British Parachute Association

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Safety & Training Committee

Minutes of the meeting held on

Thursday 13 September 2018 at 1900

at BPA HQ, Wharf Way, Glen Parva, Leicester LE2 9TF

Present:	Jeff Montgomery	-	Chair STC/STO
	Dennis Buchanan	-	Skydive North West
	Richard Wheatley	-	Skydive Langar
	Ryan Mancey *(from item 4)*	-	Go Skydive
	Gary Stevens	-	Skydive Shobdon
	Gary Small	-	Skydive Chatteris
	Brucie Johnson	-	Blue Skies
	Noel Purcell	-	Target Skysports
	Dave Emerson	-	Skydive Isle of Wight
	Stuart Meacock	-	Hinton Skydiving
	Ian Rosenvinge	-	Peterlee
	Pete Sizer	-	Skydive Headcorn
	Jason Farrant *(from item 4)*	-	Skydive Buzz
Apologies:	Jay Webster, Iain Anderson, Ady King (new CI of RAF Weston on the Green), Sara Orton, Kieran Brady, Jason Thompson, Paul Yeoman, Alex Busby-Hicks, Jimmy White, Matty Holford.		
In Attendance:	Tony Butler	-	Chief Operating Officer
	John Hitchen	-	Vice Chair STC
	Trudy Kemp	-	Assistant to COO/STC
Observers:	Karl Peart.		

ITEM MINUTE

The Chair welcomed the new CI of Target Skysports: Noel Purcell.

1. DECLARATIONS OF ANY CONFLICTS OF INTEREST

The Chair stated that any member with any personal, financial or material interest in any item/s of business on the agenda for this meeting should state any declaration of interest. These would be declared at the relevant item.

2. MINUTES OF THE STC MEETING OF 26 JULY 2018

It was proposed by Brucie Johnson and seconded by Stuart Meacock that the Minutes of the STC Meeting of the 26 July 2018 be accepted as a true record.

Carried Unanimously

3. MATTERS ARISING FROM THE STC MEETING OF 26 JULY 2018

Page 1, Item 3, (Report of Panel of Inquiry – Carl Marsh Fatality). The Chair reported that the members of the Working Group are in the process of re-writing the CF Manual, and that STC would continue to be kept informed of the Group's progress.

4. RIGGERS' SUBCOMMITTEE MEETING OF 26 JULY 2018

It was with regret that the Chair of STC had to report that Paul Applegate has decided to relinquish his rigging and packing ratings due to personal reasons, which makes rigging work difficult. Because of this Paul has also decided to retire as Chair of the Riggers' Subcommittee.

The Chair and members of STC expressed their thanks to Paul Applegate for all the time and dedication that he has given over the past 20 plus years as Riggers' Chair.

There being no questions relating to the Minutes from the previous Riggers Meeting, it was proposed by Gary Stevens and seconded by Pete Sizer that the Minutes of the Riggers' Subcommittee meeting of 26 July 2018 be accepted.

Carried Unanimously

The Chair of STC reported on the Riggers' Subcommittee meeting held in the afternoon and stated that the Subcommittee had discussed the Wingtip Pouch (WTP) Manual. He stated that the WTP is an opening system that has been designed for installation into wingsuits where the pilot chute is not housed in the bottom of the container (BOC), but in a pocket at the tip of the wing, so that handle is always in the wingsuit flyer's palm of the hand. It allows the pouch to be opened with a wrist movement without changing the flight position.

Pete Sizer stated that Riggers' had expressed some concern with regard to where the responsibility lay with regard to wingsuit modification and at which point did a wingsuit and its deployment move from being the responsibility of the experienced jumper to becoming a rigging matter? He said that that this was an area that the Riggers Subcommittee wished to explore further.

Shortly after the accident the aircraft was instructed to stop their climb to 13,000ft AGL and to land with all remaining parachutists on board.

The Jumper sustained multiple injuries and was taken to hospital and put in to intensive care where his condition appears to be improving.

The Jumper is thirty-nine years of age. He is a FAI 'D' Certificate parachutist. He is a qualified BPA Tandem and Accelerated Free Fall Instructor. He is also a Canopy Handling (CH) and Formation Skydiving (FS) Coach. He has 6773 jumps and was jumping a Valkyrie 75. He had carried out one other jump that day prior to the accident.

