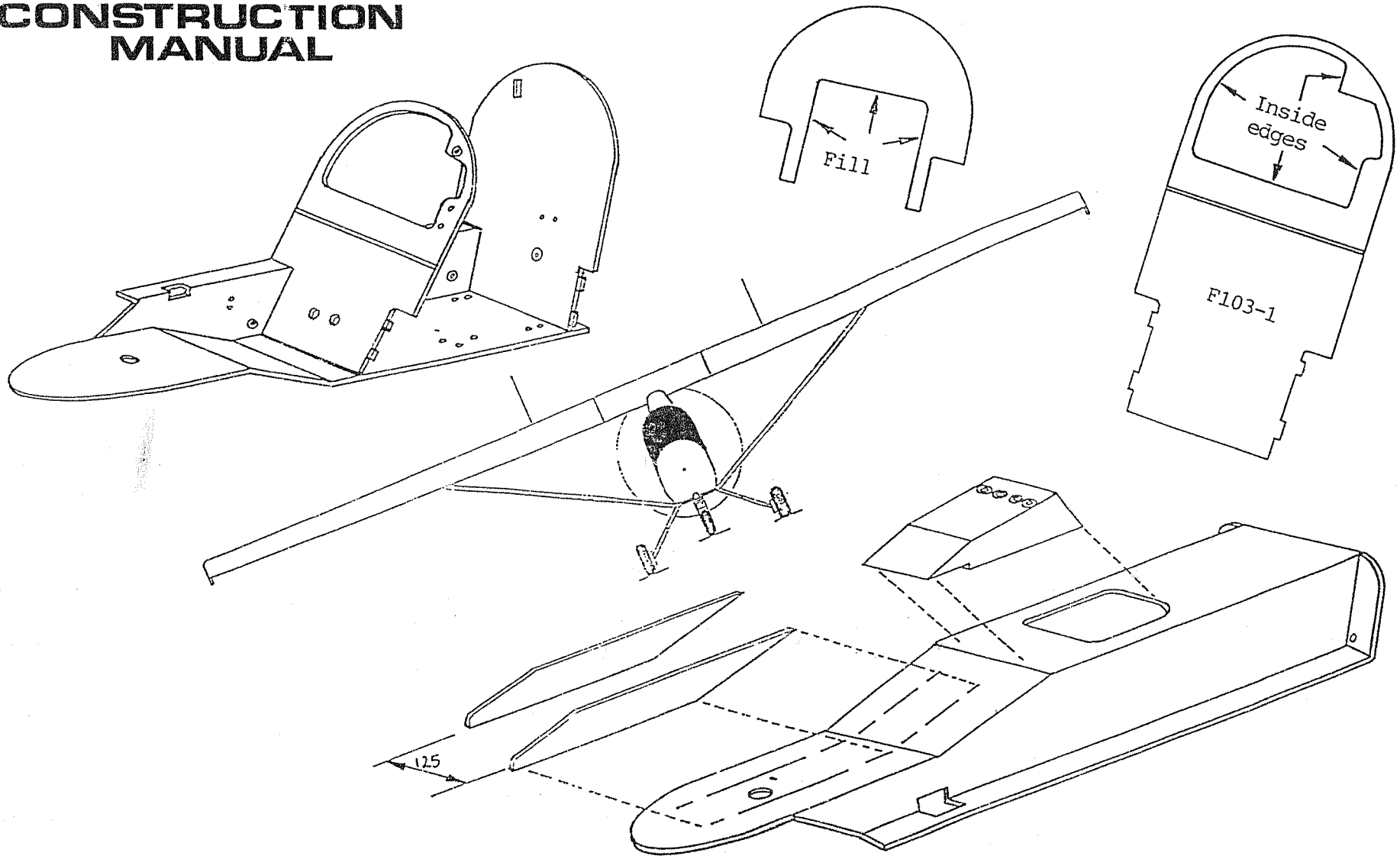


CONSTRUCTION MANUAL



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AMENDMENT REGISTER

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WARNING

CFM METAL-FAX LIMITED will not comment on, nor provide any form of analysis on modifications undertaken by the builder. Any deviation from the plans or structural components is considered your sole responsibility; they could invalidate the 'Type Certification' for the aircraft.

The EMPTY WEIGHT of the aircraft is critical. You are advised that any alterations are likely to add weight. In such a case it will not be possible to obtain a 'Permit-to-Fly' in respect of your machine as it will not comply with the categorisation requirements for a Microlight.

These remarks apply to all stages of construction.

CFM METAL-FAX welcomes any constructive comments or feed back that will be useful for the future.

'PERMIT-TO-FLY' REQUIREMENTS

Under the current CAA regulations only the following Organisations/Personnel are authorised to carry out the required stage build and final inspections which lead to the recommendation for a 'Permit to Fly for Test Purposes' and hence to a 'Permit to Fly' after successful test flights.

It is essential that you join an appropriate organisation to establish an early liaison with your Inspector. His/Her advice and guidance will be of great benefit to you - if in doubt ASK.

