British Skydiving
5 Wharf Way, Glen Parva
Leicester, LE2 9TF
0116 278 5271
info@britishskydiving.org
britishskydiving.org

Safety & Training Committee

Minutes of the virtual meeting held by Microsoft Teams on

Thursday 17 June 2021

Present:	Jeff Montgomery	-	Chair STC/STO
	Iain Anderson	-	Skydive St Andrews
	Kieran Brady	-	Skydive Strathallan
	Alex Busby-Hicks	-	Skydive Tilstock / Council *(From 19:18)*
	Stacey Canning	-	APA
	Kris Cavill	-	Target Skysports, Hibaldstow
	Bryn Chaffe	-	Sky High Skydiving *(From 19:05)*
	Andy Clark	-	Wild Geese
	Dave Emerson	-	Skydive Isle of Wight
	Paul Floyd	-	Skydiving London
	Reg Green	-	Pilgrims
	Ryan Mancey	-	Go Skydive
	Stuart Meacock	-	Hinton Skydiving
	Sara Orton	-	Skydive GB
	Mal Richardson	-	Skydive Jersey
	Pete Sizer	-	Chair Riggers' Subcommittee/Headcorn
	Gary Small	-	Skydive Chatteris
	Billy Steele	-	Skydive Snowdonia
	Jason Thompson	-	Beccles Skydivers
	Richard Wheatley	-	Skydive Langar
	Jim White	-	Paragon
	Martin White	-	Cyprus
	Paul Yeoman	-	Black Knights *(From 19:15)*
Apologies for Absence:	Dylan Bartle	-	RAFSPA/JSPC(Weston on the Green)
	Mike Carruthers	-	Skydive North West
In attendance:	Mark Bayada	-	Council / Chair Canopy Working Group
	Tony Butler	-	Chief Operating Officer
	Dr John Carter	-	Medical Adviser / RSWG Medical Panel
	Trudy Kemp	-	Assistant to COO/STO / Secretary
	Ally Milne	-	Canopy Working Group
	Craig Poxon	-	Chair of Council
	Noel Purcell	-	Canopy Working Group
	Joanne Shaw	-	Independent Director
Observers:	Mike Patchett (Member), Chris Round (Member), Chris Sears (Member) Gary Stevens (Member).		

ITEM **MINUTE**

1. **WELCOME**

The Chair welcomed all involved to the 4th STC meeting of 2021. He asked those who wished to speak to make him aware by using the wave icon or chat feature on Teams, or if he did not acknowledge those, to call out. He made a roll call of Chief Instructors as the voting members present, and then outlined the voting procedure.

The Chair stated that the meeting would be recorded to assist with preparation of the minutes after which the recording would be deleted.

2. DECLARATIONS OF ANY CONFLICTS OF INTEREST

The Chair asked that any voting member with a personal, financial or material interest in business on the agenda should declare that interest at the appropriate item.

3. MINUTES OF THE STC MEETING OF 6 APRIL 2021

It was proposed by Ryan Mancey, seconded by Pete Sizer, that the Minutes of the meeting on 6 April 2021 be accepted.

Carried Unanimously

4. MATTERS ARISING FROM THE STC MEETING OF 6 APRIL 2021

Page 8 - Item 8 (AOB-b) The Chair reported that at the last STC meeting a proposal from Kris Cavill was presented for permission to carry out Tandem descents as display jumps at RAF Scampton, in August. It was felt by those present that the only possible solution to enable this request to be considered was that RAF Scampton be accepted as a 'one-off' alternate PLA for Hibaldstow under the jurisdiction of Kris Cavill. This would be on the proviso that the PLA was inspected by the COO and/or STO.

The Chair reported that the DZ/PLA had been inspected by the STO on 28 April, and that the STO supported Kris Cavill's proposal that RAF Scampton be cleared as suitable for Tandem skydiving, on a 'one-off' basis for 6 August 2021, or on either the 8 or 9 August if the weather is unsuitable on the 6 August, and that Hibaldstow will not operate on the same day.

Full details, including maps of the proposed landing area and a Target Skysports SOP appendix regarding the procedures to take place were included with the agenda.

The provisos for the jumps are that the instructors will have a minimum of 250 Tandem descents and the camera-flyers have a minimum of 300 camera jumps.

There being no further questions raised by CIs present, it was proposed by Mal Richardson, seconded by Pete Sizer that the above request be accepted.

For: 21 Against: 0 Abstentions: 1 (Kris Cavill)

Carried

5. RIGGING MATTERS

Pete Sizer reported that three incidents involving rigging matters had been reported since the last meeting:

a. During the inspection of a Glide container, which is manufactured by Peregrine MFG it was found, that one of the Type 17 main risers, was missing the bar-tack which secures the guide ring to the riser. The container was manufactured in April 2019, serial number 2687, and according to the packing log the reserve was assembled and packed by the manufacturer. On receipt of the container by the owner, it was never jumped due to personal circumstances.

The rigger who found the error, notified the manufacturer and subsequently they wrote back admitting full responsibility for the mistake and putting it down to human error in the inspection process. The manufacturer's email also contained instructions on how to rectify fix the mistake.

b. During a Tandem descent, the Tandem Instructor (TI) deployed the main canopy, and experienced a fairly hard opening, followed by the canopy spinning which continued to increase. The TI attempted to stop the turning, but he was only able to release the right-hand brake toggle, which led to a faster turn of the canopy. The Instructor chose to initiate his emergency procedures and landed safely on the PLA under the reserve canopy. The equipment was a Sigma container with an Aerodyne A2 350 main, a Vector 360 reserve and a Vigil Quatro AAD.

After reviewing the camera footage, it was noticed that during the deployment, the student was hanging right side down, loading the risers unevenly, which may have caused the turn on deployment. On further inspection of the equipment, it was very difficult to release the left steering toggle. Later on the ground a successful attempt was made to replicate the brake lock on several occasions and the brakes were set as per the manufacturer's instructions. One of the successful attempts to replicate the brake lock was filmed and sent to HQ for information. The PTO had also consulted with other PTOs who use the A2 canopy, and it was reported that sticking brakes is a known issue with these canopies. Apparently, a quick fix is to stow the secondary brake on top of the guide ring as supposed to, below it as per the manufacturer's instructions.

