

Tandem Accidents

1. Tandem passengers not lifting legs resulting in lower leg injuries
 - *Advise passengers of potential hazards from not fully lifting legs before landing, in advance of skydive. Have passenger demonstrate prior to jump and ensure proper technique, if unable to demonstrate the ability to lift legs do not take on jump. Technique should also be practiced under canopy prior to 1500 feet. Review manufacturers guide for proper harness fitting and adjustments to allow for customer mobility during landing. Action initiated by: Tandem Instructor, DZSO, DZO*

Tandem Malfunctions

1. Line twists
 - *Tandem Instructors should review Drogue Fall Techniques and practice proper body position to minimize instability during deployment. Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. Action initiated by: Tandem Instructors, Packers, Riggers, Equipment Owner, DZSO, DZO*
2. Tension knots
 - *Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. Educate packers on regular gear checks, including but not limited to, checking the condition of the canopy and lines when packing parachutes. Ensure Standard Operating Procedure (SOP) in place for packers and/or riggers to report any equipment concerns. Action Initiated by Tandem Instructors, Packers, Riggers, Equipment Owner, DZSO, DZO*

Student Accidents

1. Injuries as a result of improper flaring techniques or lack of flaring on landing
 - *Review educational material on Landing Techniques (CSPA PIM2A-2009; Section 6.7) and Landing Problems and Solutions (CSPA PIM2A-2009; Section 6.17.5). Students should be taught, review, and practice the Parachute Landing Fall (PLF) referencing SSI Reference Manual, Appendix - Skydiving Technical Knowledge PLF Landing . Student to review and practice flare technique on the ground prior to skydive, including but not limited to, the guidance from Ground Control Instructor (GCI) to students in the landing of their canopies, through use of a recognized method of signaling. GCI should ensure accurate coaching and currency reviewing the Ground Control Instructor Reference Manual; Communication Rules. Action initiated by SSI, PFFI, JM, GCI, Student, DZSO, DZO*
2. Injuries as a result of low turns
 - ***Intentional and unintentional low turns can result in serious injury or death.*** It is important to recognize your limitations, including but not limited to, currency, skill level, external inputs, and personal inputs. Review educational material on Landing Techniques (CSPA PIM2A-2009; Section 6.7), Landing Problems and Solutions (CSPA PIM2A-2009; Section 6.17.5), and Landing Patterns (CSPA PIM2A-2009; Section 6.9). Students should be taught, review, and practice the Parachute Landing Fall (PLF) referencing SSI Reference Manual, Appendix - Skydiving Technical Knowledge PLF Landing. Student to review and practice flare technique on the ground prior to skydive, including but not limited to, the guidance from Ground Control Instructor (GCI) to students in the landing of their canopies, through use of a recognized method of signaling. Action initiated by SSI, PFFI, JM, GCI, Student, DZSO, DZO

Student Incidents

1. Instability during freefall

- *DZSO should review existing SOPs regarding the progression of students through Solo Certification to ensure Instructors have clear requirements to identify the transition from 2:1 to 1:1 Instructor/Student ratio.*

As per the CSPA PFFI Reference Manual, "Preconditions to Pass from 2 down to only 1 Instructor (2:1 to 1:1)

The student will have shown:

- *Good body position during exit*
 - *Stable position of freefall*
 - *Altitude awareness*
 - *Able to open his parachute (without assistance)*
 - *Able to fly without a grip from the MSI at any time in the previous jump*
 - *Able to maintain heading*
- Communication with Instructors should be clearly presented and understood."*

Instructor to review Module 5: Control Techniques and Unusual Situations (PFFI Reference Manual), specifically Freefall Control. Instructor and Student should review and physically rehearse Exit Types (PIM 2A, Section 4.7) and The Arch (PIM A, Section). Action initiated by SSI, PFFI, JM Student, DZSO, DZO

