# SAFETY MANAGEMENT SYSTEM (SMS)

## *Occurrence and Risk Mitigation Reporting*

## *AIM Analysis as of August 2026*

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## DISCLAIMER

The data and information used in the Safety Management System ("SMS") of CSPA is privileged and to be kept confidential. Any publication of any data or information from the CSPA's SMS by CSPA is for safety information purposes only and to enhance the safety awareness of parachutists.

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# 1 - TANDEM

## 1.1. Accident

2026T-10

- **Category:** Landing
- **Passenger Age:** 28
- **# of tandem skydives (instructor):** 2400
- **Container:** Micro Signma
- **Main Canopy:** Icarus World TX2 330
- **Details:** "Hard Tandem Landing. On landing the TI had their legs low and didn't fully flair. TI first impacted the ground on their left knee. Landing was hard and the TI flipped over the passenger. Passenger bruised their tailbone. TI ripped the quadricep off the bone and required surgery.
- Follow up with Tandem student the next day, they stated they felt fine with only a slight tenderness in the tailbone area."
- **DZSO Recommendations:** Review Tandem Landing procedures as per UPT manual, including the importance of fully finishing flares and flight cycles with heavier students.
- **SMS Analyst Recommendations:** Review the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-12

- **Category:** Landing
- **Passenger Age:** not reported
- **# of tandem skydives (instructor):** 85
- **Container:** UPT Vector
- **Main Canopy:** Icarus World TX2 330
- **Details:** During the tandem landing, the canopy appeared to be hit by a downdraft followed by turbulence, resulting in a lack of lift during the flare. The impact broke the Instructors right fibula.
- **DZSO Recommendations:** Avoid landing near areas prone to up and down drats and turbulence.
- **SMS Analyst Recommendations:** Review the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-13

- **Category:** Landing
- **Passenger Age:** 53
- **# of tandem skydives (instructor):** 700
- **Container:** UPT Micro Sigma
- **Main Canopy:** Sigma 2 340
- **Details:** Winds of 8 in the morning, a tandem student suffered a fractured foot on a tandem jump. The weather conditions were excellent at the time of the accident. Winds were mild and stable offering a favorable condition for landing safely. The student did not lift legs enough throughout the landing. Although the students leg position appeared adequate at the start of landing, they likely relaxed while sliding along the ground. the students foot slipped beneath their leg causing significant twisting and resulting in a fracture.
- **DZSO Recommendations:** No changes to operating procedures are recommended as a result of this event, as it resulted from a relaxation of the safe position by the tandem student and not from a failure of operations, equipment, or environmental conditions. Continue to emphasize, during the pre-jump briefing, the importance of keeping legs and feet raised until a complete stop after landing.
- **SMS Analyst Recommendations:** 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.
- **Action by:** Tandem Instructors; DZSO; DZOs


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2026T-16

- **Category:** Landing
- **Passenger Age:** 58
- **# of tandem skydives (instructor):** 750
- **Container:** UPT Micro Sigma
- **Main Canopy:** Sigma 2 340
- **Details:** "The tandem instructor had a standard landing pattern, with usual altitudes and procedures. The approach and the turn onto final approach were normal. During the final leg, the passenger had already lifted legs as per landing instructions. Without warning, the parachute increased its rate of descent, creating a much steeper descent than usual. The instructor reacted immediately by applying maximum brakes to reduce speed and soften the impact. The landing was harder than normal, and the passenger—who had kept legs raised—made contact with the ground on the butt. The instructor absorbed as much of the impact as possible with legs and sustained no injuries. The passenger was immediately immobilized as a precaution, and an ambulance was called. Hospital updates indicated a compressed vertebra and lumbar sprain. No equipment malfunction was found. Conditions appeared to be weather-related."
- **DZSO Recommendations:** According to the information collected, the instructor performed the appropriate manoeuvres in response to the sudden situation that arose. The landing circuit and final approach were carried out in accordance with normal procedures, and the passenger had already raised their legs in preparation for landing.
- **SMS Analyst Recommendations:** Review the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude.
- **Action by:** Tandem Instructors; DZSO; DZOs

## 1.2. Incident

2026T-01

- **Category:** Deployment
- **Passenger Age:** N/A
- **# of tandem skydives (instructor):** 10375
- **Container:** UPT Sigma
- **Main Canopy:** Icarus TX2
- **Details:** Solo Tandem Recert Jump: Jumper deployed drogue at 4500 feet which opened immediately. The TX2 main parachute took a little over 2000 feet to open finally deploying main parachute and then the reserve opened immediately afterwards. Witnesses on the ground observed the parachutist in freefall without the drogue for most of the jump, followed by deployment and then almost instantaneous opening of the reserve. Parachutist found themselves in a situation with two open parachutes, one which appeared to be trying to encircle the other. The jumper cut the main parachute away and landed under the reserve without incident. Once on the ground, it was determined that the AAD had fired.
- **DZSO Recommendations:**
    - Human Factors
        - The instructor reported having intentionally deviated from the applicable tandem standards by deciding to pull the drogue lower during the solo refresher jump in order to spend as little time as possible in freefall, in the cool early-season temperatures. The instructor was doing a refresher jump after 6 months on the ground. This factor definitely played a major role in the instructor's judgment ability. During freefall, while checking handles, the instructor spent more time looking for the RSL, which made them lose awareness of altitude. The instructor then believes they deployed the drogue followed immediately by executing the main parachute handle.
        - At the instructors' request, and in order to reduce time spent in cold conditions, the jump was made at 9,000'. This factor played a role in this incident because the instructor reported that they expected more freefall time given the habit of jumping at 13,000'.
    - Recommendations
        - Procedure review with UPT examiner - Personal review of procedures with emphasis on the following points: discipline around exits and drogue deployment; emergency procedures in terminal freefall; altitude awareness and decision-making under pressure
        - Evaluation jump with examiner as passenger
    - Other
        - Although the dominant factor in this incident was the deviation from standards and procedures, it was noted that the normal tandem refresh altitude is at least 10,500'. Consequently, the procedure has been standardized. Any other measures may be taken once data is received by Vigil."


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- **SMS Analyst Recommendations:** CSPA supports the root cause analysis and recommendations of the DZSO as provided.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-02

- **Category:** Landing
- **Passenger Age:** 70
- **# of tandem skydives (instructor):** 3715
- **Container:** UPT Sigma
- **Main Canopy:** Sigma Tandem 340
- **Details:** Exit and freefall were unremarkable. Winds were from the west, which becomes slightly sketchier due to wake turbulence from nearby object, hangar, trees etc. This direction of wind is not atypical and as such a modified west pattern was utilized keeping the down-wind phase over the fields and away from the downwind side of the hangar. Instructor felt confident with setup and turns were made at appropriate altitude. After turning to final, TI was moving straight west, in line with the "eat the carrot" view of the 3 windsocks in the landing area. TI felt confident that the setup for landing was appropriate given the conditions. During this landing the canopy was crabbing, if not going directly north as if the wind was an entirely different direction than the socks read. TI and student landed hard on their side. They both stood up. TI was fine, student complained of ankle pain but was able to make it to the hangar by their own volition. No crutch or assistance needed.
- **DZSO Recommendations:** N/A
- **SMS Analyst Recommendations:** Review the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-03

- **Category:** Landing
- **Passenger Age:** 37
- **# of tandem skydives (instructor):** N/A
- **Container:** UPT Sigma
- **Main Canopy:** Sigma 1 340
- **Details:** Landing incident. Instructor did a complete brake but final landing was abrupt and student received impact on butt on landing. Probable cause is winds from south east created turbulence.
- **DZSO Recommendations:** The landing was videotaped and will be analyzed and debriefed with a Tandem Examiner to learn from this landing.
- **SMS Analyst Recommendations:** Review the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-04

- **Category:** Landing
- **Passenger Age:** 56
- **# of tandem skydives (instructor):** 3000
- **Container:** UPT Micro Sigma
- **Main Canopy:** Icarus TX2 330
- **Details:** After an uneventful tandem exit, freefall, and canopy ride, the student barely lifted their legs and then as the Instructor touched the ground, the student reached with their legs and they caught the ground. Instructor managed to stay upright for a second and then rolled over the student to the TIs hands and then sideways without putting any of their weight on the student. Student had a sore knee but after a minute of relaxing, walked off the landing area and around the DZ without assistance. Follow up with student they reported just a sore knee but otherwise no injury.
- **DZSO Recommendations:** Landing video has been kept on file by the DZSO. Student had legs lifted and then dropped one at the last second. Light knee sprain. Student walked on their own power off field. Tandem Instructor handled it well considering the circumstances and rolled over to avoid placing extra strain on the student.