The Jumper carried out a total of 495 jumps in the previous 12 months, 461 being Tandem instructional jumps, 34 of the jumps being solo jumps on a high-performance parachute. From the start of 2018 he had carried out a total of 24 solo parachute jumps.

The Jumper weighed 156 Lbs. His wing loading on the Valkyrie 75 was approximately 2.35 lbs per square foot.

Upon examination of his equipment, it was found to be in good condition and in an airworthy state.

The conclusions of the Board are that The Jumper exited the aircraft at approximately 4,500ft AGL, deployed his main parachute within few seconds. The parachute deployed without problem and was seen to be flying normally.

Shortly after the deployment of his parachute, one of the parachutists who exited just before him, observed the jumper pulling in and removing his removable deployment system (RDS) and was seen to have control of his parachute after successfully having stowed away his RDS system.

This was not the first time that the jumper had jumped an RDS System, however the board are unable to determine how many times he has jumped the RDS System, as his logbook does not contain such information. The Board do not believe that the RDS System was a contributing factor to the accident.

After having stowed away his RDS system, the jumper was seen to have control of his parachute.

Shortly after he was then observed to carry out a 270° left turn as part of his landing pattern. It is not known if the jumper initiated a front or rear riser turn, however it is likely that he may have initiated the turn using his front risers.

As the parachute continued to dive towards the ground, witnesses stated that the jumper had both his hands placed on his rear risers, with the intention of pulling them down together in an effort to raise the angle of attack of the parachute. It is not known whether there was any rear riser input. Witnesses stated that there was no attempt from the jumper to then pull down on any of the steering toggles in an attempt to slow down the forward speed of the parachute, which may indicate that that he did not react quickly enough, and this may have been due to the increased speed of the parachute whilst in the turn.

The jumper impacted with his legs first and subsequently suffered multiple serious injuries as a result of the high-speed collision with the ground.

Due to the speed which he carried from the turn, the jumper hit the ground heavily and was carried forward approximately 35 metres across the ground from the point of impact, during that distance he made contact with a wooden fence in the process, and a few seconds after he came to a stop in the middle of the tarmac perimeter-track.

The jumper was equipped with a digital altimeter and had borrowed a "FlySight" which were both housed inside his full-face helmet. The FlySight provides real-time audible indication of glide ratio, horizontal or vertical speed. The Board interrogated The FlySight, however they were unable to retrieve any information from it, as it had been left switched on for some considerable time after the incident and had continued to record data and overrode previously held information.

The Board believes that The Jumper may have commenced his left 270° turn below an altitude of 1000ft AGL. The Board also believes that he may have been trying to ascertain how fast he could fly his parachute whilst in the final turn and during the final glide distance at the end of his landing surf. It is not known how many times he has used a FlySight in the past.

The Board believes that the jumper may have put more input in to his landing manoeuvre than he was previously accustomed to, in an effort to increase the speed of his parachute. This would have caused the parachute to dive further and subsequently lose altitude quicker than he might have expected. This would have left him with little or no time to react before impacting on the ground prior to the parachute recovering into straight and level flight.

The Board believes that the jumper attempted the high-performance landing; however, he did not have sufficient height to complete the manoeuvre successfully, resulting in the heavy, fast landing, by turning his parachute too close to the ground.

The jumper had carried out 495 jumps in the previous 12 months, 34 of those are believed to have been on the same type and size of high performance parachute which he was flying at the time of the accident, as there was no indication in the logbook of what type of equipment was used throughout those 34 descents. All the other descents were logged as Tandem Instructional descents.

Due to the cause of the accident being a low turn to the ground and the proximity of where the Jumper impacted on the ground, close to a car park, the Board recommend that BPA initiates a Working Group to review all areas of high performance landings, including:

a) Wing loading requirements for licensed jumpers.
b) Whether Parachute Training Organisations (PTOs) should segregate areas where high performance landings take place from other forms of parachuting landing areas.

The Chair reported that résumé was for information and that a Working Group is in the process of being formed to look at high performance landings.

