



GOVERNMENT OF INDIA
OFFICE OF THE DIRECTOR GENERAL OF CIVIL AVIATION
DRONE TRAINING CIRCULAR 01 OF 2023

E-File No. DGCA-31018/3/2022-DRONE-Dte

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(DGCA-31052/1/2024-DRONE-Dte)

Subject: Requirements for approval of Train the Trainer, Instructor Rating, Master Instructor Authorisation and change management.

1. Introduction

Rule 34 (1) of The Drone Rules 2021 states that the training for grant of RPC shall be conducted by DGCA authorised RPTO. Sub Rule 1 of the Rule 41 of said rules, empowers Director General to lay down criteria for training, syllabus, infrastructure, instructors, proficiency testing and issuance of remote pilot certificates. In line to the said rule, this circular is being issued to lay down criteria for approval of Train the Trainer, Instructor rating and Master Instructor Authorisation and related change management.

2. Definitions

- 2.1 **Remote Pilot Training organization (RPTO):** An organization authorised by the Directorate General of Civil Aviation to impart Remote Pilot Training to any individual seeking a Remote Pilot Certificate under Rule 34 of Drone Rules 2021.
- 2.2 **Train The Trainer:** An approval granted by DGCA to an authorised Remote Pilot Training organization (RPTO) to impart training to RPC holders desirous of obtaining Instructor rating.
- 2.3 **Remote Pilot** means an individual charged by the operator with duties essential to the operation of an unmanned aircraft and who manipulates the flight controls, as appropriate, during flight time.
- 2.4 **RPC Instructor** means an individual authorized by DGCA to impart training to a candidate enrolled in an authorised RPTO for the purpose of obtaining remote pilot certificate.
- 2.5 **Master Instructor** means an individual authorised by DGCA for imparting TTT Course.
- 2.6 **Command and control (C2) link** means the data link between the remotely piloted aircraft and the remote pilot station for the purposes of managing the flight.
- 2.7 **Detect and avoid:** The capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action.
- 2.8 **Dual flight time:** Flight time during which a person is receiving flight instructions from a RPC Instructor using the remote pilot station during a remotely piloted aircraft flight.
- 2.9 **Flight time:** The total time from the moment a command and control (C2) link is established between the remote pilot station (RPS) and the remotely piloted aircraft (RPA) for the purpose of taking off or from the moment the remote pilot receives control following a

handover until the moment the remote pilot completes a handover or the C2 link between the RPS and the RPA is terminated at the end of the flight.

- 2.10 **Handover:** The act of passing piloting control from one remote pilot station to another.
- 2.11 **Remote pilot station (RPS):** The component of the remotely piloted aircraft system containing the equipment used to pilot the remotely piloted aircraft.
- 2.12 **Remotely piloted aircraft (RPA):** An unmanned aircraft which is piloted from a remote pilot station.
- 2.13 **Remotely piloted aircraft system (RPAS):** A remotely piloted aircraft, its associated remote pilot station(s), the required command and control links and any other components as specified in the type design.

3. Applicability & Scope

- 3.1. Provisions of this circular are applicable to Individual RPC holder, DGCA authorized Instructors/ Master Instructors, Remote Pilot Training Organizations and Train the Trainer Organizations.
- 3.2. The scope of this DTC is as follows;
 - Conditions : VLOS
 - Category: Rotorcraft
 - Sub-Category: RPAS
 - Class : Micro, Small , Medium (up to 50 Kgs)

4. Requirements for the issue of Instructor rating (RPAS)

4.1 Eligibility

- 4.1.1 The applicant shall have passed a Degree Course from a University/Institutes recognised by UGC/AICTE or equivalent; or having a valid PPL/ CPL, AME/ ATC Licence or Diploma (03 years) in technical subject from a recognized institute; and
- 4.1.2 The applicant shall have a valid RPC at the time of enrolment for RPI course in respective category and class.

