

Approval document for an IGC Position Recorder (FlyWithCE)

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References:

- A. FAI Sporting Code Section 3 (Gliders and Motor Gliders) (SC3)
Particularly: SC3 Appendix A to Chapter 4 on Position Recorders
- B. Annex B to the Code (SC3B), Glossary items on Position Recorder and Validation,
and paras 1.7, 2.1.1.2, 2.2.2.
- C. Annex C to the Code (SC3C), particularly para 6.1 and 6.2, also 1.1, 1.5, 3.3.
- D. Specification for the IGC file format, Appendix 1 to the Technical Specification for IGC-
approved Flight Recorders

1. Introduction

- 1.1. This document authorises the use of the GPS recording device described in para 2 for use as an IGC Position Recorder (PR) for flights under the jurisdiction of the above NAC under the rules and procedures for PRs in the FAI Sporting Code Section 3 (Gliding), in particular under References A-D above. At the date of publication of this document, Reference A allows IGC Position Recorders to be used for flights for Silver and Gold IGC Badges.
- 1.2. This document covers only the PR recording function and the data in the IGC-format file that is downloaded from it (Reference D and 3.3 below). Other functions in the PR and other modules that can be connected, are not the responsibility of the NAC or IGC.

2. Type of Position Recorder

- 2.1. Name of Position Recorder: flyWithCE Flight Recorder FR100 & FR300

Manufacturer: flyWithCE
Uroš Podlogar s.p.
Ulica Lojzeta Hrovata 9
4000 Kranj
Slovenia

Contact details: info@flywithce.com & flywithce@gmail.com
www.flywithce.com

It should be noted that the name "Flight Recorder" does not imply that this device is approved by the IGC as a secure Flight Recorder.

- 2.2. Details of the PR. Details of this instrument can be found at: <http://www.flywithce.com>

3. Compliance with Sporting Code

This type of IGC Position Recorder complies with the Sporting Code requirements for Position Recorders (References A-D above) as follows.

- 3.1. The WGS84 ellipsoid Earth Model is used for all fixes in the IGC file (SC3 Chapter 4 para A2 refers). Reason: the recorder is fixed on WGS84.
- 3.2. All fixes in IGC files downloaded from this Recorder are all obtained from real-time GPS data, and no predicted fixes are recorded (SC3 Chapter 4 para A3 requirement).
- 3.3. The downloaded IGC file can be electronically validated at any time to ensure that the file is identical to when it was initially downloaded (SC3 Chapter 4 para A6 requirement).
 - 3.3.1. The Download program/method is: Logbook (Flight Recorder control program) available from <http://www.flywithce.com/download.html>
 - 3.3.2. The file validation program to be used with such downloaded IGC files is: IGC validation utility vali-fwc.exe available from <http://www.flywithce.com/download.html>
- 3.4. Recording of Altitude. References: SC3 Chapter 4 para A7, Annex C to SC3 para 6.2c, Reference D.
 - 3.4.1. Altitude data from this IGC PR - for accurate measurement is from figures in the IGC file for GPS altitude above the WGS84 Ellipsoid, applying the margin over Pressure Altitude requirements as specified in the Sporting Code (Reference A), currently 100 metres. This PR does not include an internal pressure altitude sensor.
 - 3.4.2. The IGC file – Field for Pressure Altitude. In IGC files from this type of Position Recorder, the field for Pressure Altitude is recorded as Zero, in accordance with SC3C para 6.2 and Reference D.

4. Engine Recording

This PR is not able to detect the operation of a Means of Propulsion (MoP).

For gliders with a MoP, SC3 4.5.4 and SC3C 12.1 apply and one of the following must be carried out:

- 4.1. Carry a separate device that records MoP use and is acceptable to the NAC, or:
- 4.2. Seal the MoP in such a way that the Official Observer can detect if it has been operated, or:
- 4.3. Disable the MoP prior to flight to the satisfaction of the Official Observer and NAC.

5. Mounting in the Glider

- 5.1. This equipment may be mounted anywhere in the glider, however the Official Observer must be able to guarantee that the device was present in the glider throughout the flight for which the performance is claimed and that the downloaded IGC flight file used to evaluate the flight came directly from that device.

6. Authority

This approval document has been issued by the office of the Bundeskommission Segelflug (a section of the German Aero Club DAeC) to permit evidence from this Position Recorder to be used for the validation of claims for flights as defined in Reference A.

7. Signature

Signature of NAC Official

Name: Jan Braune
Position in NAC: Referat Sport / Bundeskommission Segelflug / DAeC
Email address: segelflug@daec.de

Any queries or comments about this document should be sent to the above, with a copy to the Chairman of the IGC GFA Committee (currently: ian@ukiws.demon.co.uk).



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