The PTO has also written to the manufacturer informing them of the issue, but was still awaiting a response from them.

There was some discussion regarding this incident, and CIs were shown the video footage of the reconstruction on the ground of the actual brake lock itself, which had been submitted by the PTO concerned.

The Chair stated that CIs with A2 canopies should be aware that this was a potential issue with these type of canopies.

c. A further report was received of a damaged slink found during an inspection of an Infinity container. The damaged slink was on one of the front risers. At first glance, the slink appeared in good condition and serviceable and the damage was not visible. The damage was found after removing the canopy from the risers. All four slinks were hand tacked to the risers with wax thread. Out of the four slinks only one was found to be damaged.

The slink is believed to have approximately 300 jumps. The owner has been made aware and it was established the equipment was purchased second hand. All four slinks have been replaced.

d. Avalon Student Container Initial Clearance Request

Pete Sizer reported that since the agenda was issued, a request had been received from Nicky Johnston from Sky High Skydiving for the initial clearance of an Avalon Student Container. This was included in the STC folder on Sharepoint earlier this week together with the relevant documentation. He stated that normally these type of requests would be dealt with by the Riggers' Subcommittee.

Pete Sizer reported that two Advanced Riggers have inspected and signed the relevant paperwork (Form 258) and all Advanced Riggers (ARs) and Rigger Examiners (REs) have been consulted and sent copies of the paperwork via email for their comments. He stated that out of the responses received from the ARs & REs, no reasons or objections have been put forward.

It is therefore proposed by that the Avalon Student Container be accepted for use by Accelerated Free Fall Students only.

Following discussion, it was proposed by Iain Anderson, seconded by Sara Orton that the above request be accepted.

For: 21 Against: 0 Abstentions: 1 (Bryn Chaffe)

Carried

6. INCIDENT/INJURY REPORTS – RÉSUMÉ

The Chair reported that a resume of incidents had been included with the Agenda. He stated that skydiving started up again around the time of the previous STC meeting (6 April 2021), this being evident by the number of Injury and Incident reports received.

a. Five Injury reports had been received for Student Skydivers. 3 males and 2 females. The first was an AFF Level 3 student who turned into wind at approximately 300ft, was given instructions to close his legs, but did not respond and flared at approximately 50ft. He did not adopt a PLF position and hurt his ankle on landing, possibly breaking it. Another AFF student carrying out a consolidation jump rolled over on landing, breaking his ankle on hard ground. The third report was a Category System student on his second static line jump, who flared high and appeared to have a poor PLF position. He dislocated his tib & fib on landing. The fourth was another Category Student on her second free fall jump. She went onto her back on exit and hurt her arm on deployment, breaking the humerus. It is suspected she caught her arm on the riser as the canopy deployed. She landed on the PLA without further incident. The fifth was a Level 2 AFF student, who had converted from the Category System, having previously made around 20 jumps. Her canopy control had up until then been good. The

weather was warm causing lift, she weighed 58kg. She landed on the edge of the PLA, hitting a fence. She complained of pins and needles and feeling cold. An ambulance was called; however, the paramedics could find nothing wrong with her. She later fully recovered.

b. Ten injury reports had been received for Licensed skydivers and above. 7 males and 3 females. 2 of the reports involved skydivers on Tracking jumps. The first was in free fall; one jumper with 570 jumps was back-tracking, the other jumper, with 907 jumps, was also back-tracking, one higher than the other. The lower jumper went up relative to the other jumper and he banged his nose and lip on the other's container. Both landed safely on the PLA. The other Tracking jump incident occurred just after deployment when one skydiver with 156 jumps collided under canopy with another who had 74 jumps. It had been a 6-way Tracking jump, they broke off at 6,500ft. As one of the two jumpers deployed, his canopy did a 180 degree turn upon opening and he collided with the other jumper who had just deployed his canopy, and who at the time was lifting his helmet visor, the two canopies collided. One canopy was ripped from front to rear and the jumper had to carry out his reserve drills. The other jumper sustained a muscle tear to his bicep,

A jumper with 330 jumps landed on uneven ground on the PLA overshoot area breaking his fibula on landing. One skydiver with 310 jumps appeared to have opened a little low and deep. He was unable to make it back to the PLA and landed downwind in a ploughed field, fracturing his tib & fib. Another jumper with 34 descents ruptured his left shoulder as he was waving off prior to deployment. He lost balance because of the pain and could not find his pilot chute. He had one more attempt and then pulled his reserve ripcord with his right hand. Two of the injury reports were jumpers putting their arms down as they landed, one with 60 jumps broke his wrist. The other with 106 jumps fractured her elbow. One skydiver with 83 jumps carrying out a currency jump, flared high, landed one leg first and sustained an ankle injury. Another with 1,400 jumps caught his ankle on landing resulting in a sprain. A skydiver with over 4,000 jumps tried to run-off a landing whilst still wearing his booties, slipped and broke his lower leg.

c. Four reports had been received of malfunction/deployment problems for Student Skydivers. 2 males and 2 females. The first was a static line student on his first descent. He rushed the count as he carried out his reserve drills, although the canopy had deployed normally. The second was another static line student on his third jump whose arm appeared to go through the riser during deployment, the canopy had twists and started to turn. The student then carried out his reserve drills. The third was a student on a 5 second delay, who failed to locate the ripcord after two attempts, then pull the reserve handle. She landed safely. The fourth was a Level 1 AFF Student who did not deploy her main, which was deployed by her Instructor. She saw her Instructors falling away and tried to find her toggle, which was not there. She then went through her reserve drills and landed under her reserve without further incident.

d. There had been 19 malfunction/deployment problem reports received for Licensed skydivers. 15 males and 4 females. Six of the reports were brake-locks, brake-fires or toggles tangling with lines. The first was a jumper with 96 descents whose right toggle jammed, causing the canopy to spin. The next was a skydiver with 305 jumps who had a toggle release on deployment that tangled with the lines. The jumper was unable to release the toggle. The third was a jumper with 1,925 jumps whose toggle jammed on a removeable slider ring, caused by not stowing the steering line excess. The fourth was a jumper with 1,000 descents who had a brake-fire causing the canopy to spin. The fifth was a skydiver with 4,000 jumps whose steering line excess jammed with the toggle. The sixth skydiver, with 2,357 jumps had a brake-fire, causing line twists. It is most likely that all 6 could have been prevented by carefully stowing steering toggles and securing the excess.