4.2 Knowledge

- 4.2.1 The applicant shall demonstrate the ability to effectively assess trainees against the adapted competency model used in the authorized RPTO.
- 4.2.2 The applicant shall successfully complete the training and meet the qualifications of an authorized RPTO, appropriate to the delivery of competency-based training programmes.
- 4.2.3 The approved TTT shall focus on the development of competence in the following specific areas:
 - 4.2.3.1 the adapted competency model of the remote pilot training Organization ;
 - 4.2.3.2 in accordance with the assessment and grading system of the Remote Pilot training organization, making assessments by observing behaviours; gathering objective evidence regarding the observable behaviours of the adapted competency model used;
 - 4.2.3.3 recognizing and highlighting performance that meets competency standards;
 - 4.2.3.4 determining root causes for deviations below the expected standards of performance; and
 - 4.2.3.5 Identifying situations that could result in unacceptable reductions in safety margins.
- 4.2.4 The applicant shall have met the competency requirements for the issue of a remote pilot

certificate as appropriate to the category and class.

4.2.5 In addition, the applicant shall have demonstrated a level of competency appropriate to the privileges granted to the holder of an RPAS instructor rating, in at least the following areas:

- 4.2.5.1 techniques of applied instruction;
- 4.2.5.2 assessment of student performance in those subjects in which ground instruction is given;
- 4.2.5.3 the learning process;
- 4.2.5.4 elements of effective teaching;
- 4.2.5.5 competency-based training principles, including student assessments;
- 4.2.5.6 evaluation of the training programme effectiveness;
- 4.2.5.7 lesson planning;
- 4.2.5.8 classroom instructional techniques;
- 4.2.5.9 use of training aids, including flight simulator as appropriate;
- 4.2.5.10 analysis and correction of student errors;
- 4.2.5.11 human performance relevant to RPAS, instrument flight and remote pilot Certificate training, including principles of TEM; and
- 4.2.5.12 Hazards involved in simulating system failures and malfunctions in the aircraft.

Note: The detailed syllabus is attached as Annexure -I

4.3 Skill

- 4.3.1 The applicant shall have successfully performed a formal competency assessment (final test) followed by oral exam by DGCA, prior to conducting instruction and assessment within a competency-based training programme at DGCA authorized RPTO.
- 4.3.2 The competency assessment shall be conducted during a practical training session in the category of RPA and associated RPAS for which RPAS instructor privileges are sought, including pre-flight, post-flight and ground instruction as appropriate.
- 4.3.3 The competency assessment shall be conducted by a person authorized (Master Instructor) by the DGCA.

4.4 Experience

- 4.4.1 The applicant shall have met the requirements for the issue of a remote pilot licence, shall maintain competencies and meet the recent experience requirements for the licence.
- 4.4.2 The applicant shall have a minimum RPA flying experience of 20 hours for respective class, as the case may be. Flying requirements shall be fulfilled on the date of application for Oral exam for RPI.

4.5 Remote pilot Instructor flying training.

- 4.5.1 The applicant shall, under the supervision of an RPAS master instructor authorized by the DGCA for that purpose:
 - 4.5.1.1 have received training in RPAS instructional techniques including demonstration, student practices, recognition and correction of common student errors; and
 - 4.5.1.2 have practiced instructional techniques in those flight manoeuvres and procedures in which it is intended to provide remote pilot certificate training.

Note: The detailed syllabus is attached as Annexure -I

5. Requirements for approval of TTT organization/ Master Instructor Authorization.

5.1 Eligibility

5.1.1 TTT organization:

- 5.1.1.1 A DGCA authorised RPTO;
- 5.1.1.2 Shall have been in operations free from an accident/incident in the preceding six months from the date of application; and
- 5.1.1.3 Shall have generated at least 100 RPCs in respective category and class at the date of application.

5.1.2 Master Instructor:

- 5.1.2.1 Shall be a DGCA approved Instructor of appropriate category and class;
- 5.1.2.2 Shall have a minimum experience of imparting training to 100 remote pilot candidates (in respective category and class) for the purpose of RPC at DGCA authorised RPTO(s) at the time of application;
- 5.1.2.3 Shall have an overall drone flying experience of 200 Hrs, of which flying instructional experience shall be at least 100 Hours in respective category and class; and
- 5.1.2.4 Shall have an accident and incident free flying violations in preceding six months from the date of application.
- 5.1.2.5 Shall not have been involved in any violation of the drone rules 2021 or any other rules, regulations, circular, for which enforcement action is in process.

