

AIRWORTHINESS APPROVAL NOTE NO: 29066

APPLICANT: Fly Buy Ultralights Limited

AIRCRAFT TYPE: Ikarus C42 FB 80 & FB 100

REGISTRATION NO: - CONSTRUCTOR'S NO: -

OPERATOR: -

INSTALLER -

DESIGN ORGANISATION: Flybuy Ultralights Limited

CERTIFICATE CATEGORY: Permit to Fly

MODIFICATION NO: C42/011

MODIFICATION TITLE: **Approval of a 65 Litre Fuel Tank on the Ikarus C42 FB 80 and FB 100 Type Approved Microlights**

1. **Introduction**

The aircraft is largely designed and manufactured for Flybuy Ultralights by Comco Ikarus Gerätebau GmbH, based at Mengen Airport in Southern Germany. It is the natural successor to the Company's market leader, the C22, of which over 1200 examples have been built. To date over 310 examples of the C42 have been built and flown.

The prototype C42 was first flown in 1995; the first production flight took place in Spring 1996. The lead aircraft has completed over 2400 hours.

This AAN 29066 approves an alternative fuel tank of increased, 65 litre capacity.

2. **Aircraft Build Standard**

The Ikarus C42 is a single engine, side by side, two seat microlight aeroplane. It has a strutted high wing, with ailerons and simple flaps. Its tricycle undercarriage is fixed and incorporates shock absorption on all three wheels.

The aeroplane is defined in the Type Approval Data Sheet (TADS), BM-68.

3. **Approval Procedures**

This modification approval has been carried out in accordance with BCAR Section A Chapter A3-7.

4. Basis Of Approval

4.1 CAA Approval Basis For The Aircraft

The basis of approval of the Ikarus C42 FB 80 & FB 100 aeroplanes is BCAR Section S, Issue 2 dated August 1999.

4.2 CAA Design Requirements For Permit to Fly

Any installed equipment for which the Air Navigation Order requires approval must be approved by the CAA.

4.3 Environmental Requirements

The applicable Noise certification standards are BCAR Section N, Issue 5, Chapter N3-6 for two seat microlight aeroplanes.

4.4 Design Requirements Associated With Operational Approvals

Not applicable.

5. Compliance With The Basis Of Approval

5.1 Compliance With The Approval Basis For The Aircraft

The Applicant has provided various documents in support of the modification application.

a. Design Report Submission

A document titled "FBU C42 Modification Application Issue 2 65 Litre Fuel Tank" dated 15th December 2004 that describes the modification and includes a Compliance Check List against the relevant requirements in BCAR Section S.

b. Structural Test Report

A test report titled "65 Litre Fuel Tank – Pressure & Load Test Report" reference STR/C42/001 Issue 1 which is referenced from the Design Report Submission.

5.2 Compliance With Design Requirements For Permit to Fly

Not applicable

5.3 Compliance with Environmental Requirements

There is no change to the certificated noise level as a result of this modification.

5.4 Compliance with Design Requirements Associated With Operational Approvals

Not applicable.

5.5 Required Manuals And Other Documents Including Mandatory Placards

a. Flight Manual

C42 Owner's Manual reference OHB/C42/001 Issue 6 or later revision.

b. Placards - Actual text, or reference to drawings of placards

See C42 Owner's Manual.

Placarding must include a warning that the aircraft is not certificated to an international standard.

c. Maintenance Manual

C42 Owner's Manual reference OHB/C42/001 Issue 1 or later revision.

d. Weight and Balance Schedule.

See C42 Owner's Manual for permitted cockpit loads and for Weight and Balance Record.

e. Type Approval Data Sheet

Type Approval Data Sheet BM-68 Issue 4 refers.

6. **Conditions Affecting This Approval**

The compatibility of this modification with other previously approved modifications, (installed on the particular aircraft), must be verified by the installer. Where the potential for interactions between modifications exists, the advice of the CAA shall be sought.

7. **Continued Airworthiness**

The influence of the modification on Airworthiness Directive, Service Bulletin eligibility and other data must be considered and the publications monitored accordingly. The maintenance schedule for the aircraft should include reference to this material additional to the original design

8. **Survey**

No CAA survey is required.

9. **Authorisation of Release to Service**

In addition to the actions required by the procedures for release to service following maintenance or modification, all actions and ground test procedures specified by the modification instructions must be completed satisfactorily prior to signing the Certificate of Release to Service.

It must be verified that the documents or amendments to documents, and the placards defined under Section 5.5 above are as specified.

10. **Approval**

Subject to the conditions of Section 6 above, Flybuy Ultralights Ltd modification C42/011 is approved for embodiment on any Ikarus C42 FB 80 or FB 100 type approved microlight aircraft, provided that it conforms with the contents of this AAN, and is operated in accordance with the Flight Manual.

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N J Davis
For the Civil Aviation Authority

Date 11 January 2005