2006 Incident Analysis Report

Sunspots or CO2 from cars and planes? Whatever the reason 2006 proved to be another less than average year from a flying weather point of view.
The total number of reports was very similar to the figure for the previous year at 112. The number of injuries was up however at 88, giving a percentage of 78%, compared to the 66% for both 2004 and 2005.

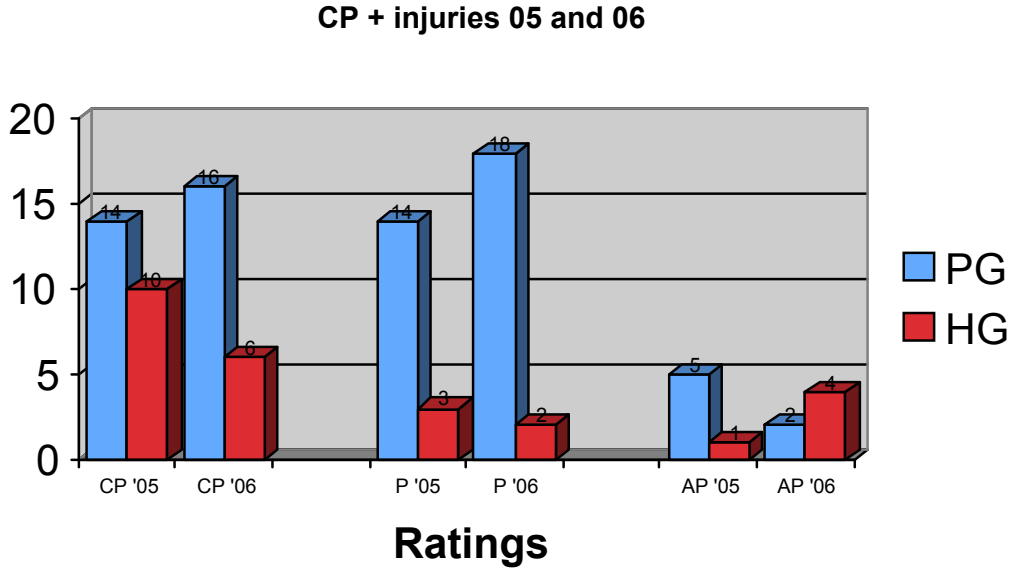
For those of you who have not seen previous reports, a few things to bear in mind whilst reading this one: As mentioned above, not all reports relate to injuries. Of the ones that do not involve injury, a proportion will be lucky escapes, equipment issues, damage to 3rd party property and things of that nature. Many of the percentage figures will NOT add up to 100% as, for example, in one incident a person may have more than one injury etc.

As mentioned in previous reports, the database can now cater for Parascending and SPHGs. This means the data can be presented in this report. Once again there have been too few incidents (0 SPHG incidents reported) to warrant formulating tables and so that data will be shown as figures instead.
The report has been split into CP+ and Training incidents as in previous years.

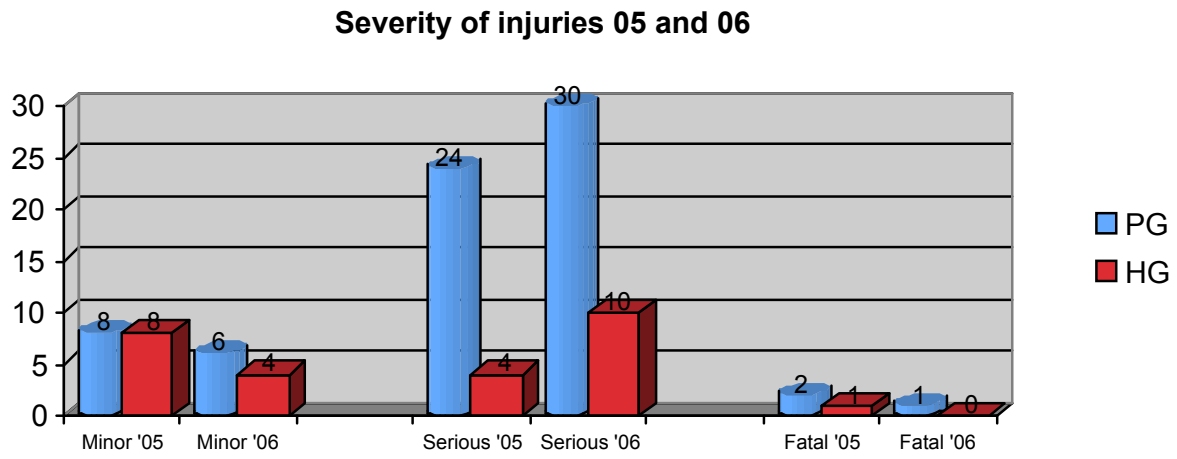
Total reported incidents (inc. training);	2004 = 125	2005 = 113	**2006 = 112**
Involving injury (inc. training);	2004 = 83	2005 = 75	**2006 = 88**