Note:

- 1. Incident here means any event / occurrence (other than accident defined in the Drone Rules, 2021), that has occurred during training/ operation.*
- 2. The candidates who are undergoing or have undergone Remote pilot Instructor course on or before Revision 02 of this circular comes in effect, shall be considered eligible as per the previous requirements of DTC 01 of 2023 Revision 01.*

6. Training Syllabus

The training syllabus for Remote pilot instructor course is attached as Annexure-I. RPTOs intending to become TTT organization, shall incorporate separate training curriculum/syllabus for RPI course and RPC course in their Training and procedure manual.

7. Procedural requirements for approval of TTT course and Master Instructor Authorisation

- 7.1 The applicant for TTT (eligible as per para 5.1.1) shall make an application as per Annexure-V to Drone Directorate, DGCA HQs along with documents as per Annexure II, at least 45 days prior to intended date of commencement of the training.
- 7.2 The applicant shall apply for authorization of at least two (02) master instructors (eligible as per para 5.1.2) in respective category/class of drone, along with application for TTT course and self-declaration of the candidate as per Annexure-VII. Skill test followed by oral exam of the proposed master instructors shall be carried out by a Board constituted by DGCA.

- 7.3 An approved TTT organization shall have at least two authorised Master Instructors on their base at all time for validity of TTT approval.
- 7.4 For an approved TTT; Number of students: Number of Master Instructor: 10:1 shall be maintained at all times.
- 7.5 In case of failure of candidate during assessment, for next assessment, the TTT can apply after a period of 30 days from the date of declaration of result.

8. Procedural requirements for Instructor rating/ additional rating

- 8.1 The applicant (eligible as per para 4) shall make an application to TTT organization authorized by DGCA to undertake RPI course.
- 8.2 Respective TTT organization shall be responsible for forwarding the list of candidates having successfully undergone the RPI course (once applicant meets the requirement of para 4.4) to DGCA for oral exam. The list (as per Annexure III) shall be forwarded, as and when, DGCA sends notification to TTT organization.

Note: Applicants meeting the requirements of para 4.1 & 4.4, may also apply directly to DGCA for oral exam, in case, respective TTT organization is not functioning after completion of course.

- 8.3 DGCA shall conduct oral examination for the eligible candidates for grant of instructor rating by the board. Result of Oral examination shall be declared to TTT/ individual candidate (as applicable).
- 8.4 The applicant shall be allowed maximum three (03) attempts for oral examination, with cooling period of at least 30 days, between the attempts.
- 8.5 The applicant, after availing all three attempts, shall undergo afresh TTT course for next oral examination. However, the minimum duration between third and next attempt shall not be less than 06 months.
- 8.6 Attempt will not be counted, if the applicant is absent for oral examination.
- 8.7 Any falsification of document/ fraudulent entries, towards obtaining RPC/RPI may lead to debarment of candidature for a period of 2 years.
- 8.8 *A RPC instructor in any category and class for additional rating, need not to undergo TTT course again for authorization in any other category and class. The candidate shall obtain RPC as per DTC 02 of 2022. For the approval process the RPTO/individual candidate shall follow the procedure as provided in para 8 of this circular.*

9. Procedural requirements for change management (amendment/ up-gradation of scope of TTT approval)

- 9.1 The applicant having TTT approval shall make an application for amendment/up-gradations of scope to Drone Directorate, DGCA HQs along with documents as per Annexure IV, at least 45 days prior to intended date of commencement of the training, under the intended scope.
- 9.2 The applicant shall apply for authorization/upgrade of at least two (02) master instructors (eligible as per para 4.3) in respective category/class of drone along with application for TTT upgrade. Skill test followed by oral exam of the proposed master instructors shall be carried out by a Board constituted by DGCA. For an approved TTT; Number of students: Number of Master Instructor: 10:1 shall be maintained at all times.