Two skydivers experienced twisted risers, one with 64 jumps, the other with 168 jumps. These were caused by the jumpers themselves. Four jumpers, one with 59 descents, another with 199, another with 396 and one with 903 descents had twists on opening, they were unable to clear them. The canopies started rotating

and increasing in speed, all jumpers carried out their reserve drills. Also, a skydiver with 350 jumps had twists which he was unable to clear. He was jumping a crossfire which started spinning. Another skydiver with 120 jumps had a bag-lock went for his reserve drills, pulled both handles simultaneously and both canopies deployed. He landed safely under his reserve. A skydiver with 109 descents deployed his canopy at 4,000ft felt no deployment, reached around to the container, realised it was empty and carried out his reserve drills. Once the reserve had deployed, the main bag, with the canopy still inside, fell past him, still attached. He landed under the reserve with the main in the bag still attached. On inspection it is thought that due to a tension knot in the pilot chute, there was not enough drag (with the weight of the bag out) to clear when cut-away. One jumper with 438 descents dislodged a steering toggle when collapsing the slider and could not figure out what was causing the canopy to spin, she carried out her reserve drills. One report was from a wing-suiter with 490 jumps who was making his second jump on a new wing-suit container where the handle/pod was in a different location to that he had been used to. This, and a lack of currency lead to him being unable to locate the pod. One jumper with 650 jumps experienced a bag-lock and another with 2,800 jumps had severe twists, causing the canopy to spin.

e. There had been 6 Tandem injury reports received. Two males and 4 females. One injury involved a student who broke her ankle landing under a reserve canopy. She dropped her left leg and landed with it tucked underneath her. Another student fractured her ankle on landing. She dropped her leg just prior to landing. This student walked back from the landing area. The PTO were unaware that she had been injured until 2 days later when they were informed. Another student also injured her ankle on landing. She complained under canopy that she was not liking the ride and dropped her legs prior to landing. Another report was a student who felt faint under canopy and still felt unwell after landing. An ambulance was called but the paramedics could not find anything wrong with the student. He later fully recovered. Another student did not lift her legs up enough for landing and sprained her ankle. The final report was for a 70-year-old student who felt ill under canopy and was unable to lift his legs for landing, resulting in a fractured fibula.

f. Fifteen Tandem Malfunction/Deployment Problem reports had been received. 5 of the malfunctions were twists in the rigging lines, which the instructors were unable to clear. 2 reports were bag-locks. Two were line-over malfunctions. Two were brake-locks, one of which is detailed in 'Rigging Matters'. One report was a streamer malfunction.

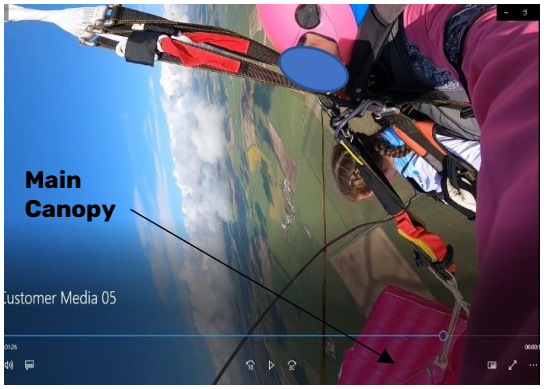
One report involved a 6ft Tandem Instructor with 365 Tandem descents with a 6ft 5in student. As they set up in the door of the aircraft, the student began to look down and as they exited the student was very de-arched and his knees were down. The instructor did not have a good arch position himself. The TI tried to leg lock the student's legs and pull them back, at the same time as he went for the drogue. He later reported that the drogue pull was stiff. As he was pulling the drogue out the pair began to fall onto their side, at which point he had the drogue half out the pocket as the air took it from his hand the bridle was fully out as they were rotating, which resulted in an entanglement around the students' legs. He attempted to clear it but was unsuccessful. At which point he deployed his reserve. The instructor has since been re-briefed on exits, with much exit practice from the mock-up. It has been decided that for the time being, he is only to jump with students of similar stature to himself and that he has a camera with each Tandem he does. He is also being de-briefed on his exits each time from the footage on a jump-by-jump basis.

Video footage of this incident was show to those present.

Another report involved a Tandem Instructor with over 2,000 Tandem descents, who deployed the drogue pilot chute, at which point the drogue failed to inflate. The TI did not realise the drogue was deflated and continued with the Skydive. During the deployment sequence, the instructor pulled the primary release handle, soon realising that there was no trap-door effect, he then pulled the secondary release handle followed by the reserve handle. Just before the

activation of the reserve, the main canopy also deployed. Fortunately, there was no entanglement of the main and reserve canopies. However, the main canopy remained connected and shortly afterwards was seen flying underneath the tandem pair. The TI then pulled the cutaway pad and managed to release the main risers, clearing the main canopy form the container. The Tandem pair landed safely underneath the reserve canopy. The main was packed by the instructor himself.

The TI was wearing a hand or wrist mounted camera during the descent. After carefully reviewing the footage, several areas of concern were highlighted. It appeared that whilst the Tandem pair were positioned in the door, the safety checks were very rushed, and almost as if they were not carried out. During the exit, the footage clearly shows the instructor did not check or look for the drogue after he threw it into the airflow. During the skydive, it also appears as though the TI does not complete a full system check. It is likely that the instructor failed to check the drogue, due to repetitive accustomed behaviour or possibly being distracted by the hand or wrist mounted camera.



The STO has discussed the incident with the PTO Chief Instructor, and suggested that an SMS audit is carried out, to sample hand or wrist mounted camera footage, to ensure all Tandem Instructors are carrying out the required system checks both in the aircraft and in free fall, as well as repetitive harness drills re-emphasising the actions of checking the drogue and completing the required system check once confirmation of a good drogue has been established. Also, all packers and instructors are to be reminded about the importance of checking that the drogue is cocked correctly before placing it in the BOC pocket.

