

PUBLIC APPOINTMENTS

Applications are invited on plain paper with attested photocopies of the testimonials for the following on contract basis in the Civil Aviation Department, Government of Punjab, Chandigarh:-

1.	Operation Officer/ Flight Dispatcher	01 Post (General Category)
2.	Salary	Consolidated in the pay scale Rs. 10300-34800+4600 (Grade pay)
3.	Qualification	(a) Should have passed class 10+2 or an equivalent examination with physics and Mathematics from a recognized Board/University. (b) Should be able to satisfy the qualification and knowledge as prescribed in CAR Section-7, Series- 'M', Part-II and CAR para-8 of Section-8 Series 'O' Part-IV. (c) Applicant should have atleast 10 years of experience in handling aviation operations, which should also include atleast 3 years of current experience in handling helicopter operations.
4.	Age	The applicant should not have attained the age of less than twenty one years or is more than thirty seven years before their initial approval. Provided further that the upper age limit may be relaxed upto forty-five years in the case of persons already in the employment of the Punjab Government, other State Government or the Government of India. Provided further that in the case of candidates belonging to Scheduled Castes and other Backward classes, the upper age limit shall be such as may be fixed by the Government from time to time. In the case of Ex-servicemen, the upper age limit shall be such as has been prescribed in the Punjab Recruitment of Ex-servicemen Rules, 1982, as amended from time to time. In the case of appointment of a war-hero, who has been discharged from defence services or para-military forces on account of disability suffered by him or his widow or dependent member of his family, the upper age limit shall be such as may be specifically fixed by the Government from time to time.

The selection of this post will be made by the Department Selection Committee and decision of this committee/Government will be final. Application with complete Bio-data alongwith attested photo copies of testimonials and experience should be addressed to the 'DIRECTOR CIVIL AVIATION, GOVT. OF PUNJAB, SCO NO. 1068-69, SECTOR 22-B, CHANDIGARH' through 'REGISTERED POST' and should reach within 15 days from the date of Publication of this advertisement.

Tejveer Singh, IAS
Secretary to Govt. of Punjab
Department of Civil Aviation



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 & LICENCING

SERIES 'M' PART II,
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Sub: Flight Dispatcher Training and Approval

1. Introduction:

Flight Dispatchers (Flight Operations Officers) are involved in operational control in accordance with the operator's approved method of control and supervision of flight operations. These personnel are required to be trained and qualified in accordance with ICAO Annex 1 and their duties and responsibilities are specified in ICAO Annex 6. This CAR is issued under the Rule 29C and 133A of the Aircraft Rules 1937 to set out the requirements to impart necessary training and qualification of flight dispatchers and their approval.

2. Requirements of Issue of Approval Flight Dispatchers:

2.1 General

No operator shall use any person nor shall any person serve as a flight dispatcher unless that person has been approved by the DGCA to act as Flight Dispatcher for the type of aircraft for the operator.

2.2 Educational Qualification

The applicant for Flight Dispatcher shall have passed class 10+2 or an equivalent examination with Physics and Mathematics from a recognized Board/University.

2.3 Age

The applicant shall be not less than 21 years of age.

2.4 Knowledge

The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight dispatcher approval, in at least the following subjects:

Air law

a) rules and regulations relevant to the holder of a flight dispatcher approval; appropriate air traffic services practices and procedures;

Aircraft general knowledge

b) principles of operation of aeroplane engines, systems and instruments;

c) operating limitations of aeroplanes and engines

d) minimum equipment list;

Flight performance calculation, planning procedures and loading

e) effects of loading and mass distribution on aircraft performance and flight characteristics; mass and balance calculations;

f) operational flight planning; fuel consumption and endurance calculations; alternate aerodrome selection procedures; en-route cruise control; extended range operation;

g) preparation and filing of air traffic services flight plans;

h) basic principles of computer-assisted planning systems;

Human performance

i) human performance relevant to dispatch duties, including principles of threat and error management;

Note.— Guidance material to design training programmes on human performance, including threat and error management, can be found in the Human Factors Training Manual (Doc 9683).

Meteorology

j) aeronautical meteorology; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;

k) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information;

Navigation

l) principles of air navigation with particular reference to instrument flight;

Operational procedures

m) use of aeronautical documentation;

n) operational procedures for the carriage of freight and dangerous goods;

o) procedures relating to aircraft accidents and incidents; emergency flight procedures;

p) procedures relating to unlawful interference and sabotage of aircraft;

Principles of flight

q) principles of flight relating to the appropriate category of aircraft; and

Radio communication

r) procedures for communicating with aircraft and relevant ground stations.

