



GOVERNMENT OF INDIA
CIVIL AVIATION DEPARTMENT
OFFICE OF DIRECTOR GENERAL OF CIVIL AVIATION

File No: 8/15/2010-L2
Dated: 15-3-2010

TRAINING & LICENCING DIRECTORATE
FLIGHT CREW LICENSING CIRCULAR No. 2/2010

Subject: Procedure and Guidelines for individual pilots regarding issuance of **pilots licence on microlight aircraft.**

In order to facilitate individual pilots for compliance of the requirements of Section-C and Section-G of Schedule-II of the Aircraft Rules 1937 for issuance of Student Pilots Licence (Microlight) and Pilots Licence (Microlight) respectively, the following guidelines / procedures are prescribed:-

1. Student Pilot License – microlight (SPL (M)):

- i) An aspirant for SPL(M) shall obtain security clearance from the concerned State Police authorities through the Flying Club/ Government Flying Training School before commencement of flying training for submission to the Director-General for issue of SPL(M).
- ii) Before forwarding the documents required by state police authority for security clearance the Flying Club/ Government Flying Training School shall ensure that the applicant has attained the age of 16 years and has passed class 10th examination or its equivalent from a recognized Board. The Flying Club/ Government Flying Training School shall simultaneously forward the educational qualification certificate for verification from the concerned Board.
- iii) After obtaining security clearance for issue of Students Pilots Licence on microlight applicant may submit the application to regional offices of DGCA at Delhi, Kolkata, Mumbai, Chennai and Bangalore in the prescribed performa as at appendix-A.
- iv) Regional offices shall conduct the oral examination in Air Regulation, Air Navigation, Aviation Metereology and Aircraft and Engines (aircraft General and Specific) as per the syllabus prescribed at appendix-B. The minimum pass marks required in the Oral Examination is 50%.
- v) The oral examination shall be conducted by a Board constituted by Deputy Director General. The board shall comprise of an officer not below the rank of Deputy Director and Instructor / Examiner / Experienced pilot on microlight aircraft.

- vi) The oral examination result shall be in the performa as specified at appendix-C.
- vii) On declaration as pass in the SPL(M) examination, the SPL(M) may be issued by the officer carrying out the renewal of pilot licenses in regions or any other officer designated by Director General.
- viii) The record of the SPL (M) examinations conducted be maintained by regional offices (e.g. fee, marks obtained in knowledge papers, result, security clearance) and consolidated details of the same shall be forwarded to DTL quarterly as per the format at appendix-D.

2. Pilot License – microlight PL (M)):

- i) After issuance of SPL(M), the microlight flying training shall be undertaken with the DGCA approved Instructor/Examiner. The list of DGCA approved Instructors/examiners is available on DGCA website in operations circular 1 of 2002.
- ii) Flying training shall be in accordance with the syllabus prescribed in appendix-E. The flying experience shall be as per the requirements laid down in section-G of the schedule-II of the Aircraft Rules-1937. However, the holder of a current Private Pilot's Licence (Aeroplanes) or a higher category of Licence (Aeroplanes) are exempted from the experience requirements. But, such pilots shall, however, be required to carry out familiarization flights which shall be followed by not less than three solo take-offs and landings. The familiarisation flights shall be carried out under the supervision of an approved Examiner or a Flight Instructor approved by the Director-General.
- iii) Applicant shall also pass a written examination in Air Regulations, Air Navigation, Aviation Meteorology and Aircraft and Engines as per the syllabus prescribed by the Director-General ;

However, an applicant who is in possession of a valid Private Pilot's Licence (Aeroplanes/helicopters) or a higher category of Pilot's Licence, is exempted from the written examination upon production (at the time of application for MPL) of evidence (in the form of a Certificate recorded by Flight Instructor/Examiner in the pilot's Log Book to the effect) that the pilot has been thoroughly familiarised with the flight controls, speed profiles, systems, engines and limitations of the Microlight aircraft;

However, an applicant who is in possession of a valid Pilot's Licence Gliders shall only be exempted from written examination in Air Regulations and Aviation Meteorology.

