My 30th Birthday gliding trip 17th Aril 1999

March 1999 I was given a gift certificate from Caroline my Girlfriend (now my wife) for a day's gliding at the London Gliding Club to celebrate my 30th Birthday.

It was to become a day that I will never forget.

I had been up about 6 times that day in the front seat of a 2-seat glider and was having a

fantastic time. Our last flight of the day was coming to an end. We had been flying for about an hour riding the thermals, enjoying the views and I had even taken control of the joystick and pedals on occasions.





Gliding instructor Peter Goldstraw and I in the cockpit of a glider during the reconstruction for Granada TV's Savage Planet program



Storm warning





Savage Planet

Photo taken on the day just before the accident. The weather looked fine before we took off. I'm on the left with parachute on my back. You can just see Peter next to me checking the glider wearing a yellow fleece

On the way back to the airfield we noticed a very black cloud off to our right but nothing to worry about.

In a split second everything had changed. I remember talking to the instructor (Peter Goldstraw) when there was a tremendous bang, the plane jolted and it felt as if a missile had hit us. Eyewitnesses say they saw a ball of lightning streak across the sky and hit our glider.



company Storm Warning



Sparks fly inside cockpit burning Peter's neck, 999

I think I may have been hit on the head by the Perspex windshield canopy getting blown off from its seating as I was confused and was seeing stars. My ears were ringing from the explosion as the force of the blast had perforated both of my eardrums.

Peter was shouting something but it just seemed like mumbling because I couldn't hear anything. He later explained he was shouting, "get out, get out"!

I quickly realised things were wrong and that we were in serious trouble and that we had to get out of the glider. I was terrified and started shaking, I didn't dare look down, I looked to the right and noticed that the wing was no longer there. I was thinking of my parents, family and girlfriend and what would they think if I was to die. I had to help myself, there was nothing that Peter could do to control the situation or save us, we were on our own and had to save ourselves. I looked down and managed to twist the buckle on the seatbelt that was holding me into the seat of the glider, stand up and jump free.







Luckily I was wearing a parachute. I found the ripcord and pulled it as I left the glider.



It was a nice feeling to look up and see that the parachute had opened successfully. I looked down and saw that Peters

parachute had also opened but that he was quite a way down, I

understand he had had trouble opening his chute.

For a moment, I was enjoying the relief of getting out. I looked down and there were bits of wreckage falling. I looked up and there were still bits of wreckage above me, which was worrying as I was scared it might fall and damage the chute.









Glider falls to sky, 999

I saw Peter land heavily in a field and tried to wave to him to let him know I was ok but he wasn't moving.

It was a GQ parachute that saved my life and that of my two young daughters who were still to be conceived! It was a round type and not controllable you just go where the wind blows you.



My parachute, at the AAIB, Graeme Cooper

I remember seeing some electricity pylons below and was panicking because I thought I might hit them. Luckily I crossed over them then over a road. I was shouting and waving at people on the ground to let them know that I was still alive as I was coming down.

On the other side of the road there was a disused petrol station. I landed on the roof of it. It was a tin roof that gave a little as I landed. The light grey roof in the picture below is where I landed.



Storm warning

Although I was on fairly firm ground I was still not out of trouble. I knew that the thing that had saved my life could now put it back in danger. I was strapped into the harness of the parachute with 4 buckles that I quickly undone and threw the harness away from

> me before the parachute had time to fill with air and drag me off of the roof.

From there I was able to climb down a wall and onto the ground, where some people helped me to calm down. Someone gave me a cup of tea, but most of it went over the floor as I was shaking so much!



Savage Planet

Peter and I were taken to hospital by ambulance where Peter spent a few days recovering from surgery to repair a broken ankle. I was released the same day with just minor scratches, bruises and perforated eardrums.



Storm warning



Wreckage of GBP

Cockpit and tail structures were relatively undamaged until impact with the ground

Figure 4

AAIB Report



The actual wreckage, Savage Planet



Savage Planet



Savage Planet, that's where I was sitting in the front

The wreckage of the glider was taken to the Air Accident Investigation Branch in Farnborough (see report) laid out and pieced back together.

Wreckage in trailer. Graeme Cooper





Detail of right wing structure in region of aileron actuator rod/bellcrank*

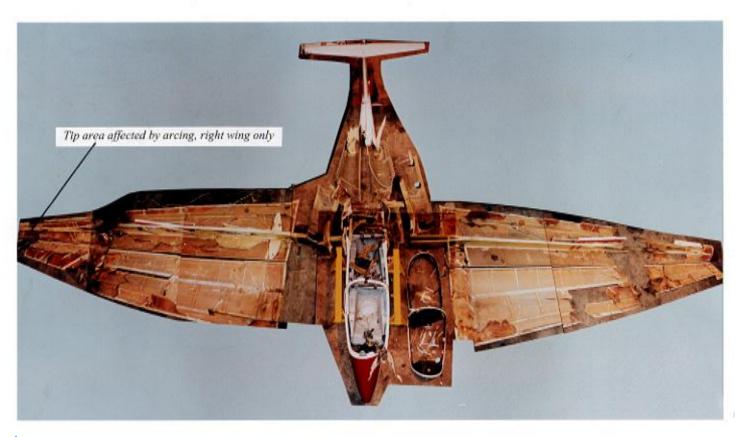


Upper surface (inverted)

