



March 2019

Report from Safety Group (SFG) to the IGC 2019 Plenary

This season started with a fatal accident in Vitacura, Chile. Some actions were adopted for future Grand Prix's in mountains like reducing WL from 52 to 48 kg/m², among other adjustments. Complete report already covered during past plenary in 2018 in Germany.

So, what can we do?. The same question we ask again.

The key is to continue working gathering information, adopting rules, coaching, dealing with technology and all the factors that affect our sport, in order to change the CULTURE.

Pilots make the final decision, but we as sport body can make the rules more or less friendly.

During 2018 WGC's, a "new" issue came up, which is the OGN and its effect in the pilots and the competition itself. We as IGC believe that online tracking by mean of FLARM signal into the internet is important and pilots were mandate to use their FLARM in normal mode. The downside of this decision is that an "OGN operator" from each team was sending important information to pilots in the air, thus creating big gaggles, besides other side-effects like leeching, etc.. Pilots complained strongly and several proposals will be carried during this plenary oriented to work with online tracking but avoiding the downside of the "operators" and "leeching".

We believe that FLARM must be re-established as an anti-collision device asap.

Statistics attached still show a relationship of app. 1.5/1 (one point five to one) Incidents/Accidents ratio. We believe this is not real and many incidents are not reported. This group encourages the use of an electronic application called FLYTOOL to be explained at Stewards Report. It will easy the process of reporting, thus more information will be available to help making appropriate changes to enhance safety.

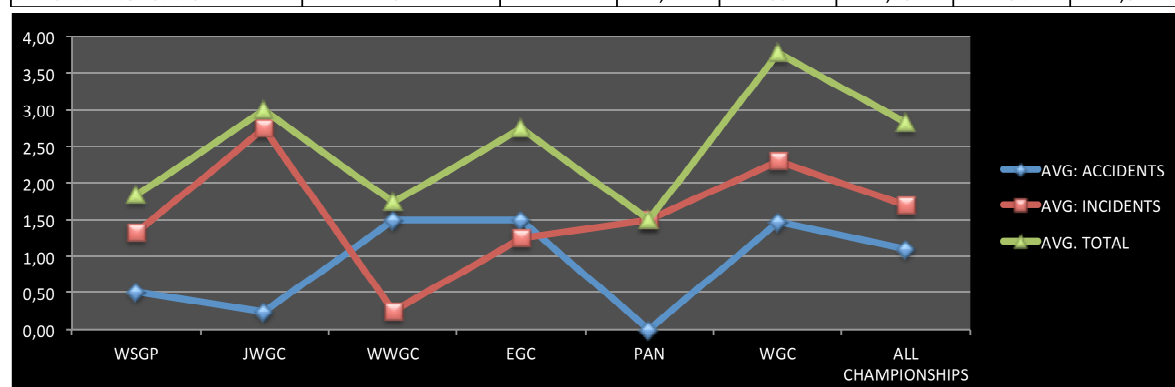
PROXIMITY ANALYSIS: it has been mentioned since two plenaries and now we are in a position to use this fantastic tool during all competitions. More information at Stewards Report.

Statistics:

a.- Accidents and Incidents per Championship (SEE ANNEX 1 for details):