6. INCIDENT/INJURY REPORTS – RÉSUMÉ

The Chair reported that as well as the usual format for informing STC of the various incidents and injuries since the last STC meeting, there had been other reported incidents that required covering in more detail and would be reported at the end of the standard résumé.

i) There had been 9 Student Injury reports received since the last STC meeting. 5 males and 4 females. All the injuries were on landing. 6 of them were minor. One Student fractured her fibula and dislocated her knee following a 'high flare' landing. One broke his ankle on landing. Another student fractured his hip after hitting a combine harvester which was parked on the PLA.

ii) Since the last meeting there had been 14 Injury report received for 'A' Licence parachutists or above. 12 males and 2 females. 2 of the injuries were the result of free fall collisions. One jumper fractured a bone in her arm and another dislocated his shoulder. One felt faint in the aircraft and landed with the aircraft. Another suffered whiplash during a hard opening, in which his helmet was thrown off. The rest were on landing. One minor, one dislocated shoulder, the rest resulting in broken bones, including 2 with broken femurs sustained during high performance landings.

iii) There had been 5 Student Malfunction/Deployment Problem reports received since the last meeting. 4 males and 1 female.

iv) There had been 35 Malfunction/Deployment Problem reports received for 'A' Licence parachutists or above. 29 males and 6 females. 9 of the jumpers had less than 100 jumps, 9 had between 100 and 1,000 jumps. 17 had over 1,000 jumps, including 4 who had in excess of 8,000 jumps.

v) Since the last STC there had been 7 Tandem Injury reports received. 5 males and 2 females. These included 2 dislocated shoulders and a broken ankle. The others were minor injuries. One mature student had a minor cut to his lower leg, caused by his shoe lace coming undone in free fall, the student was 100 years old.

vi) There had been 12 Tandem Malfunction/Deployment Problem reports received.

vii) There had been 11 'off landing' reports received since the last meeting, including 2 Tandems, 2 first jump students and a display off landing.

viii) Nine reports had been received of items coming off jumpers in freefall or under canopy. 3 cameras, 5 helmets, including a Tandem leather helmet, 1 Student radio and a knife.

ix) Three reports had been received regarding aircraft. All were DZ infringements. Two involved gliders where the DZ controller had to hold the jump aircraft until the gliders had left the DZ and one was a Cessna 172 that had to take avoiding action after seeing a 3-way FS formation in free fall.

x) An incident occurred where an Instructor carrying out a pre-jump check on an AFF Consolidation jump student shortly before the planned exit, noticed that the AAD appeared to be switched off. The student and an AFF instructor landed with the aircraft. The lift had taken off around 9 a.m. The student's flight line check had been carried out and signed for by an AFF Instructor who was certain that the AAD was on. On further investigation it was discovered that the equipment had been issued earlier that morning. It had also been issued the previous evening, when the AAD had been switched on. Therefore, when the AAD was issued in the morning, it was still on from the evening before. The AAD was sent back to Airtec, who confirmed this was the case.

When the kit issuer had issued the kit on the morning, she had not checked the AAD as required in the PTO's SOPs. The CI has written to her reminding her of her responsibilities. He has also written to all kit store staff reminding them to check AADs. Also, AFFIs have been written to requiring them to oversee the issuing of AFF equipment. All Tandem equipment must be switched on at the start of the jumping day and signed for. The PTO SOPs have been suitably amended.

xi) An incident occurred where a group for freefall jumpers fell past a group of CF jumpers. A number of Tandem jumpers exited the aircraft followed by the 3-way group of CF jumpers at 12,000ft. All were observed by the DZ control. Approximately 5-6 minutes later the Tandems landed normally. A further two minutes later the PTO's second aircraft called for a 'clear drop'. The DZ controller checked the airspace and believed it was clear. However, he did not see the CF group that were about half a mile south of the exit point. He had forgotten that the CF group were still under canopy at approximately 6-7000ft.

The first group of free fallers, a 4-way tracking group, passed the CF group at about 4-5000ft. Two of the tracking group did not see the CF jumpers until they were under canopy. One other member of the tracking group did see the group whilst in freefall. None of the other free fallers saw them.

The CF jumpers did see the free fallers pass them, though they did not feel that they were too close.

