

Organisation Scientifique et Technique Internationale
du Vol à Voile (O.S.T.I.V.)

OSTIV PRIZE

awarded to

the Flarm Team:

A. Schlapbach, U. Rothacher and U. Mäder

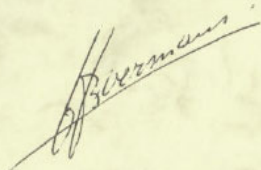
for the development of the collision
avoidance system FLARM.

With great enthusiasm and dedication they
developed the collision avoidance system FLARM
that warns against aircraft and obstacles,
thus increasing the safety of gliding and
saving lives of pilots.

Presented on occasion of the

Opening Ceremony of the XXVIII OSTIV Congress
June 8 2006, Eskilstuna, Sweden.

The Board of OSTIV,



Prof. ir. L.M.M. Boermans
President of OSTIV



OSTIV AWARD presented at



the Opening Ceremony of the XXVIII OSTIV Congress
on June 8, 2006 in Eskilstuna, Sweden

OSTIV PRIZE

Rule: The OSTIV PRIZE can be awarded for any outstanding improvement in Sailplane Technology. The nominations are made by the Sailplane Development Panel. The selection is made by the Board of OSTIV.

The OSTIV PRIZE is awarded to:

The Flarm Team

A. Schlapbach, U. Rothacher and U. Mäder

for the development of a collision avoidance system,
leading to improved safety in gliding

Citation

Driven by the danger of collisions between sailplanes and cables in the Alps, four teams of Swiss glider enthusiasts started in 2003 to think about a device to lower this risk. All projects were presented at a Flight Safety Workshop of the Swiss Gliding Federation, SFVS, and the Akaflieg Zürich, where the team leaders were invited to discuss the establishment of a common communication standard. After comparison of the different approaches the four teams came to an agreement. Work continued on the Flarm system and in the summer of 2004 the first units were delivered. Since that time the Flarm team spent considerable time and effort in developing this system to be the useful and affordable piece of equipment that it is today.

Flarm combines a GPS unit with a radio link to provide warning against possible collision with other Flarm-equipped aircraft by comparing flightpath projections from other Flarm units with that of its own. This allows for the elimination of unnecessary warnings when

flying close together and distinguishes Flarm from other possible warning systems, such as those based on transponder signals or ADS-B transmissions. The system also enables warnings for the prevention of collisions with ground obstacles like masts and cables.

Since warnings can only be provided between Flarm-equipped aircraft, a wide and fast dispersal of the system is essential. The Flarm team organised this distribution such that potential users must join the network before obtaining their Flarm; this helps in keeping the price low. The Flarm team has also offered other organisations and companies the use of their system or algorithms in exchange for developing periphery equipment that will enhance the functionality of Flarm, or to build their own systems that emulate the functionality of Flarm. Other flying communities have been invited to use Flarm with the result that helicopters, hang gliders, tow planes and motorgliders have been equipped, and a variant for parachutists is being developed.

Until now more than 3500 gliders have been equipped with Flarm. The FAI has recognised the safety aspect and amended the Code Sportif to allow the system to be used in gliding competitions.

Thanks to their efforts, the Flarm team has provided the gliding community with a very useful means of reducing the number of collisions between sailplanes and ground obstacles, which have already taken the lives of so many fellow pilots.

**The Board of OSTIV
(Loek M.M. Boermans, President)**