The Popular Flying Association - their Inspectorate can effect stage build inspections, final inspections and recommendation for both a 'Permit to Fly for Test Purposes' and the actual 'Permit to Fly'.

CFM METAL-FAX - Company approved inspectors - names may be obtained from CFM METAL-FAX.

The British Microlight Aircraft Association - This organisation reduces the cost of application for a 'Permit to Fly for Test Purposes', provides insurance cover and will keep you in touch with the microlight world. They can also recommend 'Renewals' of Permit-to-Fly.

The minimum checks are listed below. The issue of the various 'Permits' will depend on these being properly documented - the onus is on you°

Prior to the commencement of each stage your Inspector should be consulted to ensure that the procedures/techniques involved are fully understood and a decision arrived at as to what degree of monitoring will be required and when actual inspection will be effected.

* MANDATORY INSPECTIONS BY AN APPROVED INSPECTOR:

FUSELAGE - to include undercarriage and noseleg assembly but NOT fitted.
- when completed but BEFORE the fitting of side panniers or nose cone.

WINGS, CENTRE SECTION AND BOOM - when completed but BEFORE any part is covered.

TAILPLANE, ELEVATOR AND RUDDER - when completed but BEFORE any part is covered.

ENGINE - when installed.

COMPLETE AIRCRAFT - fully assembled, covered and rigged for flight.

* Form CFM 8 to be completed prior to the application for a 'Permit to Fly for Test Purposes' (can be obtained and effected through CFM METAL-FAX LTD.).
The aircraft is then test flown by a pilot 'approved' by CFM METAL-FAX LTD.

* Form CFM 9 to be completed and 'Permit to Fly' applied for (can be obtained and effected through CFM METAL-FAX LTD.).
(You can register the aircraft with the CAA and receive a registration mark for the aircraft as soon as you purchase the kit).

SECTION INSPECTION RECORD

SECTION	WHEN TO BE INSPECTED	DATE	SIGNATURE
<u>THREE</u> (MONOCOQUE)	Completion to page 3-39 Before any painting		
<u>FOUR</u> (WINGS)	Completion to page 4-26 Before any painting/covering		
<u>FIVE</u> (TAIL)	Completion to page 5-13 Before any painting/covering		
<u>EIGHT</u> (POWERPLANT)	Completion to page 8-9 (single ignition engines) Completion to page 8-7 & pages 8-10, 8-11 (dual)		

REMARKS:

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F

INTRODUCTION

You are advised to familiarise yourself with the contents of your kit.

This manual provides an ITEMS PARTS LIST, BOLTS LIST and PROCESS SHEETS for bonding, covering, fibreglassing and the use of Loctite. Following this are the detailed build instructions.

Please pay particular attention to the PROCESS SHEETS - the ambient conditions of temperature and humidity are very important in the use of the relevant materials. Epoxies and other related products can be a health hazard; take care and follow ALL precautions directed, either in this manual or with the products.

DO NOT overtighten nuts or bolts so that any tube or Fibrelam material is compressed. They should be snug but not overtightened. In almost all cases the bolts are in shear, the exceptions being those used on the LORD MOUNTS (CM 85), THRUST BAR (E111), ENGINE BEARER (E101) and ENGINE STRUT (E102). These are torqued to approximately 100 inch/lbs.

Each FIGURE No. is accompanied by a PARTS LIST for ease of recognition and all are inter-referenced to facilitate checking. Special notes and explanations accompany each Figure No. where necessary - these MUST be studied before starting.

All 'Critical' items have been jig produced to ensure accuracy. The Main Spar and complete 'D' Section have also been produced in the Factory to ensure that the correct assembly environment has been maintained and specific alignments checked.

There is NO requirement for jigs, special tools or equipment and there is no machining, forming, welding or bending to be effected.

The kit does NOT contain paints.

Flight and Engine Instruments are NOT included in the kit.

It is estimated that it will require some 300 - 400 hours of work to complete the kit - depending on your experience.

All measurements are in millimetres.

ITEMS REQUIRED BUT NOT PROVIDED IN THE KIT

ITEM	QTY.	PURPOSE	SUPPLIER
PAINT Polyester Filler Spray Filler Thinners	500g P62 kit 1 ltr. 3 ltr. 3 ltr.	Finishing inside hull outside aircraft	ICI PAINTS - general LESANOL ICI Spectrum 2K ICI Spectrum 2K ICI P850-1332
ACETONE	5 ltr..	Degreaser - bonding	Chemical Firms
RED HERMETITE	1 tube	Fuel Tank fittings	- general
LOCTITE 242e LOCTITE 601	1 bottle 1 bottle	NUT locking RETAINER	- general - general
CUSHIONS	2	Monocoque seats.	
FLIGHT & ENGINE INSTRUMENTS	U.K. Statutory : Air Speed Indicator; Altimeter; Fuel Gauge; Tachometer; CHT or EGT Gauge. Available from CFM Metal-Fax Ltd.		

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