- iv) Applicant shall obtain the FRTOL(R) in accordance with the provisions of section-Z of schedule-II of the Aircraft Rules-1937 for carrying out X-country flights. The X-country flight under the privileges of SPL(M) shall be carried out in compliance with the requirements as laid down in para 5(d) of Section-C of Schedule-II of the Aircraft Rules-1937.
- v) General Flying Test by day for issuance of pilots licence (Microlight) shall be carried out by DGCA approved Instructor/Examiner as per the performa attached at appendix -F. However, skill test shall be carried out only after the pilot under test has passed the written examination in aircraft and engine on the type of microlight as specified in para iii) above.
- vi) Flying experience details be submitted in the form of appendix-G. The flying experience shall be recorded in the log book as per rule 67A. An FTPR (dossier) of each trainee pilot undergoing microlight flying training shall also be maintained by the Instructor/ Examiner carrying out the training / test. (These documents shall be submitted in original to DGCA at the time of request for MPL)
- vii) Flying training shall be carried out on microlights having valid C of R and Permit to Fly.
- viii) On successful completion of flying training and test applicant shall submit the application to DGCA in the prescribed format as at appendix-H. Before, submission of application applicant shall ensure that he is meeting all the requirements as laid down in Section- G of Schedule-II of the Aircraft rules-1937.

This issues with approval of Director General.

Sd/-
(A. Sardana)
Director (Training and Licensing)

Appendix-A

Medical File No.....

APPLICATION FOR THE ISSUE STUDENT PILOT LICENSE (MICROLIGHT)

| | | | |
|----|---|--|--|
| 1. | Name (as in 10 th certificate) | | Affix self attested recent photograph of size 3 x 4 cm (also enclose atleast 5 photographs with form) |
| | Father's Name | | |
| | Mother's Name | | |
| 2. | Date of birth & Age (as in 10 th certificate) | | |
| 3. | Place of birth | | |
| 4. | Country of birth | | |
| 5. | Nationality | | |
| 6. | Correspondence address | | (signature of candidate) |
| 7. | Permanent address | | |

8. Educational Qualification:

| | Examination | Name of Board/ university | Year | Subjects offered (write name of subjects) |
|------|-----------------------|---------------------------|------|---|
| (i) | Class X or equivalent | | | |
| (ii) | Any other | | | |

10th shall be from recognized Board/ University. For recognition and equivalency please check from Association of Indian Universities.

9. Details of Class-II

| Medical Centre | Date of medical | Valid upto |
|----------------|-----------------|------------|
| | | |

Class-II medical is valid for one year if age is below 40 yrs and valid for 6 months if age is 40 and above.

10. Fee Details:

| DD Number and Date | Place of issue & Bank Name | Amount |
|--------------------|----------------------------|--------|
| | | |

Amount of Fee is Rs, 3500 (Rs 2500 for SPL(M) oral examinations and Rs 1000 for issue of SPL(M)

11. for defense personnel only:

| | Condition | Complied |
|------|--|----------|
| i) | Whether the applicant is/ was in the service of Defense Forces of India. | Yes/ No |
| ii) | If serving, No Objection Certificate obtained from the concerned Hqrs. | Yes/ No |
| iii) | If serving, indicate whether accident/incident free certificate for the preceding 5 years has been obtained from the concerned Hqrs. | Yes/ No |
| iv) | If not serving, indicate the Force..... and date of release..... | |

12. Security Clearance:

| Date of Security clearance | Name of the state police authority from where Security clearance is obtained | Name of the Flying Club/ Government Flying Training School who forwarded your application for security clearance. |
|----------------------------|--|---|
| | | |

Please enclose security copy of the security clearance.

Declaration by the Applicant

I declare that in terms of provisions of Rule 39A of the Aircraft Rules, 1937, I have not suppressed or given any wrong information herein above for the purpose of obtaining the licence/ rating applied for here. I understand that I am liable for appropriate action, if any information given by me is found to be wrong even at a later date.