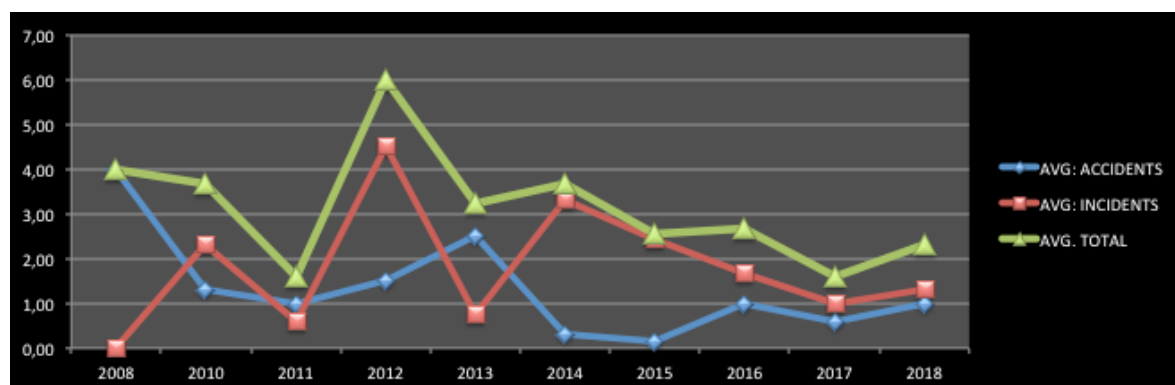
b.- Summary data per type of championship:

CHAMPIONSHIPS 2008 TO 2018	TOTAL CHAMP.	ACCIDENTS	AVG. ACC.	INCIDENTS	AVG. INC.	TOTAL	AVG. TOT.
WSGP	6	3	0,50	8	1,33	11	1,83
JWGC	4	1	0,25	11	2,75	12	3,00
WWGC	4	6	1,50	1	0,25	7	1,75
EGC	8	12	1,50	10	1,25	22	2,75
PAN	2	0	0,00	3	1,50	3	1,50
WGC	13	19	1,46	30	2,31	49	3,77
ALL CHAMPIONSHIPS	37	41	1,11	63	1,70	104	2,81



c.- Statistics per year (*2009 is not included):

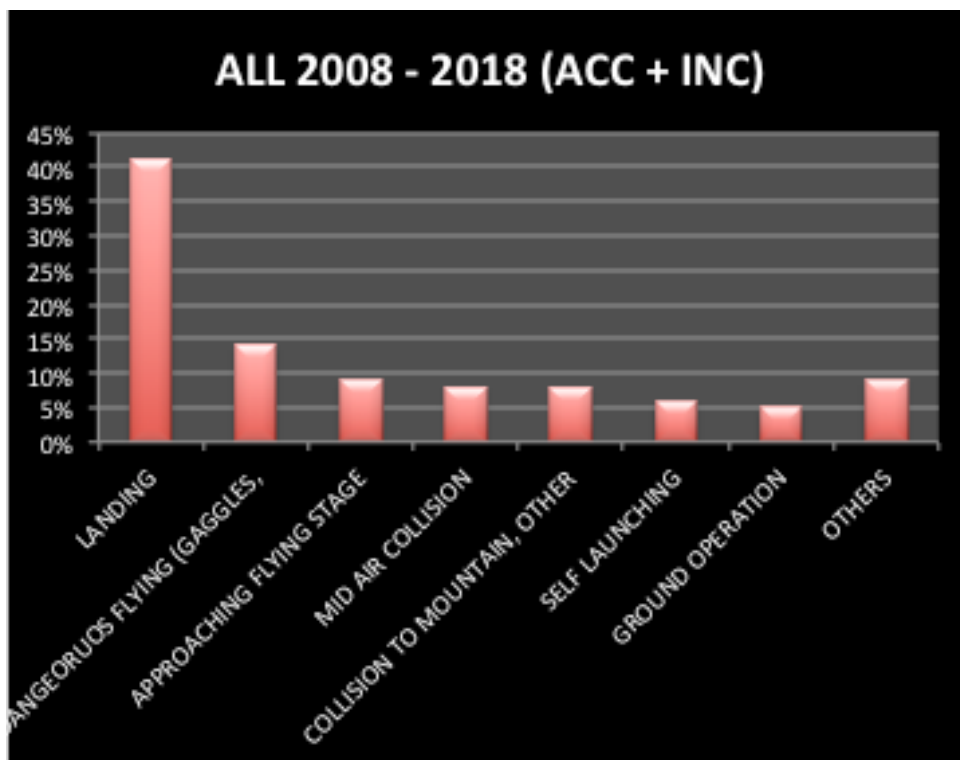
	TOTAL CHAMP.	ACCIDENTS	AVG. ACC.	INCIDENTS	AVG. INC.	TOTAL	AVG. TOT.	Delta	Delta/2008
2008	2	8	4,00	0	0,00	8	4,00		
2010	3	4	1,33	7	2,33	11	3,67	-8%	-8%
2011	5	5	1,00	3	0,60	8	1,60	-56%	-60%
2012	2	3	1,50	9	4,50	12	6,00	275%	50%
2013	4	10	2,50	3	0,75	13	3,25	-46%	-19%
2014	3	1	0,33	10	3,33	11	3,67	13%	-8%
2015	7	1	0,14	17	2,43	18	2,57	-30%	-36%
2016	3	3	1,00	5	1,67	8	2,67	4%	-33%
2017	5	3	0,60	5	1,00	8	1,60	-40%	-60%
2018	3	3	1,00	4	1,33	7	2,33	46%	-42%
	37	41	1,11	63	1,70	104	2,81		