LE

Lower surface

Detail of left wing structure in region of aileron actuator rod/bellcrank*

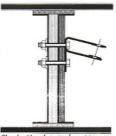


AAIB Report

Composite view of structural layout



Right aileron bellerank mounting bracket showing melted end and heat effects



Sketch of bracket attachment to spar Two upper bolts, one lower



Lower bolt failure



Details of centre push rod from right wing Rod is normally a tube of 16mm diameter, Imm wall thickness





Figure 8





Airbrake mechanism, sooted but unaffected

Details of right bellcrank Left item similar



Aileron system bellerank (distorted)



Crossbeam showing symmetrical nature of deformation/damage from Joule heating.

Hottest/softest areas are at minimum cross section near extremities



View of the inbound end of the centre atteron push rod from the left wing showing localised heating, part of the fork end fitting and undistorted tube section



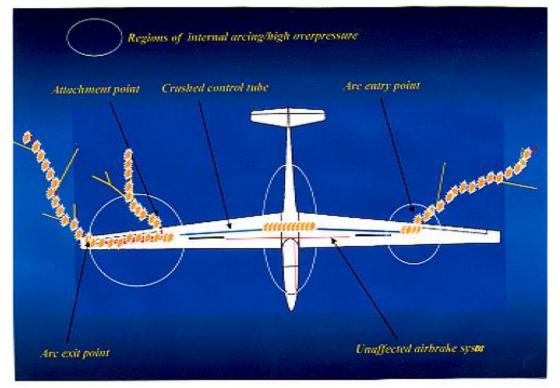
Above and below, outboard end of centre pash rod illustrating creeking and arcing drawage at outer end only.





Left aileron bellcrank, found attached to support bracket and section of spar. Attachment bolts were undamaged.

Figure 9



AAIB Report

Sketch illustrating regions of are attachment and arcing within the structure





999

very severe strike.

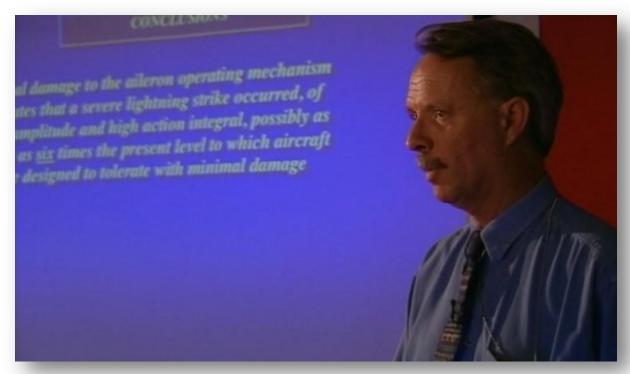
The twisted aluminium steering rod that lightning scientist Stephen Haig is holding came from the glider, it hasn't actually melted, what you can see, is the magnetic forces, which have crushed the pipe down, this is indicative of the fact that it was a

To simulate the lightning strikes, Stephen Haig used an impulse generator that can generate over a million volts. But the lab found their machines were too weak to replicate the immense force that destroyed the glider

London Gliding Club member, Senior Air Accident Investigator and Eyewitness Peter Claiden lectures aircraft professionals on the events that day and said that "putting all the figures together it was concluded by everybody who worked on this that it could have been up to six times the level that aircraft are designed to tolerate with minimal damage. Six times".



Top notch productions Ltd **MEGALIGHTNING**



MEGALIGHTNING

Commentary from the Top notch production Itd MEGALIGHTNING program.

"IN 1993 THE WORLD OF WEATHERMEN HAD BEEN ROCKED BY THE DISCOVERY OF A GIANT FORM OF LIGHTNING ABOVE THE CLOUDS. THEY HAD ONLY RECENTLY FOUND ANOTHER BREED OF SUPER BOLTS BELOW THE CLOUDS CALLED POSITIVE LIGHTNING". "THE ROLE OF POSITIVE LIGHTNING IN AIR ACCIDENTS WOULD NEVER HAVE WON OFFICIAL RECOGNITION, IF PLANE CRASH INVESTIGATOR PETER CLAIDEN HAD NOT SEEN HIS FRIEND STRUCK BY LIGHTNING." Here is a link to the documentary http://vimeo.com/26110990 they mention the accident from 23.47 on the timeline



MEGALIGHTNING



MEGALIGHTNING



my injuries

It was whilst waiting in hospital that I began to realise how lucky we had been. I saw a man in a muddy

football strip having his leg set in plaster. I thought I have been struck by lightning, fallen from the sky, landed on the roof of a petrol station and still less injured than him.



landed the next day



Peter & I reflecting on the day's events during a reconstruction for Savage Planet

And now for my 40^{th!}

I have been back in touch with the London Gliding Club and they have kindly agreed for me to go back up and have another flight. I will be having an aerobatic flight and hope to do a loop the loop etc. Gliding is a safe sport, otherwise I would not be going up again. I would recommend it to anyone wanting a day to remember, I certainly haven't forgotten it!