Place:

Date:

Signature of the applicant

SYLLABUS for SPL(M) ORAL EXAMINATION

1. AIR REGULATIONS

- i) Knowledge of terms used in Aviation such as aircraft, aeroplane, aerodrome, Director General, flight time, solo flight time, dual flight time, log book, flight crew member, helicopter, prohibited area, take-off, landing, Air Traffic Control, Mayday, PAN, etc.
- ii) The different categories of pilots' licences.
- iii) Student Pilot Licence, requirements for issue, renewal, validity and privileges.
- iv) Visual Flight Rules.

2. AIR NAVIGATION

- i) Basic knowledge of form of earth and the method of representing sphere (Earth) on a flat surface for mapping.
- ii) Basic knowledge of various units of measure such as
 - nautical miles, kilometer, statute mile
 - Fahrenheit and Celsius, millibars (hectapascal)
 - lbs, kilogram, US and Imperial gallons, liters, and conversion from one to other.
- iii) Elementary knowledge of some navigational instruments such as Magnetic Compass, Air Speed Indicator, Altimeter and basic knowledge of magnetism.
- iv) Use of Radio Telephony, VHF etc
- v) Elementary understanding of Radio Navigational Aids such as NDB, VOR, and their uses in aviation (appreciation only).

3. AVIATION METEOROLOGY

- i) Elementary knowledge of atmosphere and its properties.
- ii) Basic knowledge of temperature, pressure and density and their relationship.
- iii) Elementary knowledge of relationship between pressure and wind.
- iv) Elementary knowledge of variation of wind with height.
- v) Elementary knowledge of sea breeze and land breeze.
- vi) Elementary knowledge of different types of clouds and precipitation. Basic understanding of hazards associated with certain types of clouds.
- vii) Elementary knowledge of the terms – Visibility, Fog, Mist and Haze.

- viii) Elementary knowledge of variation of pressure with height, and the Q codes– QNH, QFE and QNE, etc.
- ix) Basic understanding of METAR, SPECI and aerodrome warnings and their importance in aviation.
- x) Elementary knowledge of the uses of Anemometer, Aneroid Barometer, Wind Sock etc.

4. AIRCRAFT AND ENGINES (General)

- i) Elementary knowledge of – density, pressure, temperature, humidity and the relation-ship between them.
- ii) Understanding of the terms –thrust, drag, lift, weight, aerofoil, angle of attack, centre of lift, stalling, range endurance etc.
- iii) Elementary knowledge of the forces acting on an aerofoil in level flight – understanding of Bernoulli's Theorem.
- iv) Elementary knowledge of the primary controls, understanding of the uses of aileron, rudder, elevator, stabilizer, trimming devices, flaps, landing gear etc.
- v) General knowledge of the principle of operation of a piston engine and associated systems.
- vi) Elementary knowledge of the principle of a fixed pitch propeller.
- vii) Elementary knowledge of weight and balance.
- viii) Basic knowledge of first-aid , the use of generally available first-aid-kits.
- ix) Elementary knowledge of Certificate of Airworthiness, Certificate of Registratio and Flight Release
- x) Basic knowledge of the following systems of the type of aircraft- flying controls and flaps, landing gear, electrical system, heating and ventilating system, flight instruments and types of propellers
- xi) Adequate knowledge of the instrumentation and radio navigation aids pertaining to the aircraft.
- xii) Basic handling and care of aircraft.

5. Technical Specific:

Specific knowledge pertaining to ype of microlight aircraft (please refer the manufacturer's flight manual of the type of microlight).