10. Issuance

After such scrutiny and inspection, as necessary and based on the satisfactory compliance of the applicable requirements by the applicant, DGCA may issue TTT approval, Instructor rating/ Master Instructor authorization.

11. Validity

Unless revoked or suspended:-

- 11.1 TTT approval shall remain valid for a period of five years from the date of issue, subject to continued compliance of the Drone Rules 2021 and DTCs issued thereunder from time to time.
- 11.2 Master Instructor authorization shall remain valid for a period upto five years from the date of issue, subject to validity of respective RPC and instructor rating.
- 11.3 The validity of authorisation of Master Instructor is linked with the authorised RPTO approved for conducting TTT. Disassociation of the RPTO approved for conducting TTT & authorised Master Instructor shall void the approval and authorisation granted by DGCA, for RPTO and master instructor respectively.
- 11.4 Instructor rating shall remain valid for a period of Ten years from the date of issue or the validity of RPC whichever is earlier, subject to validity of respective RPC.

12. Refresher Course

The Instructors / Master Instructors shall undergo refresher course every 2 years in respective class & category for a duration not less than 8 hours and broadly encompassing the topics covered under Annexure-I and new developments occurred during the period.

13. Renewal

13.1 TTT Approval and Master Instructor Authorisation

The applicant shall apply for renewal of validity of TTT Course/ Master Instructor authorisation along with compliance of requirements laid down in this DTC to Drone Directorate, DGCA HQs at least 45 days before the date of expiry. The period of renewal shall be for a maximum period of 05 Years.

13.2 Instructor rating

The applicant shall apply for renewal of validity of Instructor rating along with compliance of requirements laid down in this DTC to Drone Directorate, DGCA HQs at least 45 days before the date of expiry. The period of renewal shall be for a maximum period of 10 Years.

14. Functions

14.1 TTT organization

The functions of TTT shall be:

- 14.1.1 to conduct of Train the trainer course of eligible candidates in respective category and class, as per applicable syllabus prescribed by DGCA.
- 14.1.2 to ensure compliance of applicable clause of this DTC, prior to conduct of training of candidates and forwarding their name for oral examination to DGCA.
- 14.1.3 to maintain complete training record of the candidates.
- 14.1.4 to submit returns as desired by DGCA from time to time.
- 14.1.5 to make and verify entries in various Logbooks such as Organization/ RPAS/ Battery/ Personnel Logbook etc.
- 14.1.6 to ensure compliance of The Drone Rules 2021, DTCs and any other guidelines/directions issued by DGCA from time to time.

14.2 Master Instructor

The functions of holder of Master Instructor Authorization shall be:

- 14.2.1 to impart Instructor training (as per applicable syllabus) and Competency Assessment (Final test) to eligible candidates to take DGCA oral exam towards instructor Rating.
- 14.2.2 to verify various entries in candidates personal Logbook.
- 14.2.3 to ensure compliance of The Drone Rules 2021, DTCs and any other guidelines/directions issued by DGCA from time to time.

14.3 Instructor

The functions of the holder of an RPASinstructor rating shall be:

- 14.3.1 to supervise solo flights by student remote pilots in DGCA authorized RPTO; and
- 14.3.2 to carry out remote pilot certificate training (as per applicable syllabus) for the issue of a remote pilot certificate provided that the RPAS instructor:
 - 14.3.2.1 holds at least the remote pilot certificate and rating for which instruction is being given, in the appropriate RPA category and associated RPS;
 - 14.3.2.2 holds the remote pilot certificate and rating necessary to act as the remote pilot-in-command of the RPA category and associated RPS on which the instruction is given; and
 - 14.3.2.3 has the RPAS instructor privileges granted endorsed on the remote pilot certificate.
- 14.3.3 to verify various entries in candidates personal Logbook.
- 14.3.4 to ensure compliance of The Drone Rules 2021, DTCs and any other guidelines/directions issued by DGCA from time to time.