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- **SMS Analyst Recommendations:** 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.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-06

- **Category:** Other
- **Passenger Age:** N/A
- **# of tandem skydives (instructor):** 8500
- **Container:** UPT
- **Main Canopy:** Sigma 340
- **Details:** Over the course of 3 tandem jumps Tandem Instructor had unknowingly suffered a heart attack. Unknown that the conditions they were feeling was a cardiac event as they would have stopped sooner. Just thought it was a long day and thirsty. All tandems went normally.
- **DZSO Recommendations:** N/A
- **SMS Analyst Recommendations:** Instructors should be in good health, with no heart conditions or any other debilitating ailment.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-08

- **Category:** Landing
- **Passenger Age:** Not reported
- **# of tandem skydives (instructor):** 500
- **Container:** UPT Vector
- **Main Canopy:** Icarus World Tx2 330
- **Details:** During the final approach, the instructor had to alter their flight path to avoid landing in the forest. A sudden increase in wind caused them to drift off the intended course. The Instructor executed a low-altitude turn resulting in a minor collision with the ground. The instructor absorbed most of the impact on their knee, sustaining a minor bruise. The client is doing well and shows no signs of pain or visible injury.
- **DZSO Recommendations:** We discussed it, aside from landing in the woods, the Instructor made the right decision.
- **SMS Analyst Recommendations:** Review the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-09

- **Category:** Landing
- **Passenger Age:** 26
- **# of tandem skydives (instructor):** 150
- **Container:** Strong DHT
- **Main Canopy:** Icarus TX2 365
- **Details:** Instructor was crabbing canopy to move to the landing area, held toggles too long. When the Instructor flared there wasn't much. Hit the ground harder than usual. Instructor jammed right ankle and rolled it a bit. Swelled up a bit was sore but was able to return to work after one day off.
- **DZSO Recommendations:** Was a crosswind landing in stronger winds. Instructor needs to get into the wind next time. Student could get feet up more next time.
- **SMS Analyst Recommendations:** "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 the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude. "
- **Action by:** Tandem Instructors; DZSO; DZOs


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2026T-11

- **Category:** Freefall
- **Passenger Age:** 43
- **# of tandem skydives (instructor):** 3800
- **Container:** UPT Sigma
- **Main Canopy:** Aerodyne A2 350
- **Details:** Tandem Instructor forgot wrist altimeter. Deployed main canopy low. AAD fired resulting in a partial 2-out. Landed main canopy without complications.
- **DZSO Recommendations:** Gear check prior to boarding to ensure wrist altimeter is worn and turned on.
- **SMS Analyst Recommendations:** As per UPT Sigma Tandem Operations Manual, Section D: Pre-flight Gear Checks, "Altimeter: A serviceable visually accessible altimeter must be worn on all tandem jumps." Additionally, review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors. As per CSPA PIM 1 Section 4.4 INSPECTION "Every parachutist, prior to boarding the aircraft for a parachute descent, shall have their equipment safety-checked by another CoP/FAI rated parachutist."
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-18

- **Category:** Landing
- **Passenger Age:** 36
- **# of tandem skydives (instructor):** 200
- **Container:** UPT Sigma
- **Main Canopy:** UPT SG 340
- **Details:** TI did a braked approached to adjust accuracy on landing, upon letting canopy surge the gusty conditions caused the canopy to continue to descend. TI attempted to fully flare the canopy with vertical movement not ceasing.
- **DZSO Recommendations:** In gusty conditions, avoid doing a braked approach. Allow canopy 10 seconds in full flight
- **SMS Analyst Recommendations:** Review the manufacturers recommendations for external factors that can alter flight cycle and/or flare performance including, but not limited to, winds, passenger weight, outside temperature changes, terrain, and altitude.
- **Action by:** Tandem Instructors; DZSO; DZOs

2026T-19

- **Category:** Freefall
- **Passenger Age:** not reported
- **# of tandem skydives (instructor):** not reported
- **Container:** UPT Sigma
- **Main Canopy:** 389
- **Details:** During a tandem skydive upon deploying the drogue the bridle line formed a loop and trapped part of the drogue preventing the drogue from opening properly.
- **DZSO Recommendations:** The tandem instructor noticed the drogue wasn't completely inflated. Monitored their rate of descent was adequate and deployed at proper altitude. The Tandem Instructor was briefed on proper drogue procedures. The packers were also briefed on proper method to pack the drogue.
- **SMS Analyst Recommendations:** "Reference to Sigma Tandem Manual Section 3: Instructor Techniques, Chapter 3 - Freefall & Drogue-Fall"". Additional reference to Sigma Tandem Manual Section 4: Malfunctions & Emergencies, Chapter 1 - Reserve Procedures with a focus on ""Un-inflated drogue"". Have equipment inspected by a rigger for serviceability. Review of equipment and specific packing procedures should be completed consulting with a Rigger if necessary. "
- **Action by:** Tandem Instructors; Packers; Riggers; DZSO; DZOs

**1.3. Malfunction**

2026T-05

- **Category:** Deployment
- **Passenger Age:** N/A
- **# of tandem skydives (instructor):** 360
- **Container:** UPT
- **Main Canopy:** Sigma 2 340

- **Details:** Instructor exited at 10000', drogue throw and freefall was good. Instructor released the drogue at 5500'. The main opened with line twists, which the Instructor wasn't able to clear before the canopy went into a spin. Instructor cutaway and pulled the reserve and landed at the dropzone. The main was recovered immediately but the freebag has not been found.
- **DZSO Recommendations:** N/A
- **SMS Analyst Recommendations:** "Attempt to kick out of the line twist, instructing the student to assist if necessary. If unsuccessful, perform emergency procedures by pulling the cutaway handle, ensuring full release of the main risers, physically assisting if necessary. Immediately pull the reserve handle." (Sigma Tandem Manual Chapter 3: Deployment Problems). Regular review of UPT Sigma Tandem Manual Chapter 1: Reserve Procedure. Review of equipment and specific packing procedures should be completed consulting with a Rigger if necessary.
- **Action by:** Tandem Instructors; Riggers; Packers; DZSO; DZOs

2026T-07

- **Category:** Canopy
- **Passenger Age:** 36
- **# of tandem skydives (instructor):** 1200
- **Container:** UPT Vector
- **Main Canopy:** Icarus TX2 Steep 330
- **Details:** Tension knot during brake release. Right brake, cascade level.
- **DZSO Recommendations:** Upon review could not find any element that could have caused this malfunction.
- **SMS Analyst Recommendations:** Regular review of UPT Sigma Tandem Manual Chapter 1: Reserve Procedure. Review of equipment and specific packing procedures should be completed consulting with a Rigger if necessary.
- **Action by:** Tandem Instructors; Riggers; Packers; DZSO; DZOs

2026T-14

- **Category:** Deployment
- **Passenger Age:** 58
- **# of tandem skydives (instructor):** 509
- **Container:** UPT Micro Sigma
- **Main Canopy:** Icarus World TX2 330
- **Details:** On a regular tandem jump with outside video. Free fall was very stable and normal facing the sun. Waved off and opened just above 5000'. Canopy opened flying straight but line twists above the risers and over half way up the lines. Kept flying straight, not a hard opening. TI tried to bring the twists down but it didn't untwist an inch. TI tried twisting them away from them and also kicking out. The passenger also had 5 tandem Skydive's and two IAD jumps so they very calm and relaxed and TI asked student to try kicking out with them but still absolutely nothing budged and they were flying straight and away from the lz. Watching alti, TI was getting below 3500' and nothing was working so decided to cut away so they could make it back to the lz. Cut away, kept handled, did house keeping and flew it back to the lz with a good landing and a happy passenger.
- **DZSO Recommendations:** Tandem Instructor executed EPs correctly. No found causation of the line twists as review of video showed correct body position on deployment with the main canopy deploying into a slow but continuous line twist. Discussions with packer also indicated no changes in standard packing procedures.
- **SMS Analyst Recommendations:** "Attempt to kick out of the line twist, instructing the student to assist if necessary. If unsuccessful, perform emergency procedures by pulling the cutaway handle, ensuring full release of the main risers, physically assisting if necessary. Immediately pull the reserve handle." (Sigma Tandem Manual Chapter 3: Deployment Problems). Regular review of UPT Sigma Tandem Manual Chapter 1: Reserve Procedure. Review of equipment and specific packing procedures should be completed consulting with a Rigger if necessary.
- **Action by:** Tandem Instructors; Packers; DZSO; DZOs

2026T-15

- **Category:** Deployment
- **Passenger Age:** not reported
- **# of tandem skydives (instructor):** 250
- **Container:** UPT Micro Sigma
- **Main Canopy:** Icarus World TX2 330
- **Details:** "A tandem skydive was conducted with a relatively light passenger. The exit was good, and the drogue fall was stable. The main parachute was activated at 5,500 feet. The deployment was stable, with a long, sniveling opening. The canopy appeared square at first, but during the final stage of opening it snapped in one direction and began to spin. The


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tandem instructor attempted to stop the rotation. The risers were twisted down to the three-ring area, and both the instructor and passenger attempted to spin out of the twists, but no progress was made. The canopy was flying flat and square in a safe direction, so the instructor continued efforts to clear the twists until reaching 3,000 feet, which is the decision altitude for the Sigma system. With approximately 6–8 line twists and no improvement, the instructor chose to cut away. The reserve canopy flew normally. The instructor performed one practice flare to test the reserve's flight characteristics. The landing was safe and uneventful at the originally intended landing area. The passenger remained in good spirits and was happy with the jump. The passenger did not fully understand what had occurred until the instructor explained the malfunction and the corrective actions taken."