2. AAD fires

- ***Altitude Awareness is our #1 survival skill. The student's main parachute must be activated at a minimum altitude of 3000 feet AGL.*** (CSPA PIM1; Basic Safety Rules - Students & Instructors Section 2.11). *Instructor and Student should review PIM2A - Section 5: Freefall Skills Subsections: 5.4 Activation, 5.5 Altimeter Use, and 5.6 Heading Control. In addition, anticipatory skills can be improved if you learn and practice skydiving skills in the sequence in which they occur, and mentally and physically rehearse the skydive and your emergency procedures, therefore a focused review for the student on Section 2 Preparation: Mental and Physical (CSPA PIM2A-2009) will be of great benefit.*
- *AAD fires should not be taken lightly. Careful evaluation of student's practice on the ground against a pre-defined standard is an essential aspect of student training. If the student is unable to perform the tasks on the ground, correctly and in real time, they are unlikely to perform correctly in the freefall. Freefall tasks are high stress, and there must be enough repetitions and proper evaluations of the student's demonstration of the skills on the ground (min 3x correctly in real time). Instructors should clearly understand what they are teaching, why, and what the acceptable standard is for a student to be allowed to perform the skydive. DZSOs and/or DZOs should evaluate how training altitude awareness is being trained and look for any possible improvements to their existing training processes. Action initiated by SSI, PFFI, JM, Student, DZSO, DZO*

Student Malfunctions

1. Line Twists

- *Instructor & Student should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 Activation). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. Action initiated by SSI, PFFI, JM, GCI, Student, Packer, Rigger, DZSO, DZO*

Experienced Accidents

1. Injuries as a result of improper flaring techniques or lack of flaring on landing
 - *Review educational material on Landing Techniques (CSPA PIM2A-2009; Section 6.7) and Landing Problems and Solutions (CSPA PIM2A-2009; Section 6.17.5). Jumpers should review and practice the Parachute Landing Fall (PLF) referencing SSI Reference Manual, Appendix - Skydiving Technical Knowledge PLF Landing. Action initiated by Jumper, Coaches, Instructors, DZSO, DZO*
2. Injuries as a result of improper landing pattern
 - *Review of Landing Pattern (CSPA PIM2A-2009; Section 6.9), FS Landing Approach (CSPA PIM2B-2016; Section 6.6), and Group Pattern Approach (CSPA PIM2B-2016; Section 6.7). Additionally, review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors. Action Initiated by Jumper, Coaches, Instructors, DZSO, DZO*
3. Injuries as a result of low turns
 - ***Intentional and unintentional low turns can result in serious injury or death.*** *It is important to recognize your limitations, including but not limited to, currency, skill level, external inputs, and personal inputs. Review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors. Additionally, jumpers should regularly review the CSPA Sport Canopy Endorsement document to ensure a safe transition during training and to assist in their overall skills development and awareness. Exercising caution, common sense, self-discipline, control, alertness and better judgment is highly recommended to help ensure continued safety under canopy. Never attempt anything beyond your skill level, or without first consulting a certified coach experienced in that discipline. Review educational material on Landing Techniques (CSPA PIM2A-2009; Section 6.7), Landing Pattern (CSPA PIM2A-2009; Section 6.9), and Landing Problems and Solutions (CSPA PIM2A-2009; Section 6.17.5). Action initiated by Jumper, Coaches, Instructors, DZSO, DZO*

Experienced Incidents

1. AAD fires
 - *Altitude Awareness is our #1 survival skill. ""The minimum altitudes (AGL) at which the main parachute must be activated are: 4500' for all Tandem jumps, 3000' for all students, Solo & A CoP holders, 2500' for B, C, and D CoP holders"" (CSPA PIM1; Basic Safety Rules - General, Section 2.5). Review of PIM2A - Section 5 Freefall Skills; 5.4 Activation, as well as, PIM2A - Section 6.17.2 Two Canopy Situations. In addition, anticipatory skills can be improved if you learn and practice skydiving skills in the sequence in which they occur, and mentally and physically rehearse the skydive and your emergency procedures, therefore a focused review for the student on Section 2 Preparation: Mental and Physical (CSPA PIM2A-2009) will be of great benefit. Action initiated by Jumper, Coaches, Instructors, DZSO, DZO*

Experienced Malfunctions

1. Line twists

- *Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 Activation). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 Line Twists). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. Action initiated by Jumper, Coaches, Instructors, Packers, Riggers, DZSO, SZO*

2. Line overs

- *Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 Activation). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 Line Twists). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. Action initiated by Jumper, Coaches, Instructors, Packers, Riggers, DZSO, DZO*

3. Tension Knots

- *Have equipment inspected by a rigger for serviceability. Educate packers on regular gear checks, including but not limited to, checking the condition of lines when packing parachutes. Ensure Standard Operating Procedure (SOP) in place for packers and/or riggers to report any equipment concerns. Action initiated by Jumper, Coaches, Instructors, Packers, Riggers, DZSO, DZO*