



CIVL 2022 PLENARY – ANNEX 31
BADGES&RECORDS PROPOSAL FOR S7D
1s RECORDING INTERVAL

Shorten the recording interval from 5s to 1s.

Current rule

5.2.3. Measurement of altitude

Altitude and altitude gain shall be by barograph, or by a GPS or flight data recorder with barometric altitude encoding in the tracklog (3D). A tracklog recording interval not exceeding 5 seconds shall be used.

5.2.4. Measurement of time

Where a GPS or approved flight data recorder is used to validate a flight and the track-log has 2 points either side of the start or goal line (or cylinder circumference) at most 5 seconds apart, then the start or finish time is interpolated from these points (constant speed being assumed).

5.4.1. The GPS

A GPS track-log with altitude encoding (3D) may be used to validate a claim for a badge or record flight providing the track-log is nearly continuous and provides unequivocal evidence that no intermediate landing was made and it generally substantiates the flight. Interruptions in the track-log will not invalidate the flight provided the gaps do not bring into question the continuity of the flight. Generally speaking, gaps of less than 10 min. are acceptable. GPS units without altitude encoding (2D) may be used alone only for bronze badges; for silver and higher badges, and records, 2D GPS may only be used in combination with a barograph.

- The GPS data (for record attempts) shall be downloaded by the Official Observer using flight verification software (see 5.4.2 below) that reads the GPS directly, produces an IGC formatted file and incorporates a security feature to identify tampering.
- The Official Observer must clear the active GPS track-log before the start of the flight. The GPS memory should contain the start point, any turn points and the declared finish point (in addition to any other points) before the start of the flight. The route, if any, should be activated in the GPS and so observed by the Official Observer at the start of the flight.
- The recording interval of the GPS, if adjustable, should be set to an interval as short as feasible, taking into account the memory capacity of the GPS and the intended length of flight, but in any event equal or less than 5s.

5.4.1.2. Essential Data

The track-log must show for any start, finish or turn point that the pilot was in the relevant observation zone i.e. one of the following:

- A point within the normal FAI sector or cylinder.
- A pair of consecutive points not more than 5 seconds apart for which a straight line drawn from the first point to the second point passes through the allowable sector, plus the allowable sector additions for possible GPS error.

Recommendation

5.2.3. Measurement of altitude

Altitude and altitude gain shall be by barograph, or by a GPS or flight data recorder with barometric altitude encoding in the tracklog (3D). A tracklog recording interval not exceeding **1 second** shall be used.

5.2.4. Measurement of time

Where a GPS or approved flight data recorder is used to validate a flight and the track-log has 2 points either side of the start or goal line (or cylinder circumference) at most **1 second** apart, then the start or finish time is interpolated from these points (constant speed being assumed).

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- **The recording interval of the GPS, if adjustable, should be set to equal or less than 1second.**

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Comment: There is no need to keep 5s interval with today's instruments.