2013 CIVL Plenary – Annex 16
Safety Subcommittee Report

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"Every system is perfectly designed to achieve exactly the results it gets." Donald Berwick

In the subcommittee, only the rescue parachute working group was active, and concluded that it didn't agree on a way forward, and had little means of influencing the development direction. Here I have tried to compare our subcommittee with what happens in the neighbour commissions IPC and IGC, and then there are some proposals. It's more a personal reflection than a complete solution, and is open for later modification.

Observations / Issues

CIVL

Paragliding context
PG Certification and Certification bodies: the main certification bodies, such as LTF, follow CEN standards. On-going discussions to improve safety by evolving the EN standards, especially at the higher performance level.
PMA: Paraglider Manufacturers Association is active and includes most PG manufacturers, some harness manufacturers and some independent Test Houses. Not always consensus among members on direction.
Cooperation among manufacturers, test houses and NAC representatives in the certification definition through the WG6, a joint CEN/manufacturers working group.
EHPU is a European lobby organisation with its own safety group (ESTC).
Some NACs have national safety surveys and initiatives.

Hang gliding context
HG Certification and Certification bodies: HGMA / BHPA and LTF, their labels don't fully match.
HGMA is a manufacturers association, BHPA and LTF (DHV) are national federations, communication looks poor between them.
HGMA: Hang glider Manufacturers Association, inactive.
No international coordination outside EHPU, national safety surveys.

IPC (Parachuting)

Active Technical and Safety Committee with more than 30 years track record.
Activities: coordination of NACs, promotion of safety, of international equipment standards, of medical requirements, cooperation with medical research, data collection, annual safety report, annual automatic activation devices report (Cypress/Vigil…), edition of safety notes, specific surveys, proficiency certificates, technical forum, experts network (> 100 safety officers).

IGC (Gliding)

‘Safety Pays’ Working Group with more than 50 years experience and track record.
Activities: coordination of NACs, promotion of safety, of new safety devices, certified gliders, equipment survey (energy absorbing foam, cockpit evacuation drill, visibility, FLARM, live trackers, AoA indicators, spinal protection), data collection, annual safety report, cooperation with OSTIV (independent international association, member of FAI and dedicated to gliding safety).

Comments

Free flying involves a less structured approach, such as launching from remote or isolated mountain sites, when compared to skydiving or gliding from specific airfield-based centres. There are 2 drawbacks and 1 advantage:
– (unless in competition) it's harder to reach every pilot with safety information,
– we can't always rely on the team support or crew to undertake checks,
+ if we find a solution, it might be solid and interesting for general aviation.
In general aviation the primary safety procedure is the check list. But ultimately, it is wholly reliant on the human carrying it out: the weakest link especially if under pressure. Irrespective of how the HG/PG safety record compares to other aviation sports, our image is badly damaged by every single accident. Not only to avoid loss of life, it has to be worth the effort to change something to improve safety.

Two major safety concerns haven't yet been touched:

Human psychology.
Any briefing dealing with safety involves the underlying implication of death. We humans are the only animals that truly understand that we will die. Very young, we probably build a strategy to deal with this knowledge while still managing to live ‘normal’ lives. In safety briefings, we agree in principle with the premise: "it happens to us all eventually", but the automatic strategy whispers "but I'm careful". It's incredibly hard to change this mind-set, as we feel immune to the possibility of accidents: "it won’t happen to me". Only by sincerely accepting that accidents can actually happen to each of us too, will we get a new outlook. Any input on how to achieve that is welcome.

Human fallibility.
We have check lists too, like the pre-flight check. But our pilot will eventually be alone some day, with no crew to point out a missed item. As long as the door is open, the mistake can and will happen, it's just a matter of time. A solution could be to definitely distrust the human. To take that into account, we need to totally redesign our system, from CIVL to equipment. It may be disruptive, politically incorrect and it will disturb many, but otherwise we won't essentially change anything.

Recommendations

- Put safety in the heart of CIVL.
In IPC and IGC, the Safety Groups are represented in their Bureau. It shows safety is no longer an "annex", but the system takes it into account.

- Be a link.
As PG and HG are rather different, a Safety Officer could be a link between the Subcommittees.

- Organising more influence for the Safety Subcommittee.
A manufacturers' association chairman told: "CIVL can't enforce anything" (in the way manufacturers build equipment). But we can set standards required in competition, and they will be respected if they're wise.

- Coming together.

Like the PWCA / CIVL rapprochement, maybe there should be a closer EN / EHPU / CIVL relation. CIVL would take more expert decisions and Testing bodies / Manufacturers would have a direct relay in CIVL... This is how it seems to work in IPC.

- PG and HG expert networks.
Maybe we don't need to create them, but only expand existing groups, or get the manufacturers associations (if they are active) to create them. Have a formal partnership with them, maybe agree on joint issues, and help them promote, broadcast, relay the safety notices.

- Review our equipment and systems around "idiot-proof" solutions.
The human can and will fail. Let's design / organise the system so that it cannot fail, or at least has a failsafe mode.

(A hang gliding example… New Zealand 2003, tandem passenger not hooked in. Result: fatality. Canada 2012, same accident, same end result. At first glance, it's an unforgivable mistake of the pilot. But we have the proof it happened, and as long as it can, it will happen again, in a form or another.
A 2010 safety film concludes "Are you hooked in?", exactly what we've kept on preaching for 30 years. "If there were no hook, it could not be forgotten". This solution creates new problems, but it hasn't been fully investigated. It may be wrong, or not, and as long as we don't test innovative equipment, we can't be sure it's wrong.(
Humans make mistakes, this is absolutely sure. Why not stop relying on them? We need some different thinking…)