2.5 Experience

The applicant shall have gained the following experience:

a) a total of two years of service in any one or in any combination of the capacities specified in 1) to 3) inclusive, provided that in any combination of experience the period serviced in any capacity shall be at least one year:

1) a flight crew member in air transportation; or

2) a meteorologist in an organization dispatching aircraft in air transportation;
or

3) an air traffic controller; or a technical supervisor of flight operations officer or air transportation flight operation systems; or

b) have satisfactorily completed a course of approved training.

The applicant shall have served under the supervision of a flight dispatcher at least 90 working days within the six months immediately preceding the application.

2.6 Skill

The applicant shall have demonstrated the ability to:

- a) make an accurate and operationally acceptable weather analysis from a series of daily weather maps and weather reports; provide an operationally valid briefing on weather conditions prevailing in the general neighbourhood of a specific air route; forecast weather trends pertinent to air transportation with particular reference to destination and alternates;
- b) determine the optimum flight path for a given segment, and create accurate manual and/or computer generated flight plans;
- c) provide operating supervision and all other assistance to a flight in actual or simulated adverse weather conditions, as appropriate to the duties of the holder of a flight dispatcher approval; and
- d) recognize and manage threats and errors.

Note. — Guidance material on the application of threat and error management is found in the Procedures for Air Navigation Services — Training (Doc 9868, PANS-TRG), Chapter 3, Attachment C, and in Part II, Chapter 2, of the Human Factors Training Manual (Doc 9683).

3. Flight Dispatcher Training Programme

3.1 The training programme for Flight Dispatchers will be documented in Operations Manual Part D and approved by FSD, DGCA and shall comprise of the following curriculum. The maximum training hours per day shall be 6 hours.

- a) Initial training
 - 1) Basic Knowledge
 - 2) Applied Practical training
- b) Type training
- c) Transition training
- d) Recurrent training
- e) Refresher training
- f) Differences training

Note: For assessment purposes, the pass percentage for all training shall be 70%.

3.2 Each training curriculum shall include practical demonstration as applicable.

- 3.3 Each training curriculum shall cover the differences between aircraft of the same type operated by the airline/operator to ensure that the Flight Dispatchers are adequately trained to perform their assigned duties on different aircraft being operated.

4. Initial Training

Initial training shall consist of basic knowledge training and applied practical training. Initial training is required for the persons who have not been previously approved/carried out flight dispatch duties during the preceding 3 years. The goal of initial training is to ensure that each trainee acquires the competencies, knowledge and skills required to perform the duties and responsibilities related to a flight dispatcher. The training shall be conducted as per Appendix 1. Flight dispatchers holding current approval from an ICAO Contracting State with verification of training, approval and experience from the Contracting State may be given credit of OJT for up to 8 weeks (Phase Two of Appendix 1) depending on the training undergone in the Contracting State.

5. Type training

Type training is required to gain qualification on the aircraft model and its variants that the flight dispatcher will be assigned on and will be part of initial training except for addition of aircraft type to the flight dispatcher approval wherein as a minimum Module 7 and 9 of initial training basic knowledge (Appendix 1) will be conducted.

6. Transition training

Training for flight dispatchers who are qualified on the aircraft type, but from a different operator. This will consist of operator indoctrination course with minimum duration 32 hours covering the operations manual and human factors (DRM/CRM). Additionally, applicable recurrent training as per Para 7 below shall be carried out prior to application for flight dispatcher approval with the new operator.

7. Recurrent training

Recurrent training is conducted annually to ensure the maintenance of competencies, knowledge and skills through a series of theoretical training, hands-on exercises, simulated exercises, written exam, etc. relevant to each aircraft type on which the flight dispatcher will be assigned duties. This shall be documented in Operations Manual Part D.

Recurrent training validity is 12 months. If carried out in 3 months preceding the expiry, the subsequent validity will be 12 months from the original expiry. The minimum duration of recurrent training shall be 24 hours.

An operator shall ensure that each flight dispatcher who has not carried out any flight dispatch duties from 12 up to 60 months completes extended recurrent training and minimum number of days of on-job-training (OJT) under an approved flight dispatcher followed by observation flights prior to exercising privileges of the approval as per the table below:

Gap period	Extended Recurrent Training	OJT	Observation Flight (aeroplane/simulator)
12-24 months	36 hours	3 days	One sector
24-36 months	48 hours	7 days	Two sectors
36-60 months	72 hours	30 days	Four sectors
More than 60 months	Complete Flight Dispatcher Training		

8. Refresher training

An operator shall ensure that each flight dispatcher who has not carried out any flight dispatch duties for more than 3 months up to 6 months and still remains within the period of validity of the previous Initial/Type/Recurrent Training completes refresher training with minimum duration of 2 days theoretical training, one day OJT under an approved flight dispatcher prior to exercising privileges of the approval. For a gap between 6 to 12 months, recurrent training will be carried out.