2006 Statistics CP+

CP+ injuries; 2004 = 47 (57%), 2005 = 51 (68%), **2006 = 48 (55%)**



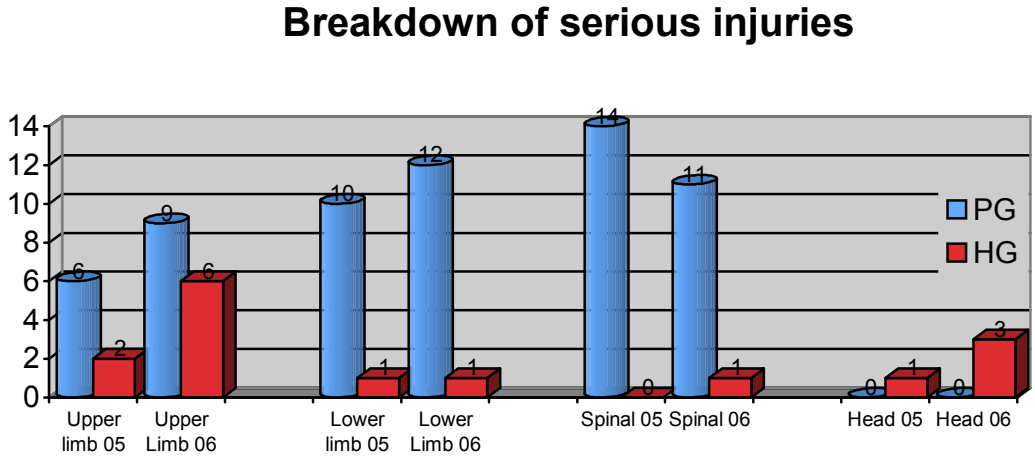
There were no reported SPHG injuries during 2006 and only 1 parascending injury (foreign comp pilot).



It is important to note that the descriptions 'Minor, Serious and Fatal' are recognised EU terms for the purpose of accident investigation. Not all 'Serious' incidents are actually that serious e.g. a broken limb (inc. wrists and ankles but not fingers or toes) is classed as serious. Clearly there is quite a range within the term when comparing a fractured wrist to a badly crushed vertebra.

Of the serious PG incidents upper limb injuries accounted for 30% (24% in 2004 and 25% in 2005); lower limb 40% (36% in 2004 and 42% in 2005); and spinal 37% (36% in 2004 and 58% in 2005).

Of the serious HG incidents head injuries accounted for 30% (13% in 2004 and 25% in 2005); lower limb 10% (13% in 2004 and 25% in 2005); and upper limb 60% (63% in 2004 and 50% in 2005).



Causal Factors

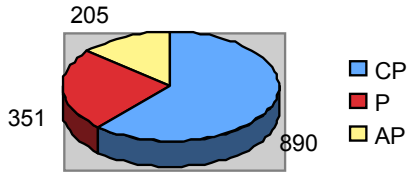
The database has the facility to record the causes of the incidents and accidents. The table below shows a selection of the causal factors common to our incidents. The figures are very similar to previous years apart from the blip in the "CP controlling glider" category, which saw a significant increase. The major causes of paragliding and hang gliding accidents are still glider handling errors and misjudgement of the weather (often a combination of the two).

Human Factors	CP 05	**CP 06**	P 05	**P 06**	AP 05	**AP 06**
Pre-flight Check (omission)	0	**0**	2	**0**	3	**1**
Controlling Glider (error)	15	**27**	13	**14**	6	**6**
Judgement Position (error)	9	**11**	3	**9**	1	**2**
Awareness (lack of situational awareness)	11	**5**	6	**8**	2	**2**
Environmental Factors	CP 05	**CP 06**	P 05	**P 06**	AP 05	**AP 06**
Unsuitable Site	1	**0**	0	**0**	0	**0**
Judgement Weather (error)	9	**9**	7	**8**	2	**2**
Judgement Orography (misjudging airflow around terrain)	4	**7**	5	**5**	0	**1**
Judgment Wind Gradient (error)	1	**0**	0	**0**	0	**0**

Ratings

The following charts and tables are to enable a quick visualisation of membership breakdown per rating. The greatest proportion of accidents occurring in both disciplines is to CP rated pilots, which is to be expected, as they constitute the largest portion of the membership. Having said that, CPs had less accidents proportionally than both Pilot and Advanced Pilot rating groups. It must be noted that with such small data sets, it does not need much of a change in the numbers to create a big shift in the stats. See HG 05 and 06 AP figures as an example of this.

