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## **Riggers' Subcommittee**

**Thursday 21 September 2017 at 1600**

**at BPA HQ, 5 Wharf Way, Glen Parva, Leicester LE2 9TF**

**Present:** Paul Applegate (AR) - Riggers' Subcommittee Chair  
Pete Sizer (RE)  
Noel Purcell (AR)  
Rick Boardman (AR)  
Karen Saunders (AR)  
Matt Knight (PRv)  
Gary Stevens (PRnv)

**Key:**

RE = Rigger Examiner

AR = Advanced Rigger

PR(v) = Parachute Rigger (voting)

PR(nv) = Parachute Rigger (non-voting)

**Apologies:** John Curtis, Paul Stockwell, Dave Major.

**In Attendance:** Tony Butler - Chief Operating Officer  
Jeff Montgomery - Chair STC/STO  
John Hitchen - Vice Chair STC  
Trudy Kemp - Assistant to COO/STO

**Observers:** Alex Busby-Hicks, Steve Saunders, Stuart Meacock (*from item 6*).

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### **ITEM**

**1. DECLARATIONS OF INTEREST**

The Chair invited declarations of interest relating to items on the agenda for this meeting. None were stated.

**2. MINUTES AND MATTERS ARISING FROM THE RIGGERS' SUBCOMMITTEE MEETING OF THE 27 JULY 2017**

**Page 1, Item 2 – Tandem Mods Website & Supporting Documentation.** The Chair had spoken to Paul Stockwell who had promised an update on this project.

**Page 1, Item 2 – Mars 2 AAD.** Karen Saunders stated that there had been no further issues relating to the Mars 2 AAD. It was therefore agreed by those present that no further action was required with regard to this item.

**Page 3, Item 5 – Suggested Tools List for AP Course Candidates.** Circulated to those present was an e-mail from Pete Sizer with the list of packing tools and suggested text, which would be included in the AP Guide.

**Page 5, Item 7 – Equipment Related Incident Report Résumé (vii).** At the previous meeting, an incident had been reported where it had been noticed in the aircraft that an AAD on a Tandem rig was switched off. The Tandem pair landed with the aircraft. The AAD had been returned to the manufacturer for checking. The CI had believed that the AAD may not have been switched on, even though the TI and the Instructor who carried out the flight line check had insisted that it had been switched on. The report back from the manufacturer

indicated that the AAD had not been switched on. The CI has sent a written warning to the two Instructors leaving them in no doubt as to the seriousness of what happened. This incident would be discussed at STC this evening.

**Page 7, Item 11 – Manufacturers’ Safety Notices/Information Bulletins (ii)**. At the previous meeting, the Committee were given details of a notice (dated 1 June 2016), which HQ had been recently alerted to on the UPT website. This concerned the Mandatory re-certification of Vector Tandem Reserve canopies. Following discussion at the meeting on 27 July 2017, the Committee agreed that for any Vector Tandem reserve canopies that may be affected by the requirements on the notice, they were now grounded and were not to be used until they have been returned from the manufacturer with a re-certification instruction.

Following circulation of the notice the following day, correspondence was received raising a number of issues and concerns with regard to manufacturer’s recommendations and the BPA system of certifying equipment every 6 months. It appeared that there were differences of opinion amongst some Riggers and CIs regarding the rules, and it was felt that further clarification is required.

The COO has therefore asked the Equipment Inspection Policies WG to address these issues. A meeting of the WG Meeting is planned at 1400 prior to the next Riggers Meeting on 16 November 2017.

There being no further matters arising, it was proposed by Rick Boardman and seconded by Pete Sizer that the Minutes of the Riggers Subcommittee Meeting of 27 July 2017 be accepted as a true record.

**Carried Unanimously**

**Riggers’ Subcommittee Meeting – 6 April 2017, Item 2 – Next & Next Century Tandem Systems**. It had been reported that the WG set up to look at the various issues surrounding reserve loops on Next and Next Century Tandem Systems had nothing further to report. The Committee had felt that this item could now be drawn to a close.

Pete Sizer stated that as there had been no reported issues on these particular reserve loops, should the Committee now consider issuing a BPA Safety Information retracting previous notices (SN1/14, SI 5/15 & SI 1/16).

Following discussion, it was felt that the status quo remains for inspecting reserve closure loops on Next and Next Century Tandem Systems (BPA SI 1/16 refers), unless anyone had any strong objection to change it. No objection was raised.

### **3. MATTERS ARISING FROM THE STC MEETING OF THE 27 JULY 2017**

There were no matters arising from the previous meeting.

### **4. REVISED RIGGERS’ SUBCOMMITTEE TERMS OF REFERENCE (ToRs)**

Copies of both the current and amended copies of the Riggers’ Subcommittee ToRs had been circulated with the agenda.