The STO has also spoken to the Tandem Instructor and subsequently sent him a letter to reminding him of the responsibilities expected from a Tandem Instructor.

Video footage of this incident was shown to those present.

There was some disappointment expressed by a CI present that a Tandem Instructor with 2000 Tandem jumps was unaware that he had a deflated drogue.

The Chair reiterated that he had spoken with the CI concerned at length concerning this incident . It was also the first incident that the Tandem Instructor concerned had been involved in, and it had been felt that the actions taken had been fair. He stated that should there be any further incidents involving the Tandem Instructor concerned, then the situation would be reviewed.

Another Tandem report involved a TI with 2,800 Tandem descents who, following a good exit and systems check noticed the right-hand riser flap had come open, which he noted and carried on as normal. He waved off at 6000ft, pulled the primary handle, the drogue collapsed, the container opened, and the bag lifted out. The bag was seen to be inverted and one stow locking bag. This caused the Tandem pair to be pulled onto their side and start to spin. The TI located handles, cutaway, the reserve initiated but the risers did not clear.

The reserve extractor came out and hesitated in the burble, it went up half the length of bridle and was sucked down by the burble, then went fully up but ended up going around the kill line on the way. The reserve free bag lifted and went past the attached main (because the lines were not at full line stretch). The reserve came out of the bag (the free bag wrapped around the drogue's big ring. By that time, the risers had released as reserve extractor was pulling the main away. The slack riser went through the brake line of the reserve and became caught, the reserve then deployed fully.

After releasing the brakes to fully inflate the reserve, the TI noticed there was a turn to the right and the main and free bag attached above the cascade on the right-hand brake causing a lot of drag. It needed near full flare on the left-hand side to fly straight. The TI turned towards the PLA and started to assess where he could land. His full-face helmet then started to fog up, he managed to get one side open. He and the Student both landed safely.

Video footage of this incident was shown to those present.

g. Three reports had been received of AAD firings. The first was a skydiver who had 1,680 jumps who was jumping a Sabre 2-120, in a Javelin container. The jump was a 4-way FS jump. Upon deployment he experienced a pilot-chute in tow. He wrote the following comprehensive report:

"After a 4-way FS jump, I tracked away from the formation breaking off at 5,000ft and pulling at 4,000ft. I had a pilot chute in tow for 3-4 seconds and then reached around and pulled the main bridle to extract the main manually. The main bag came out, leading to a bag lock malfunction. At approximately 2,500ft I cutaway with 2 handed cutaway procedures and was then unable to find my reserve handle.

I believe this was made worse due to lack of familiarity with a metal D ring handle (I have 50-100 jumps on this rig but predominantly have a reserve pad) and the fogging up of my visor.

This rig has a Skyhook, but it did not pull out the reserve during this deployment. Several seconds later, I found the reserve handle and pulled it and 1-2 seconds later had a reserve out. The reserve, from memory, took longer to open than my last terminal reserve deployment. I believe that the cutaway did not clear the risers based on the position of the kit when found and the damage to the free-bag, presumably caused by a main/reserve entanglement despite having "cutaway" several seconds before pulling my reserve.

At some point during this process, the Cypres activated and cut the reserve closing loop. I believe this was after I had pulled the reserve handle, but it is not possible to check on a Javelin.

I was under a good reserve canopy by 540ft and landed safely, just off the PLA. The main and free-bag landed nearby and together, just off the PLA.

This is my 2nd pilot chute in tow in 2 weeks, on 2 different rigs (and 2 different canopies/pilot chutes packed by 2 different regular packers). The first appeared to have knotted itself upon deployment, the second looked normal when the kit was recovered.

Both pilot chutes and rigs have been inspected by a rigger and appear to be in good condition. The packers both confirmed they had cocked the pilot chute, and everything appeared normal during packing. It is possible that my deployment technique has become lazy, and I was not throwing the pilot chute hard enough."

The second report involved a jumper with 36 jumps who was making her fourth descent of the day, on the same equipment as her previous jumps. She had been attending a canopy course. The plan was for her to carry out a delay of 5 seconds. She made her first attempt to pull, but she said this was a stiff pull. She returned to the stable spread position and attempted a second pull; this was also a stiff pull. The jumper then returned to the stable spread position

again. She then considered carrying out her reserve drills at this point but wanted one last attempt to open her main.

She later told the CI that whilst she was trying to pull on the third attempt, that if she could not pull her main parachute, she felt she would be criticised for being a weak girl and not strong enough to open her main parachute. She also believed at the time that if she could not pull her main parachute, she would be grounded for being weak.

The severity of the situation dawned on her as her body clock also kicked in and she carried out her reserve drills. Her canopy opened at 900ft (according to her digital altimeter). The Vigil did fire, but the loop was not cut. She was stable throughout the free fall and during the pull attempts on the main and the reserve drill pull. She landed on the PLA without further incident or injury. The CI asked her if during the free fall and stiff pulls whether she checked her altimeter, she could not remember any specific heights that she could recall seeing whilst in free fall. She did know she had a canopy at 900ft, and this was confirmed by the digital altimeter.

Factors contributing
The CI pulled the pilot chute out after the incident and found it to be firmly in the pocket. It should have come out during her attempts to pull. The pilot chute had been pulled out of the BOC slightly, so this confirmed that the jumper had located the pilot chute correctly and was pulling it and not a leg strap or some other part of the container harness system.

The most time wasted in free fall was during the third attempt to pull her main when she became very distracted by thoughts of potential criticism of her lack of strength and physical ability due to her size. She is I.5 metres in height and 40 KG.

Action taken.
A one hour debrief followed the incident carried out by the CI. The jumper was informed that she must never again allow outside factors or thought processes to distract her from making the correct safety decisions. The same equipment w a s packed the following day for her to carry out many, practice pulls with a few stiff pulls to give her the confidence that she could and did pull her main on the first attempt every time during these drills. She was then permitted to jump from 14,000ft. She carried out several practice, reach and recover exercises before pulling successfully at 5,000ft first time. Her canopy handling was very good, and she landed on the PLA.