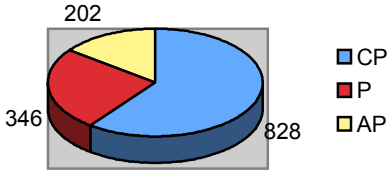
HG pilots by Rating 2005



1,446 total ratings
1,396 pilots

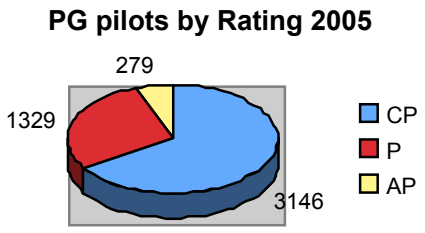
HG 05	% membership	% accidents
CP	62%	71%
P	24%	21%
AP	14%	7%

HG pilots by Rating 2006



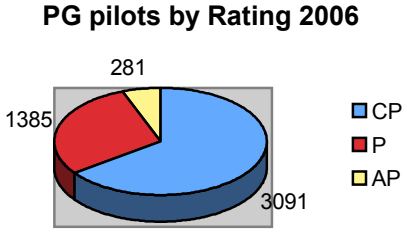
1,376 total ratings
1,325 pilots

HG 06	% membership	% accidents
CP	60%	50%
P	25%	17%
AP	15%	33%



4,754 total ratings
4,510 pilots

PG 05	% membership	% accidents
CP	66%	42%
P	28%	42%
AP	6%	15%



4,757 total ratings
4,510 pilots

PG 06	% membership	% accidents
CP	65%	44%
P	29%	50%
AP	6%	6%

Fatalities
In 2006 there were 2 fatal accidents, one involving a qualified pilot and the other, a CP tow pilot undergoing aerotow conversion training.

Mid Air Collisions
Mid air collisions were down to 2 in 2006 compared to the 5 in both 04 and 05. It must be stressed that this represents only those that were reported. We know there were far more that went unreported. Yes, it is not big or clever to be involved in a midair collision – but please report it anyway!
Both the incidents reported involved paragliders.

It is essential that you are realistic about avoiding collisions. They are often fatal and are always avoidable. The best pilots fly in such a way that they rarely (if ever) have to resort to collision avoidance manoeuvres. Once you get that far (even if you avoid the collision) you have screwed up and next time may not be so lucky.

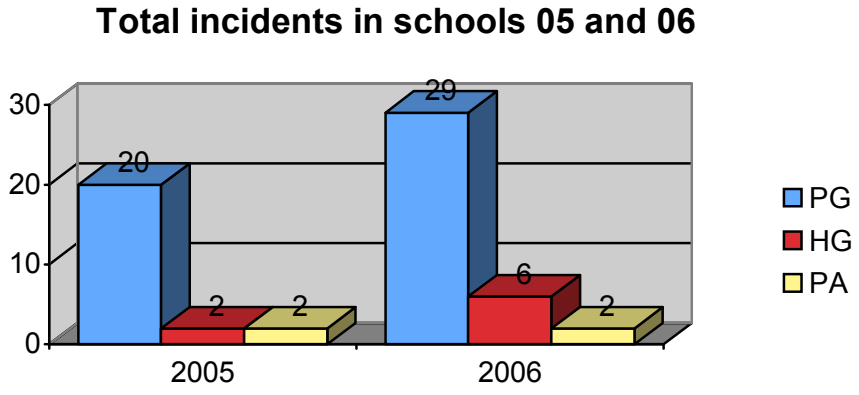
Emergency Parachute Deployments
There were 9 intentional deployments reported in 2006 and no unintentional. Two of these deployments resulted in injury to the pilot, one serious and one minor. 6 of the deployments occurred in the UK and 3 were non-UK.

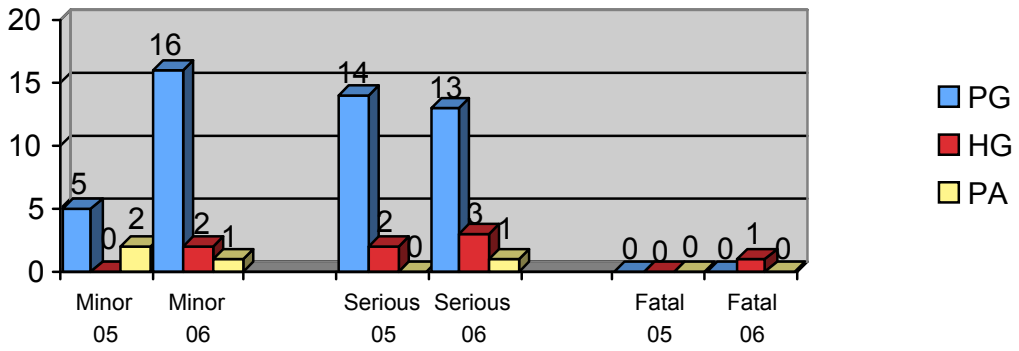
Tandem Incidents
There was only one reported tandem incident in 2006, which involved a control line being trapped in the trimmer system. There were no injuries involved.