9. Differences training

The duration of differences training shall depend upon degree of differences between the different variants of aircraft of the same type used by the operator. Differences training for variants of a particular type of aircraft may be included in initial, transition, and recurrent training for the aircraft.

10. Training facilities

10.1 Facilities and equipment for classroom-based training

10.1.1 General.

Whenever the operator utilizes training facilities an approval shall be obtained for the facility, equipment and the personnel utilized for training/ maintenance from the DGCA, before commencing the training. Training may include the use of, video presentations; computer based training, e-learning and other types of training.

10.1.2 Classroom facilities

The space for each adult in a classroom will be from 1.4m² to 6.7m². Each trainee's workspace should include space to house trainee's work surface,

any additional equipment, the chair, space for chair pushback and maneuverability.

10.1.3 The learning environment.

It will be ensured that temperature should be comfortable, ventilation should be adequate, lighting should adequate and training equipment should be adequate.

10.1.4 Use of instructional aids.

Instructional aids may include the use of computer-based-training (CBT), e-learning in which case, this should be supported by instructors.

10.2 Trainee to instructor ratio

The trainee to instructor ratio shall be limited to 25:1.

10.3 Instructional personnel

Modules and topics concerning aircraft technical and performance shall be conducted by DGCA approved ground instructors. Human factors (CRM/DRM) shall be conducted by facilitators authorized by the post-holder training. Topics concerning meteorology, legislation, ATM may be conducted by subject matter experts (SMEs) authorized by the post-holder training. Flight dispatch functions shall be instructed by DGCA approved Flight Dispatch Trainers. OJT may be conducted under an approved flight dispatcher authorized by the post-holder training.

10.4 Flight Dispatch-Trainers

Flight dispatchers with experience of 3 years with an Indian operator or a person who has held flight dispatch instructor approval with another Indian operator, may be approved as flight dispatch trainers to impart training on flight dispatch functions provided they have completed type/transition training and other training as per Appendix 2. Approval shall be issued for 5 years by the Post Holder Training. Existing flight dispatch instructors as on date of issue of this CAR shall be issued with letter of approval under this CAR without need for additional training.

11. Competency Check For Flight Dispatchers

To demonstrate his competency, a Flight Dispatcher should undergo following tests/examinations:

11.1 Written test/Examination

Each Flight Dispatcher trainee after having undergone the prescribed initial training (basic knowledge) shall appear in a written examination conducted by DGCA (Central Examination Organization). The examination shall consist of:

- a) General subjects,
- b) Specific on type of aircraft.

11.2 Oral and Practical Test:

The applicant after successfully undergoing the basic knowledge training and DGCA Flight Dispatcher examination shall carry out applied practical training within six months immediately preceding the application for oral test. The practical training should commence within 12 months from the date of the declaration of result of the written examination.

The Flight Dispatchers shall undergo an oral/practical test to demonstrate their proficiency to a Board at FSD, DGCA consisting of minimum two Flight Operations Inspectors, which shall include the post-holder training or his nominee who shall be a Flight Dispatcher on type with managerial responsibility and position or a Flight Dispatch Instructor.

12. Issue, Withdrawal and Renewal of Flight Dispatcher Approval

On successful completion of requirements as laid down in this CAR, FSD, DGCA may issue flight dispatcher approval for a period of 5 years. DGCA may withdraw this approval if the requirements are no longer met or the flight dispatcher fails to meet standards on the basis of which approval was issued. The operator shall ensure that certificate by post-holder training indicating satisfactory performance of the flight dispatcher for the previous 5 years along with recurrent training records for the last 2 years are submitted to FSD at least 3 months prior to expiry of approval following which renewal of approval may be issued by DGCA. Fees for initial approval shall be Rs 5000 and for renewal of flight dispatcher approval shall be Rs 2500.



(B S Bhullar)
Director General of Civil Aviation

Appendix 1

INITIAL TRAINING

Phase One – Basic Knowledge

Module	Subject Matter	Trainees without previous aviation experience (duration in hours)	Trainees with previous aviation experience (duration in hours)
1.	Civil air law and regulation	30	18
2.	Aviation indoctrination	12	6
3.	Aircraft mass (weight) and performance	27	15
4.	Navigation	24	12
5.	Air traffic management	39	21
6.	Meteorology	42	21
7.	Mass (weight) and balance control	27	15
8.	Transport of dangerous goods by air	9	9
9.	Flight planning	18	9
10.	Flight monitoring	16	16
11.	Communication – Radio	18	6
12.	Human factors	15	15
13.	Security (emergencies and abnormal situations)	8	6

Phase Two – Applied Practical Training

Module	Subject Matter	Duration
1	Applied practical flight operations	25 hours
2.	Simulator LOFT observation or observation flights	4 hours
3.	Flight dispatch functions (OJT)	13 weeks
4.	Route familiarization	30 hours

Note: Refer ICAO Doc 7192 Training Manual Flight Operations Officer/Flight Dispatchers Part D3.

