



Position Recorders for Silver and Gold Badges

Approval Document

Document Number: SDP027

Author and Approved by: Tim Shirley, January 2022, Revision 1

1 Introduction

- 1.1 This document authorises the use of the GPS recording devices described below, for use as Position Recorders in Australia under the rules specified in the FAI Sporting Code Section 3 (Gliders). These rules specify the circumstances in which a Position Recorder may be used for the validation of a Silver and Gold Badge performance only (The use of an IGC-approved GNSS Flight Recorder, if available, for such flights is unaffected).
- 1.2 This approval covers only the instrument itself, related software and any operational requirements for its use. The process for attempting a badge flight and providing the necessary evidence to the GFA's FAI Certificates Officer is provided in the Sporting Code and in other GFA documentation.

2 Equipment Approved

- 2.1 Two lists of devices are approved for Silver and Gold Badge flights. The devices and software products on this list are approved for use as Position Recorders in Australia subject to the conditions in the remainder of this approval document, unless they are approved by the GFAC at a higher level, in which case the higher level approval applies.

Some software products on this list can operate on a variety of commercially available devices, and it is the intention of this approval that any device capable of operating the approved software is itself approved.

In case of any doubt, the pilot or Official Observer must check any device against the website above before the flight.

2.1.1 OLC:

This approval applies to the range of devices approved for validation using the Green or Blue V symbol on the OLC website at <https://www.onlinecontest.org/olc-3.0/gliding/logger.html>

2.1.2 WeGlide:

All devices list on the WeGlide logger list are approved -
<https://docs.weglide.org/docs/contests/loggers/>

2.2 This approval applies to the flight data recorded internally in the instrument and downloaded directly in the form of an IGC format file.

2.3 It has been determined that, to comply with the Sporting Code for Position Recorders,

2.3.1 These devices record only in the WGS84 datum (ellipsoid Earth Model) and that other Datums are not selectable.

2.3.2 Fixes in the downloaded IGC file are always derived from GPS data. No predictive fixes are recorded without GPS data.

2.3.3 The downloaded IGC file can be electronically validated at any time to ensure that the file is identical to when it was initially downloaded.

3 Approval Limitations

3.1 This equipment is approved as a Position Recorder for Silver and Gold Badge Flights only, as specified in the documents referenced in Paragraph 1 and Annexes B and C to the Sporting Code for Gliding.

3.1.1 GPS altitude, or uncalibrated pressure altitude, may only be used within the limitations specified in the Sporting Code at the time of the flight. For Calibrated pressure altitude, see Paragraph 3.4.

3.2 Data used to validate a claim must be recorded on and downloaded from the device carried on the flight being claimed. Flight files downloaded from the OLC site are not acceptable.

3.3 This type of equipment is generally not able to detect the operation of a Means of Propulsion (MoP). Gliders with a functioning MoP must do one of the following:

3.3.1 Disable it prior to flight to the satisfaction of the Official Observer

3.3.2 Carry a separate device acceptable to the Official Observer and the FAI Certificates Officer that records MoP use, or

3.3.3 Seal the MoP in such a way that the Official Observer can detect if it has been operated.

3.4 The Pressure Altitude functions of any device may be used for pressure altitude evidence for a claim only if the Pressure Sensor is calibrated in accordance with Sporting Code Section 3. The procedures for doing this are in the Sporting Code for Gliding (SC3), Chapters 4 and 5 (particularly paragraph 5.3.2) and relevant Annexes. Otherwise, pressure altitude evidence from a separate

device must be provided. Pressure altitude claims must conform to the requirements of the Sporting Code including its Annexes.

- 3.5 If the Calibration Authority is unable to download the calibration data in IGC File format, an alternative electronic format acceptable to the GFA may be used, as detailed in the document GFA Calibration Guidelines for Pressure Sensors in Position Recorders.
- 3.6 For this type of Position Recorder, there is no mandatory requirement for the PR serial number to be accurately recorded, as long as the OO can confirm that the downloaded file came directly from the device carried in the glider and was used to record the flight. In regard to declaration content, the Sporting Code section 2.3.2d is not a mandatory requirement.

4 Operational Requirements

- 4.1 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.
- 4.2 Files downloaded from this equipment must be in IGC file format (so that they can be read unmodified by commercial flight analysis software such as SeeYou, Strepla or similar).
- 4.3 For OLC: A file that can be successfully uploaded and validated in the Online Competition (OLC) (with a Green or Blue V symbol is acceptable for this purpose. Flights submitted for badge claims however must be downloaded directly from the equipment and not sourced from the OLC website. For WeGlide: the file will not score and will be greyed out if it not valid.

5 Authority

- 5.1 This approval has been issued by the Sports Committee of the Gliding Federation of Australia to permit the use of the specified equipment to be used for the validation of claims for Silver and Gold Badges (for which an IGC- approved Flight Recorder may also be used).
- 5.2 Any questions regarding this document should be addressed to Tim Shirley at tshirley@internode.on.net or on 0417 268 073.

6 References:

- FAI Sporting Code for Gliding, Annexes B and C.
- GFA Calibration Guidelines for Pressure Sensors in Position Recorders