d.- Classification of accidents and incidents:

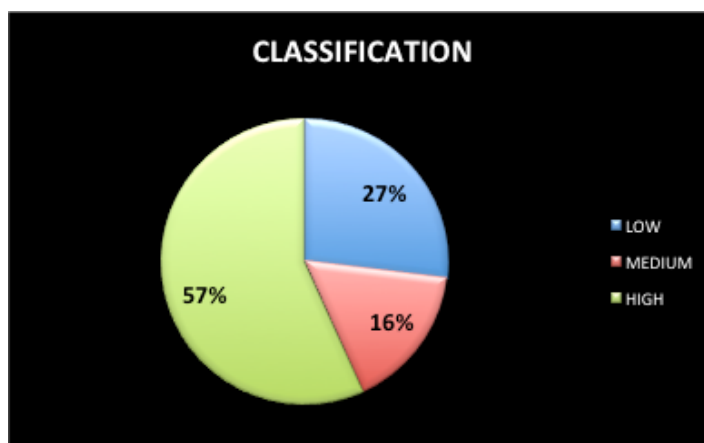
By main groups:

ALL CHAMPIONSHIPS 2008 TO 2018 (ACC + INC)	
LANDING	41%
DANGEORUOS FLYING (GAGGLES, STARTING, PATTERN)	14%
APPROACHING FLYING STAGE	9%
MID AIR COLLISION	8%
COLLISION TO MOUNTAIN, OTHE	8%
SELF LAUNCHING	6%
GROUND OPERATION	5%
OTHERS	9%
	100%



Accidents and Incidents per Clasification (SEE ANNEX 2 for adopted criteria):

CHAMPIONSHIPS 2008 TO 2018		ACCIDENTS	INCIDENTS	ACC+INC	% ALL CHAMP.
LOW		1	27	28	27%
LANDING/LAUNCHING	Landing wheel up		7		7%
	Hard landing		11		11%
	Checking engine		1		1%
	Hard launching	1			1%
OTHERS	Others		8		8%
MEDIUM		9	8	17	16%
ARRIVING / FINAL STAGE	Flying low arriving		3		3%
	Hard landing	5	3		8%
	lake outlanding		1		1%
FLYING	Mid air collision	2			2%
LAUNCHING	Grib staff hit while launching		1		1%
OTHERS	Ground operation	2			2%
HIGH		31	28	59	57%
FLYING	Mid air collision	4	2		6%
	Spin unrecovered	1			1%
	Flying pattern	2	2		4%
	Flying in clouds		1		1%
	Before starts		3		3%
	Dangerous flying gaggles		7		7%
	Collided to mountain	3			3%
ARRIVING / FINAL STAGE	Collided with house	1			1%
	Final turn		3		3%
	Hazardous approaching		3		3%
	Collided on final glide	4			4%
LANDING/LAUNCHING	Self launching problem	4	2		6%
	Hard landing	11	4		14%
OTHERS	Car/retrieve	1	1		2%
TOTAL ALL CHAMPIONSHIPS		41	63	104	