- **DZSO Recommendations:** "Always ensure perfect stability on drogue release to minimize chance of line twists. Try arm and leg out method to grab wind next time in attempt to get the body spinning in the opposite direction"
- **SMS Analyst Recommendations:** "Attempt to kick out of the line twist, instructing the student to assist if necessary. If unsuccessful, perform emergency procedures by pulling the cutaway handle, ensuring full release of the main risers, physically assisting if necessary. Immediately pull the reserve handle." (Sigma Tandem Manual Chapter 3: Deployment Problems). Regular review of UPT Sigma Tandem Manual Chapter 1: Reserve Procedure. Review of equipment and specific packing procedures should be completed consulting with a Rigger if necessary.
- **Action by:** Tandem Instructors; Packers; DZSO; DZOs

2026T-17

- **Category:** Freefall
- **Passenger Age:** 20
- **# of tandem skydives (instructor):** 940
- **Container:** UPT
- **Main Canopy:** Icarus TX2 330
- **Details:** "A tandem pair exited the aircraft at 18,000 feet with a camera flyer. The tandem instructor performed a stable, sitting exit but did not throw the drogue. The camera flyer followed throughout the entire drogue less freefall. The instructor realized the drogue had not been thrown upon reaching the intended opening altitude of 6,000 feet. The left-side release did not function, so an attempt was made on the right-side release, which also did not function. The instructor felt that the drogue remained in the pouch and set it immediately. The instructor then recalled the saying "no drogue, no main," recognized that altitude was becoming low, and pulled the reserve four seconds after setting the drogue. The reserve deployed normally, and the tandem pair landed safely in the designated landing area with the drogue in tow. It was later noted that the system was fully open by 3,100 feet, as recorded on the instructor's Ares2 altimeter."
- **DZSO Recommendations:**
    - "Human Factors Fatigue – The tandem instructor had completed fun jumps as well as tandem work over the previous two days, at a higher rate than usual. The instructor woke up early to be ready. The day before the incident, the instructor asked whether they were on the schedule and stated that it was acceptable but that fatigue would likely be a factor.
    - Stress – The first load of the day was at 18,000 feet, and the instructor was not originally scheduled for it. Manifest required an additional instructor and requested participation at the last minute. The instructor had extensive experience with that altitude over the past 20 years but had not completed any such jumps during the current season. The instructor was rushed into preparing the passenger while also trying to recall procedures specific to high-altitude tandem jumps. The instructor boarded the aircraft stressed and fatigued.
    - Physiology Hypoxia – After investigation, all 18,000-foot protocols were confirmed to have been followed, including supplemental oxygen. The instructor did not report any symptoms of hypoxia prior to or during the jump. This factor was examined due to the nature of the incident occurring on an 18,000-foot jump.
    - Decision Making Instructor - Operational decision – The instructor chose to proceed with the jump to support operations, despite experiencing fatigue and stress.
    - Procedures – The instructor did not set the drogue after exit. Upon discovering the issue, the instructor attempted both drogue releases, set the drogue, and then pulled the reserve handle. The instructor also did not perform handle checks in freefall.
    - Operations Operational decision – Operations made a last-minute decision to assign the instructor to a tandem student based on weight suitability for that load. Operations informed the instructor of the assignment, and the instructor did not report fatigue and proceeded with jump preparation.
    - Conclusion  This incident reflects shared responsibility between Operations and the instructor. Instructor - Instructors have a duty to refuse a jump if they feel unable to carry it out safely.
    - Retraining – The instructor will undergo retraining with a UPT Tandem Examiner to review emergency procedures and address the procedures used during the incident. The instructor will also complete jumps with the examiner to demonstrate proper procedures and rebuild confidence.


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- General training – All instructors will receive a refresher on the duty to refuse a jump and on recognizing fatigue and stress in high-turn environments. Instructors will also receive a refresher on communicating concerns to Operations, as any instructor may refuse to jump, refuse a student, or refuse a camera flyer at any time.
- Operations -Operations share responsibility for ensuring instructors are fit to perform duties and must identify alternatives when an instructor is unfit.
- Training – Operations personnel will be retrained on decision-making related to instructors reporting fatigue or stress. Operational needs do not override safety, and Operations acknowledge that any instructor may refuse a jump. In this case, a lack of communication on the day of the jump contributed to conditions that allowed the incident to occur."

- **SMS Analyst Recommendations:** CSPA supports the root cause analysis and recommendations as provided.
- **Action by:** Tandem Instructors; Camera Flyers; DZSO; DZOs


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# 2 – STUDENT

## 2.1. Accident

2026S-03

- **Category:** Landing
- **Student Type:** PFF
- **Age:** 31
- **# of skydives:** 2
- **Container:** UPT Vector SE
- **Main Canopy:** PD Navigator 260
- **Details:** Student was on complete normal landing, flare was called at correct altitude. Student did not complete PLF instead dug heals in, fell forward on knees coming to a stop on all fours. Student indicated their ankle hurt and was helped back to the dropzone where they were assessed by an off duty medic. Medic applied ice and advised visiting a doctor, which the student did. Student report into the dropzone the following day that her foot was broken.
- **DZSO Recommendations:** Students are encouraged to follow proper PLF technique as taught and reviewed throughout the PFF course.
- **SMS Analyst Recommendations:** 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.
- **Action by:** Jumpers; Coaches; Instructors; DSZO

2026S-04

- **Category:** Landing
- **Student Type:** Static Line
- **Age:** 27
- **# of skydives:** 2
- **Container:** Icon
- **Main Canopy:** Solo 270
- **Details:** After a bad exit, student grabbed the strut and did not let go at first. Left aircraft. Followed instruction well until about 150' above ground. Was asked to do a small left turn which they did, but even after asking them to keep hands up, they did not. Student did a very slow turn into the ground and flared at almost ground level. Student hit hard and did a tumble. People went to give first aid. Student insisted they were okay and walked in with help. It appeared they were staring at the ground and may have fixated on it. After encouragement from staff and friends, the student said they would go to the hospital to get checked out. The students ankle was sore and they may have hit their head.
- **DZSO Recommendations:** It appears the student was fixated on the ground and froze. They also froze at exit for a while but was hanging on the strut which made it impossible to bring back into aircraft. When the student is feeling better we will talk to them but the recommendation is to try another sport.
- **SMS Analyst Recommendations:** Student and Instructor to review and physically rehearse climb out and exit procedures (JM Reference Manual, Appendix: Dispatching Techniques for Specific Aircrafts). 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. Review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors. DZSOs should review existing operating procedures and processes as it pertains to recurrency tasks and responsibilities to mitigate risks.
- **Action by:** Jumpers; Instructors; DSZO

2026S-06

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 34
- **# of skydives:** 5
- **Container:** Mirage
- **Main Canopy:** Navigator 260
- **Details:** Student lifted their legs on landing causing them to land on their tailbone.


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- **DZSO Recommendations:** Tendency to land on their butt, need to continually reinforce proper landing position.
- **SMS Analyst Recommendations:** 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 .
- **Action by:** Jumpers; Instructors; DSZO

2026S-08

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 29
- **# of skydives:** 1
- **Container:** Conquest
- **Main Canopy:** Solo 270
- **Details:** Student was coming in for landing on first jump. Student did not finish the flare. Was recommended to go to hospital but they chose to wait until the following day.
- **DZSO Recommendations:** All students briefed immediately to focus 100% on completing the flare. Student only completed a 1/2 flare.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Instructors; DSZO

2026S-09

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 29
- **# of skydives:** 8
- **Container:** Side Winder
- **Main Canopy:** Manta 290
- **Details:** Student flared without command from GCI, about 3-4 feet high. They approached the ground with legs extended forward and wide. After finishing the flare, the student let up on the flare with the right hand. Canopy turned to the left. Student did not PLF. Mild sprain to left ankle. Basic first aid given but student has not yet decided if they will need to see a doctor.
- **DZSO Recommendations:** Debrief on the importance of flaring technique given. Once healed, practice PLF. Discussion on importance of PLF and body position on final.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Instructors; DSZO

2026S-13

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 53
- **# of skydives:** 0
- **Container:** Wings


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- **Main Canopy:** Solo 270
- **Details:** Successful radio control. Proper flare execution, possibly a bit fast. Student popped up 6 feet at the end of their flare and broke left femur on impact.
- **DZSO Recommendations:** Student flared too quickly. Recommend a slow steady flare. More focus on PLF in the future.
- **SMS Analyst Recommendations:** 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.
- **Action by:** Jumpers; Instructors; DSZO

2026S-14

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 47
- **# of skydives:** 0
- **Container:** Wings
- **Main Canopy:** Solo 270
- **Details:** "Witness Account: Student came in slow, flared quickly which popped them up. Student PLF'd and fell backwards. Student impacted hard on their feet, which may have jarred the jumpers head. The canopy caught some wind and pulled the student backwards however the jumper does not recall hitting their head at all. Jumper went to the ER via ambulance. Jumper was cleared by doctors, however they did have concussive symptoms. Jumper previously had a TBI unrelated to skydiving.
    - GCI Account: Jumper was coming in on final, everything was normal, flared jumper at regular height. Jumper flared faster than required. It caused the parachute to pop up 5 feet which created a harder landing than normal resulting in a PLF. At the time the student gave a thumbs up. The drop zone was not notified about the injury until 31Jul2026. Everything appeared fine after the jump."
- **DZSO Recommendations:** Jumpers were briefed on the proper flare method and execution of a PLF. They were advised to report any injury the same day. This injury was not reported.
- **SMS Analyst Recommendations:** Waivers should be reviewed for any medical conditions that could affect a participant's ability to complete a safe skydive. 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.
- **Action by:** Jumpers; Instructors; DSZO, Manifest

2026S-15

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 41
- **# of skydives:** 0
- **Container:** Sunpath
- **Main Canopy:** Solo 270
- **Details:** Jumper was being radio'd in. All went well until downwind leg. Student responses became slow and confused. Turning left when told to turn right, etc. Half way downwind the student stopped responding. Parachute drifted south (downwind) landed on taxi way 100 meters. When first responders approached, the student was unconscious. The student was stabilized and transported by ambulance to the hospital. Doctors suspected the student had a seizure. No further injuries.
- **DZSO Recommendations:** This was unforeseen and unpredictable. Fortunately the student did not get injured more than they did. Student will not jump again until cleared by doctors.
- **SMS Analyst Recommendations:** Waivers should be reviewed for any medical conditions that could affect a participant's ability to complete a safe skydive.
- **Action by:** Jumpers; Instructors; DSZO, Manifest


