

British Parachute Association

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Safety & Training Committee

Minutes of the meeting held on

Thursday 2 August 2012 at 1900

at the BPA Office, 5 Wharf Way, Glen Parva, Leicester LE2 9TF

Present:

John Hitchen	-	Chairman STC
Kieran Brady	-	Skydive Strathallan
Dane Kenny	-	Pilgrims
Phil Collett	-	22 Tng GP RAF
Mike Rust	-	NLSC
Gary Stevens	-	Skydive UK Ltd
Noel Purcell	-	Target Skysports
Paul Yeoman	-	Black Knights
Jason Thompson	-	UK Parachuting (Beccles)
Jeff Montgomery	-	Silver Stars
Bruce Johnson	-	Skydive London
Alan Wilkinson	-	Skydive St Andrews
Stuart Meacock	-	Hinton Skydiving
Richard Wheatley	-	BPS, Langar
Pete Sizer	-	Skydive Headcorn
Ian Rosenvinge	-	Peterlee
Jason Webster	-	JSPC(N)/APA

Apologies: Dr John Carter, Maggie Penny, Chris McCann, Nigel Allen, Martin White, Alex Busby-Hicks, Paul Applegate, Jim White, Carl Williams, Mike Bolton, George McGuinness, Dave Wood, Dennis Buchanan, Andy Clark.

In Attendance:

Tony Butler	-	Technical Officer
Paul Moore	-	Council
John Page	-	Council
Tony Knight	-	Pilot Age Working Group
Mike Westwood	-	Pilot Age Working Group
Trudy Kemp	-	Assistant to NCSO/TO

Observers: Colin Fitzmaurice, Paul Stockwell, Rick Boardman, Dick Kalinski, Tony Cowan, Ken Glendinning, Stuart Palmer, Mal Richardson, Sandy Barnett.

ITEM MINUTE

1. MINUTES OF THE STC MEETING OF THE 7 JUNE 2012

It was proposed by Dane Kenny and seconded by Kieran Brady that the Minutes of the STC Meeting of the 7 June 2012 be accepted as a true record.

Carried Unanimously

2. MATTERS ARISING FROM THE STC MEETING OF THE 7 JUNE 2012

Page 3, Item 5 – Pilot Age Working Group. This was a main agenda item.

3. RIGGERS' SUB-COMMITTEE MEETING OF THE 7 JUNE 2012

There being no matters arising, it was proposed by Pete Sizer and seconded by Dane Kenny that the Minutes of the Riggers' Sub-Committee meeting of the 7 June 2012 be accepted.

Carried Unanimously

As the Chairman of the Riggers' Meeting was on holiday, the Riggers meeting that afternoon had been chaired by the Chairman of STC.

The Chairman of STC reported that the Committee had discussed a proposed equipment modification. The proposal was to add a Y strap to a specific Next Paratec Tandem Student harness. He stated that no decision could be taken that evening regarding this modification, as the paperwork had not been circulated with the agenda. This item had therefore been deferred until the next Riggers meeting.

4. FATALITY - COCKERHAM

The Chairman reported that unfortunately there had been a fatal accident at Cockerham on the 7 July 2012. The Board of Inquiry Report resume had been sent to CCIs last week with an amended agenda. The resume of the Report had been tabled to those present.

At approximately 13.40 hours on Saturday 7 July 2012, Lee Arthur Clifford boarded a Pilatus Porter PC6 operated by the Black Knights Parachute Centre, Cockerham, in order to make his first parachute descent, an AFF Level 1 jump, following his training on the 5 and 6 July 2012 and refresher training on the morning of the jump. Also on the aircraft were 6 other parachutists; an experienced solo parachutist, a Tandem instructor, together with his Student and their videographer. Lee Clifford's two instructors, one of whom was jumpmaster. It was intended that the AFF group would be the last group to leave the aircraft following the solo parachutist and a Tandem group.

The aircraft climbed to approximately 14,000ft AGL. It 'ran in' over the top of the PLA. Once the aircraft was over the 'exit point' the parachutists started to exit. First to leave was a solo parachutist, followed by the Tandem pair and their videographer. The AFF group exited last. The exit and the majority of the free-fall portion of the descent appeared to go to plan with the student initiating the main parachute deployment sequence at approximately 5000ft AGL. However, the student did not release the pilot chute, but held onto it. It is unclear whether the efforts of the primary instructor or the already deploying parachute caused Lee Clifford to release the pilot-chute. The parachute then deployed but was observed to be distorted, due to a 'line-over' type malfunction.