Additional comments to the obtained data:

1.- We believe the incidents record, is still too conservative and there is data missing. As per Stewards Report, some tools are under development to gather more data, in addition to the provided by the stewards report, which is the source of the graphics shown. They are:

- **Proximity analysis:** the possibility to identify dangerous flying and potential mid air collisions. Steward working group has developed a relationship with software developers that will have this tool available soon.
- **Flytool:** a smartphone application that will be available to all pilots during the competitions to ease the process of reporting incidents.

The aim for more incidents report to have more data to develop future actions

2.- Type of championships:

- JWGC, WGC and EGC's are the highest rated in accidents/incidents.
- WSGP, WWGC and PAN's are the lowest rated in accidents/incidents.

3.- Three fatal accidents in 10 years, 37 major championships.

Recommendations:

1.- To continue gathering information from reports, flight analysis and Flytool.

2.- To focus the initiatives in the main issues obtained during the last 10 years:

- Landing, flying gaggles, mid air collision, approaching stage.

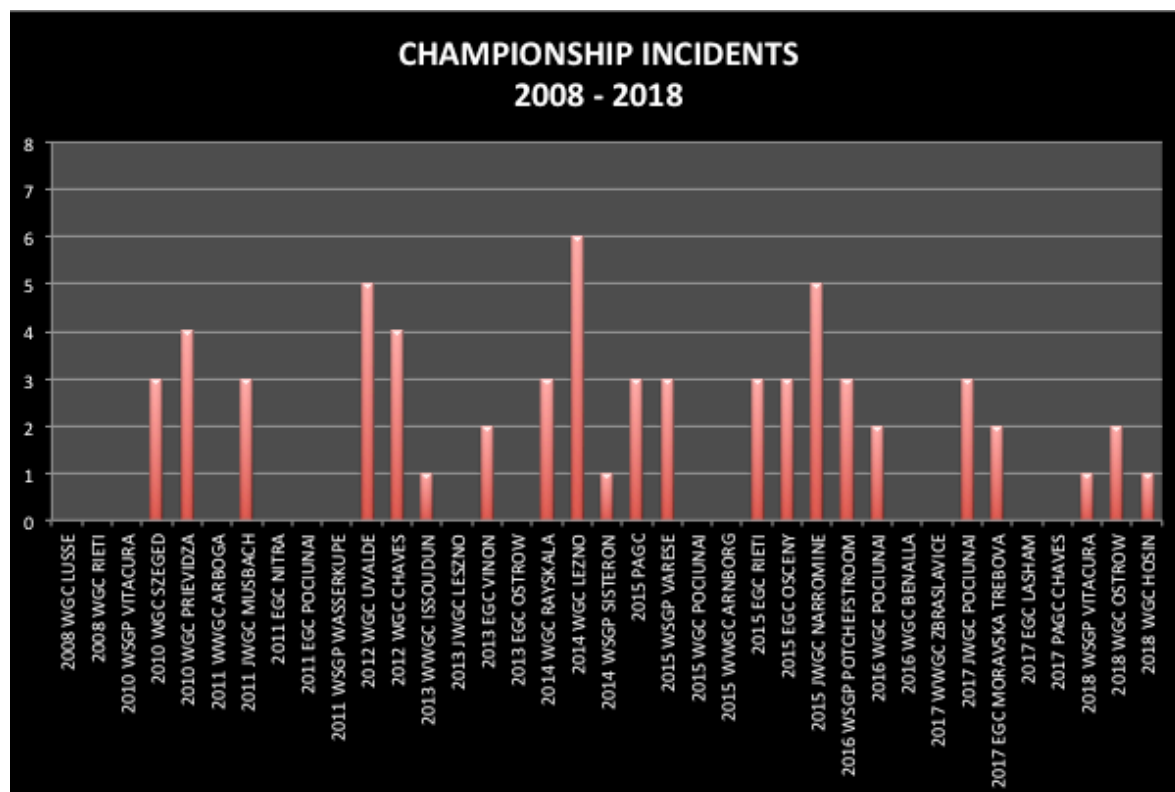
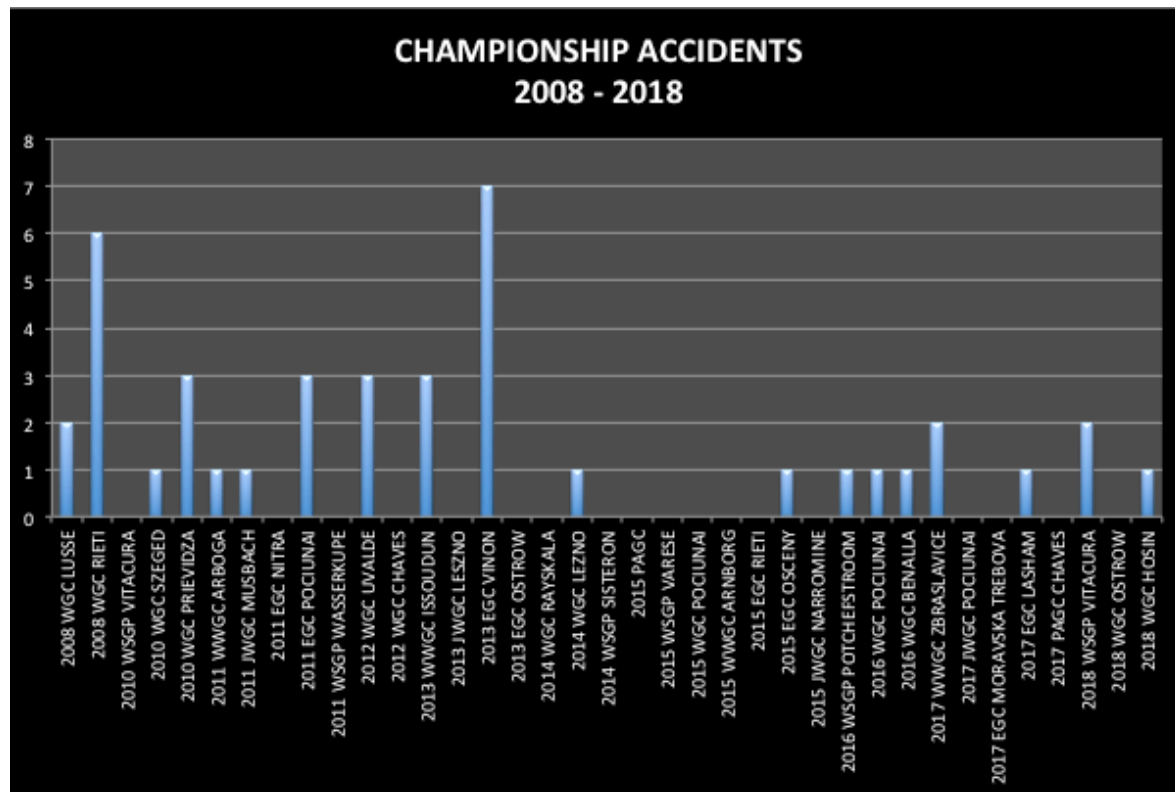
Regards,