Result of the Student Pilot License – microlight oral examination

Date of examination:

Centre of Examination: DGCA Hqrs./ Delhi/ Mumbai/ Kolkata/ Chennai/ Bangalore

| Sl. No. | Name of the Candidate | Write percentage of marks obtained in each subject | | | | | Result | Remarks |
|---------|-----------------------|--|------|-----|------------|----------|--------|---------|
| | | Air Reg. | Nav. | Met | Tech. Gnl. | Specific | | |
| | | | | | | | | |
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Minimum pass marks in each subject is 50%

Signatures of the Board Members:

1. DGCA Representative:

Signature:

Name:

Designation:

2. Instructor / Examiner / Experienced pilot on microlight aircraft

Signature:

Name:

Designation:

DGCA Regional Office: Delhi/ Mumbai/ Kolkata/ Chennai/ Bangalore

Statement of issue of SPL(M) in quarter:

| Sl. No. | Medical file No. | Name | Status | SPL No. | Validity | | Fee received |
|---------|------------------|------|-----------------------------|---------|----------|----|--------------|
| | | | Individual/ organisation | | From | to | |
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Signature of officer

Name:

Designation:

Flying training syllabus for issue of Pilot's License (Microlight)

A pilot trainee shall receive dual instructions in microlights, from an authorised flight Instructor/ examiner. The pilot trainee shall be provided operational experience, atleast in the following areas to the level of performance required for the pilot license-microlight:

- a) pre-flight operations, including mass and balance determination, microlight inspection and servicing;
- b) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;
- c) control of the microlight by external visual reference;
- d) flight at critically slow airspeeds; spin avoidance; recognition of, and recovery from, incipient and full stalls;
- e) flight at critically high airspeeds; recognition of, and recovery from, spiral dives;
- f) normal and cross-wind take-offs and landings;
- g) maximum performance (short field and obstacle clearance) take-offs; short-field landings;
- h) flight by reference solely to instruments, including the completion of a level 180 degree turn;
- i) cross-country flying using visual reference, dead-reckoning and, where available, radio navigation aids;
- j) emergency operations as prescribed in flight manual and which shall include simulated microlight equipment malfunctions; and
- k) operations to, from and transitting controlled aerodromes, compliance with air traffic services procedures, radio-telephony procedures and phraseology.

If the privileges of the licence are to be exercised at night as well, the applicant shall receive dual instructions in microlights in night flying, including take-offs, landings and navigation.

**GENERAL FLYING TEST BY DAY FOR ISSUE OF
PILOTS LICENCE MICROLIGHT (PLM)**

NAME: _____ Licence No.: _____
 HOURS FLOWN: _____ TYPES OF AIRCRAFT FLOWN: _____
 TEST ON A/C TYPE: _____ REGN:VT- _____
 TIME (IST) DAY: from..... to Duration of test: _____
 DATE of test : _____

**Certified that the above information
has been verified from relevant records**

DGCA APPROVED EXAMINER

| Sl. No. | MANOEUVERS | REMARKS |
|---------|---|---------|
| 1. | Cockpit Checks | |
| 2. | Starting Procedure | |
| 3. | Precaution before taxiing out | |
| 4. | Taxiing procedure | |
| 5. | Engine check | |
| 6. | Pre-flight check | |
| 7. | Precautions before entering runway and lining up | |
| 8. | Take off | |
| 9. | Climb, Speed and use of Power | |
| 10. | Procedure for leveling out | |
| 11. | a. Use of correct power b. Correct use of fore aft trim c. Keeping lateral level, direction and constant speed | |
| 12. | <u>Turns:</u> <u>Medium</u> Height + -50 ft Bank 20 -30 Degrees Slip / Skid one ball width <u>Steep</u> Height + -100 ft Bank 45 – 60 Degrees Slip / Skid one ball width | |
| 13. | <u>Climbing Turns</u> Speed + -5 Kmph Bank 10 -20 Degrees Roll out + -10 Degrees <u>Gliding turns</u> Medium gliding turns Descending turns at given speed | |