15. Enforcement Action

In case of any concealment or misrepresentation of facts to DGCA or during the course of training activities, if the organization/individual fails to comply with the requirements of The Aircraft Rules 1937, The Drone Rules, 2021, other applicable DTCs and any other guidelines/directions issued by DGCA from time to time or if the standard of training is found to be below the desired level, the approval/authorisation granted to the organization/individual shall be liable to alteration, suspension or cancellation or Penalty in accordance with the Rule 50 and/ or 53 of the Drone Rules, 2021.

Sd/-

(Vikram Dev Dutt)
(Director General of Civil Aviation)

A MINIMUM TRAINING REQUIREMENTS FOR INSTRUCTORS

1. Ground Training

Ground training shall consist of two parts;

(a) Technical theoretical knowledge instruction (technical training) comprising of minimum 05 hours training to include the revision of technical knowledge, the preparation of lesson plans and the development of classroom instructional skills to enable the Instructor to instruct the technical theoretical knowledge syllabus.

(b) Teaching and learning instruction (trainers course) comprising of minimum 7:30 hours training to cover;

- Learning process
- Teaching process
- Training philosophies
- Techniques of applied instruction
- Airborne instruction techniques
- Student evaluation and testing
- Training programme development
- Human performance and limitations relevant to flight instruction
- Specific hazards involved in simulating systems failures and malfunctions in the aircraft during flight
- Training administration
- Mock session

Note: Ground training for instructor can be modular.

2. Simulator Training

2.1 Phase I

One simulator session of at least 1 hour for the purpose of familiarisation and handling of normal, abnormal and emergency conditions.

2.2 Phase II

(a) One simulator session of at least 30 min for trainee Instructor Pilot (s) to observe master instructor imparting instructions on simulator, covering at least Circuit Flying – Square, Flying in circles, Flying in figure of 8, Disorientation and Recovery.

(b) The trainee Instructor Pilot shall impart instructions on simulator for 30 mins under supervision of master instructor, covering at least Circuit Flying – Square, Flying in circles, Flying in figure of 8, Disorientation and Recovery.

3. RPAS Training

3.1 Phase I

One RPAS practical flying training of at least 1 hour mins to the satisfaction of Master Instructor with the trainee Instructor Pilot having control of Master remote pilot station and Master Instructor having control of slave remote pilot station and acting as remote Pilot-under-Training. This will provide handling the RPAS in normal, abnormal and emergency conditions while imparting instructions and to take timely corrective actions.

3.2 Phase II

(a) One session of at least 30 min for trainee Instructor Pilot (s) to observe master Instructor imparting instructions on RPAS, covering at least Circuit Flying – Square, Flying in circles, Flying in figure of 8, Disorientation and Recovery.

(b) The trainee Instructor Pilot shall impart instructions on RPAS for 30 mins under supervision of master instructor, covering at least Circuit Flying – Square, Flying in circles, flying in figure of 8, Disorientation and Recovery.

4. Final Test

An Instructor evaluation does not entail an evaluation of the candidate's proficiency in the basic flying skills. The purpose of the Instructor evaluation is to ensure that the candidate has achieved the required skills for briefing, evaluating, and debriefing.

A final test of trainee instructor pilot shall be carried out for at least 30 min, as per Annexure VI

List of documents to be submitted along with application for TTT approval

- a) Copy of RPTO authorisation issued by DGCA.
- b) Details of proposed Master Instructors meeting the eligibility requirements specified in Para 4.3 along with relevant documents.
- c) Updated TPM containing proposed syllabus for TTT Course, drones addition/ deletion (as applicable), instructor, master instructor, etc.
- d) Proof of continuous operations for the preceding six months.
- e) Proof of having generated at least 100 RPCs in respective category and class.
- f) Self-Declaration signed by applicant stating that no accident and incident has occurred during training in preceding six months. It must also state that the RPTO has complied with provisions of The Drone Rules, DTCs in last six months also.

