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GOVERNMENT OF INDIA

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

CIVIL AVIATION REQUIREMENTS
SECTION 7 - FLIGHT CREW STANDARDS
TRAINING & LICENSING

SERIES 'I', PART II

22nd SEPTEMBER 2014

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F. No. 22024/27/2014-FSD

**SUBJECT: AUTHORIZATION OF INSTRUCTORS AND LINE TRAINING CAPTAINS
FOR SCHEDULED COMMERCIAL OPERATORS WITH FIXED WING
AIRCRAFT AND APPROVED TRAINING ORGANISATIONS**

1. INTRODUCTION

This Civil Aviation Requirement is issued under Rule 29C and Rule 133A of the Aircraft Rules 1937 laying down the minimum requirements for the authorization of instructors as provided for in Rule 38A of the Aircraft Rules, 1937 for scheduled commercial operations with fixed-wing aircraft. An Instructor is an operator/ATO employee, "authorized" by DGCA to impart instructional training with an operator. To provide adequate trainers for line training and meet the objectives of an operator's/ATO's training programme, this CAR lays down the minimum requirements for an operator to "authorize" line training captains (LTCs). The appointment of Line Training Captains is an operator's function and responsibility for standards rests with the post-holder Training of the operator. Approval/authorization of DGCA is not required for LTCs.

2. TYPES OF INSTRUCTORS

- (a) Type Rating Instructor – Simulator (TRI-S). For conduct of simulator and aeroplane training and checking (other than base training)
- (b) Type rating Instructor - Aeroplane (TRI-A). For conduct of simulator and aeroplane training and checking.
- (c) Synthetic Flight Instructors (SFI). For conduct of simulator training by pilots not holding current and valid licenses.

3. PROCEDURE FOR SELECTION OF INSTRUCTORS

- 3.1 The seniority, the position in the organisation and remuneration received by the pilots shall not be the consideration for authorization as Instructors.
- 3.2 The number of Instructors depends on the requirement of line training needs of the operator. Operators while recommending the names of pilot for authorization of Instructors shall ensure and confirm that pilots recommended for authorization as Instructors are of recognised integrity, free from prejudices and strong likes and dislikes and capable of recording fair assessments and shall be known for impartial conduct. They shall be capable of instilling high standard of discipline among the flight crew and shall have balanced attitude towards them.
- 3.3 The Operator's Post-holder Training shall forward the names of pilots proposed as Instructors to FSD, DGCA. Operators, before recommending the names of the pilots, shall subject the pilots to a process of selection and suitability tests. Formal advice of the acceptability of each nominee Instructor must be received from DGCA prior to commencement of the Instructor training course. However, if advice is not received within 15 days of the recommendation, the operator may commence training subject to compliance with other provisions in this CAR.
- 3.4 After completion of training, the completed records shall be submitted to FSD, DGCA for authorization as Instructor.

Note: The minimum training requirements for Instructors are prescribed in Appendix A.

- 3.5 The pilots recommended for authorization as TRIs:
- (a) should have been regularly flying the aircraft type for which the authorization is sought. They should have consistently shown satisfactory proficiency;
 - (b) should not have failed in any of the proficiency checks on simulator/aircraft during the preceding three months;
 - (c) should have functioned as a Line Training Captain on the same type with the operator for a minimum period of 6 months or should have functioned as a TRI with the same operator on another type for a minimum period of 6 months, or should have functioned as a TRI with another operator on the same/another type for a minimum period of 12 months in the previous 5 years, or for a pilot issued with FATA employed by the operator, functioned as a TRI on type with an ICAO Contracting State for a minimum period of 2 years during the previous 3 years, and;
 - (d) should have minimum 100 hours of line training as LTC unless the pilot has functioned as TRI earlier.
 - (e) should not have tested alcohol positive during a pre/post flight medical check in the previous 3 years.

- (f) should not have been held blameworthy for an aircraft accident in the previous 3 years or an aircraft incident in the previous 1 year.