I am doing this to raise awareness and hopefully funds for the Parkinson's Disease Society who are also celebrating their 40th year this year. My wife Caroline will also be having a flight that day. My Father in Law (Graham) has Parkinson's and both he and his Wife (Lesley) are active fundraisers. Graham is the Branch Secretary of the Taunton and Mid Somerset branch of the PDS. Graham and Lesley also set up SPARKIES, a section of the branch that caters for those of working age.

Weather permitting the date for this will be Saturday 18th April 2009 and coincides with the start of the Parkinson's Disease Society awareness week that begins Monday the 20th April.

I have been in touch with Peter and hopefully we will also be having a flight together again on that day (I am owed a landing!)

My fundraising page is:-

http://www.justgiving.com/big40reachfortheskiesagain

Well we did it!

Peter and I flew together again starting from where we left off from 10 years ago above the village of Northall in Bedfordshire. We were towed up by plane and had a good 20 minute flight. I felt fine about going up and wasn't too nervous as I was in Peter's safe hands. Peter told me that he had over 700 hours of flying under his belt since our last flight that ended so dramatically.

There were a few clouds in the sky some were dark but I put the thought of them being storm clouds to the back of my mind. Looking down I asked myself the question 'if something were to happen would I be able to bail out again?' It brought back the enormity of what we had to do last time and hopefully I would do the same again if I was ever put in a dangerous situation.

An ITV film crew filmed the day and interviewed Peter, Caroline and I. I also met Susan Newby the editor of the British Gliding Association's Sailplane and Gliding magazine who was collecting information on the event for an article in the magazine.



Peter being interviewed, he is holding up the yellow fleece jacket that he wore 10 years ago showing the reporters the burn marks of the back of the collar from the lightning strike.







I am holding Peters Jacket you can see the burn marks around the collar. Peter is holding a section of the aluminium steering rods that buckled and twisted from the powerful magnetic force of the lightning.



Caroline being interviewed



Peter and I preparing for our flight







That's me on the right wearing a parachute stood next to Adrian Hobbs prior to our loop the loop flight.





The flight went well and Peter managed to land the glider with just a gentle bump. I then took to the sky again this time with Adrian Hobbs at the controls and we flew a loop the loop and a chandelle. Just before the loop we flew some fast tight stomach churning turns to check that there were no other aircraft below or around us then Adrian pointed the gliders nose down towards the ground at an angle of about 45° to pick up speed to about 100mph before pulling back on the control stick and heading towards the sky. We flew inverted for a couple of seconds before hurtling towards the ground and pulling out to again the normal flying position. I'm not too sure where I was during the chandelle manoeuvre it was just a blur of sky, ground and sky!

So far this has raised over £1500 for the Parkinson's Disease Society. The London Gliding Club funded the event so all the money will go to the charity.

I would like to thank all those who have supported me on this, it really is very much appreciated and it's not too late for anyone still wanting too!

I would like to thank:-

- Andrew Roch London Gliding Club Manager for allowing this to happen.
- Peter Goldstraw for agreeing to fly with me again.
- Adrian Hobbs for arranging this, for organising the press coverage and flying the loop the loop with me I really did enjoy it.
- Members of the London Gliding Club for their hospitality, helpfulness, funding
 of the event and putting up with the disruption caused to the gliding on the
 day. At least we brought the glider back this time!
- Susan Newby for the magazine coverage.
- Gliding clubs, club members and aviators from the UK and around the world for all your messages of support and charitable donations it really is appreciated.
- My friends, family, colleagues, neighbours and those who just heard the story and wanted to donate for whatever reason.



Gliding is a safe sport, please don't let what happened to Peter and I put you off from having a go yourself. It's an amazing feeling soaring above the countryside in an unpowered glider and an ideal gift for a day to remember. For more information on gliding visit the British Gliding Association's website:- www.gliding.co.uk

Click 'here' to listen to the BBC Radio interviews and to see the ITV video of my return flight

Graeme Cooper

http://www.justgiving.com/big40reachfortheskiesagain

GQ Gold Wing Club

For those whose lives have been saved by one of GQ Parachute company's parachutes they have set up an exclusive club called the GQ Club. I was nominated and appointed a member of the club in December 1999 and awarded this certificate and solid gold badge below. The badge is engraved on the back with my name and membership number.