The third report involved a jumper with 302 jumps, who broke off late from an FS formation due to a loss of altitude awareness. He deployed his main canopy low and as the canopy deployed the Vigil also fired, deploying the reserve. He cutaway the main, and with no further issues.

h. A report had been received of a canopy entanglement during a CF jump. A fifth jumper was attempting to dock onto a 4-way formation. His canopy wrapped around the fourth jumper, ripping the canopy's centre cell, resulting in the fifth jumper having to cutaway.

i. Ten 'off-landing' reports had been received, including one static line student and one Tandem pair. The remaining 'off-landings' were licensed skydivers.

j. five reports had been received of items coming off on exit, in free fall, on deployment or under canopy. They were all GoPro cameras.

k. A report had been received concerning the loss of power to a Cessna 206. The aircraft was making its fourth flight of the day. It climbed to 10,000ft and the 4 skydivers exited without incident. The aircraft then started its decent. At approximately 8,500ft the manifold pressure was observed to quickly fade, followed by a quieting of the engine and subsequent loss of engine power. The aircraft landed safely. During the initial aircraft checks no water was evident in the tanks. Approximately one hour later the engine was started using the right

tank and continued to operate without hesitation. Also, two days later the engine was started using the left tank and again ran without hesitation before being shut down. The tanks were checked and contained and there was enough fuel for approximately 90 minutes flying time. Upon inspection, no faults have been found with the aircraft engine.

A review of the GPS flight log showed the flight profile to consist of two large left hand climbing orbits, during which time the pilot had the left tank selected. Following discussion with another operator, it is concluded that the inboard fuel pickups had likely been uncovered for a sufficient length of time in order to starve the engine of fuel and subsequently stop the engine. The aircraft concerned has long range fuel tanks fitted which also was a contributing factor, as the overall depth of fuel remaining, is less than that of a standard size tank for the same quantity. The PTO has reviewed all of its procedures including flight climb profile, and fuel tank selection, in order to prevent a recurrence.

ADDITIONAL INCIDENT REPORTS

The Chair reported that there had been quite a number of incident/injury reports received since the agenda for the meeting was published, approximately two weeks ago:

i. Three Injury reports had been received for Student Skydivers. All males and all AFF Students. The first was an AFF Level 3 student who sustained cuts to his fingers. He set up too high on finals in light winds and hit a PLA boundary fence during his flare. The second was an AFF Level 4 student who dislocated his thumb on landing. He landed before completing his flare and hit his thumb as he landed. The third was a Level 1 student who had completed a poor jump in free fall, appeared to initially respond to radio commands, but from around 200ft spiralled into the ground, breaking his femur. After the accident it was discovered, the student had not released one of the brakes.

ii. Five injury reports had been received for Licensed skydivers. 4 males and 1 female. The first was a skydiver with 120 jumps who broke his tib, fib and ankle. He was jumping in nil winds and as he flared, he put one foot down first, lost his footing, and rotated outwards displacing his ankle. The second involved an experienced jumper who flared late and did not complete the flare, resulting in a hard landing, causing him back pain. The third was a jumper with 310 jumps who broke his hip after carrying out a low turn. The fourth was a 64-year-old skydiver with 487 jumps, who also carried out a low turn resulting in a very hard landing and who sustained a pelvic and head injury. He and the previous jumper were both uncurrent. The fifth was for a jumper with 561 descents who had a very hard opening causing whiplash.

iii. One report had been received of a deployment problem for a Student Skydiver. A male jumper. The student with 19 jumps was completing a Category 8 qualifying jump, he went unstable on exit, regained stability and then on the back-loop exercise the main deployed prematurely. It was noted from the video that the pilot chute was slightly out of the pocket, which was also a little loose.

iv. There had been 10 malfunction/deployment problem reports received for Licensed skydivers. 7 males and 3 females. Two reports were twisted risers caused by inversions, one was a jumper with 55 jumps and the other jumper had 110 jumps. 4 skydivers experienced twists, including one wingsuit jumper. Their jump numbers ranged from 500 -1,100 jumps. One report was a skydiver with 876 jumps who had a brake-fire. Another with 2,000 descents had tension knots causing the canopy to spiral. One report was a jumper with 7,000 jumps whose slider was stuck up causing the canopy to become unstable. The final one was a skydiver with 1,168 jumps on a CF jump. The reefing system for the pilot chute developed a friction knot, causing the top surface of canopy to deform, making it uncontrollable.

v. There had been 2 Tandem injury reports received. Both males. One was an instructor who had a hard landing because of a late turn and slow flare who hurt his knee preventing him from jumping for the rest of the day. The student was

uninjured. The other was a student who sustained a lower back injury on landing. The student had had a previous lower back injury, which had not been declared.

vi. Nine Tandem Malfunction/Deployment Problem reports had been received. 3 of the malfunctions were twists in the rigging lines. Another 2 were tension knots. One was a canopy that started a violent turn on deployment. One was a pack rotation. Another was a line-over. One report involved a light Tandem Instructor (53kg) with a light student (54kg) who experienced a rotating main canopy. The TI carried out her reserve drills, and when the reserve deployed it surged forward and recovered approximately 10 times, until the TI was able to release the brakes.

The Chair stated that it was worth reminding TIs that the VTC – 2R reserve brake lines are stowed near to the stall point. The manufacturer was contacted and replied that the surge forward/rock back, is commonly referred to as the "rock & roll" of the reserve canopy in its braked configuration after deployment in braked forward flight. This scenario comes as a result of the deep brake configuration of the canopy during deployment. The procedure to alleviate the situation is to simply unstow the brakes and put the canopy into forward flight. This scenario can happen when the canopy is loaded at any wing loading, light, moderate or even heavy (up to 500lbs). It does not have any set parameters to occur and is simply the normal characteristic of the canopy in deep brakes. It is stable in this configuration and only needs to have the brakes released.