Note: Another type in context of (c) above means turboprop to turboprop, turbojet to turbojet

3.6 The pilots recommended for authorization as SFIs:

- (a) should have been rated as PIC on the aircraft type and current in the preceding 5 years or should have been a line/simulator trainer in the preceding 5 years on the same/another type of commercial air transport with a scheduled operator or with a DGCA approved TRTO/ATO with aeroplane AUW exceeding 5700 kgs or for a foreign pilot employed/engaged by an operator without FATA, functioned as a TRI/SFI on the type with an ICAO Contracting State for a minimum period of 2 years during the previous 3 years, and;
- (b) should not have tested alcohol positive during a pre/post flight medical check in the previous 3 years.
- (c) should not have been held blameworthy for an aircraft accident in the previous 3 years or an aircraft incident in the previous 1 year.
- (d) should have undergone a medical assessment by a doctor qualified in Aviation Medicine on suitability for simulator instructional duties that will address;
- Physical ability
 - Visual and colour perception
 - Hearing

Note 1: In addition to entry requirements, the medical assessment above shall be conducted annually for SFIs above the age of 70 years. The medical assessment may be conducted by any doctor including operator's doctor trained in aviation medicine,

Note 2: Another type in context of (a) above means turboprop to turboprop, turbojet to turbojet

3.7 The pilots recommended for authorization as Instructors shall undergo the stipulated ground training and satisfactory checks on an approved simulator/aircraft. The pilots who fail in the check should not be recommended for the respective approval for a period of three months.

3.8 The pilot trained as Instructors shall be checked for proficiency by DGCA Flight Inspector. The pilots who fail in the proficiency check should not be recommended for the respective approval for a period of three months.

4. PROCEDURE FOR SELECTION OF LINE TRAINING CAPTAINS

4.1 The seniority, the position in the organisation and remuneration received by the

pilots shall not be the consideration for authorization as LTCs.

4.2 The number of LTCs depends on the requirement of line training needs of the operator. It should be ensured that LTCs are of recognised integrity, free from prejudices and strong likes and dislikes and capable of recording fair assessments and shall be known for impartial conduct. They shall be capable of instilling high standard of discipline among the flight crew and shall have balanced attitude towards them.

4.3 The pilots appointed as LTCs :

- (a) should have been regularly flying the aircraft type. They should have consistently shown satisfactory proficiency;
- (b) should not have failed in any of the proficiency checks on simulator/aircraft during the preceding three months;
- (c) should not have tested alcohol positive during a pre/post flight medical check in the previous 3 years.
- (d) should not have been held blameworthy for an aircraft accident in the previous 3 years or an aircraft incident in the previous 1 year.

Note: Pilots employed by an operator with FATA and holding current LTC or equivalent approvals from an ICAO Contracting State will be permitted to function as LTCs subject satisfactory completion of the selection and release process as for national license holder LTCs.

4.4 LTCs shall be trained prior to being utilized for line training duties. The pilots authorized as LTCs shall undergo the stipulated ground training and satisfactory checks on an approved simulator/aircraft. The pilots who fail in the check should not be appointed for a period of three months.

Note: The minimum training requirements for LTCs are prescribed in Appendix B.

4.5 The pilots trained as LTCs shall be checked for proficiency by the operator. The pilots who fail in the proficiency check should not be appointed for a period of three months.

4.6 The record of successful completion of training and checks shall be maintained by the operator and may be scrutinized by DGCA at any time.

5. QUALIFYING EXPERIENCE REQUIREMENTS

(a) Instructors

- (i) Total Flying Experience - 3,500 hours
- (ii) Total Command Experience - 1,500 hours
- (iii) Total Command Experience on the type - 1,000 hours

The total command experience on the type for approval as an Instructor shall be 500 hours in case the pilot has been a functional instructor with the same operator for not less than 1 year on another type and 750 hours in case the pilot has been a functional instructor with another operator on another type for not less than 1 year.

Note: Total command experience above is for pilots rated on type.

