy of the technicians employed.		
11.1:	Maintenance space and its availability (throughout the year or otherwise) to carry out inspection.		
11.14	Lighting of Maintenance and Battery Rooms.		
11.1	Ground equipment such as workbenches, Charging Stations to carry out the work.		
11.16	Procedure for tagging of all removed articles.		
11.1	System of cleaning and well arranging of stores.		
11.18	System of proper tagging of Quarantine store.		
11.19	System of keeping the Batteries in store and record of rotation.		
11.20	Maintenance of defect register.		
11.2	Procedure for approval of battery charging shop and individual along with system of ensuring calibration and serviceability of equipment.		
11.2:	Procedure to update the first-aid station in the battery shop.		
11.2:	Procedure to carry out inspections of RPAs as per standard check-list for serviceability of equipment, instruments etc.		
11.24	Procedure for calibration of precision tools/ instruments.		

12.	RETURNS TO BE SUBMITTED TO DGCA		
12.1	Students Records		
12.2	RPA records and Utilization		

The information as mentioned on the page and para column has been verified from the Training and Procedure Manual of RpTO.

(Accountable Manager)		(RPA Instructor)				
Signature with Date:			Signature wi	th Date:		
			-7			
For office	use only:					
Review by	/ DGCA Ir	nspector as ur	nder:-			
Remarks:						
Actions re	quired:					
Name	of	DGCA	Inspector	conducted	the	review:
Date:				,		

Annexure 4

Training Certificate/Card Format

(Size: 8.5 * 5.5 Cm on at least 100 GSM glazed paper)

NAME AND LOGO OF RPTO	
NAME:	
ADDRESS:	
Photo ID Number **	
SEX: DOB:	
 Has Successfully Completed the Remote Pilot Training Capsule as per Civil Aviation Requirements Section 3 Series X Part 1 Certificate number: IND-(ZONE-N/S/E/W)-(ORGANIZATION APPROVAL NO, as issue by DGCA)-UNIQUE SERIAL NUMBER (ISSUED BY RPTO) Category of RPA: Type of RPA: Type of issue: Valid upto 	

The certificate is valid for one year

** List of Photo IDs acceptable are:

- a. Aadhar Card
- b. Passport
- c. Driving License

SAMPLE TRAINING CERTIFICATE

XXXXXX DRONE TRAINING INSTITUTE	
OPP. SAFDARJUNG AIRPORT	
NEW DELHI-110003	
NAME:	
Ms. / Mr. /Capt. XYZ	
ADDRESS:	
HOUSE NUMBER ABC, STREET DEF, NEW DELHI-11003	Sample sign
Photo ID Number:	
XXXX XXXX XXXX	
SEX: MALE DOB: 01-01-1985	
 Has Successfully Completed the Remote Pilot Training Aviation Requirements Section 3 Series X Part 1 Certificate number: IND-N-XXX-001 Category of RPA: (Micro/Small/medium/large) Type of RPA: (Fixed wing/ Rotory/ Hybrid) Date of issue: 01-01-2019 Valid from Valid upto 	Capsule as per Civil
Sample sign	Sample sign
Mr. ABC (Accountable Manager)	Mr. XYZ (RPA Trainer)

The certificate is valid for one year

Annexure 5

Flight Log Book

(To be maintained by RPTO as a training Record)

Date	Trainees Name	Trainers Name	Name of the Exercise (Flight training /Simulator/Ground Training/ De briefing/ Test)	Duration	Signature	Remarks
	_					

Annexure 6

Battery Charging Log Book / Log Card

(To be filled at the time of battery charging or cannibalization from one RPA to the other)

Date	Battery Number	Starting battery Voltage (V)	Final Battery Voltage (v)	After Charging (mAH)	UID of RPA	REMARKS
	+					

Annexure-7

Line Replaceable Units (LRUs) cannibalization Record

S/NO	NAME AND ID OF THE LRU REMOVED	UID OF RPA FROM WHICH LRU WAS REMOVED	TO WHICH	

Annexure 8

Firmware/Software Version Records

S/NO	UID of RPA	LRU Name and ID on which firmware/Software is installed	Checksum/CRC	Remarks