The Chair reported that this was a total of 24 Tandem malfunction/deployment problem reports in the past 2 months. This was around half of the total we usually get in 12 months.

vii. One report had been received of an 'off-landing.' This was a jumper on a tracking dive who tracked away from the PLA, landing in an adjacent field.

viii. Two reports had been received of GoPros falling off helmets on deployment. Quite a few lost GoPros have been reported this year since jumping started again. One report was received of a jumper with 247 jumps who lost his helmet in free fall. Another report has been received a Tandem Instructor's altimeter detaching as he went in for the pull.

7. PROPOSED CHANGES TO OPERATIONS MANUAL REQUIREMENTS

Canopy Training (CT) updates

The Chair reported that as so many areas have been changed or updated due to the new Canopy Training (CT) system, from new Manuals, procedures, forms and Operations Manual changes, there were bound to be updates from time to time. The two proposed amendments below were from feedback received.

a. **SECTION 2 (DESIGNATION AND CLASSIFICATION OF SKYDIVERS), Paragraph 6 (The Grading System), sub-para 6.2.10-b**, states:

b. Proficient, high-performance landings, using front risers during a straight on approach, on at least 50 consecutive descents.

The Chair stated that this refers to a requirement for obtaining CT Canopy Grade 3 (CT3). However, it was felt by the Canopy Working Group that it is not practicable to require that the 50 jumps using front risers during a straight on approach must be made consecutively.

Following consideration, it was proposed by Gary Small, seconded by Ryan Mancey that the word 'consecutive' be deleted from this section of the Operations Manual.

Carried Unanimously

The Chair stated that Form 248 (CT3 Jump Record) would also need to be updated to remove the word 'consecutive'.

b. **SECTION 10 (SAFETY), Paragraph 5 (Safety During Skydiving Descents), Sub-para 5.6**, states:

5.6. *High performance landings with a final turn over 90 degrees should only be carried out by qualified skydivers, cleared by the CI or skydivers under instruction, onto a designated high-performance landing area (see Section 7 para 3.3).*

The above paragraph could give the impression that skydivers under instruction may not need CI approval. Therefore, it is suggested this is changed to:

5.6. High performance landings with a final turn over 90 degrees should only be carried out by qualified skydivers, or skydivers under instruction, cleared by the CI, onto a designated high-performance landing area (see Section 7 para 3.3).

Following consideration, it was proposed by Pete Sizer, seconded by Gary Small that the above amendment to the Operations Manual be accepted.

Carried Unanimously

c. A proposed Operations Manual change from Richard Wheatley was included with the agenda. Richard had requested that Category System Student Skydivers may transfer to the AFF method of training, at Level 2 once they have completed at least 2 jumps and having obtained Category 2.

Richard had stated that the student would be expected to complete the AFF ground school training as required in Section 2, Paragraph 5 (AFF Level) of the Operations Manual which states: *'Has successfully completed the syllabus requirements as detailed in Section 5 (Training), Paragraph 2 (The Basic Training System Syllabus), sub-para 2.1 – 2.3 of this Manual.'* prior to their AFF level 2.

Therefore, it is proposed that **SECTION 2 (DESIGNATION AND CLASSIFICATION OF SKYDIVERS), Paragraph 4 (The Category System), sub-para 4.2 (Category 2),** be changed to read:

4.2. Category 2

4.2.1. Has demonstrated the ability to fall in a stable position counting throughout

4.2.2. Student Skydivers may transfer to the AFF method of training, at Level 2 once they have completed at least 2 jumps and have obtained Category 2.

Following consideration, it was proposed by Stacey Canning, seconded by Gary Small that the above amendments to the Operations Manual be accepted.

For: 21 Against: 0 Abstentions: 1 (Richard Wheatley)

Carried

8. PERMISSIONS

a. The Chair reported that since the STC meeting of 6 April 2021, the COO/STO have extended the following ratings/qualifications:

AFF Basic Instructor 6-month extension to the rating of:

Elise Sharp extended until 21 November 2021

Tandem Basic instructor 6-manth extension to the rating of:

Cameron Clark extended until 30 November 2021.

b. A request from Jason Webster was included with the agenda, requesting a 6-month extension to the rating of Graham Jackson. Jason had stated that Graham's current rating expired at the end of May 2021. Due to military commitments and then COVID he had been unable to attend a CSI course to date. Graham had applied for the next available CSI course this year. Jason Webster also stated that Graham has shadowed three basic courses at JSPW(N) and this year he has also shadowed a basic course and attended an advance course and practised emplaning and dispatching scenarios in their Foam exit trainer.

The Chair reported that Graham Jackson has held his CSBI rating for 2 years and has had more than one extension.

Following consideration, it was proposed by Jason Thompson, seconded by Stacey Canning that the above request be accepted.

Carried Unanimously

c. A letter from Alex Busby-Hicks was included with the agenda requesting the re-instatement of the TI rating of Laura Bamford. Alex's letter stated that Laura's rating lapsed on 31 March 2020, that Laura was a Tandem Instructor at Skydive Tilstock in 2019 until September, when she travelled to Australia for the winter season and planned to return at the beginning of 2020. With the advent of Covid 19 she remained in Australia and did not renew her membership for 2020. She has renewed her membership for 2021.

Alex Busby-Hicks also stated that Laura has held her rating since 2018. She has over 800 Tandem descents and has completed over 200 so far this year and plans to return to the UK in July and continue jumping at Skydive Tilstock. Having worked with Laura during 2019, Alex stated that he would have no hesitation in signing her rating renewal.

Alex Busby-Hicks provided the meeting with further details of his request and reported that he had received supporting documentation from a New Zealand UPT examiner who had confirmed Laura's jump numbers and currency, which he had also passed onto HQ to keep on record.

Following consideration, it was proposed by Iain Anderson, seconded by Ryan Mancey that the above request be accepted.

For: 20 Against: 0 Abstentions: 2 (Alex Busby-Hicks, Bryn Chaffe)

Carried

d. A request from Pete Sizer was included with the agenda requesting the re-instatement of the AFF instructor rating of Michelle (Shell) Meakins. Pete had stated that Michelle qualified as a BPA AFF Instructor 7 years ago and prior to moving to the USA in 2019 had been working full time at Peterlee.

