



## CIVL 2019 PLENARY – ANNEXE 11B LIVE TRACKING COORDINATOR REPORT

*By Elena Filonova*

### Summary of activity during 2018

- In the first quarter of 2018, CIVL bought a fleet of 170 Flymaster Live Trackers to be used at Category 1 events and appointed Elena Filonova as CIVL Live Tracking Coordinator.
- The fleet was delivered to Elena Filonova in Italy.
- In May 2018 Elena Filonova obtained ATA carnet for free export of a re-export of the fleet.
- During 2018 CIVL live trackers were used at the following events:
  - 20th FAI European Hang Gliding Class 1 Championship Krushevo Macedonia 8 Jul to 21 Jul 2018.
  - 8th FAI World Hang Gliding Class 5 Championship Krushevo Macedonia 08 Jul to 21 Jul 2018
  - HG Class 1 XC Test World Italy July 27 to August 3 2018
  - PG XC Test World Macedonia August 5 to 11 2018

### Bonuses

The manufacturer of the Life Trackers – a Portuguese IT company Flymaster provided 2 unexpected bonuses to the live tracking service provided by his devices:

- Highest quality 3D visualisation based on live tracking data that allowed broadcasting competitions as if the pilots had cameras on them. The organisers of HG Class 1 Worlds Test event organised Live video broadcasting based on direct streaming from Take off/Goal areas and 3D visualisation of Flymaster.  
See direct video from the media centre  
<https://www.facebook.com/fai.civil/videos/450830272060523/>  
Watch broadcasting example: <https://www.youtube.com/watch?v=dAXZNeO6OjI>
- Another bonus was the development of free for users of Flymaster Live Trackers Retrieve system. The system allows setting statuses, assigning vehicles and send drivers the coordinates of pilots waiting for a retrieve. There is a smartphone app chat that works both ways and brings all changes of statutes to the operator's control panel or mobile phone. All SOS messages and other questions are also instantly delivered to the organisers mobile phones.  
Screens examples: <https://www.facebook.com/fai.civil/posts/457881128022104>

### Operational issues

The trackers were updated with the new software that made them compatible with CIVL Category 1 flight recorder specification. So in 99% of cases all the IGC files were

automatically received by scorer without the need for downloading track logs from the devices of the participants.

During the competition there was a case when we had to download track log directly from the tracker and all worked fine.

Only a couple of times pilots were not satisfied by their results and have brought their back-up instruments for download.

Important issues turned out to be taken into consideration while managing the live trackers:

- Live Trackers should not be exposed to direct sunlight for a long time (battery drain), so a tent or shade should be organised on take-off.
- Live Trackers should be kept and charged in cool (better air-conditioned) environment, which was not the case in Italy.
- Live Tracking Coordinator finishes work at about 1 a.m. every day and starts at 7–8 a.m. every day, so should be accommodated in walking distance from HQ or other place where the live tracking devices are stored.

## **Evaluation of activity**

On the whole the project was successful. The trackers worked fine during the flights that allowed monitoring of the pilots activity for various purposes:

- Race watching
- Safety
- Retrieve
- Fast scoring
- Penalty

The work of the trackers and coordinator received high esteem of PWC President Goran Dimiskovski who was a meet director of the 3 events.

The experience of the use of CIVL live trackers allowed to contribute significantly to FAI Category 1 Organisers Handbook, which new edition will come out shortly.