NAME OF THE ORGANISATION

SI No.	Candidate Name (As per RPC)	RPC No.	RPI SI No. (As on eGCA platform), if applicable	Attempt Number	Date of last attempt	Remark
1.						
2.						
3.						
4.						
5.						

List of documents to be submitted along with application for amendment/up-grade of scope of TTT

- a) Copy of TTT approval issued by DGCA.
- b) Details of proposed Master Instructors meeting the eligibility requirements specified in Para 4.3 along with relevant documents.
- c) Updated TPM containing proposed syllabus for TTT Course, drones addition/ deletion (as applicable), instructor, master instructor, etc.
- d) Proof of continuous operations for the preceding six months.
- e) Proof of having generated at least 100 RPCs in respective category and class.
- f) Self-Declaration signed by applicant stating that no accident and incident has occurred during training in preceding six months. It must also state that the RPTO has complied with provisions of The Drone Rules, DTCs in last six months also.

APPLICATION TO BE FILLED BY THE APPLICANT FOR TTT				
APPLICANT'S DEATILS				
Name of RPTO			Address:	
Authorization Number	Flying Base:	Validity of Authorization:	Scope of Approval:	
Category	Sub-Category	Class	Scope requested for:	
ELIGIBILITY:				
1. Details of proposed Master Instructors:-				
s. no.	Name	RPC details including scope	RPC generated by candidate at the time of application	Flying hours in respective class and category
1.				
2.				
3.				
2. No. of RPC generated by RPTO in Respective Category and Class:-_____				
3. Details of Penalty / Enforcement action taken by DGCA in previous 6 months:-				
DECLARATION BY APPLICANT				
<p>I CERTIFY THAT (<i>The RPTO Name</i>) is in continuous operations and no accident and incident has occurred in the preceding six months from the date of application. I also certify that THE ABOVE INFORMATION IS TRUE IN EVERY RESPECT, and I AGREE TO ABIDE BY THE PROVISIONS OF THE DRONE RULES 2021 AND DTC's ISSUED THEREUNDER.</p>				
Accountable Manager's SIGNATURE DATE (DD/MM/YY)				
Accountable Manager's NAME and stamp				

ANNEXURE-VI

PROFORMA FOR INSTRUCTOR/ MASTER INSTRUCTOR EVALUATION (FINAL TEST)

Name of Candidate: (under check)	RPC No.	Category	Sub-category	Class	Scope of operations
Name of RPTO	Model Name & number	UIN	Date & Time	Duration	Flying experience Number of RPC generated
Details of DGCA officer/Master Instructor:					
Name:					
RPC no:					
Validity:					
EXERCISE				Assessment	
(S – Satisfactory/ U – Unsatisfactory/ NA – Not Applicable)					
PRE-FLIGHT BRIEFING	a. Briefing preparation				
	b. Knowledge of Drone rule and DTCs				
	c. RPAS knowledge				
	d. Lesson plan				
	e. Pre-flight Check				
EVALUATION DURING IN-FLIGHT	a. Ability to give exercises				
	b. Ability to introduce failure				
	c. Time management for evaluation of trainee				
POST FLIGHT BRIEFING	a. Ability to recount key faults				
	b. Note taking during session				
	c. De-brief techniques				
	d. Report writing				
FLIGHT CHECK REPORT	a. Filling-up forms				
	b. Filling up log-books				
	c. other records				
COMMENTS:				OVERALL ASSESSMENT	
				SAT	UNSAT
Signature of Candidate:				Inspector's Signature	

ANNEXURE-VII

Self Declaration by the proposed Master Instructor

s. no.	Name of proposed master instructor	RPC details including scope	RPC generated by candidate at the time of application	Flying hours in respective class and category
1.				
2.				

I certify that **THE ABOVE INFORMATION IS TRUE IN EVERY RESPECT, and I AGREE TO ABIDE BY THE PROVISIONS OF THE DRONE RULES 2021 AND DTC's ISSUED THEREUNDER.**

Applicants's SIGNATURE

DATE (DD/MM/YY)

*****END*****