(b) Line Training Captains

- | | | | |
|-------|--------------------------------------|---|-------------|
| (i) | Total Flying Experience | - | 3,000 hours |
| (ii) | Total Command Experience | - | 1,000 hours |
| (iii) | Total Command Experience on the type | - | 500 hours |

6. PRIVILEGES OF INSTRUCTORS AND LTCs

6.1 Type Rating Instructor - Simulator

- (a) Training of PIC/co-pilots for type rating
- (b) Training for issue/renewal of Instrument rating.
- (c) Recurrent pilot proficiency training
- (d) Line training including SLF
- (e) Training and assessment of TRI-A and S/SFIs and LTCs
- (f) Aeroplane/Simulator checks and assessment except Skill Tests, PPC and IR Check and PIC upgrade route checks

6.2 Type Rating Instructor – Aeroplane

- (a) Training of PIC/co-pilots for type rating
- (b) Training for issue/renewal of Instrument rating.
- (c) Recurrent pilot proficiency training
- (d) Line training including SLF
- (e) Training and assessment of TRI-A and S/SFIs and LTCs
- (f) Aeroplane/Simulator checks and assessment except Skill Tests, PPC and IR Check and PIC upgrade route checks
- (g) Aeroplane training (Base training)

6.3 Synthetic Flight Instructors

- (a) Training of PIC/co-pilots for type rating
- (b) Training for issue/renewal of Instrument rating.
- (c) Recurrent pilot proficiency training
- (d) Simulator training of SFIs and LTCs

6.4 Line Training Captains

- (a) Line training including SLF
- (b) Line checks and assessments when authorized by the operator, except PIC upgrade route checks

Note: Special operations training can be imparted by the Instructor provided he has observed and conducted applicable special operations training simulator session with an Instructor qualified to conduct such training

- 6.5 (a) An TRI/LTC shall exercise his privileges on an aeroplane only when he has a minimum of 10 hours flying experience as PIC on the type during the preceding 90 days. In case an Instructor does not meet this requirement, he shall exercise privileges limited to that of an SFI till he has this recent experience; and

- (b) An Instructor/LTC shall continue to exercise his privileges when he has exercised the privileges of Instructor/LTC as applicable on the type during the preceding 6 months except when a pilot is newly authorized on the type. In case an Instructor is not meeting this recent experience, he shall first exercise his privileges under the supervision of a functional Instructor. He shall start functioning independently again, only if his proficiency is found satisfactory.

7. VALIDITY AND RENEWAL OF INSTRUCTORS:

7.1 Unless revoked or suspended, the authorization of the Instructor shall remain valid for a period of five years from the date of issue of authorization so long as the pilots continue to meet the applicable requirements of this CAR and remain in the employment of the operator who has obtained the authorization.

7.2 The DGCA authorized Instructors shall be required to undergo assessment of their continued proficiency in carrying out their privileges as Instructors. Such assessment shall be carried out in the simulator as a "Instructor Standardization Check" once in two years by a Designated Examiner of the operator, record of which will be forwarded to FSD.

7.3 Renewal of authorization of Instructor shall be accorded after submitting the following documents by the operators at least three months in advance.

- (a) Record of training done in last 24 months.
- (b) Copy of license and medical certificate.
- (c) Record of standardization checks.

The request will be examined at FSD, and if found satisfactory, a DGCA FOI will

assess the proficiency as in para 3.8 above following which the authorization may be extended for another 5 years.

8. WITHDRAWAL OF INSTRUCTOR PRIVILEGES

8.1 Privileges granted to a pilot as an Instructor may be withdrawn by the DGCA if the pilot is found lacking in any of the requirements. Besides, a Board consisting of the Chief of Operations and Chief of Training of the operator may also recommend to the DGCA, withdrawal of privileges as Instructor in respect of any pilot giving adequate justification.

8.2 Instructor privileges may be withdrawn by the DGCA, in part or in whole, for due cause. In these cases, the DGCA Flight Standards Directorate will issue a written notification of withdrawal of privileges to the Instructor concerned, and also inform the applicable Operator(s). Where there is an immediate threat to safety, this privilege will be withdrawn immediately. The DGCA may withdraw an Instructor's authority if evidence shows that an Instructor has:

- At any time, acts in a manner which is in contravention of the guidelines contained in this CAR;
- Failed to follow the applicable instructions to maintain the required standards, or to follow proper procedures;
- Tested alcohol positive in a pre/post flight medical check;
- Fraudulently misused Instructor authority, or acted in any other way that would discredit the DGCA;
- Breached the DGCA Civil Aviation Rules and Regulations; or
- During the course of a Proficiency Check, Skill Test or Standardization Check failed to meet the required DGCA Standards.