| | | |
|-----|---|--|
| 14. | a. Correct procedure for joining Circuit b. Circuit pattern (90 Deg. Turns) i. X-Wind level out +-100 ft ii. Direction + -15 Degrees & Displacement from RW iii. Down wind height + -100 ft. iv. Speed + -5mph | |
| 15. | <u>Base Leg:</u> Speed +-5 Kmph Direction +-5 Degree | |
| 16. | <u>Final Approach</u> Engine Assisted Speed +-5 Kmph Over Shoot +- 100 ft. Glide approach Speed + -5 Kmph Over shoot +-100ft. | |
| 17. | <u>Stall</u> Entry height +-100 ft Direction +-15 Degrees Recovery Ht. loss- 150 ft. | |
| 18. | <u>Landing</u> 2 point landing (Normal, Bounced, Balooned Drift) | |
| 19. | <u>Practice Force Landing</u> Immediate /sub action Ht. /Speed Low key +-150 ft. Undershoot -500 ft. Overshoot + 1000 ft. Practice Engine off approach & Landing | |
| 20. | <u>Actions in the event of fire</u> After take off & at circuit altitude | |
| 21. | <u>Action in the event of Engine Failure After Take off at circuit Altitude</u> | |
| 22. | <u>U/S – ASI</u> | |
| 23. | <u>Knowledge of Aircraft System & Engine</u> & Ability to conduct servicing upto 10 hrs on Airframe and Engine. | |

FINAL ASSESSMENT

ABOVE AVERAGE : _____

AVERAGE : _____

BELOW AVERAGE : _____

Certified that I have more than 10 hrs of flying on type in the last 6 months.

DGCA APPROVED EXAMINER

Appendix-G

FCL 2/2010

Flying experience on microlight aircraft:

| Year | Microlight AIRCRFAT | | | | Total |
|--|---------------------|-------------|-------------|-------------|-------|
| | DAY | | NIGHT | | |
| | Dual (1) | Solo (2) | Dual (3) | Solo (4) | |
| | | | | | (5) |
| | | | | | |
| | | | | | |
| | | | | | |
| In preceding one year from the date of application for MPL in DGCA | | | | | |
| Total | | | | | |

Signature of DGCA approved Instructor/ Examiner

Date:

SOLO X-Country Summary

This is to certify that Mr. _____ has carried out following solo X-country flights. He has also completed one solo cross-country of distance (more than 50 nm) fromthe aerodrome of departure and carried out one full stop landing ataerodrome (other than that of departure).

| Date | Aerodrome | | Time | | Distance | Duration |
|------|-----------|---------|-----------|---------|----------|----------|
| | Departure | Arrival | Departure | Arrival | | |
| | | | | | | |
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| | | | | | | |
| | | | | | Total | |

Signature of DGCA approved Instructor/ Examiner

Date:

Medical File No.....

APPLICATION FOR THE ISSUE PILOT LICENSE (MICROLIGHT)

| | | | |
|----|--|--|--|
| 1. | Name <i>(as in 10th certificate)</i> | | Affix self attested recent photograph of size 3 x 4 cm (also enclose atleast 5 photographs with form) |
| | Father's Name | | |
| | Mother's Name | | |
| 2. | Date of birth & Age <i>(as in 10th certificate)</i> | | |
| 3. | Place of birth | | |
| 4. | Country of birth | | |
| 5. | Nationality | | |
| 6. | Correspondence address | | (signature of candidate) |
| 7. | Permanent address | | |

8. Educational Qualification:

| | Examination | Name of Board/ university | Year | Subjects offered <small>(write name of subjects)</small> |
|------|------------------------------|----------------------------------|-------------|---|
| (i) | Class X or equivalent | | | |
| (ii) | Any other | | | |

10th shall be from recognized Board/ University. For recognition and equivalency please check from Association of Indian Universities.

9. Details of Class-II

| Medical Centre | Date of medical | Valid upto |
|-----------------------|------------------------|-------------------|
| | | |

Class-II medical is valid for one year if age is below 40 yrs and valid for 6 months if age is 40 and above.