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2026S-16

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 24
- **# of skydives:** 6
- **Container:** Sunpath
- **Main Canopy:** Solo 270
- **Details:** "A student completing an IAD jump on their fourth skydive was working on maintaining a stable arch. The climb out, hang, and exit were all performed correctly, and the pilot-chute throw was clean. The student demonstrated good control and was cleared for practice pulls. During landing, the student flew a normal final approach. The student initiated a flare too high, released the toggles, and attempted to flare again. This resulted in a relatively hard landing, though not excessively hard according to the supervising instructor. The student stood up, appeared stable, and walked back to the hangar without assistance. Later, while the instructor was packing, the student—who normally approaches for a debrief—was found sitting on the couches with a foot elevated. A debrief was conducted, and it was clear the student was experiencing significant discomfort. The instructor recommended medical evaluation. The student went to the emergency department, where X-rays confirmed a fracture of the fibula."
- **DZSO Recommendations:** Student didn't follow training. After high flare, they let toggles up and tried to stab out of it after the canopy already surged for the ground. Student admitted to the fault and fully understands wrongdoing. Lack of experience had led the student to the wrong decision to let their hands up.
- **SMS Analyst Recommendations:** 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.
- **Action by:** Jumpers; Instructors; DSZO

2026S-17

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 31
- **# of skydives:** 1
- **Container:** Sunpath
- **Main Canopy:** Solo 270
- **Details:** "A student who had completed a First Jump Course earlier in the day proceeded to make their initial skydive. As the only participant in the course, the student received full instructional attention, and all required material was thoroughly covered. The student appeared to understand the information well and demonstrated readiness during ground practice. During the jump, the student struggled significantly during the climb out and exit—one of the most challenging exits observed by the jump master, who nearly had to physically assist the student off the step. After dispatch, the student experienced a normal deployment. Under canopy, the student generally responded to radio guidance appropriately for a first-time jumper. The student was turned onto final approach at approximately 250 feet. Shortly afterward, the student began to panic, pulling hard on one toggle and then the other in an attempt to correct heading. At around 100 feet, radio instructions were repeated multiple times to raise both hands fully, as the student's left toggle remained about halfway down while the right was fully raised. Despite continued commands to raise the hands, the student did not do so. Radio instructions then shifted to feet and knees together, followed by readiness cues and flare commands. The student initiated the flare late—approximately 5 to 8 feet above the ground—while still in a constant turn, ultimately turning into the ground. Although the canopy used was the largest and slowest student wing available, the landing was still hard enough to cause injury. Upon reaching the student, the jump master observed the ankle positioned abnormally. Emergency services were contacted, and the student was transported to the hospital. While the exact diagnosis was not confirmed at the time, the injury appeared consistent with fractures of the fibula and tibia."
- **DZSO Recommendations:** "It was noted that there was no clear additional corrective action available. The student had been fully trained within hours of the jump, and all necessary information had been provided that same morning. The student had been instructed during the First Jump Course that hands must remain all the way up on final approach. One possible recommendation identified was that the ground-to-air radio instructor could have conducted additional practice with the student before the jump, or provided more in-air familiarization to help the student become accustomed to the instructor's voice. The instructor typically has students perform a practice turn and flare while under canopy to assess their abilities and reaction speed to radio commands. It was believed that the student froze and became scared during the landing sequence. The student had appeared confident and ready to pursue the solo license and had paid for a full week of training to obtain it."


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- **SMS Analyst Recommendations:** "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. Review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors. "
- **Action by:** Jumpers; Instructors; DSZO

2026S-18

- **Category:** Landing
- **Student Type:** PFF
- **Age:** 73
- **# of skydives:** 1
- **Container:** Wings
- **Main Canopy:** Navigator 260
- **Details:** This was the students first PFF jump and had done a previous tandem skydive. The student is older and seemed in reasonable health. The skydive overall went very well and all goals set for the jump were met. The student did well with radio instruction and at the same time of the landing it seemed they timed the flare well with radio instruction and perhaps did not fully finish the flare on landing. The student attempted a PLF and instead of rolling to the side, went more forward. However it appeared to be a pretty reasonable landing. The student took a moment or two before calling over the instructor and informed them that they believed they had broken their ankle.
- **DZSO Recommendations:** Not reported.
- **SMS Analyst Recommendations:** 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 .
- **Action by:** Jumpers; Instructors; DSZO

## 2.2. Incident

2026S-07

- **Category:** Landing
- **Student Type:** IAD
- **Age:** 29
- **# of skydives:** 0
- **Container:** Javelin
- **Main Canopy:** Sabre 2 230
- **Details:** Student completed canopy control checks after opening. Was instructed to go to holding area B and immediately went to the correct location. Student did a good job maintaining position in the holding area and responding to the radio. Instructed to begin downwind at 1000 ft and appears to be at approximately the correct altitude on the downwind landing. Similar on instruction for the base and final leg. During final needed reminders to look ahead - student kept looking at the altimeter. Instructed to have feet and knees together and to look up at the horizon. Feet looked more out in front (similar to instructions told to tandem students for landing). Instructed to flare multiple times and although student began flare at a reasonable altitude they flared only to shoulder level and landed fairly hard on their glutes, slightly on right side. Appeared to have the wind knocked out of them, but was able to stand and walk to the cart and walk back to the hanger. Follow up with student after the jump they indicated a bruise to the right buttock otherwise no injuries.
- **DZSO Recommendations:** Student was watching (almost fixated) on their altimeter through the final 100' and flared only to their shoulders. Student was debriefed about the importance of landing pattern awareness including, looking to the horizon, keeping feet and knees together, and effective flaring as trained and practiced prior to the skydive. More direct instructions from the GCI are recommended and to use a louder voice over the radio to ensure clarity for the student.
- **SMS Analyst Recommendations:** 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


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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 by:** Jumpers; Instructors; DSZO

2026S-11

- **Category:** Exit
- **Student Type:** IAD
- **Age:** 24
- **# of skydives:** 0
- **Container:** Sidewinder
- **Main Canopy:** Manta 290
- **Details:** Initial climb out good until point of removing foot from the step. Student would not or could not remove foot to reach a full hanging exit. JM used their foot to push students foot off the step. When students foot was off the step the student released their hand grip while partially turned towards the plane. Being still rather close to the step the students left arm appears to have hit the step (when examining video). Student was short lined. Parachute appeared to open properly. Student landed without incident
- **DZSO Recommendations:** Educating the student to anticipate the strength of the wind on climb out can help assist with a more successful climb out.
- **SMS Analyst Recommendations:** Student and Instructor to review and physically rehearse climb out and exit procedures (JM Reference Manual, Appendix: Dispatching Techniques for Specific Aircrafts).
- **Action by:** Jumpers; Instructors; DSZO

2026S-12

- **Category:** Deployment
- **Student Type:** supervised
- **Age:** 54
- **# of skydives:** 42
- **Container:** Mirage
- **Main Canopy:** Navigator 260
- **Details:** "Jumper was stable until they saw their instructor. Jumper was in an uncontrollable flip-flopping situation that they struggled to get out of. Jumper managed to get the pilot chute out late, and now completely understand to just go back to a solid arch for correction. After the chute was deployed jumper noticed that the reserve was deployed as well. Jumper was on full radio and guided in, flying a bi-plane canopy to a no flare landing with a plf landing upon impact."
- **DZSO Recommendations:** "Unstable at pull time, difficulty finding the pilot chute, deployed much lower than the designated pull time which resulted in an AAD fire. Main canopy was fully inflated and out before the reserve deployed."
- **SMS Analyst Recommendations:** "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 5.5 Altimeter Use. 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 jumper on Section 2 Preparation: Mental and Physical (CSPA PIM2A-2009) will be of great benefit. "
- **Action by:** Jumpers; Instructors; DSZO

## 2.3. Malfunction

2026S-01

- **Category:** Canopy
- **Student Type:** IAD
- **Age:** 27

- **# of skydives:** 3
- **Container:** Javelin
- **Main Canopy:** PD Navigator
- **Details:** Student completed the FJC the morning of the 9th. They went for 2 IAD jumps with the same coach. On the 3rd IAD jump the student was dispatched successfully and was under a functioning open canopy. The brake toggles were stowed on opening, and the student was flying straight. They unstowed the toggles and continued to fly straight, then performed emergency procedures. Student landed safely on the reserve canopy under the instruction of our GCI. On the ground when approached and questioned, student said "That was my mistake, I undid the knots". The toggles were finger trapped and stitched as per PD, the finger traps were still in tack on the ground, so we believe the students "knots" were the student detaching the toggles, however they remained in the keepers keeping the brakes stowed. Upon further inspection both of the toggles from the main canopy were around the students wrists. The main parachute was repacked by the head rigger. The rig was returned after previous jump 2 with brake lines unstowed. Rigger untangled the brake lines with no issues and repacked the parachute. It is believed that at some point after the pack job, the student altered the gear. We believe that the student undid the toggles after the gear was packed and ready, as the toggles can be accessed once the rig is packed. Student said that they undid the knots because they were catching on the lines while the student was collecting the parachute after the 2nd jump. The student was told in the FJC not to touch the gear without an instructor. This student was a danger and they will not be permitted to jump at our drop zone again.
- **DZSO Recommendations:** The root cause of this issue was a student who did not follow instruction and made very bad decisions. We believe they may have been trying to experience a cut away. The student is banned from returning. In the future we will make sure that students understand not to touch their gear without the supervision of an instructor.
- **SMS Analyst Recommendations:** Jumper should perform and review procedures of full gear checks prior to boarding the aircraft (CSPA PIM2A-2009; Section 3.7.1 Safety Check). Have equipment inspected by a rigger for serviceability. Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review). Additionally, review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026S-02

- **Category:** Canopy
- **Student Type:** IAD
- **Age:** 20
- **# of skydives:** 6
- **Container:** Sidewinder
- **Main Canopy:** Solo 210
- **Details:** Student exited aircraft, parachute deployed, got sent into a left turn. Student didn't like to canopy and did their emergency procedures.
- **DZSO Recommendations:** On exit the jumper experienced uncontrolled spiraling turn. Emergency procedures performed. Unconfirmed cause. Possible tension knot. both toggles still stowed. Packers briefed on proper line management during packing.
- **SMS Analyst Recommendations:** "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. Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review)."
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026S-05

- **Category:** Exit
- **Student Type:** IAD
- **Age:** 28
- **# of skydives:** 0
- **Container:** Sidewinder
- **Main Canopy:** Manta 290
- **Details:** Student climb out was normal. Student de-arched on exit, resulting on a back to earth orientation. Once main deployed it experienced a line-over malfunction. Instructor exited following student and observed cutaway procedure at approximately 2200'. Upon video review, student appeared to have caught a hand in a line as it was deploying due to body position resulting in the line getting pulled over the parachute fabric as it was deploying. Student appeared very altitude aware and conscious of his altitude. Student performed EPs and landed at the DZ without injury.