The changes mainly dealt with the composition of the Riggers’ Subcommittee, voting rights and the nomination and voting procedures for the Chair of the Rigger’s’ Subcommittee.

The Committee noted that the amended ToRs now permitted a newly qualified PR to vote on items relating to their status. It was the consensus of those present that there was now more depth of knowledge in the field, and there were no concerns raised with this change to the ToRs.

It was proposed by Pete Sizer and seconded by Rick Boardman that the amended Terms of Reference for the Riggers’ Subcommittee be accepted.

**Carried Unanimously**

## 5. TANDEM PAPERWORK ISSUES

A paper by Karen Saunders had been circulated with the Agenda, which she had written in response to issues found during recent TBI and TI Instructor courses. These mainly concerned inconsistencies within the Tandem 100 Jump Equipment Inspection (blue book) and related paperwork. Although guidance notes (Form 281) had been written to accompany this paperwork, there were still a number errors and omissions being found.

Karen's paper had detailed the various paperwork and the correct information that was required:

Packing Card  
F112A - Record of Inspection  
F112E - Repair, Modification, Replacement Sheet  
F112D - Tandem Student Harness Airworthiness Inspection Sheet/modification sheet.  
F112C – Equipment 100 Jump Inspection

The Guidance Notes (BPA Form 281), relating to 112E state:

*“Tandem equipment repairs, modifications, component replacements, should be recorded on form 112E, with the date, procedure, jump number (on the container), name and qualification and signature. The Tandem reserve packing card, must record the date, qualification and signature of the AP (T). “*

**For clarity the following information is required:**

### **Form F112E – Repair, Modification, Replacement sheet**

Any changes, modification or repairs should be recorded; this includes but is not limited to:

**Changing or replacing:** Main/reserve Canopies, Drogue, Risers, AAD or ANY component part including kill line and sub components thereof (such as bridle).

**Any Repairs to:** The Container, Main/reserve canopy, Drogue, Risers or sub component, including any servicing or changing of batteries on the AAD.

**Modification:** Modifications to the equipment, which may include alterations to the RSL (such as the UPT split RSL for Skyhook system) or any modification recommended by the Manufacturer.

These changes should be recorded on form F112E with the date the change was made. The jump number **on the container** of when the change was made, the name, qualification and signature of the person completing the work.

Riggers and APs (T) are further reminded that the following alterations to paperwork has also taken place:

**F112C – Blue Book** – this had been amended 3 years ago. The current books were available from the BPA HQ. **The Total Numbers of Jumps on each item (container, Canopies, AAD, Risers, Drogue, Lines) is now required.** If, however you are still using the original blue book the following action should be taken:

***The current blue books should be amended by deleting the two references to “(since last inspection)” and “(since last six month inspection)” The wording should be changed to “Total number of jumps”***

***In the back of the blue book Section 12 of the 100 Jump Inspection log should be removed (or struck through) as this is recorded separately on form 112D.***

**F112D – Student Harness Airworthiness Inspection sheet** has also been changed and is now double sided. This allows for a further Modification Sheet relating to the Student Harness only. This should be completed when any repairs, replacement (such as side clips), or modifications are carried out to the Student Harness Only. The new Form 112D should be stapled to the original to enable an audit trail.

**Packing Cards** should be kept up to date and should include the serial numbers and DOM of **each item** – for example: if there is a change in AAD the packing card should be altered to reflect this.

The Riggers' Subcommittee considered Karen's paper and agreed that Packers and Riggers required educating about completing the paperwork correctly. It was also felt that TBI and TI candidates should have some knowledge of the paperwork that accompanies Tandem equipment, and that this was an area that should perhaps be considered for future Instructor Courses.

The STO reported that on looking through some of the 100 Jump Inspection books on the recent TI Course, it appeared that some components (mainly kill lines) had been replaced well beyond the manufacturers recommended life. He stated that this was something that Packers would need to monitor.

The STO also stated that he was in the process of updating some of the paperwork contained within the Tandem Instructor manual, which was now out of date.

Karen's paper would be re-circulated with the Minutes for information (Appendix A).

## **6. CLARIFICATION ON THE LIMITATIONS OF WORK CARRIED OUT BY RIGGERS**

Karen Saunders referred to the rules concerning the supervision of Basic Riggers. She stated that the supervising Rigger must be at least a PR, who has held the rating for a minimum of two years. However, when we look at the rules relating to APs under training, the AP Training Syllabus state that the supervision must be carried out by at least a PR. The supervising PR does not require to be of two years' standing.

Karen Saunders asked if any consideration had been given to an AP who has held the rating for two years' being permitted to supervise an AP under training.

The Committee stated that in relation to Riggers, it had always been the case of one rank/rating above, who undertook the supervision. However, the Committee felt that if this became an issue, particularly for APs working independently and there was no overseeing PR, the Riggers' Subcommittee could consider awarding individual exemptions in such special circumstances, particularly if the AP had several years of experience.

