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FAI AEROMODELLING COMMISSION (CIAM)
ELECTRONIC DEVICES IN COMPETITIONS WORKING GROUP (EDIC-WG)

References:
FAI web site: www.fai.org
CIAM website: www.fai.org/aeromodelling

To: CIAM web site under AMRT Approvals
CIAM Technical Secretary
F5 Sub Committee

Copy: Manufacturer Concerned

Date: 20 July 2026

CIAM APPROVAL FOR F5J ALTIMETER/MOTOR RUN TIMER (AMRT)

Approval Reference:	**AMRT066**
Manufacturer:	**RC Electronics**
Manufacturer Contact:	**support@rc-electronics.org**
Device Names:	**FalconX**

(i) This document gives formal approval from the above date for the AMRT equipment described below to be used for competitions under the Sporting Code Section 4:Aeromodelling – Class F5J – Electric Thermal Duration Gliders.

(ii) This document is the initial approval for this type of AMRT and only applies to the functions relevant to the F5J competition class rules.

(iii) Tests undertaken by EDIC-WG (or such representative as it may appoint), are specifically concerned with the functions relevant to the F5J competition class rules. Other functions of the equipment are not part of this approval and the relevance of this document does not extend beyond the specific validation and certification purposes mentioned above.

(iv) This document does not constitute a guarantee of compatibility of the device listed above with any associated devices with which it may be interconnected.

(v) This document does not constitute any guarantee and/or statement by EDIC-WG, CIAM and/or FAI as to the reliability of the device listed above.

(vi) This approval is not concerned with National and other regulations relating to electronic equipment and compliance with such regulations is not the responsibility of the FAI.

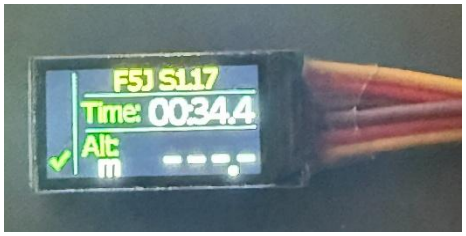
(vii) This approval is not concerned with, and the FAI has no responsibility for, matters related to: (a) intellectual property and intellectual property rights and/or, (b) relations of the manufacturer listed above with any other entities except with FAI and its agents or as they affect the FAI, its agents and this approval.

EQUIPMENT

1 HARDWARE

1.1 Equipment Name

FalconX



1.2 Hardware Version

HW 1.2

1.3 External Features

The AMRT module is a transparent heatshrink-encased circuit board with attached cables terminated in two 3 pin JR style male/female connectors for connection to the control equipment (RC) and ESC within a model.

An onboard color display provides readout of the F5J Start height and flight time.

The hardware has a built in BT interface, onboard accelerometer, microphone adding additional functions like measuring the flight time from motor-ON to model touch down.
Most functions are not applicable to, nor do they have any influence on the F5J application. However, it is possible to connect to an Android or iPhone driven device in order to replicate the F5J information on an external mobile phone or download flight data. This so-called user/setup Interface is not part of this functional test.

The mobile Android or iPhone app for the purpose of upgrading firmware does not form part of this approval.

1.4 Pressure Altitude Sensor

The pressure sensor module manufactured by STM is ILPS22QS with built in temperature compensation and is read with a 100Hz rate.

2 FIRMWARE

2.1 Firmware Version

FalconX	CAT-I	F1.17
	CAT-II	S1.17

2.2 Pressure to ISA Height Conversion

The firmware uses the standard pressure to ISA height calculation.

2.3 Temperature Compensation

The firmware incorporates temperature compensation processing in accordance with the pressure sensor manufacturer's recommendations.

2.4 Dynamic Response

Oversampling of pressure sensor data and subsequent processing does not contribute any significant degradation of dynamic response in the context of the F5J competition application.

3 CONDITIONS OF APPROVAL

3.1.1 This Approval only applicable to devices of the type described and manufactured to the same production standards as the example evaluated.

3.1.2 The firmware version starting with letter “F” does PREVENT the emergency operation of the motor´s throttle and MUST be used in FAI Class 1 competitions (i.e. WCh, ECh, WORD CUP or EUROPEAN CUP) and where the contest organization so stipulates.
Firmware version starting with letter “S” does allow motor restart but sets start height to “---.-“ which indicates the motor restart with the described consequences in the F5J rules.

3.1.2 This Approval is not applicable to any device which has been subject to repair or modification by person(s) other than the original manufacturer or his authorised agent.

3.2 Withdrawal of Approval

If after this Approval has been issued, inconsistencies of performance are found in further examples of the device(s), Approval may be withdrawn upon notice to the manufacturer.

3.3 Changes to F5J Class Rules

If the F5J class rules are amended in any manner that affects the technical specification of the AMRT, the validity of this Approval will be subject to review.

3.4 Expiry of Approval

This Approval remains active until it is either superseded or withdrawn. A list of all currently active Approvals can be obtained from the FAI CIAM website.

4 PRODUCTION STATUS

At the date of issue of this Approval, the FalconX is in production state.

5 MANUFACTURER’S CHANGES

Notification of any changes to hardware and/or firmware must be made by the manufacturer to the Chairman of EDIC-WG so that a decision can be made on any further testing that might be required to maintain CIAM Approval of the AMRT. This includes changes that are applicable to any additional functions of the device(s) that do not necessarily form part of the F5J requirements.

Manfred Lex
Chairman FAI CIAM EDIC Working Group

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