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- **DZSO Recommendations:** Student debriefed on the importance of body position on exit. Student praised for handling EPs with confidence. attitude awareness, and proceeded to make safe landing decisions.
- **SMS Analyst Recommendations:** Instructor & Student should review educational material on Exit Types (CSPA PIM 2A-2009; Section 4.7), and The Arch (CSPA PIM2A-2009; Section 5.2. Additionally, 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).
- **Action by:** Jumpers; Instructors; DSZO

2026S-10

- **Category:** Exit
- **Student Type:** IAD
- **Age:** 19
- **# of skydives:** 1
- **Container:** Sidewinder
- **Main Canopy:** Skymaster 290
- **Details:** Student did a half reverse somersault, contacted the deploying lines. Canopy opened with a significant turn. Student cut away after about one and a half revolutions. Student retained both emergency handles and then responded well to radio instructions and had a good landing under reserve.
- **DZSO Recommendations:** "Unstable exit. More ground practice recommended, focus on arch"
- **SMS Analyst Recommendations:** Student and Instructor to review and physically rehearse climb out and exit procedures (JM Reference Manual, Appendix: Dispatching Techniques for Specific Aircrafts). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review).
- **Action by:** Jumpers; Instructors; DSZO


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# 3 – EXPERIENCED

## 3.1. Accident

2026E-01

- **Category:** Landing
- **Discipline:** Formation Skydiving
- **Age:** 38
- **# of skydives:** 1084
- **Container:** Wings
- **Main Canopy:** Precision Nitron 135
- **Details:** Jumper was landing their main parachute in an alternate landing area. The jump, canopy flight, and pattern were all normal without issues. As the jumper was landing and "surfing" the grass their right foot caught a hole in the landing area. As the jumper was still travelling forward with some speed it caused their ankle (tibiotalar joint) to dislocate laterally and fracture their fibula. As the jumper rolled onto their left side to ask for assistance from another jumper on the landing area, the ankle popped back into forward facing alignment. Surgery was required. Ambulance was called and jumper was transported to local hospital.
- **DZSO Recommendations:** Landing area is checked regularly by DZSO for holes and repair is done as needed. The holes are common in the alternate landing area due to regular animal activity.
- **SMS Analyst Recommendations:** Assess, flag, and/or repair potential obstacles and hazard areas in landing area, such as uneven ground, animal holes, drainage, and so forth to minimize potential injury.
- **Action by:** Jumper; Coaches; Instructors; DZSO

2026E-09

- **Category:** Landing
- **Discipline:** Vertical Formation Skydiving
- **Age:** 34
- **# of skydives:** 68
- **Container:** Icon
- **Main Canopy:** Pilot 170
- **Details:** Faced turbulence on the final approach. Ended up too high on the final and risked over shooting the landing area. Jumper flared a bit too high and this led to the canopy stalling and jumper ended up landing on one foot. After discussing with canopy course instructor, they suggested that the brake lines were a couple of inches short which led to aggressive stall
- **DZSO Recommendations:** Instructor went over jump and landing with jumper to review landing procedures.
- **SMS Analyst Recommendations:** 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). Jumpers should review and practice the Parachute Landing Fall (PLF) referencing SSI Reference Manual, Appendix - Skydiving Technical Knowledge PLF Landing. Have equipment inspected by a rigger for serviceability.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-10

- **Category:** Landing
- **Discipline:** Wingsuit
- **Age:** 27
- **# of skydives:** 800
- **Container:** Icon
- **Main Canopy:** Epicene Pro2 135
- **Details:** "Jumper was on final approach and started their flare and almost immediately lost flight and landed directly on their butt with legs sliding in front of them. Jumper was reached by first responders within moments and was talked to and treated until paramedics arrived. Jumper did not lose consciousness at any point and was taken to hospital for treatment."
- **DZSO Recommendations:** N/A
- **SMS Analyst Recommendations:** Review educational material on Landing Techniques (CSPA PIM2A-2009; Section 6.7) and Landing Problems and Solutions (CSPA PIM2A-2009; Section 6.17.5). Have equipment inspected by a rigger for serviceability.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers


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2026E-12

- **Category:** Landing
- **Discipline:** Other
- **Age:** 23
- **# of skydives:** 700
- **Container:** Icon
- **Main Canopy:** PD Sabre 2 135
- **Details:** Uneventful freefall on a camera jump for a Tandem skydive. During landing the jumper hyperextended their left knee. After finishing the flare, jumper transitioned into a run to slow down after touchdown. While running, the jumper slipped on wet grass causing their left knee to hyperextend. Jumper fell onto their left side. Immediately following the incident, jumper experienced pain in the back of their left knee. No other injuries were noted at the time.
- **DZSO Recommendations:** As an experienced jumper, there is no other recommendations other than rest for leg injury was medically checked out.
- **SMS Analyst Recommendations:** Assess, flag, and/or repair potential obstacles and hazard areas in landing area, such as uneven ground, animal holes, drainage, and so forth to minimize potential injury.
- **Action by:** Jumpers; Coaches; Instructors; DSZO

2026E-17

- **Category:** Landing
- **Discipline:** Formation Skydiving
- **Age:** 45
- **# of skydives:** 78
- **Container:** Javelin
- **Main Canopy:** Navigator 200
- **Details:** "Upon landing, jumpers foot caught on the target mat and slipped. It was their first jump on a NAV 200; they flew a great landing pattern, but during the final approach, they kept shouting ""Hello, hello, hello"" instead of focusing on the landing. Jumper executed a nice flare at the right altitude, but when their feet touched the target mat, they stopped abruptly, causing them to fall flat on their stomach. The mat material is very high-traction. Ground support went over and helped them remove helmet and parachute. An ambulance was called, and onsite staff came over to assist with first aid. The jumper suffered a broken tibia and fibula. "
- **DZSO Recommendations:** "The first recommendation is to remind jumpers to take downsizing seriously and to pay close attention to the pre-jump briefing. Even though everyone agreed the jumper was ready to jump a 200-square-foot canopy, the jumpers lack of focus during the landing could well have led to this situation.The second recommendation concerns whether canopy changes should be made on the ground."
- **SMS Analyst Recommendations:** Review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors. Jumpers should review and practice the Parachute Landing Fall (PLF) referencing SSI Reference Manual, Appendix - Skydiving Technical Knowledge PLF Landing. Jumper and a coach and/or the DZSO should review in depth CSPA PIM 2B Section 3.13 Parachute Downsizing Criterion.
- **Action by:** Jumpers; Coaches; Instructors; DSZO

2026E-26

- **Category:** Landing
- **Discipline:** Canopy Piloting
- **Age:** 31
- **# of skydives:** 1400
- **Container:** Javelin
- **Main Canopy:** Comp Velo 79
- **Details:** "During a recent competition period, a jumper attended both a U.S. canopy piloting meet and a national Canadian canopy piloting training camp. The jumper arrived several days before the competition to train and felt prepared going into the event. Because it was the first competition of the season, the jumper chose to fly a larger, more conservative wing and finished with solid scores despite having only 15–20 jumps for the year. The day after the competition, the jumper began adding weight to increase wing loading on their current canopy, aiming to transition back toward the wing loading of a smaller canopy. Later, the jumper hooked up a 79-square-foot wing and manifested for a high-altitude deployment, asking a friend to observe from the ground. The jump and opening were uneventful, and the jumper performed standard canopy-control exercises to assess flight characteristics. The original plan was to land along the distance course. However, upon entering the pattern, the jumper identified a student canopy flying in the same general area and noted that the designated


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landing direction for the day was 180 degrees opposite of the distance course. Continuing with the planned turn would have created both a conflict with the student and a jousting scenario. The jumper elected to abort the turn, perform a simple 90-degree approach, and land in the same direction as the student. For safety, the jumper still initiated the turn over the pond, as they were flying a different canopy than usual. The jumper had never landed in that direction at this dropzone and did not realize the far side of the pond had a drop-off of approximately 3–4 feet. Coming off the pond, the wing gained an additional 3 feet of altitude, creating a deficit of more than 6 feet on final. The jumper still had excess speed and attempted a slide-in landing. The touchdown area, however, consisted of sticky, uneven sand. The jumper's heels made contact first, but instead of sliding, the sand grabbed, causing the heel to dig abruptly. The jumper stood immediately and recognized instability in the ankle. The jumper transported themselves to a hospital, where imaging confirmed the need for surgical intervention. The injury resulted in the placement of seven screws and a plate in the left fibula."