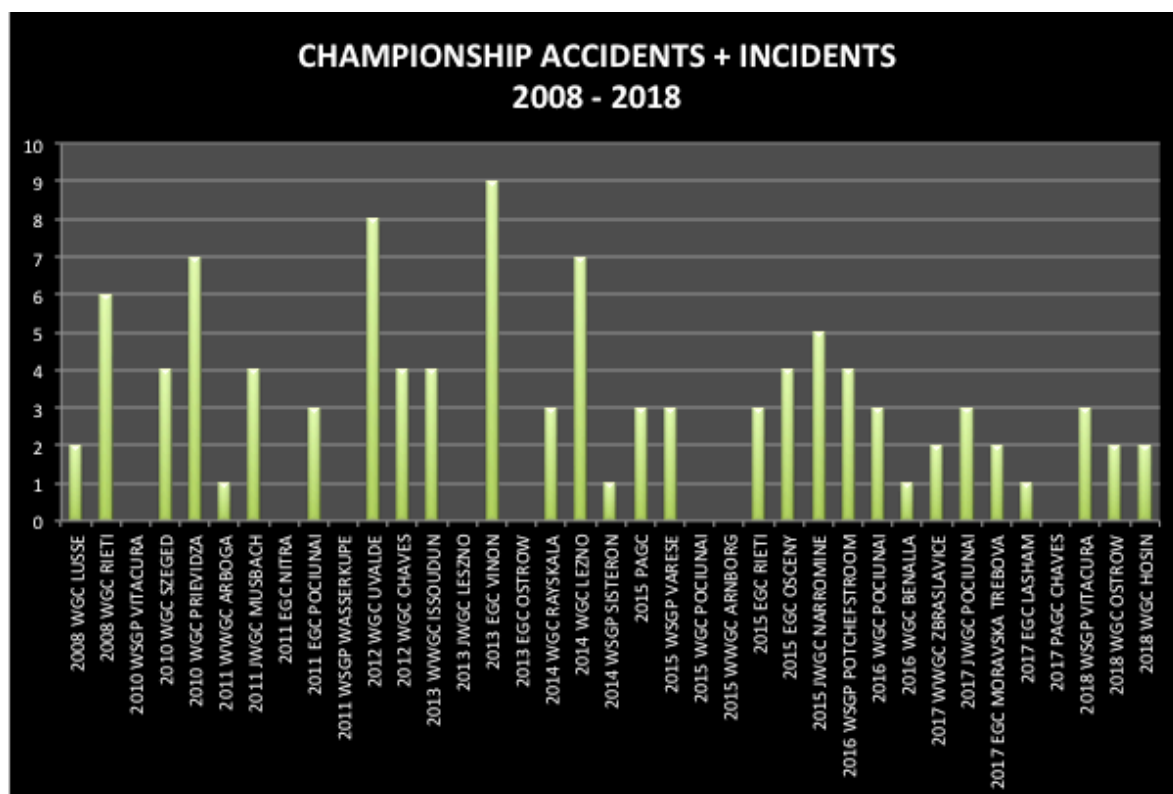
SFG (full members):

- Frouwke Kuijpers
- Terry Cubley
- Vladimir Foltin
- Brian Spreckly
- René Vidal

ANNEX 1:

Summary per Championship:





ANNEX 2:

Criteria used to classify the events in the reports:

	ACCIDENT		
	LOW	MEDIUM	HIGH
PILOT OR ANYBODY IN THE COMPETITION (PUBLIC, STAFF, MEDIA, ETC.)	Small injuries. No medical attention	Injured pilot. Some scratches. Medical attention on airfield only.	Severely injured, medical attention on Hospital or even killed
GLIDER	Slight damage. Fixed overnight	Damage to glider: parts to be changed. Not easy to fix, but still on competition. Maybe skips one or two days of competition	Severely damaged. Glider out of competition
THINGS AROUND THE AIRFIELD OR OUTLANDING FIELD (cables, animals, irrigation, poles, houses, glider trailers)	Slight damage	Things that can be fixed fast and does not require resources.	Huge damage. Normally requires important resources, time and money

Note: This is just a guidance for statistics purposes. An accident can have a mixture of above classification, to be selected by IGC Steward when making report as per his/her judgment.