Michelle did not renew her ratings in April 2019 as she was not expecting to return to the UK for some time. She has been doing AFF in the States using her USPA rating and now has 5,000 jumps, 1,200 of which are AFF (450 last year). Her last AFF jump was in October 2020. Michelle came back to the UK in the winter, and Pete hopes to use her as a AFF Instructor on courses at Headcorn.

Pete Sizer had proposed that Michelle's rating is reinstated without her needing to attend a British Skydiving AFF course.

Following discussion, there was some concern raised by those present as to at what point do STC stop considering these type of requests if a rating has lapsed for a period of time.

The Chair stated that he believed that previously STC have considered individual requests for Instructors who may not have held a British Skydiving Instructor rating for between 3 – 5 years. However, this was generally on the basis that the Instructor concerned has been doing instructional descents and maintained currency during this time period.

It was pointed out that Michelle has been making AFF instructional descents in the States until October 2020. However, the CI concerned stated that he was still waiting for confirmation of these jump numbers.

Following consideration, it was proposed by Stuart Meacock, seconded by Stacey Canning that Michelle Meakins have her British Skydiving AFF Instructor rating reinstated without her needing to attending a British Skydiving AFF Instructor Course.

For: 12 Against: 6 Abstentions: 4

Carried

e. A request had been received from George Panagopoulos (RE), via Pete Sizer for an extension to the Basic Rigger (BR) of Ryan Clark of the Tigers Display Team who attended the Basic Rigger course from 2-6 December 2019. He has had one previous extension (Covid extensions agreed by STC). His BR rating is valid until 30 June 2021. The request is that his BR is extended so that he can attend a PR course over the winter period, as there were no Rigger Courses last year.

Following consideration, it was proposed by Richard Wheatley, seconded by Bryn Chaffe that Ryan Clark's BR rating is extended until 31 January 2022.

Carried Unanimously

f. A request from Stuart Meacock was included in the STC Sharepoint folder this week, asking that Keith Rivett's AFFBI rating be re-instated with a six-month extension (expiration in November 2021).

Stuart's email stated that due to an oversight, the AFFBI was not picked up until after attending an examination course at Langar in June.

Following consideration, it was proposed by Paul Floyd, seconded by Dave Emerson that the above request be accepted.

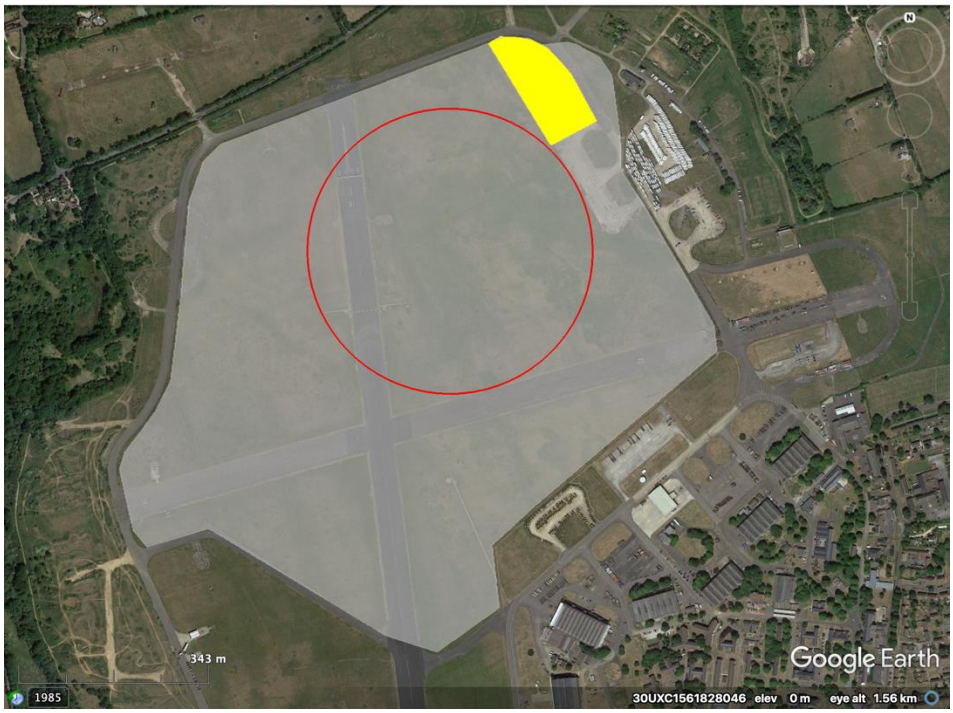
For: 21 Against: 0 Abstentions: 1 (Stuart Meacock)

Carried

9. PROPOSED NEW DZ/PLA – LPS

The Chair reported that a proposal was included with the agenda for a new DZ/PLA for London Parachute School (Skydiving London) at Abingdon Airfield, Oxon.

The centre of the DZ/PLA co-ordinates are 51:41.6184 -1:18.8874 (DD:MM) 244 ft AMSL). Maps of the Airfield including the PLA and proposed landing area were included. See below.



The PLA is most of the airfield (in grey). The intended landing area for all categories of skydivers is within the red circle. Tandem and 'C' licence jumpers may also land in the area marked in yellow.

Paul Floyd clarified that this was not a new Centre, but just a new PLA (location) for the PTO.

Following consideration, it was proposed by Martin White, seconded by Jason Thompson that the DZ/PLA at Abingdon Airfield be accepted for all categories of skydivers, including the Tandem and C licence landing area.

For: 21 Against: 0 Abstentions: 1 (Paul Floyd)

Carried

10. ALTERNATIVE DZ/PLA – UPAVON AIRFIELD

The Chair reported that a request from Stacey Canning was included with the Agenda for Upavon Airfield to be cleared as an alternative DZ/PLA for the APA.

Stacey's request had stated that Upavon Airfield is a military airfield used primarily for gliding, it is situated approximatley 4 miles from Airfield camp, Netheravon, where the APA are operating from now. If approved as an alternative DZ/PLA the intention would be to operate there very ocassionaly when there is a particularly busy schedule for the Joint Service Parachute Centre - Netheravon, to limit the impact on their military courses.