- **DZSO Recommendations:** "A few days after the incident, the jumper reviewed the jump footage with two coaches. Their assessment was that the jumper had not made any significant technical errors; the outcome was primarily the result of an unexpected "pop" off the pond combined with the sticky sand in the landing area. The jumper had chosen the safer option by aborting the turn to avoid conflict with a student canopy and executed a full flare to reduce forward momentum. The degree of rotation was minimized to a simple 90-degree turn. The coaches noted one improvement for future decision-making: conducting a full landing-area inspection, including zones not originally intended for use. In the event of an abort or a switch to a secondary plan, having prior knowledge of all potential landing surfaces would provide additional safety margins and reduce the likelihood of encountering unexpected terrain features."
- **SMS Analyst Recommendations:** CSPA supports the root cause analysis and recommendations as provided.
- **Action by:** Jumpers; Coaches; Instructors; DSZO, Manifest

2026E-28

- **Category:** Landing
- **Discipline:** Other
- **Age:** 31
- **# of skydives:** 6200
- **Container:** Micron 306
- **Main Canopy:** Fluid Wings Airwolf 79
- **Details:** The skydiver conducted the landing pattern in a standard and controlled manner. During the final phase of the landing, the skydiver decelerated by sliding. Near the end of this slide, a brief loss of balance prompted the skydiver to place a hand on the ground for stability. This contact resulted in a hand injury. A subsequent medical evaluation confirmed a fracture of a small bone located on the back of the hand.
- **DZSO Recommendations:** Raise awareness among skydivers about the risk of hand and wrist injuries when using their hands to cushion a fall or correct an imbalance.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Coaches; Instructors; DSZO

2026E-34

- **Category:** Landing
- **Discipline:** Other
- **Age:** 31
- **# of skydives:** 502
- **Container:** Wings
- **Main Canopy:** Sabre 2 150
- **Details:** Jumper performed a tandem video without incident. Jumper deployed main canopy without incident. Winds were coming from the south. Jumper landed behind main building. That area had turbulent winds. Jumper set up for a south facing landing at the north end of the field. At approximately 40 feet above the ground the jumpers parachute experienced rotors and dirty wind deflating the canopy cells. Jumper fell vertically under a partially inflated canopy from 10-20 feet.
- **DZSO Recommendations:** Landing in clean air at target on south wind days would have eliminated turbulence. Jumper was taken by ambulance to hospital and will require surgery for three broken ankle bones.
- **SMS Analyst Recommendations:** "Turbulence is a violent or unsteady movement of air (bumpy air). It is created by many factors and can affect our canopies in a negative manner if not dealt with properly (especially as we get closer to the ground)."" Review educational material in the CSPA Sport Canopy Endorsements A & B CoP, Section 2: Turbulance."
- **Action by:** Jumpers; Coaches; Instructors; DSZO


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2026E-36

- **Category:** Landing
- **Discipline:** Formation Skydiving
- **Age:** 42
- **# of skydives:** 275
- **Container:** Infinity
- **Main Canopy:** Sabre 2 170
- **Details:** The jumper appeared to be set up for a downwind landing near the target but was overshooting. At approximately 200 feet, a 90-degree turn to crosswind was made. The turn was safe enough and the canopy returned to stable flight, but the jumper was then at risk of landing on the tarmac. The jumper ultimately landed in the grass but flared slightly high and appeared to reach for the ground with one foot. The jumper reported catching a foot on a hole or rough spot and falling forward. The jumper sustained a right-side fibula fracture and some injury to the left wrist.
- **DZSO Recommendations:** Light wind day, cross wind landing, foot caught on rough spot on field, injury sustained.
- **SMS Analyst Recommendations:** "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). Review of CSPA PIM2B; Section 6.3.1 Factors Affecting Human Performance, will assist in recognizing possible performance inhibiting factors. Additional review of the CSPA Sport Canopy Endorsement A & B CoP specifically Section 3 regarding. Using Effective Glide by Adjusting Flight Modes"" will be beneficial. Jumpers should review and practice the Parachute Landing Fall (PLF) referencing SSI Reference Manual, Appendix - Skydiving Technical Knowledge PLF Landing."
- **Action by:** Jumpers; Coaches; Instructors; DSZO

**3.2. Incident**

2026E-06

- **Category:** Freefall
- **Discipline:** Vertical Formation Skydiving
- **Age:** 49
- **# of skydives:** 715
- **Container:** Wings
- **Main Canopy:** PD Sabre 135
- **Details:** During a freefly jump - the first jump of the year, jumper apparently lost altitude awareness due to a combination of factors. First jump of the year, new altimeter, the freefly season begins with a new group.
- **DZSO Recommendations:** Ensure you are thoroughly familiar with the equipment you are using for your jump (altimeter) have a better understanding of the people you are jumping with and remain more aware of altitude
- **SMS Analyst Recommendations:**
    - "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 5.5 Altimeter Use, as well as Section 5.18 ""Break Off and Tracking. 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 jumper on Section 2 Preparation: Mental and Physical (CSPA PIM2A-2009) will be of great benefit."
- **Action by:** Jumper; Coaches; Instructors; DZSO

2026E-14

- **Category:** Landing
- **Discipline:** Formation Skydiving
- **Age:** 22
- **# of skydives:** 55
- **Container:** UPT Vector
- **Main Canopy:** Sabre 2 190
- **Details:** On landing, jumper did not complete flare and landed on butt. Severe bruising but nothing major.


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- **DZSO Recommendations:** Jumper will be taking an upcoming canopy course.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Coaches; Instructors; DSZO

2026E-16

- **Category:** Landing
- **Discipline:** Formation Skydiving
- **Age:** 35
- **# of skydives:** 33
- **Container:** Flying High
- **Main Canopy:** Navigator 240
- **Details:** Jumper did unstable exit and arched within seconds. During a turn, they lost control and started spinning. Jumper pulled the parachute around 7800-8000ft. During the landing, they attempted to land into the Wind. Due to the strong wind the forward going speed reduced to nearly zero, and they became almost stationary and wasn't moving forward over the ground. After they touched down, the Wind dragged them backward for almost 2-3 meters. While getting dragged they pulled one riser to stop getting dragged. Ended up with some scratch on the right hand. Container damaged; reserve closing flap worn nearly through- some small wear on the main canopy closing flaps.
- **DZSO Recommendations:** Discussion took place with jumper regarding stability recovery and ways to get stable. Issue with landing was discussed regarding collapsing the canopy quicker was also reviewed and understood.
- **SMS Analyst Recommendations:** Review educational material in the CSPA Sport Canopy Endorsements A & B CoP, Section 3: Winds, Effective Glide & Increased Performance. Jumper should review PIM2A Section 5.6 Heading Control - Turns. Have equipment inspected by a rigger for serviceability.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-18

- **Category:** Canopy
- **Discipline:** Other
- **Age:** 34
- **# of skydives:** 230
- **Container:** Not reported
- **Main Canopy:** Hayduke 250
- **Details:** High Pull. Had a line over in the back left corner of the canopy. Was not able to clear it with rear riser flares. Flared with toggles about 3-4 times and was able to clear it. Everything worked out.
- **DZSO Recommendations:** Informed jumper that they must always be aware of altitude and always keep this in mind fighting a canopy problem.
- **SMS Analyst Recommendations:** Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review). CSPA PIM2A Section 3.32 Advanced Correctable Situations states, "When assessing and reacting to a correctable situation, if the problem has not been corrected after two (2) tries, you must initiate your Emergency Procedures. In addition, always keep your “hard deck” altitude in mind. This is the altitude at which you must have made a decision about the usefulness of the parachute above your head, and below which it is not advisable to cut away because there may be inadequate time for reserve inflation. If you have not corrected the situation by your hard deck altitude (even if you have not tried, or have only tried once) you must initiate your Emergency Procedures. It is better to cut away a questionable canopy at 1500 feet than to realize at 500 feet that the parachute you have been trying to fix is definitely not correctable."
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-19

- **Category:** Freefall
- **Discipline:** Formation Skydiving
- **Age:** 46
- **# of skydives:** not reported
- **Container:** Aerodyne Icon
- **Main Canopy:** Pilot 117
- **Details:**


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    - "Witness (Camera Person): exit was normal; Camera person had situated themselves at their normal position above and slightly to the side. The team was working through their planned dive and the block being executed passed underneath camera person causing a loss of lift. As a result, camera person ended up colliding with the team. They passed under the camera person fairly quickly and camera person did not have time to react. The team discontinued the planned dive and maintained proximity until it was the scheduled break off altitude.
    - Witness (Team Member): Another team member was impacted by camera person falling through the formation. Taking a hit to the back of their neck and head. The impact was hard enough to knock the team members helmet loose. The team member regained orientation and maintained proximity with the group until scheduled breakoff. On the ground staff provided ice pack for team members neck."
- **DZSO Recommendations:** "Recommendation for outside camera to better anticipate the group pieces moving apart to avoid the burble. Stressed the importance of knowing the dive flow to anticipate problem areas. Staff recommended that injured team member take the rest of the day off from jumping to rest and recover."
- **SMS Analyst Recommendations:** CSPA supports the root cause analysis and recommendations of the DZSO as provided.
- **Action by:** Jumpers; Coaches; Instructors; DSZO

2026E-21

- **Category:** Aircraft
- **Discipline:** Wingsuit
- **Age:** 34
- **# of skydives:** 330
- **Container:** Wings
- **Main Canopy:** Winx 150
- **Details:** "Jumper was sitting in JM seat on a Cessna 182, there was a bit of shuffling around. Jumper exited fine and had a normal skydive. As they landed, someone came up to them and held them still telling the jumper that their Reserve pin was almost out. After carefully taking off the rig, we found that the reserve flap was open and the pin was nearly out of the closing loop sitting at 45 degree angle with the tip sunk into the grommet. Upon inspection from the rigger, a shorter closing loop was put in and the reserve was resealed. Jumper jumped the next day three more times with no issue."
- **DZSO Recommendations:** Movement in plane can create unintentional dangers. Move slowly and always protect gear. Jumper should ensure regular gear checks are being completed and reach out to a rigger if there are any questions or concerns.
- **SMS Analyst Recommendations:** Jumper should review CSPA PIM 2A Section 4.2 "Seating and Movement". Have equipment inspected by a rigger for serviceability.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers; Pilots