Except where there is an immediate threat to safety, the DGCA, prior to making a final decision in the matter of withdrawal of an Instructor's authority, shall ensure the matter has been investigated thoroughly; and the Instructor and, where applicable, the concerned Operator, have been given a formal opportunity to respond to the allegations, either verbally or in writing.

Note: Refer Operations Circular 2 of 2013 - Withdrawal/Reinstatement of Trainer Approval

9. VALIDITY, RENEWAL AND STANDARDS OF LTC

The validity and renewal of LTC authorization and standards required to be maintained by the LTC are the responsibility of the operator.

10. GENERAL

10.1 This CAR supersedes;

- (a) CAR Section 7 Series I Part I dealing with Instructor approval.
- (b) CAR Section 7 Series I Part II dealing with SFI approval.
- (c) CAR Section 7 Series I Part I dealing with Check Pilot approval.

10.2 A pilot may hold independent yet concurrent appointment as DE and authorization as Instructor. The requirements for such appointment or authorization will be met separately with distinct approval, standardization processes and validity periods. Withdrawal and reinstatement would be treated separately for both cases.

10.3 Simulator Instructors approved for one operator/ATO may be cross-utilized by another operator/ATO with the same type of aeroplane provided an indoctrination course of the respective Operations Manual/Training and Procedures Manual with minimum duration 8 hours is conducted followed by a standardization check by the Post-holder Training or his nominated TRI. Training and duty records will be maintained by both operator/ATO involved in the cross-utilization.

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(M Sathiyavathy)
Director General of Civil Aviation

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 12 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. For an SFI who is not current on type, an additional extended technical and performance refresher comprising of minimum 40 hours shall be carried out.
- (b) Teaching and learning instruction (trainers course) comprising of minimum 40 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

Note: Ground training for Instructors can be modular. Validity of the ground course will be 2 years. Refresher course is to be undertaken every 2 years which may be of shorter duration. If the refresher course is done within 3 months prior to original expiry date, the next refresher is to be done within 2 years of the original expiry date. Existing Instructors transitioning to this CAR will need to do a refresher course without the need for an initial course. In case of change of operator, credit for similar duration ground course can be carried forward.

2. **Simulator Training**

2.1 **Phase I**

- (a) One simulator session of at least two hours from right hand seat and for the purpose of familiarisation and handling of normal, abnormal and emergency conditions especially in traffic circuits.
- (b) Assessment of at least two hours with the trainee instructor in the right hand seat, instructor in left hand seat acting as a Pilot-under-training during which the trainee Instructor Pilot shall demonstrate his skill in handling the aircraft in normal, abnormal and emergency conditions and taking timely corrective actions.

2.2 **Phase - II**

- (a) The trainee Instructor Pilot should observe a complete PIC or Co-pilot training profile (inclusive of LVTO/AWO, training but not skill tests and IR/PPC)
- (b) The trainee Instructor Pilot should impart instructions under supervision of an Instructor for a complete training profile of PIC or Co-pilot.

Note 1: If a batch of at least two PIC/Co-pilot trainees is being trained together for the complete course, the trainee Instructor Pilot may impart instructions along with the Instructor Pilot alternatively, thus reducing the simulator timings.

Note 2: The Operator shall formulate and specify additional syllabus of simulator training for trainee SFIs depending upon their background and experience level to enable them to demonstrate adequately exercises such as, but not limited to, reject take off, engine failure on take off and approach, circuits and landings including with engine inoperative, stall and recovery, crosswind take off and landing.

