Approval document for an IGC Position Recorder
For IGC Silver and Gold Badge Flights

Issuing Authority: British Gliding Association
8 Merus Court
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Leicester
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United Kingdom
Email: office@gliding.co.uk

Date of effect: 12th June 2012

References:

FAI Sporting Code Section 3 (Gliders and Motor Gliders) (SC3)
Particularly: SC3 Appendix A to Chapter 4 on Position Recorders
Annex B to the Code (SC3B), Glossary on Position Recorder and Validation, and paras 1.7, 2.1.1.2, 2.2.2.
Annex C to the Code (SC3C), particularly para 6.1, also 1.1, 1.5, 3.3.

Introduction

1.1. This document authorises the use of the GPS recording device described in para 2 for use as an IGC Position Recorder for flights under the jurisdiction of the above NAC under the rules and procedures specified in the FAI Sporting Code Section 3, in particular under the References above. These specify when an IGC "Position Recorder" may be used for the validation of flights for IGC Silver and Gold Badge performances. In addition, for such flights, evidence from an IGC-approved GNSS Flight Recorder may also be used if one is available.

1.2. This approval covers only the Position Recorder itself and its operation. The detailed process for making a badge flight and providing evidence to the NAC, is contained in the Sporting Code for Gliding (SC3 and its Annexes).

Type of Position Recorder

2.1. Name of Position Recorder: flyWithCE Flight Recorder FR300
Manufacturer: flyWithCE
Uroš Podlogar s.p.
Ulica Lojzeta Hrovata 9
4000 Kranj
Slovenia
Uros.podlogar@flywithce.com
www.flywithce.com

2.2. This approval applies to the flight data recorded internally in the instrument and downloaded in the form of a file in IGC format with a verifiable security record (3.3 below).

3. **Compliance with Sporting Code**
To comply with the Sporting Code requirements for Position Recorders, the following sub-paragraphs apply. References below are to paragraphs in Appendix A to SC3 Chapter 4.

3.1. The WGS84 datum (ellipsoid Earth Model) is used for all fixes in the IGC file (Para A2 refers).

3.2. Fixes in the downloaded IGC file are obtained from real-time GPS data (Para A3 refers). No predictive fixes are recorded without GPS data.

3.3. The downloaded IGC file may be electronically validated at any time to ensure that the file is identical to when it was initially downloaded (para A6 refers).

3.3.1 The Download program/method is:

FlyWithCE Logbook application (version 3.40 or higher) is used for downloading IGC file from the FlyWithCE FR300 device to a Personal Computer. During download the Personal Computer has to be connected to Internet, because FlyWithCE web server is used to sign the downloaded flight. If Internet connection is not available than G record is not generated in IGC file (the flight can be reloaded at later time when an Internet connection is available and then the G record will be generated).

Any Flight declaration has to be entered before the flight. User can change flight declarations at later time, but then G record will be deleted (or will no longer be valid if the user edits the IGC file).

Program flyWithCE Logbook is available with flyWithCE Flight Recorder FR300 or on web site:
http://www.flywithce.com/download.html

3.3.2 The file validation program to be used with such downloaded IGC files is:
VALI-FWC.EXE which is available on web site:
http://www.flywithce.com/download.html

3.4. Pressure Altitude calibrated to the ICAO ISA (Para A7). FlyWithCE Flight Recorder FR300 does not have an internal pressure altitude sensor. GPS altitude is used in the IGC file. Pressure Altitude information must be obtained from separate barograph system.

Approval Limitations

4.1. General. This equipment is approved as a Position Recorder for flights for IGC Silver and Gold Badges only, as specified in the references above para 1, mainly Appendix A to Chapter 4 of SC3.

4.2. Altitude for IGC Measurement Purposes. Altitude for IGC Measurement Purposes shall be in accordance with the Sporting Code.

4.3. Motor Glider Means of Propulsion (MoP) Recording. This equipment is not able to detect the operation of a Means of Propulsion (MoP). For gliders with a functioning MoP, SC3 4.5.4 and SC3C 12.1 apply. One of the following must be carried out:

4.4.1. Carry a separate device that records MoP use and is acceptable to the Official Observer and the NAC, or:

4.4.2. Seal the MoP is such a way that the Official Observer can detect if it has been operated, or:

4.4.3. Disable the MoP prior to flight to the satisfaction of the Official Observer and NAC.

Operating Requirements

5.1. This Position Recorder may be mounted anywhere in the glider, but the Official Observer must be able to show that it was present in the glider throughout the flight for which the performance is claimed, and that the downloaded IGC file used to assess the flight came directly from it.

5.2. Files downloaded from this Position Recorder must be in the IGC file format, so that they can be read by analysis programs designed for the IGC format, without modification to the file. It must be possible to carry out a Validation check (see 3.3.2 above) that ensures that the IGC file used for assessment of the flight performance is the same as the file that was originally downloaded from this type of Position Recorder.

Authority

6. This approval document has been issued by Competition & Awards Sub Committee of the British Gliding Association to permit evidence from this Position Recorder to be used for the validation of claims for Silver and Gold Badges (for which an IGC-approved Flight Recorder may also be used).

Questions

7. Any questions about the contents of this document should be sent to Chairman of BGA

Competition & Awards Sub-Committee (office@gliding.co.uk) or through the Chairman of the IGC GFA Committee (ian@ukiws.demon.co.uk) who is responsible for co-ordinating Position Recorder data and putting it forward for publication on the IGC GNSS web site.