Lee Clifford's parachute was observed to be turning to the right and not correctly developed, but in a distorted condition. The D Z Controller attempted to give radio instructions, but there appeared to be no response from Lee.

At a height of approximately 150-200ft AGL Lee was observed to detach from the main parachute and then fall away. The reserve parachute started to deploy but had not inflated by the time of impact.

A BPA Board of Inquiry was immediately instigated, by the National Coach & Safety Officer who was already on site. He was there on an informal visit. The other member of the Board was BPA Instructor Examiner John Page, who arrived later.

The Board inspected the parachute equipment and it was noted that neither the main and reserve steering toggles had been released from their keepers. It was also noted that the radio appeared to be switched off. The Board were also able to view the exit, jump and main deployment from the primary instructor's video and the malfunction appeared to be a 'line over' type.

The Conclusions of the Board are that Lee Clifford and his instructors exited the aircraft at a suitable altitude to carry out the planned AFF free-fall manoeuvres. The free-fall portion of the jump went without incident and reasonably well, until Lee attempted to deploy his main parachute, approximately 48 seconds after exit from the aircraft. Instead of releasing his main parachute pilot-chute after extracting it from its pocket, he held onto it. The primary instructor attempted to get Lee to release it and after approximately 4 seconds they became unstable. At this time the main parachute deployment bag started to extract from the container, approximately 56 seconds after exit. At about this time Lee released the pilot-chute. As the main parachute deployed it experienced a 'line-over' type malfunction. This was most probably caused by Lee being unstable and not releasing the pilot-chute during deployment.

The parachute was observed to be distorted and rotating slowly to the right. It appears that Lee made no attempt to carry out his reserve procedures at this time, although he was under a (malfunctioned) parachute above 3,000ft AGL. Neither did he attempt to take control of the parachute, as the steering toggles were found later to still be in their keepers.

The DZ controller attempted to communicate to Lee via the radio, but it is not known whether Lee received any of the communication as the radio receiver was later found to be switched off; possibly due to faulty or low charge batteries. The secondary instructor had switched the radio on during the flight line equipment check. However, when carrying out the pre-jump check prior to exiting the aircraft, the radio appeared to have been switched off. The instructor switched it on again. On both occasions the instructor stated that the radio registered two bars on the symbol check, which indicated it was charged.

The parachute continued to rotate until approximately 150-200ft AGL, when Lee cutaway from the main parachute. The reserve parachute was seen to begin to deploy, but Lee impacted with the ground before the parachute could develop.

The Board do not know why Lee did not release his pilot-chute in free-fall, as he was trained to do, or why he did not carry out his reserve drills once his main parachute had developed into a malfunctioned parachute. He was under the malfunctioned main parachute for over three minutes before he carried out his emergency drills at an altitude that was too low. Part of his training was that he should not cutaway his main parachute below 2,500ft AGL. Neither did he attempt to take control of his main parachute, as the steering toggles had not been released from their keepers.

The Board could only conclude that Lee became confused and/or stressed, which may have caused him to react too slowly.

The Recommendations of the Board are:

- a) That instructors re-emphasize to their students the importance of carrying out their reserve procedures as soon as possible and that they must not carry them out at a low altitude.
- b) That Clubs should re-assess the adequacy of their procedures for ensuring that student radio receivers remain fully operative during parachute descents.

During discussion on the Recommendations of the Board, some concern was expressed that in their opinion the recommendation concerning the radio procedures could imply that procedures for the use of radios at Clubs were not adequate. They believed the facts in this case were that the Student had cutaway far too low.

The Chairman explained that the Board had considered this issue at some length, but they felt they could not ignore that the radio may not have been working, and that was why the recommendation had been included in their report.

After further discussion, it was proposed by Jason Webster and seconded by Kieran Brady that the Board of Inquiry Report, including the Recommendations and Conclusion be accepted.

Carried Unanimously

The Chairman reported that it was BPA Council policy that a Panel of Inquiry is formed to investigate all peripheral aspects of a Board of Inquiry following a parachuting fatality. It was not the intention that the 'Panel' should duplicate aspects covered by the Board of Inquiry. He stated that a Panel had now been formed and will meet in the near future.

The Panel will be 'chaired' by Mark Bayada and the other members of the Panel are; Noel Purcell and Richard Wheatley.

5. **INCIDENT REPORTS – RESUME**

The Chairman reported that unfortunately, there had been a very serious accident; though at this time it was not known as to whether this would be classified as a parachuting accident. He stated that a student parachutist, aged 43, carried out his first static line jump at RAPA on the 29 July. He landed in a tree and it appeared that he was uninjured. However, whilst being recovered by the emergency services it is believed that he hit his head on a branch, resulting in him being knocked unconscious. He was airlifted to hospital, where he remained in a coma. The Chief Instructor had informed the Association that the parachutist was on a life support machine at this time, but it was unlikely that he would survive. More information would be available at the next STC Meeting.

