

## **LM (Large Model) Endorsement**

The LM test can be performed with any large fixed wing, helicopter or multirotor unmanned aircraft that qualifies for Certification as a Cat 1, 2 or 3 aircraft as described in the Large Model Code of Practice.

It is a MFNZ requirement that anyone flying a model in these categories must hold the Large Model endorsement.

The Endorsements are BP (LM), GD (LM), HP (LM), BT (LM), and MR (LM).

The Large Model Endorsement rating comprises the following two (2) test components:

1/ Oral Questions

2/ Test Flight

These two tests must be carried out with a MFNZ registered club appointed examiner or a combination Inspector/Examiner detailed in Item 2, below, Test Flight.

### **1.0 ORAL QUESTIONS**

Successfully answer the ten (10) LM oral theory questions as follows:

Note: All answers are defined in the relevant section of the Large Model Code of Practise (LMCOP) highlighted in red.

Q1. State the purpose of the Large Model certification scheme

Answer: see section 2.3 of the LMCOP.

Q2. Define Category 1, 2 and 3 aircraft.

Answer: see section 3.2 sub para a/b/c of the LMCOP

Q3. Which Wings badge/s must be held when operating large models?

Answer: see section 4.4 of the LMCOP

Q4. Are redundant Receivers and batteries mandatory for all categories?

Answer: see section 5.4/5.5 of the LMCOP

Q5. Describe the two methods of choosing suitable servos for certified aircraft.

Answer: see section 5.7 sub para a/b of the LMCOP

Q6. Define the 3 sequential parts of the certification process and give brief description of each process.

Answer: see section 6.2/6.3/6.4 of the LMCOP

Q7. Where must test flights be performed, who may be present during the test flights and how many aircraft are allowed in the air during test flights.

Answer: see section 6.5 of the LMCOP

Q8. How long is a Category 1, 2 & 3 permit valid for and which Category aircraft require a flight log book be kept?

Answer: see section 6.9 (a) and 6.12 of the LMCOP

Q9. When must checks of a certified aircraft be carried out and to what level?

Answer: see section 4.2 and appendix 1 of the LMCOP.

Q10. Explain what validates a Permit.

Answer: see section 6.14 of the LMCOP.

## 2.0 TEST FLIGHT

Pilots must perform the LM endorsement using a schedule of manoeuvres decided by the pilot and approved by the Inspector IAW Section 6.8 of the Large Model Code of Practise. The manoeuvres approved by the Inspector should be listed in the comments box on Form C.

### Note:

A pilot wishing to undertake their LM endorsement with a Cat 1, 2 or 3 registered aircraft that is undergoing its' five (5) certification test flights may do so provided:

- (a) Both the inspector/witness AND examiner are present during the flights. Any one of the 5 test flights may be called as the LM endorsement check flight so long as the examiner is advised before the flight commences. This allows the pilot to become familiar with the aircraft before the endorsement check flight.
- (b) The examiner must confirm that the test manoeuvres flown for the endorsement check flight are those approved by the Inspector on Form C.

A list of suggested manoeuvres to assist pilots that choose LMCOP Section 6.8 can be found here: <http://www.modelflyingnz.org/sigs/largemodel.html> under LM manoeuvre Library.

This list is by no means comprehensive and is to be used as a guide only. The pilot may choose whichever manoeuvres suit their style and aircraft. It should be considered that those chosen during the testing phase are also the only manoeuvres permitted to be flown once the Permit to Fly is issued.

### **Important Note.**

Existing owners of Cat 1, 2 or 3 models will be granted the LM endorsement as a "grand-parented right" on the Large Model types they have completed certification flights on and hold a permit to fly as of 30 November 2017.