A lesson has been learnt regarding the different disciplines and multi-aircraft operations.

xii) A Tandem incident occurred where a Tandem Instructor exited the aircraft, went left side down, extracted the drogue toggle as he went over on his back. He then held onto the toggle. The drogue bridle then entangled with the Tandem pair. He then released the toggle. The TI eventually managed to release the entangle bridle, after approximately 8 seconds. The remainder of the freefall went without further incident, other than the TI did not complete his systems check. The canopy deployed normally, and the pair landed without incident.

The Chief Instructor reviewed a number of the TI's previous exits and drills and re-briefed the instructor on the importance of stable exits. The TI has completed approximately 500 Tandem jumps without incident. The CI is satisfied that this was a one-off mistake and he has learnt from the incident.

xiii) Another Tandem incident has occurred where the Tandem Instructor decided to carry out a back-loop exit from the aircraft. He gained stability but forgot to deploy his drogue chute. He tapped the student for him to bring his arms out, he then started his systems check, touched the drogue handle, but treated it as a 'check drogue'. He proceeded with the jump, including carrying out a tracking manoeuvre. At 6,500ft he waived off and pulled the primary handle, then pulled the secondary. Nothing happened, he then deployed the reserve. The pair landed safely without further incident.

He stated that he didn't know why he didn't realise he hadn't thrown the drogue and doesn't know why he carried out the incorrect drills. He has made 826 jumps in the past 12 months, 471 of them were Tandem descents

The CI suspended him from carrying out further Tandem jumps at that time. The CI feels that the unplanned type of exit may have overloaded the TI.

The TI has undergone extensive suspended harness training and has made two supervised jumps with a 'C' Licence parachutist before being permitted to recommence Tandem jumping. He has been written to by both his CI and COO reminding him of his responsibilities. Both the CI and COO believe that the TI has learnt a valuable lesson from his error.

The CI has also written to all his TIs informing them that intentional unstable exits, layouts, periods of drogue-less freefall and other such manoeuvres are not permitted, unless part of a Tandem currency jump or a BPA Tandem Instructor course and in-air manoeuvres such as turns, and tracking should be kept simple and performed in such a way as to enhance safety rather than introduce an additional risk. He has also updated the PTO SMS.

This incident generated some discussion.

It was pointed out that the Instructor involved in this particular incident had also been involved in a Tandem related incident earlier this year, and it was questioned whether this had been taken into account.

The COO stated that these were two different types of incident and said that STC had been satisfied with the action that had taken place with the Instructor concerned at the time.

The COO stated that it is for STC to decide whether they believe that a Panel of Inquiry should be held following an incident. However, after coordination with the CI, he considered that the action that had been taken regarding the TI concerned in relation to this particular incident was proportionate to the incident that had taken place, and he believed that the TI concerned had learnt from this incident.

Brucie Johnson stated that he would like to a see a rule introduced where if a Tandem Instructor has experienced an out of sequence deployment they should automatically re-attend another Tandem Instructor Course for re-assessment.

The Committee noted Brucie's comments. However, it was the general consensus amongst those present that they did not wish to see a 'blanket' rule introduced, but considered that each incident should be dealt with on a case by case basis.

Following further discussion, STC were content with the action taken by the COO and CI regarding the TI concerned on this occasion.

In summary, the Chair asked CIs if they could inform himself or the COO as soon as possible following any serious incident or an occurrence of an unusual nature.

7. INSTRUCTOR COURSES

The Chair reported that two Instructor Courses had taken place since the last STC meeting:

i) The Association expressed its thanks to Skydive Headcorn for hosting Instructor Course 3-2018, which had taken place from the 6 – 16 August. The course report had been circulated with the Agenda and was for information only.

ii) Circulated to those present was a report from the AFF/Tandem Instructor course held at Target Skyports this week and which had finished this morning. The Association expressed its thanks to the PTO for hosting the Course. The report was for information only.

Noel Purcell reported that when he was conducting they equipment docs on the Sigma containers, he found that all the drogue kill line lengths were too short and had to be recalibrated. He also stated that one of the TI candidates had a disc cover on a Sigma which was in extremely poor condition.