Incidents/accidents occurring in schools

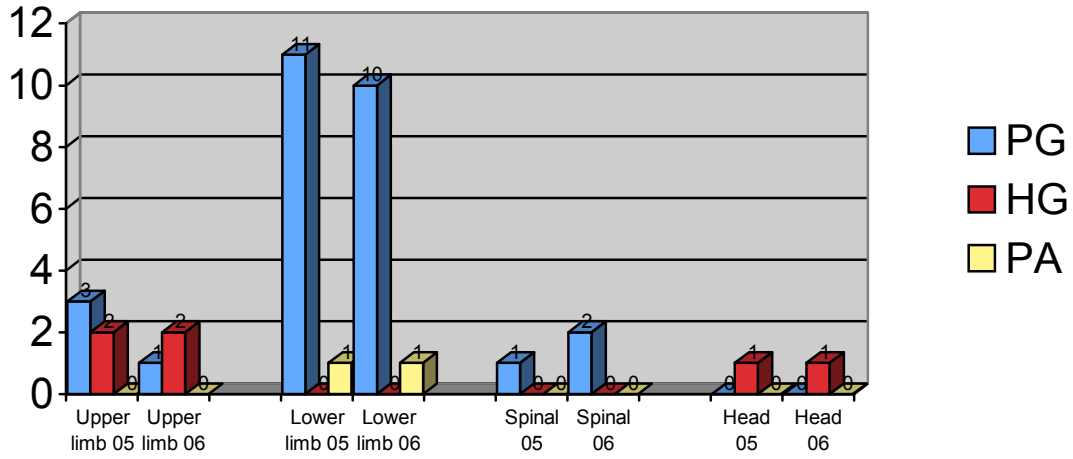
There were 37 incidents reported in schools in 2006 that involved injury to the student. Once again, I suspect that this relatively low number is a reflection of last season's weather.

The graphs that follow give the breakdown of the injuries and type of injuries that occurred in schools in 2004 and 2005.





Breakdown of Serious injuries



As in previous years the most noticeable figure is the number of 'serious' lower limb injuries in paragliding. Given the nature of the sport I would suggest that this is probably to be expected. The majority of these injuries tend to be relatively minor ankle and lower leg fractures where the student goes on to make a full recovery. They are classed as 'serious' in line with EU definitions rather than the actual seriousness of the injury.

Again as in previous years the majority of the incidents stem from the student failing to properly control the glider and/or tripping and falling whilst ground handling or landing. There were no instances where the students were flying in unsuitable conditions which is as it should be given the student is under the control of an instructor.

It is very difficult to make meaningful comparisons between the rate of hang gliding, paragliding and parascending accident rates. This is due to the vast difference in the amount of people who come through the various arms of the sport.

In 2006, 3616 new memberships were sold (intro + training + full + concession). This is very similar to 2004 and 2005. The big difference is that 2006 only saw 475 (89% PG, 9% HG, 2% PA) new CPs processed.
During 2004 606 new CPs were processed; 82% of these were PG, 12% HG and 6% PA.
During 2005 664 new CPs were processed; 83% of these were PG, 14% HG and 3% PA.

When attempting to compare the accident rates of the PG schools and HG schools there are some important factors that need to be considered.

1. There are 42 active paragliding schools and 8 hang gliding – approx 5 to 1.
2. There are approx 125 PG instructors and approx 26 HG – approx 5 to 1.
3. There were 421 new PG CPs awarded and 44 HG CPs - approx 10 to 1.

To finish
Finally I'd like to thank all pilots who submitted Incident Report forms. These forms are our only means of identifying incident trends, and so enabling us to keep the membership informed when hazardous equipment or procedures come to light. With this in mind I'd like to stress the importance of completing the form as fully as possible. It may appear that many of the fields on the form are insignificant or

irrelevant; they do all make a difference when compiling the data. And you "mid-air collision" mob – please send in a report – we need the info!

For comparative purposes (and to avoid large graphs and tables) this report and all the previous reports will soon be available on the BHPA web site.

Here's to a great 2007. Happy flying and please don't become one of the statistics!