The Committee also clarified that a Rigger (without an APT rating) could carry out the 100 jump inspection on Tandem equipment.

## **7. EQUIPMENT RELATED INCIDENT REPORT RESUME**

HQ has received several Incident / Malfunction / or Deployment problems reported since the last Riggers Subcommittee meeting of the 27 July 2017.

- i) On the 13 August 2017, a parachutist with 1463 descents carried out a high-performance landing under a J VX 93 main canopy. Whilst in the turn the parachutist's AAD fired causing the reserve canopy to deploy. The reserve deployment occurred at approximately 350ft and ended up in a biplane configuration with the main canopy. The parachutist landed without injury.

The container was a Wings with a PD143 reserve, and a MarS M2 AAD. The parachutist thought that the AAD was set on 'speed' mode. It appears that this setting is lost when the AAD is switched off and the MarS M2 requires to be set to 'speed' mode every time it is switched on.

- ii) On the 27 August 2017, a solo parachutist with 104 descents experienced a pilot chute in tow malfunction upon deployment. The parachutist attempted to clear the problem but was unable to do so. The report states that the parachutist experienced the same type of malfunction previously whilst carrying out a 'hop and pop' in Hungary, but on that occasion, he managed to clear it.

Upon inspection on the ground, it was noticed that the end of the main curved pin was found stuck inside the kill line window preventing the extraction of the pin.

The container was a Wings with a Safire 170 main, Speed 170 reserve and a Vigil 2 AAD.

- iii) On the 16 September 2017, a Tandem Instructor checked his Tandem equipment prior to gearing up for a Tandem descent and noticed that the AAD was switched off. He found this to be unusual as he had already carried out a Tandem descent that day and the AAD was found to be switched on during the flight line check. As he attempted to switch the AAD back on, he found an error code being displayed. The equipment was opened up and on inspection, the AAD had separated from the black cable.

The equipment was a Strong TNT single pin container with a Tandem Cypres AAD.

During a routine reserve repack the rigger at Point Zero Rigging, David Gould (AR) noted that the plastic cap built in to the top of the reserve pilot chute was cracked. This isn't an uncommon problem on the single pin TNT System. The manufacturer was contacted on the issue and they supplied a replacement extractor. The replacement extractor did not have any reinforcement at the top where the AAD cutter is placed.

It is presumed that as the flaps that close the reserve container push down on the cutter, undue force from the edge of the extractor pushes upward on the black cable, cracking the plastic sleeve and separating it from the cutter.

The Rigger concerned had stated that he felt that had an aluminium cap been used, this problem would not occur.

The Tandem equipment is the only TNT on the DZ to have the new extractor fitted. The extractor was fitted and packed 6 days prior on the 10 September. The incident occurred after one jump on the system. The Cypres AAD had just entered its 6 month life extension (DOM 09/2005), but this is not considered to be a contributing factor to the incident.

The PTO concerned has stated that any TNT equipment found with the new extractor will be grounded at their PTO until the issues had been resolved.

The manufacturer had requested that the damaged components be returned to them so they can look in to the incident and they hope to find a solution.

## **8. ADVANCED PACKER (AP) COURSE REPORTS**

The following AP Courses had been held since the last meeting, and the respective Course Reports had been circulated to those present:

- i) Andy Shaw had run an AP Training Course at Skydive Buzz from the 12 – 15 August 2017. The Course had been attended by Chris Dutton and Michael Price, both of whom were advised to attend the Examination phase of the Course once they had completed several supervised reserve pack jobs.
- ii) Karen Saunders had run an AP Training Course at the Black Knights Parachute Centre from the 28 – 31 August 2017. The Course was attended by Alex Hewitt and David Cagno, both of whom were advised to attend the Examination phase of the Course once they had completed several supervised reserve pack jobs.
- iii) Noel Purcell had run an AP Tandem Upgrade Course at Hibaldstow on the 18 Sept 2017. The Course was attended by Liam Goddard and Ionut-Lucian Ciofu. Both candidates were successful and awarded AP Grade (T) status.

## 9. PERMISSIONS

A request from Pete Sizer had been circulated with the agenda regarding Vitor Pacheco.

Pete Sizer stated that Vitor had been a professional packer at various drop zones around the world, and had been packing reserves and training to be a Rigger in Ireland. Vitor was now working in the UK and Pete had requested permission to bring him into the British system over a few days (to include the AP examination when ready).

Pete Sizer reported that he had already supervised a few reserve repacks with Vitor. However, although Victor now held a BPA Packing Certificate, he only joined the BPA this year.

Following consideration, it was proposed by Pete Sizer and seconded by Karen Saunders that the above request be accepted.

