

AIRWORTHINESS APPROVAL NOTE NO: 21408P Issue 2

APPLICANT: Microflight Aircraft Ltd

AIRCRAFT TYPE: Spectrum

REGISTRATION NO: G-MVJM

CONSTRUCTOR'S NO: 007

**Approval of the Spectrum Microlight for
Issue of a Permit to Fly**

1 Introduction

The Microflight Aircraft Limited Spectrum, a three axis microlight, is derived from experimental examples with their roots in the American Weedhopper, progressing through the Ladybird (C/N 001), of which several examples were built, the original Spectrum (C/N 002) which was extensively flown with fabric wing and tail, and C/N 004 which was flown with composite wings and tail surfaces. The data derived from C/N 004 has been used in the design of the production aircraft, of which this is the first.

Spectrum C/N 005 was the pre-production machine used to show compliance with the flight requirements of BCAR Section S, C/N 006 was used for structural test purposes. C/N 005 was accepted by the CAA under AAN 18996P.

2 Description

The build standard of this aircraft is defined by Microflight Aircraft Ltd Drawing No S/00/00 Issue 1 dated 17.10.88, and Type Approval Data Sheets No. BM29.

The aircraft is of braced high wing configuration. A Rotax 503 engine is mounted at the front of the fuselage and turns a 65" x 38" propeller.

The fuselage is of aluminium alloy tube construction and has two seats in tandem, each of which is provided with three axis controls.

The wing, tailplane and fin are of fibreglass/sandwich panel construction.

3 Basis for Approval

The basis for approval is BCAR Section S, Advanced copy dated March 1983 as amended 11/10/88.

4 Technical Investigation

The applicant's submission dated 8/2/89 at amendment No. 3, "Summary of Compliance of Spectrum with BCAR Section S" Document No. MFA/AAN/01, makes reference to the complete technical investigation undertaken to show compliance with the basis for approval.

5 Noise

A noise certificate is required for the issue of a Permit to Fly. Noise Type Certificate 113M issue 1 refers to Type.

6 Flight Testing

Flight Testing of the pre-production machine C/N 005 has been conducted to show compliance with BCAR Section S. This machine has been flight tested by the CAA. The performance and flight handling characteristic were found to be acceptable. CAA Flight Test Report No. 6947 P refers.

7 Maintenance

The aircraft and its components must be maintained in an airworthy condition in accordance with the manufacturers recommended schedules and maintenance practices, including the Pilot's Operating Handbook and Maintenance Manual Document No MFA/AAN/02.

8 Weight and Balance

The weight and balance limitations are defined in the Pilot's Handbook Document No MFA/AAN/02 dated 25/10/88, as follows;

Max All Up Weight	= 375 kg (825 lb)
Forward c.g. Limit	= 1080 mm aft of datum at 285 kg (625 lb)
Straight line to	= 1105 mm aft of datum at 375 kg (825 lb)
Aft c.g. Limit	= 1205 mm aft of datum at all weights

Datum - Forward end of the main fuselage keel.

9 Operating Handbook, Placards and Limitations

Operation must be in accordance with the manufacturers recommended procedures and limitations provided in the Pilot's Operating Handbook Document No MFA/AAN/02.

The following placard must be installed in full view of the pilot;

"OCCUPANT WARNING"

"THIS AIRCRAFT HAS NOT BEEN CERTIFICATED TO AN INTERNATIONAL REQUIREMENT"

The following aircraft limitations must also be clearly displayed.

10 Inspection

Inspection by the CAA has found this aircraft to be in an airworthy condition and to comply with this AAN.

11 Approval

This aircraft is approved for the issue of a Permit to Fly, provided that the conditions of this AAN and the Type Approval Data Sheets No. BM29 are complied with.

T R WOODS

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For the Civil Aviation Authority

Date2.March.1989.....