3. **Aircraft Training**

3.1 **Phase I**

Adequate flying training to the satisfaction of instructor with the trainee Instructor Pilot occupying right hand seat and TRI occupying left hand

seat acting as Pilot-under-Training. Minimum 3 take-offs and landings out of which at least one landing shall be with simulated one engine inoperative. This is to provide practice in handling the aircraft in normal, abnormal and emergency conditions from right hand seat and also to impart instructions and to take timely corrective actions.

Note: Phase 1 above may be carried out in a simulator.

3.2 Phase II (required only for TRI-A)

- Observe an Instructor conduct base training in an aeroplane, consisting of minimum 3 take offs and landings
- Conduct under supervision of an Instructor base training in an aeroplane consisting of minimum 3 take offs and landings.

Note 1: If the time between the Phase 1 of simulator training (Para 2.1 and the initiation of Aircraft Training (Para 3.1) is more than three months but less than 6 months, one more session of simulator training of at least two hours would be required as a refresher for simulator training of Phase-I before starting the aircraft training. If more than 6 months have elapsed, then simulator training as in Para 2 will need to be repeated.

Note 2: The Instructor supervising the base training (Para3.2) occupies the observer seat while the under trainee instructor, having been trained in Phase 1 satisfactorily occupies the RHS seat as PIC.

4. Line Training

4.1 For TRIs, at least one SLF sector should be conducted by the trainee Instructor pilot under supervision of an Instructor. Instructor may occupy left hand seat or right hand seat and act as a Pilot-under-training also.

4.2 For SFIs, at least 4 sectors observation of a line flight with an Instructor.

5. Release Check

Final proficiency check of the trainee Instructor Pilot shall be carried out by a DGCA Flight Inspector in a simulator or on aircraft (if there is no simulator) as per Annexure 16 to CAP 8200 FOI Manual.

Appendix B

MINIMUM TRAINING REQUIREMENTS FOR LINE TRAINING CAPTAINS

1. **Ground Training**

Ground training shall consist of two parts;

- (a) Technical theoretical knowledge instruction (technical training) comprising of minimum 12 hours training to include the revision of technical knowledge, the preparation of lesson plans and the development of classroom instructional skills to enable the LTC to instruct the technical theoretical knowledge syllabus.
- (b) Teaching and learning instruction (trainers course) comprising of minimum 24 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

Note: Ground training for LTCs can be modular with credit for modules carried forward in case of LTC to Instructor upgrade within 2 years of the ground course. Validity of the ground course will be 2 years. Refresher course to be undertaken every 2 years which may be of shorter duration. If the refresher course is done within 3 months prior to original expiry date, the next refresher is to be done within 2 years of the original expiry date. Existing Check Pilots transitioning to this CAR will need to do a refresher course without the need for an initial course. In case of change of operator, credit for similar duration ground course can be carried forward.

2. **Simulator Training**

- (a) One simulator session of at least two hours from right hand seat for the purpose of familiarisation and handling of normal, abnormal and emergency conditions from right hand seat.
- (b) One simulator session of at least two hours from left hand seat for the purpose of familiarisation of Pilot Monitoring duties from left hand seat.
- (c) Assessment of at least 2 hours from right hand seat.

3. **Aircraft Training**

Adequate flying training to the satisfaction of instructor from right hand seat with minimum of 3 take-offs and landings and at least one landing shall be with simulated one engine inoperative. The purpose of the training flight is to establish proficiency in handling the aircraft in normal, abnormal and emergency conditions from right hand seat.

Note: For aircraft where Level 'D' Simulator is available, this requirement of aircraft training can also be carried out on Simulator along with Simulator Training as in para 2 above. Where Simulator Training cannot be availed, aircraft training as at para 3 above is required to be carried out.

4. **Line Training**

At least two SLF sectors with trainee LTC occupying right hand seat with Instructor in left hand seat. Out of the two, at least one flight should be at night. The purpose is to introduce the trainee LTC to line flying duties from right hand seat as PF.

5. **Release Flight**

On successful completion of Line Training, the post-holder Training (or his nominee) shall observe the trainee LTC from the observer seat and if performance is satisfactory, the pilot may be authorized as LTC to act as PIC from LHS/RHS for line training flights.