Upavon airfield has a gliding programme for Military Courses but there are weeks where no activity is taking place. Parachute activity would only occur on the days when there is no gliding activity. The airfield manager is also the manager of Airfield Camp so there already is an established working relationship in place.

The Chair reported that the site had been inspected by Tony Butler on 26 April 2021.

Google maps of Upavon Airfield were included with the request indicating a proposed 500m diameter PLA, it contains no hazards. The image also shows a 800m radius area from the centre of the PLA, there are some low level power lines running through a depression at 650m from the centre of the PLA. A Second diagram showed that there are larger overshoots on all sides.

The parachuting to be carried out at Upavon Airfield is intended to be mostly currency for the military dispay teams. If there is any student jumping the following restrictions would be adhered to:

- WDI to be thrown before commencing any student jumping
- All students will remain on a student talk down radio until qualified A Licence
- Talk down will done by dedicated instructor on the ground
- No students will be dispatched beyond the boundary of the airfield
- Student parachuting will only take place when conditions are suitable for the aircraft to run in parallel to the power lines on a bearing from 080 degrees to 260 degrees or vise versa.

Following consideration, it was proposed by Reg Green, seconded by Alex Busby-Hicks that the PLA at Upavon Airfield be approved for all categories of parachutists with the above previos.

For: 21 Against: 0 Abstentions: 1 (Stacey Canning)

Carried

11. TANDEM DRILLS AIDE MEMOIRS

The Chair reported that the Tandem Working Group (TWG) held a meeting on the 25 May to revisit suggested changes to the Next Tandem Aide Memoir, so that the wording and terminology matches that of the revised Sigma Aide Memoir approved in November 2019.

Several additional scenarios such as: ***Student interference*** and ***Drogue entanglement with Videographer or Skydiver*** have been included.

The Chair stated that within the ***Drogue release handle pulled*** scenarios, the ***deflated drogue in tow*** has been removed and the drill for this included within ***Drogue deflates but does not release.*** The action of pulling the cutaway handle has also been included for these scenarios, as the opinion of the TWG is that this action is favourable in such cases. This was also prompted by a recent incident where a Tandem Instructor ended up with both the reserve and main canopies out.

The Chair reported that a second page has been included in the Aide Memoir, where other scenarios such as: Aircraft emergencies, free fall and canopy scenarios including two canopies out and off landings, have been added to the aide memoir to assist Tandem Instructors to better prepare in the suspended harnesses for such scenarios.

Following discussion, a number of comments and concerns were raised from CIs present regarding the suggested amendments to the Aid Memoir. It was therefore agreed that this item be referred back to the TWG for consideration.

12. INSTRUCTOR COURSES

The Chair reported that two Courses had been conducted last week. One at Skydive Langar and the other at Sky High Skydiving, Peterlee.

a. Accelerated Free Fall, Tandem & Pre-Advanced Instructor Courses

British Skydiving expressed its thanks to Skydive Langar for hosting the course. The Course report had been included in the STC folder this week and was for information only.

b. AFFBI, TBI, Advanced & Examiner Courses

British Skydiving expressed its thanks to Sky-High Skydiving, Peterlee for hosting the course. The Course report had been included in STC folder this week and was for information only.

13. A.O.B

The Chair reported that a request had been received from Kieran Brady for the reinstatement of the CSI ratings of two of his Instructors: Sergiy Rulikovskyy and Steven Hughes.

Kieran had stated that both Instructors were under the misapprehension that an exemption existed for return after lockdown and did not renew their membership and ratings for the period 2020/21 due to the Covid restrictions and the unlikely situation regarding jumping in Scotland during 2020.

Kieran apologised for the lateness of this request, but this had only just come to light now that the PTO is planning to resume its operations.

Following consideration, it was proposed by Gary Small, seconded by Iain Anderson that the above request be accepted.

For: 21 Against: 0 Abstentions: 1 (Kieran Brady)

Carried

Kieran Brady thanked CIs for considering this requested and stated that he would conduct an appraisal of both Instructors prior to them carry out Instructional duties.

14. DATES OF NEXT MEETINGS

Thursdays at 19:00: 5 August, 23 September, 11 November.

The Chair stated that the next meeting on 5 August may take place at British Skydiving HQ, dependent on current Covid restrictions.

Gary Small asked if we could continue to conduct online meetings, especially for normal items of business.

The Chair stated that this was a Committee decision overall and was part of the STC review which was ongoing.

Note: Following the meeting, it has been decided that the remaining 3 STC Meetings of the year would be conducted online, with a further review next year.

The meeting closed at 20:15 (duration 1:15)

Attached:

Amendments to the British Skydiving Operations Manual, 17 June 2021

Distribution: Chair British Skydiving, Council, CIs, All Riggers, Advanced Packers, CAA, Editor – Skydive the Mag, File

Approved by STC on 5 August 2021
Published on 6 August 2021

British Skydiving
5 Wharf Way, Glen Parva
Leicester, LE2 9TF

AMENDMENTS TO BRITISH SKYDIVING OPERATIONS MANUAL

At the STC meeting of 17 June 2021, the following amendments to the British Skydiving Operations Manual were accepted.

SECTION 2 (DESIGNATION AND CLASSIFICATION OF SKYDIVERS), Paragraph 4 (The Category System), sub-para 4.2 (Category 2), Change to read:

4.2. Category 2

4.2.1. Has demonstrated the ability to fall in a stable position counting throughout

4.2.2. Student Skydivers may transfer to the AFF method of training, at Level 2 once they have completed at least 2 jumps and have obtained Category 2.

SECTION 2 (DESIGNATION AND CLASSIFICATION OF SKYDIVERS), Paragraph 6 (The Grading System), sub-para 6.2.10-b. Change to read:

b. Proficient, high-performance landings, using front risers during a straight on approach, on at least 50 descents.

SECTION 10 (SAFETY), Paragraph 5 (Safety During Skydiving Descents), Sub-para 5.6, Change to read:

5.6. High performance landings with a final turn over 90 degrees should only be carried out by qualified skydivers, or skydivers under instruction, cleared by the CI, onto a designated high-performance landing area (see Section 7 para 3.3).