2026E-24

- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 44
- **# of skydives:** 651
- **Container:** Side Winder
- **Main Canopy:** Solo 210
- **Details:**
    - "Jumper Account - Jumper on a recurrency jump with a coach. Exited poised, coach dove to jumper. Coach failed to meet up with jumper although came close at about 5500 feet. Gave a thumbs up , turned and tracked away. Jumper went to pull at 3500 feet, failed to locate BOC. Attempted again, dropped head and shoulder. Jumper ended up in a forward tumble. Hard arch, got stable. Felt ground rush. Punched out. Jumper tried to turn to get away from trees but not enough altitude. Jumper realized they were going to land in the trees, found trees in close proximity that looked strong. Approached and flared into a nice soft landing. Branches not very strong so stayed in harness and waited for ground to show up. When they arrived, jumper attempted to loosen leg strap. Leg strap came undone. Jumper slid down the tree like a fire pole.
    - Witness (Coach) - No pull, AAD fire. Jumper was found and brought back with no injuries."
- **DZSO Recommendations:** Pull higher on recurrency jumps. Try twice then go to reserve. Be altitude aware. Don't sacrifice altitude for stability. There was no pull, it was an AAD fire.
- **SMS Analyst Recommendations:** "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


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    - 2500’ for B, C, and D CoP holders"" (CSPA PIM1; Basic Safety Rules - General, Section 2.5).
    - Review of PIM2A - Section 5.5 Altimeter Use. 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 jumper on Section 2 Preparation: Mental and Physical (CSPA PIM2A-2009) will be of great benefit. "
- **Action by:** Jumpers; Coaches; Instructors; DSZO

2026E-27
- **Category:** Deployment
- **Discipline:** not reported
- **Age:** not reported
- **# of skydives:** not reported
- **Container:** Vector 3
- **Main Canopy:** Aerodyne Pilot 230
- **Details:** Opened at 4k from a good stable arch. Threw pilot chute, jumper felt like it was in an explosion. Loud bang, saw stars. Looked up and saw what was left of slider rocketing down at warp speed. Had a usable chute, flew it. Viewers on ground heard the opening as well.
- **DZSO Recommendations:** Rig was rented by an outside contractor rigger with nothing to do with dropzone. Rigger will be informed, jumper warned when renting to be careful and fully inspect and rig they rent from anyone. Unknown if it was poor maintenance or just a hard opening.
- **SMS Analyst Recommendations:** Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 Activation). Have equipment inspected by a rigger for serviceability. Ensure Standard Operating Procedure (SOP) in place for packers and/or riggers to report any equipment concerns.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-35
- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 35
- **# of skydives:** 19
- **Container:** Javelin
- **Main Canopy:** Navigator 220
- **Details:** Solo was practicing front loops with a C1 conducting their evaluation jump. At the end of the jump solo motioned to deploy and flipped forward while pulling PC out. Solo rotated, D-bag snagged on arm briefly and possibly some riser slap on the neck. System eventually righted her position and jumper opened with some line twists. Landed safely, no medical attention required.
- **DZSO Recommendations:** Reviewed with novice body position at pull time, and not holding on to the pilot chute longer than it takes to throw it. Practiced pull sequence on the mat. Novice was also encouraged to jump more often to help with currency challenges
- **SMS Analyst Recommendations:** Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 Activation).
- **Action by:** Jumpers; Coaches; Instructors; DSZO

**3.3. Malfunction**

2026E-01
- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 37
- **# of skydives:** 3200
- **Container:** Mirage G4.1
- **Main Canopy:** Fluid Wings Airwolf 2 79
- **Details:** Second jump of the day, the first went well. Retake a jump with a student, everything goes smoothly. The student opens at 5500 feet successfully. Then jumper separates to open at 4500 feet. Very violent opening followed by a backflip, leading the jumper to believe broken lines. Cutaway then reserve opening after stabilization without incident. All equipment was recovered. Inspection of the main canopy revealed no problems. The whole set up was jumped six times the next day without issue.


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- **DZSO Recommendations:** First time since jumping this equipment that such a violent incident occurred. The feeling is that it was just a random unlucky moment.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Riggers; Packers; DZSO

2026E-03

- **Category:** Canopy
- **Discipline:** Hop n Pop
- **Age:** 44
- **# of skydives:** 171
- **Container:** Mirage G4.1
- **Main Canopy:** PD Sabre 2 190
- **Details:** Diving exit, canopy opened properly and passed function checks at 4000'. Played under canopy (Front riser dives and turns) until 3000'. Turned back towards DZ with an aggressive hook turn. Line twists started immediately and turned into a diving turn. Cut away at around 2000'-1900'. Flew the reserve canopy back and landed without incident in the main landing area of the DZ
- **DZSO Recommendations:** Recommendation was to ensure smooth control inputs and to stop the initial turn prior to commencing a turn in the opposing direction. Also discussed the minimum cutaway altitude and when to stop canopy manoeuvres.
- **SMS Analyst Recommendations:** "Coordinated turns can be a lot of fun and can significantly increase the speed of your turn. The caution comes with turning in the opposite direction abruptly. If you gain too much momentum in one direction (e.g. multiple coordinated turns in a series), then suddenly turn in the opposite direction, the lines can become slack due to the abrupt direction change and the canopy trying to change direction. Once this happens the suspended weight and the canopy are traveling in different directions, and now there is a potential to induce line twists." CSPA Sport Canopy Endorsements; Section 5 Coordinated Turns. Jumper should also review the CSPA Sport Canopy Endorsement; Section 3 Front Riser Turns.
- **Action by:** Jumpers; Coaches; Instructors; DSZO

2026E-04

- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 29
- **# of skydives:** 49
- **Container:** Sunpath
- **Main Canopy:** PD Navigator 240
- **Details:** After a successful freefall jumper deployed pilot chute at 3500' opening sequence smooth, right 3 cells were not inflated. After two toggle flares and rear riser flare, jumper executed emergency procedures. Jumper located handles and followed EP training. Landed safely under reserve, handles and all gar recovered.
- **DZSO Recommendations:** Equipment was inspected and no evidence to cause the malfunction was discovered. Actions by jumper were concluded to be appropriate.
- **SMS Analyst Recommendations:** Have equipment inspected by a rigger for serviceability. Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review).
- **Action by:** Jumpers; Riggers; Packers; DZSO

2026E-05

- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 32
- **# of skydives:** 22
- **Container:** Icon
- **Main Canopy:** Aerodyne 270
- **Details:** Jumper did some front loops stopping at 5500' for pull at 4000'. Pull was normal but jumper kept falling and went to reserve opening just below 3000'. Witness said bag(main) was hanging below jumper on landing. Possible RSL hang up - Single Action system reserve deployment.


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- **DZSO Recommendations:** Jumper followed emergency procedures. Malfunction is being investigated by rigger.
- **SMS Analyst Recommendations:** Have equipment inspected by a rigger for serviceability. Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review).
- **Action by:** Jumpers; Riggers; Packers; DZSO

2026E-07

- **Category:** Deployment
- **Discipline:** Wingsuit
- **Age:** 47
- **# of skydives:** 1500
- **Container:** Sunpath
- **Main Canopy:** PD Horizon 150
- **Details:** Main opened stable in complete line twists. Jumper was pinned with their head back. Fought line twists while monitoring altitude, at 2000' performed cutaway. Jumper accessed winds and decided landing in an alternate landing area was safest. Found open field and landed safely
- **DZSO Recommendations:** None
- **SMS Analyst Recommendations:** Jumper should review proper body position during wingsuit deployment with a CSPA Coach 3 (Wingsuit). 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 as per the manufacturer should be completed and consult with a Rigger if necessary.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-08

- **Category:** Deployment
- **Discipline:** Canopy Formation
- **Age:** 37
- **# of skydives:** 776
- **Container:** Wings
- **Main Canopy:** Gangster 135
- **Details:** Planned jump - 4W flock from altitude. Exited aircraft from 10,800', delayed 5 seconds for deploy. Deployed on heading then began downward spirals. Checked toggles, everything appeared to be seated. Jumper tried pulling out of the spiral with rears but nothing changed. Trouble shot the issue for 2000' then cut away. Very likely a toggle fire that the jumper was unable to identify or resolve.
- **DZSO Recommendations:** Experienced jumper. 1000+ pack jobs, cause not clear.
- **SMS Analyst Recommendations:** Review of equipment and specific packing procedures should be completed consulting with a Rigger if necessary. Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review).
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-11

- **Category:** Deployment
- **Discipline:** Movement/Angle
- **Age:** 55
- **# of skydives:** 9200
- **Container:** Firebird
- **Main Canopy:** JFX-2 89
- **Details:** 4 way tracking jump, after breakoff jumper deployed at 4500 ish. Jumper had 1 line twist, attempted to unpin but the canopy started diving then jumper was on their back spinning horizontally. (typical small main Mal type). Jumper cutaway and reserve opened awesome- new MARD was installed so it was quick! Jumper landed in the main field uneventfully. Main was located near the dz with free bag still attached to risers because of the MARD.
- **DZSO Recommendations:** Jumper had a Malfunction, normal cutaway, no injury, no equipment damage.
- **SMS Analyst Recommendations:** 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;