- i) There had been 11 Student Injury Reports received since the last STC meeting. 8 male and 3 female, including two Students injured whilst in training; one who dislocated his shoulder during AFF training and another who jarred his back during PLF training. The others were landing injuries, including a student who was knocked out whilst being rescued from a tree by the emergency services.
- ii) Since the last meeting there had been 11 Injury Reports received for 'A' Licence parachutists or above. 8 male and 3 female. One parachutist injured his shoulder following a severe canopy opening. Another hurt her shoulder during a 4-way funnelled exit. Another dislocated his shoulder on opening after deploying in a track. One jumper made a low turn and fractured his neck, but is expected to make a full recovery. Another jumper with 220 jumps had a main and reserve entanglement. His main pilot chute was knotted causing initially a 'total'. He carried out his reserve drills. As his reserve deployed, his main canopy became entangled with his reserve lines. He landed two partially deployed rotating canopies. He suffered severe back injuries and was airlifted to Stoke Mandeville Hospital. At this time he had no feeling in his legs. The CCI was present that evening and was able to provide further information on this incident. The remaining Injury Reports received were on landing.
- iii) There had been 12 Student Malfunction/Deployment Problem Reports received since the last meeting. 10 male and 2 female.
- iv) There had also been 39 Malfunction/Deployment Problem Reports received for 'A' Licence parachutists or above. 34 male and 5 female.
- v) Since the last STC there had been 8 Tandem Injury reports received. 5 male and 3 female, including one instructor. The majority of which were minor, including one student who fell asleep in free-fall or under canopy!
- vi) There had also been 14 Tandem Malfunction/Deployment Problem reports received. One involved an instructor who noticed in free-fall that the RSL had become disconnected. He tried to re-connect it in free-fall, thought he had, but it was pointed out by the cameraman that he had connected it to the 'small' ring of the 3-ring release. He deployed without incident. A problem on a Tandem rig was found after a jump whilst it was being packed. It was noticed that the connector link on the drogue was bent out of shape. It appeared that the link had become loose over time. The Riggers Committee had discussed this incident that afternoon.
- vii) Since the last meeting there had been one report received of an AAD firing. The jumper (with 430 jumps) lost altitude awareness because her goggles misted up. She deployed her main low and the Cypres also fired.

- viii) There had been 9 reports received of 'off landings'. One on a display and the others at Clubs, including a student who landed on a factory roof.
- ix) Three reports had been received of items coming off parachutists. Two helmets and a camera.
- x) There had been 2 reports received concerning aircraft. The first was for a Beech that following a lift was coming into land, but the green gear down and locked light was not showing. After a series of fault finding passes, the ground staff suggested the landing gear looked normal. The aircraft landed without incident. The second was to a Cessna 208. The pilot failed to secure the cowling correctly. It came loose on take-off and eventually was ripped off. The cowling landed in an open area and the aircraft landed with all on board.

6. PILOT AGE WORKING GROUP

The Working Group formed to consider the Current BPA Authorised Parachute Pilot Upper Age Limit Requirements completed their report prior to the last STC meeting. However, STC decided to put the consideration of the report off until this meeting, to enable further input, which had been required to be submitted to the BPA by the 2 July. The report had been circulated again with the STC agenda, as it had been so long since it had previously been sent out. Also sent out was all input received by the 2 July. A further 'Amended' STC Agenda had been sent out last week together with the response from the Pilot Age Working Group.

All the above paperwork had also been tabled to those present.

The Chairman reported that unfortunately Dr John Carter was unavailable to attend this meeting, but Kieran Brady, Tony Knight, Mike Westwood and the Technical Officer were present.

The Conclusions and Recommendations of the PAWG are as follows:

The Conclusions of the Working Group are that it is incumbent upon the BPA to impose an upper age limit on its approved pilots. Parachuting in the UK appears currently to be out of step with mainstream aviation practice, not just by a little bit, but by a huge amount (the extent of overall mental and physical decline between 60 and 70 is extremely significant). The group, therefore, feels that the BPA will be exercising due diligence in considering and imposing an age limit.

The Working Group members do not believe that the imposition of an age limit is arbitrary and unjustified. If it were, then presumably the bulk of global commercial air transport regulators are wrong to do just that.

The BPA is in the fortunate position, at the moment, of being able to take steps ahead of a possible incident by exercising due diligence. This is a much better position to be in than one where such action is forced upon it because it did not.