10. Fee Details:

| DD Number and Date | Place of issue & Bank Name | Amount |
|---------------------------|---------------------------------------|---------------|
| | | |

Amount of Fee is Rs, 3500 (Rs 2500 for SPL(M) oral examinations and Rs 1000 for issue of SPL(M))

11. for defense personnel only:

| | Condition | Complied |
|------|---|-----------------|
| i) | Whether the applicant is/ was in the service of Defense Forces of India. | Yes/ No |
| ii) | If serving, No Objection Certificate obtained from the concerned Hqrs. | Yes/ No |
| iii) | If serving, indicate whether accident/incident free certificate for the preceding 5 years has been obtained from the concerned Hqrs. | Yes/ No |
| iv) | If not serving, indicate the Force..... and date of release..... | |

12. Security Clearance:

| Date of Security clearance | Name of the state police authority from where Security clearance is obtained | Name of the Flying Club/ Government Flying Training School who forwarded your application for security clearance. |
|-----------------------------------|---|--|
| | | |

Please enclose security clearance in original.

13. Knowledge: (Computer Number -.....)

| # | Paper | Passed in Session | Roll No. | Date of Result | Valid upto |
|----|--------------------------------|-------------------|----------|----------------|------------|
| a) | Composite paper (Reg +Nav+Met) | | | | |
| e) | Technical General | | | | |
| f) | Specific A/c Name..... | | | | |

All technical exams are valid upto two and half years only. An applicant who is in possession of a valid Private Pilot's Licence (Aeroplanes/helicopters) or a higher category of Pilot's Licence, is exempted from the written examination upon production (at the time of application for MPL) of evidence *(in the form of a Certificate recorded by Flight Instructor/Examiner in the pilot's Log Book to the effect)* that the pilot has been thoroughly familiarized with the flight controls, speed profiles, systems, engines and limitations of the Microlight aircraft; however, an applicant who is in possession of a valid Pilot's Licence Gliders shall only be exempted from written examination in Air Regulations and Aviation Meteorology.

14. Flying experience on microlight aircraft (submit appendix-G):

| Year | Microlight AIRCRFAT | | | | Total |
|--|---------------------|-------------|-------------|-------------|-------|
| | DAY | | NIGHT | | |
| | Dual (1) | Solo (2) | Dual (3) | Solo (4) | |
| | | | | | (5) |
| | | | | | |
| | | | | | |
| | | | | | |
| In preceding one year from the date of application for MPL in DGCA | | | | | |
| Total | | | | | |

| | Requirement | Hrs Required | Actual |
|-------|---|-----------------------------------|--------|
| (i) | Total within {Col 5} | 40 | |
| (ii) | As solo {Col (2) +(4)} (attach sortie wise list) | 15 | |
| (iii) | As solo within preceding 12 months {Col (2) +(4) from preceding one year} (attach sortie wise list) | 10 | |
| (iv) | As solo X-country (attach sortie wise list) | 5 | |
| (v) | Details of the 50NM solo X-country with name of one full stop landings (attach certificate) | Date : Sector: Landings at: | |

However, the holder of a current Private Pilot's Licence (Aeroplanes) or a higher category of Licence (Aeroplanes) are exempted from the experience requirements. But, such pilots shall, however, be required to carry out familiarization flights which shall be followed by not less than three solo take-offs and landings.

13. Skill in preceding six months as required vide section-G from date of application in DGCA:

| a) | Requirement | A/c Name | duration | Date of test | Valid upto | Number of solo landings (after test/ familiarisations) |
|------|--|----------|----------|--------------|------------|--|
| (i) | general flying test | | | | | |
| (ii) | Detail of familiarisation flight (to be filled by applicants exempted from experience requirement) (please give copy of the relevant page of log book) | | | | | |

Note:- skill tests shall be submitted in DGCA approved performas. Test reports shall be duly signed by the DGCA approved instructor/examiner and shall be submitted in original. (DGCA approved performas is available in this circular). Atleast 3 solo landings are required after test / familiarisation.

Declaration by the Applicant

I declare that in terms of provisions of Rule 39A of the Aircraft Rules,1937, I have not suppressed or given any wrong information herein above for the purpose of obtaining the licence/ rating applied for here. I understand that I am liable for appropriate action, if any information given by me is found to be wrong even at a later date.

Place:
Date:

Signature of the applicant