Appendix 2

FLIGHT DISPATCH TRAINER

Topics	
Flight Dispatch Trainer	The person shall go through a Train The Trainer course (duration 40 hours). This is not applicable for a person already holding a valid flight dispatcher instructor approval as on date of issue of this CAR, however recurrent train the trainer course will be carried out every 2 years for all FD trainers
	Observes one flight dispatch (FD) classroom batch and conducts one flight dispatch classroom batch under supervision followed by;
	Oral examination on the aircraft type to be conducted by Post Holder training/operations
	If satisfactory, then an approval shall be accorded for the period of 5 years. For existing FD Instructors under CAR, Section 7, Series M, Part II, Post Holder training may issue an approval under this CAR with the validity of approval 5 years from date of issue of this CAR without additional requirements, followed by renewal process as per eligibility requirements of this CAR.
	If the performance is unsatisfactory, the trainer shall be assessed again after 1 month.
	In case of repeated failure, the trainer may be assessed after 3 months. The operator shall maintain the record of all the classes (including its performance)
	For renewal of approval, a viva by Post Holder Training/operations will be conducted and on successful evaluation, the approval shall be renewed for 5 years from the date of previous validity.

such checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.

Note 1.- Flight simulation training devices approved by DGCA may be used for those parts of the checks for which they are specifically approved.

Note 2.— See the Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625).

7.4.3.2 When an operator schedules flight crew on several variants of the same type of helicopter or different types of helicopter with similar characteristics in terms of operating procedures, systems and handling, the pilot shall be required to undergo proficiency checks on each type. However, proficiency checks for variants of each type of helicopter can be combined.

7.5 **Flight crew equipment.** A flight crew member assessed as fit to exercise the privileges of a licence subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.

7.6 **Flight time, flight duty periods and rest periods**

7.6.1 An operator shall formulate requirements to limit flight time and flight duty periods, and for the provision of adequate rest periods for all its crew members. These requirements shall be in accordance with the CAR Section 7, Series J, Part II, and shall be included in the operations manual.

7.6.2 An operator shall maintain current records of the flight time, flight duty periods and rest periods of all its crew members.

8. **FLIGHT OPERATIONS OFFICER / FLIGHT DISPATCHER**

8.1 A flight operations officer/ flight dispatcher, employed in conjunction with an approved method of control and supervision of flight operations be approved that flight operations officer/flight dispatcher shall be approved in accordance with the provisions of CAR Section 7, Series 'M' Part II.

8.2 A flight operations officer/ flight dispatcher shall not be assigned to duty unless that person has:

(a) satisfactorily completed an operator-specific training course that addresses all the specific components of its approved method of control and supervision of flight operations specified in 2.2.1.3;

(b) made within the preceding 12 months, at least a one-way qualification flight in a helicopter over any area for which that person is authorized to exercise flight supervision. The flight shall include landings at as many heliports as practicable;

Note. For the purpose of the qualification flight, the flight operations officer/ flight dispatcher must be able to monitor the flight crew intercommunication system and radio communications, and be able to observe the actions of the flight crew.

- (c) demonstrated to the operator a knowledge of:
 - i. the contents of the operations manual described;
 - ii. the radio equipment in the helicopters used; and
 - iii. the navigation equipment in the helicopters used;
- (d) demonstrated to the operator a knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision:
 - i. the seasonal meteorological conditions and the sources of meteorological information;
 - ii. the effects of meteorological conditions on radio reception in the helicopters used;
 - iii. the peculiarities and limitations of each navigation system which is used by the operation; and
 - iv. the helicopter loading instructions;
- (e) satisfied the operator as to knowledge and skills related to human performance as they apply to dispatch duties; and
- (f) demonstrated to the operator the ability to perform the duties specified in 2.6.

8.3 A flight operations officer/ flight dispatcher assigned to duty should maintain complete familiarization with all features of the operations which are pertinent to such duties, including knowledge and skills related to human performance.

Note.— Guidance material to design training programmes to develop knowledge and skills in human performance can be found in the Human Factors Training Manual (Doc 9683).

8.4 A flight operations officer/ flight dispatcher should not be assigned to duty after 12 consecutive months of absence from such duty, unless the provisions of 8.3 are met.

9. MANUALS, LOGS AND RECORDS

9.1 **Flight Manual.** Each aircraft shall have a Flight Manual or equivalent approved document on board, which shall be kept up to date.