The recommendations of The Pilot Age Working Group are that STC impose a maximum age limit of 65 years for all pilots who fly under the terms of a class II medical. This would include pilots who possess a class I medical but whose circumstances restrict their flying to the privileges of a class II.

It also recommends that consideration should be given to extending the age limit to 70 years for those pilots in possession of a class I medical. It should be noted here that no distinction is drawn between CPL holders and PPL holders. It is recognised that CPL holders will already possess class I medicals but PPL holders who wish to extend to 70 will have to obtain one.

It also strongly recommends that under no circumstances should consideration ever be given to extending, by individual exemption, the age limits it may decide to set. This exemption ban should apply rigidly, in the way it does for the lower permitted age limit for parachuting.

There would also have to be additional administrative procedures introduced to monitor pilot age and medical requirements along with appropriate changes made to the BPA Operations Manual and Pilot Manual.

It would seem administratively sensible to bring whatever recommendations are accepted into force at the next BPA membership renewal in March 2013. This would make for a smoother transition to the new regime and would give reasonable notice to affected pilots.

Tony Knight reported on the Working Group response and was also able to answer questions from members present.

The Chairman said that he would not allow input from the observers present, to which Ian Rosenvinge strongly objected, as those affected by the Working Group recommendations had travelled a long distance to represent their views.

An extensive discussion ensued on the Working Group's report and the subsequent written input.

Following further consideration, it was proposed by Kieran Brady and seconded by Jason Thompson that the Recommendations of the Pilot Age Working Group be accepted.

For: 16 (incl 5 by proxy), Against: 10 (incl 5 by proxy), Abstention: 1 (by proxy)

Carried

7. PERMISSIONS

- i) A letter from Richard Wheatley had been circulated with the agenda requesting permission to carry out a small midweek program of altitude jumps from approximately 20,000ft for qualified jumpers in September. It was intended that the jumps would be from a Beech aircraft fitted with an independent oxygen system for skydivers. Richard's letter had stated that the climb time from take-off to the exit of the last person would only be approximately 17 minutes. Langar had several staff members with considerable experience with the use of oxygen for higher altitude skydiving. Only experienced instructors with this oxygen usage experience would be used as the jump master.

The Chairman reported that Richard Wheatley had produced a set of comprehensive procedures and risk assessments for the jumps which included limitations for group size, style of exit and processes to monitor and minimise time 'off' oxygen during the jump run. Richard had also stated that the BPA's medical advisor, Dr Carter had been of great assistance in producing these procedures and supported the proposal.

The Chairman reported that Richard Wheatley's letter had also included a number of bullet points from these procedures:

- **Two independent oxygen systems fitted.** The system has extra capacity with spare masks available plus an extra cylinder ready for use. We will also carry a third, portable oxygen cylinder and mask for emergency use. All have gauges to show remaining supply available.
- **Rapid climb rate and descent rate.** The Beech aircraft can sustain a climb rate of over 2000 feet per minute meaning only a small amount of time from above 10000 feet to exit. The aircraft can safely descend at over 4000 feet per minute.
- **Pilot experience of high altitude jumps.** Jan has 5000 jumps and is a former German 4 way team member. Jan has dropped 30000 - 40000 jumpers per year from his Beech aircraft for many years.

- **Highly experienced jump masters.** Will be using BPS instructors with previous high altitude and oxygen usage experience.
- **Oxygen use from 8500 feet by all on board.** Flow rate of 2.5 litres per min. Emergency cylinder can provide up to 15 litres per minute.
- **Limited places.** We plan to run only limited number of lifts as the first lifts of the day on midweek dates. Participation and group sizes will be limited to control exit times.
- **No go around, No second pass.** The jump master will leave last and will supervise the whole lift. Any issues once above 12000 feet will mean the lift is aborted. Phased removal of oxygen masks based on exit order. Stopwatch visible for JM to control and limit exit timing. This means the JM remains on oxygen whilst the previous groups leave.

Richard Wheatley provided the meeting with further details and also confirmed that he had been in contact with the CAA (Lawrence Hay) concerning this request.

It was proposed by Richard Wheatley and seconded by Kieran Brady that the above request be accepted.

Carried Unanimously

8. A.O.B

No items of A.O.B. had been notified.

Date of next Meeting: Thursday 27 September 2012

BPA Offices, Glen Parva, Leicester
at 7.00 p.m

6 August 2012

Distribution: Chairman BPA, Council, CCIs, All Riggers, Advanced Packers, CAA, Editor – Skydive,
File