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Section 6.1.1 Canopy Malfunctions Review). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-13
- **Category:** Freefall
- **Discipline:** Wingsuit
- **Age:** 57
- **# of skydives:** 604
- **Container:** Icon
- **Main Canopy:** Pilot 7 207
- **Details:** Following a premature opening, the skydiver had to perform emergency procedures. The main canopy and deployment bag on reserve were not found estimated 2-4km from dropzone.
- **DZSO Recommendations:** The problem has been pointed out to the jumpers rigger. A check will be required by the dropzone prior to his next jump.
- **SMS Analyst Recommendations:** Have equipment inspected by a rigger for serviceability.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-15
- **Category:** Canopy
- **Discipline:** Freefly
- **Age:** 53
- **# of skydives:** 6376
- **Container:** UPT Vector
- **Main Canopy:** VK 75
- **Details:** Tension knot on opening above the rear risers.
- **DZSO Recommendations:** It happens.
- **SMS Analyst Recommendations:** 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. Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review).
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-20
- **Category:** Deployment
- **Discipline:** Movement/Angle
- **Age:** 26
- **# of skydives:** 1100
- **Container:** Wings
- **Main Canopy:** Crossfire 119
- **Details:** Chopped line twists. Landed on site.
- **DZSO Recommendations:** No recommendations. Just bad body position as per jumper.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-22
- **Category:** Deployment
- **Discipline:** Other
- **Age:** 32
- **# of skydives:** 3700
- **Container:** UPT


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- **Main Canopy:** JFX2 94
- **Details:** Exit and Freefall were unremarkable. On Deployment all the fun occurred. An absolute spinner of a tension knot was immediately present and discovered. Flaring the canopy, using a single toggle, a rear etc. nothing stopped the spin. A cut away was performed, stability achieved, a reserve fired into the air. A reserve freebag was lost in a nearby field.
- **DZSO Recommendations:** Not reported.
- **SMS Analyst Recommendations:** 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. Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review).
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-23

- **Category:** Canopy
- **Discipline:** Movement/Angle
- **Age:** 30
- **# of skydives:** 1335
- **Container:** UPT
- **Main Canopy:** Gangster 90
- **Details:** Jumper changed their main canopy from a Sabre3 97 to a Gangster 90 the night before. Jumper felt ready to do it with having done 205 jumps on the sabre3 97. This was their first jump on it the following morning. After an uneventful angle coaching jump jumper gave to a student, they opened the parachute at 4500'. The opening was great! Jumper flew the canopy straight and started taking off the RDS. Jumper had previous experience with RDS systems but the canopy started flying from left to right. Jumper tried to compensate, put the RDS halfway in their T-Shirt but overcompensated on one side and got stuck in a very steep, diving turn. Jumper tried pulling on the opposite rear riser but it did not work. They did their best to stop the turn but did not think on unstowing the brakes. After several seconds jumper decided to perform emergency procedures and was sitting in the harness under reserve at 1000'. Uneventful landing in the appropriate landing area.
- **DZSO Recommendations:** The jumper has been coached from a few people for their downsize and was taking the coaching appropriately. Although, the jumper has not been briefed about potentially being stuck into a G-Turn like this. When compensating in the harness or pulling on the opposite rear riser isn't enough, unstowing the brakes should be the next manoeuvre to try for getting out of a diving turn like this one. We believe it is very important to talk about this scenario happening when people downsize into a harness sensitive canopy like this one. This briefing will be spread out around the staff and fun jumpers at the DZ.
- **SMS Analyst Recommendations:** CSPA supports the root cause analysis and recommendations of the DZSO as provided. Jumper and a coach and/or the DZSO should review in depth CSPA PIM 2B Section 3.13 Parachute Downsizing Criterion.
- **Action by:** Jumpers; Coaches; Instructors; DSZO

2026E-25

- **Category:** Deployment
- **Discipline:** Movement/Angle
- **Age:** 36
- **# of skydives:** 950
- **Container:** Vector
- **Main Canopy:** Airwolf 90
- **Details:** Freefall portion went as planned. Deployed and immediately into a diving spiral to the left. Grabbed right riser to get wing overhead and stop the spiral. Through this jumper noticed a tension knot on the left side. Jumper popped left toggle and pulled in an effort to clear the knot. It was not successful. Then heard audible hard deck alarm, jumper cut away and before they could reach for reserve handle, the skyhook had the reserve out. The spinning mal resulted in 6-8 twists on the reserve. Jumper has not been unable to locate main or free bag/reserve PC.
- **DZSO Recommendations:** Not reported.
- **SMS Analyst Recommendations:** 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. Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review).
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers


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2026E-29

- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 31
- **# of skydives:** 13
- **Container:** Side Winder
- **Main Canopy:** Manta 290
- **Details:** Freefall uneventful. Upon deployment jumper noticed canopy was not looking as it should. Performed canopy control check as taught and noticed canopy was not performing as it should. It was a low speed malfunction. Jumper noticed a line over the center of the parachute and initiated EPs at 2700 feet. Landed safely at LZ. Canopy was located close to LZ.
- **DZSO Recommendations:** Jumper initiated EPs as trained. A discussion with the packer identified nothing out of the normal packing procedures, however education was reviewed specific to maintaining clean line tension throughout the pack job.
- **SMS Analyst Recommendations:** Jumper 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 by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-30

- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 59
- **# of skydives:** 68
- **Container:** Sunpath Javelin
- **Main Canopy:** Navigator 240
- **Details:** Stable during FF and Opening. Deployed Normally at 4200'. Observed 2 line overs. Tried breaks. Canopy entered a turn. Preformed emergency procedures by pulling cutaway handle. Main released and reserve deployed via Skyhook. Uneventful Landing. Gear was safely recovered.
- **DZSO Recommendations:** Jumper did not pull reserve handle after pulling cutaway handle. Jumper did EP Review with PFFi immediately after the jump followed by another jump. Reviewed ensuring the Reserve handle is always pulled, even if the skyhook is actioned. Reviewed proper, patient canopy control checks.
- **SMS Analyst Recommendations:** Jumper 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 by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-31

- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 42
- **# of skydives:** 84
- **Container:** Aerodyne Icon
- **Main Canopy:** Safire 189
- **Details:** Severe line twists upon opening. Unable to undo.
- **DZSO Recommendations:** This happens sometimes.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-32

- **Category:** Deployment


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- **Discipline:** Formation Skydiving
- **Age:** 40
- **# of skydives:** 618
- **Container:** Aerodyne Icon
- **Main Canopy:** Safire 129
- **Details:** Tension knot on opening.
- **DZSO Recommendations:** Not reported.
- **SMS Analyst Recommendations:** 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 by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers

2026E-33

- **Category:** Deployment
- **Discipline:** Formation Skydiving
- **Age:** 48
- **# of skydives:** 1500
- **Container:** Mirage
- **Main Canopy:** Jyro Crossfire 129
- **Details:** A skydiver was working with a student progressing through solo training. The exit occurred at approximately 10,500 feet, with the student performing 360-degree turns. The freefall portion of the jump was uneventful. At 3,500 feet, the skydiver deployed the main parachute, which resulted in a hard opening and five line twists. The canopy immediately entered a rapid, violent spin. The skydiver spent only a brief moment attempting to clear the line twists—approximately two seconds—before initiating emergency procedures. The reserve deployed at 2,800 feet, and the skydiver was under a fully inflated reserve canopy by 2,500 feet. Video footage later showed that a toggle fired during the opening sequence, contributing to the line twists and subsequent spin. The skydiver landed safely in the designated landing area.
- **DZSO Recommendations:** Upon video review, it appeared that the left hand toggle was not seated in a stowed position upon opening. This was likely a packing error but could have also been dislodged as the risers were pulled from the rig. Suggestion to ensure proper placement of the toggles prior to finishing the pack..
- **SMS Analyst Recommendations:** Review of equipment and specific packing procedures should be completed consulting with a Rigger if necessary.
- **Action by:** Jumpers; Coaches; Instructors; DSZO; Riggers; Packers


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# 4 – Equipment

2026EQ-01

- **Container:** Sunpath Javelin
- **Main Canopy:** Sabre 3 120
- **Details:** During an equipment inspection, two problems were found:
    - 1. Incorrect routing of the spare cable. The cable did not pass through the RSL guide rings on the spare flap. Note: Equipment does not have an active RSL, and it is used in crew mode.
    - 2. Incorrect assembly of main wing soft links (soft links with rings)
- **DZSO Recommendations:** Rigger contacted Sunpath to confirm if this was a compliant way to route the cable and they confirmed that it was not. With or without RSL, it must pass through the guide rings.
- **SMS Analyst Recommendations:** When performing gear inspections or working on any piece of equipment, always consult the manufacturer's manual to ensure all recommended procedures, specifications, and requirements are fully met.
- **Action by:** Jumpers; Riggers; Packers

2026EQ-02

- **Container:** Wings
- **Main Canopy:** Sabre 2 170
- **Details:** A gear check was performed by the jumper (rigger) on a new skydiver prior to boarding the plane which included an inspection of the reserve pin and surrounding area. Everything looked fine and they went on the aircraft. Jumpers on the aircraft exited and everyone landed without incident in the designated landing area. The jumper (rigger) was bothered by the way the reserve looked when they performed a pin check and went to take a look at the Wings manual and a closer look at the jumpers rig when they were on the ground. The jumper (rigger) determined that the closing flaps were in the incorrect order, specifically the bottom flap was closed first, followed by the top flap, then the pin was inserted. The manual (Page 22 of the current manual on the website) states that the top flap is closed prior to the bottom flap. The jumper (rigger) informed the rigger that packed the reserve in question. That rigger checked the manual and confirmed the findings. The rigger was already planning to do some work on that rig and said they would fix the flap order. They were done jumping for the day so it was left at that. At the time of writing this report the owner of the rig informed us that the issue was indeed corrected by the rigger who packed it.
- **DZSO Recommendations:** N/A
- **SMS Analyst Recommendations:** When performing gear inspections or working on any piece of equipment, always consult the manufacturer's manual to ensure all recommended procedures, specifications, and requirements are fully met.

# 5 - Aircraft


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