For: 4

Against: 0

Abstention: 1

**Carried**

## 10. BPA SAFETY NOTICES/INFORMATION BULLETINS

There had been no BPA Safety Notices/Information Bulletins issued since the last meeting.

## 11. MANUFACTURERS' SAFETY NOTICES/INFORMATION BULLETINS

- i) A Service Bulletin had been issued by SIFE and concerned the compliance with the instructions of the SIFE's owner manual when packing the reserve canopy. Full details are included in the bulletin, which will be attached to the Minutes.

## 12. A.O.B.

- i) Circulated to those present was an update to the Index of Safety Notices and Information Bulletins prepared by Pete Sizer:

### 2. **Safety Information Index**

- 109. Cypres units manufactured after 1/1/17 have a life of 15.5 years, serviced at 5 and 10 years SI 1.17

### 12. **UPT (RW) Index**

- 64. Mandatory recertification of Vector Tandem Reserve canopies (25 uses, 40 repacks, 20 years) 1.6.2016

### 38. **Airtec**

- 16. Units manufactured after 1/1/17 have a life of 15.5 years, serviced at 5 and 10 years SI 1.17

### 44. **Vigil / AAD**

- 17. 10 year battery replacement only at AAD. PAA ADV-01-2017 20/1/17

### 49. **MarS**

- 5. Mandatory check of EITHER Lock release mechanism or Barometric pressure test IB 6-2-17

### 50. **AVA Sports**

- 2. Spectra Ripcord length PSB 001/2016

52. **SIFE**

2. Pilotchute material to be packed inside coils as per manual SB2017.001 6/9/17

The STO stated that he would update the Index prior to publishing it on the BPA website.

i) **Magazine Articles**

The Chair reported that the Editor of the BPA Mag, Liz Ashley, has asked him to mention that she is always on the lookout for safety and educational articles, particularly with good photos. Even 'everyday' stuff like normal wear and tear on kit, untwisting your brake lines, flight-line checking, safety stuff etc. Liz had said that she was sure that Riggers would be able to think of something that has happened on their DZ this year that can be learned from.

- ii) **For information** – The Chair reported that Rick Boardman had registered Marie-Anne Stevens as a Method 2 Basic Rigger.

Dates of Next Meetings: Thursday 16 November at 1600  
at BPA HQ, 5 Wharf Way, Glen Parva,  
Leicester LE2 9TF

2 October 2017

**PAPERWORK FOR CIRCULATION WITH THE NEXT AGENDA MUST REACH THE BPA OFFICE BY MONDAY 30 OCTOBER 2017**

**Distribution:**

Chairperson Riggers' Subcommittee, All CIs, All Riggers, AP, Council, CAA  
Editor – Skydive

## Tandem Paperwork

This paper is being written in response to issues found during TBI and TI Instructor courses held recently.

It has been highlighted that paperwork relating to Tandem equipment is being completed either incorrectly or not at all.

The paperwork concerned is:

Packing Card

F112A Record of Inspection

F112E Repair, Modification, Replacement Sheet

F112D Tandem Student Harness Airworthiness Inspection Sheet/modification sheet.

F112C Equipment 100 Jump Inspection

Form 281 – Guidance notes; have been written to accompany this paperwork but still there are errors and omissions being seen.

These errors relate mainly to Form F112E .

Form 281 (relating to 112E) states:

*“Tandem equipment repairs, modifications, component replacements, should be recorded on form 112E, with the date, procedure, jump number (on the container), name and qualification and signature. The Tandem reserve packing card, must record the date, qualification and signature of the Advanced Packer (T). “*

**For clarity the following information is submitted:**

### **Form F112E – Repair, Modification, Replacement sheet**

Any changes, modification or repairs should be recorded; this includes but is not limited to:

**Changing or replacing:** Main/reserve Canopies, Drogue, Risers, AAD or ANY component part including kill line and sub components thereof (such as bridle).

**Any Repairs to:** the Container, Main/reserve canopy, Drogue, Risers or sub component, including any servicing or changing of batteries on the AAD.

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These changes should be recorded on form F112E with the date the change was made. The jump number **on the container** of when the change was made, the name, qualification and signature of the person completing the work.



Riggers and Advance Packers (T) are further reminded that the following alterations to paperwork has also taken place:

**F112C – Blue Book** – this has been re-written and new books are now available from the BPA Office. **The Total Numbers of Jumps on each item (container, Canopies, AAD, Risers, Drogue, Lines) is now required.** If however you are still using the original blue book the following action should be taken:  
***The current blue books should be amended by deleting the two references to “(since last inspection)” and “(since last six month inspection)” The wording should be changed to “Total number of jumps”***

***In the back of the blue book Section 12 of the 100 Jump Inspection log should be removed (or struck through) as this is recorded separately on form 112D.***

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