Noel Purcell wished to remind jumpers of the importance of basic maintenance on their equipment

8. STC & RIGGERS' SUBCOMMITTEE TERMS OF REFERENCE (BPA FORMS 160 & 194) - ANNUAL REVIEW

The Chair reported that it is Council policy that the Terms of Reference for all the Committees of Council are reviewed annually towards the end of the year.

Both the Terms of Reference for STC and the Riggers' Subcommittee had been circulated with the Agenda. There had been no suggested changes this year.

It was therefore proposed by Brucie Johnson and seconded by Stuart Meacock that no changes be made to the Terms of Reference for STC or the Riggers' Subcommittee.

Carried Unanimously

9. PERMISSIONS

i) The Chair reported that a request had been circulated with Agenda from Vance Allen, Team Leader of The Poppy Parachute Team, supported by Brucie Johnson, to jump into The National Memorial Arboretum (NMA). He stated that the intended PLA is 72m x 52m, which is (3,744sq. mtrs), less than the Operations Manual requirements of 5,000sq. mtrs.

Details of the arena had also been circulated with the request and a Risk Assessment had been supplied to the BPA. Vance Allen had made the request with the following provisos:

i. Minimum 1,000 jumps (D Licence).
ii. Minimum of 30 previous displays.
iii. All display jumpers will use their respective J4H display canopies (Storm 150 & 170).
iv. All jumpers to visit the PLA before the display. Jump aircraft is a Bell 206 launch from site.
v. An area of 100m x 52m will be cordoned off and free from spectators.

Brucie Johnson was present and able to give further details of this request.

Following consideration, it was proposed by Gary Small and seconded by Ryan Mancey that the above request be accepted.

For: 11 Against: 0 Abstentions: 1 (Brucie Johnson)

Carried

10. A.O.B

i) The COO reported that at the Council meeting of 7 August 2018, it was decided on the recommendation of the Development Committee and following consultation, including that of STC, to remove the Operations Manual provision that permits certain members of EU countries parachuting organisations from requiring BPA membership to jump at BPA Affiliated PTOs.

Therefore, **BPA Operations Manual, Section 12 (Documentation), Paragraph 1 (Personal Documents),** which states:

1.1 All parachutists, riggers, packers, judges and DZ controllers must be current members of the British Parachute Association. Except in the case of other European Union (EU) parachutists, who are current members of their own country's parachuting governing organisation, have proof that they are not classified as student parachutists, have a minimum of 100 descents and hold current third-party liability insurance to cover of a minimum of 1,500,000 Euro.

be changed to read:

1.1 All parachutists, riggers, packers, judges and DZ controllers must be current members of the British Parachute Association.

The COO stated that the amendment would be included in the Operations Manual but would not come into effect until 1 April 2019.

ii) Chair, Riggers' Subcommittee

The Chair stated that nominations for the Chair of the Riggers' Subcommittee must be in to BPA HQ by Friday 26 October, using BPA Form 211A, which is available on the BPA web-site. He stated that the form would also be circulated to CIs and Advanced Riggers in due course. Nominations would go out with the next STC Agenda for consideration at the November meeting. Paul Applegate would not be standing in the future for the position.

iii) The Chair reported that at the BPA AGM & BPA Skydive the Expo each year the BPA Chair includes a video of BPA skydiving for the previous year as part of his speech. This usually included skydiving competition and achievements. However, there was a lack of Student jumping. Therefore, if any CIs could send us, by the end of the year, some good short video clips of Tandem, AFF and/or Static-line jumping, this would be helpful. So far this year no one has sent us any, and we would be grateful for PTOs help.

The Chair also asked that if anyone had any ideas for the various seminars on the Saturday to please let us know.

11. DATE OF NEXT MEETING

Thursday 15 November at 1900 at BPA HQ.

18 September 2018

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

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AMENDMENTS TO BPA OPERATIONS MANUAL

At the STC meeting of the 13 September 2018 the following amendment was made to the BPA Operations Manual:

BPA OPERATIONS MANUAL, SECTION 12 (DOCUMENTATION), Paragraph 1 (Personal Documents), sub-para 1.1. Change to read:

1.1. All parachutists, riggers, packers, judges and DZ controllers must be current members of the British Parachute Association.

Note: ***The above takes effect from the 1 April 2019. The current sub-paragraph remains in force until 31 March 2019.***