2020 CSPA Safety Management System | Système de gestion de la sécurité 2020

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.

Les données et informations utilisées dans le système de gestion de la sécurité de l'ACPS sont privilégiées et demeurent confidentielles. Toute publication par l'ACPS de données ou d'informations provenant du système de gestion de la sécurité de l'ACPS sera diffusée uniquement à titre d'information de sécurité ou afin de favoriser la sensibilisation des parachutistes à la sécurité.

Tandem AIM Reports | Les rapports AID tandem

Accident / Incident/Malfunction	Trend	Cause	Total Jumps	Months since last jump	Proposed Corrective Action From AIM Report	Action Initiated by:
Accident	Exit	Upon exit, passenger threw legs off the step, jerking instructors arm into a hyperextension jury. Landed without incident.			Review the body position the student should assume for the exit launch and freefall. Go to the plane or aircraft mock-up, and practice in-flight procedures. The in-flight instruction should include: climbing into the aircraft and seating position, what to do on the way to altitude, the hook-up procedures and the climb out and launch from the airplane.	Tandem Instructors
Accident	Deployment	At some point, likely on opening, the canopy ripped on the top skin. Instructor continued the descent and landed hard. Both instructor and passenger were injured.			Complete canopy control check as per manufacturers guidelines.	Tandem Instructors
Accident	Deployment	Following an uneventful skydive, had a hard opening. After inspecting canopy for damage was able to do a flight control check and landed safely. Neck and shoulders injured with possible whiplash.			Tandem Instructors should review Drogue Fall Techniques and practise proper body position to minimize instability during deployment. Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Tandem Instructors; Packers; Riggers; Equipment Owner
Accident	Landing	Uneventful landing. No wind for a fast landing, passenger put their foot down and twister their ankle.			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.	Tandem Instructors
Accident	Landing	Slow flare when being assisted by the repeat tandem passenger. Injured ankle on landing during impact.			If Tandem passenger will be assisting or initiating flare, ensure technique is practiced under canopy prior to 1500 feet. If passenger does not demonstrate acceptable technique do not permit them to execute flare during landing. "If the student is to assist with the landing flare, in-air practice is a must. We recommend at least three good repetitions. Extra landing training may be required, if the student is heavy (over 200lbs), the tandem pair is landing at high altitude, or in light wind, or in general for a new tandem master." (UPT, *Sigma Tandem Manual* , MAN-013 REV 0.5 p88-89).	Tandem Instructors
Accident	Landing	After an uneventful freefall/canopy ride, instructor turned too low to get into wind for landing. After trying to dig hard with the toggles, the pair collided with the ground. Instructor fractured lower leg, passenger fractured their knee.			Review procedures for landing patterns, including landing in different wind conditions (downwind, crosswind, turbulent). Turn onto final with enough time to ensure canopy can recover to full flight. Ensure you maintain altitude awareness throughout your skydive.	Tandem Instructors
Accident	Landing	Upon final, the winds gusted, and unfortunately the tandem pair was over top of the building on final and could not make it back to the landing area. The tandem pair was surrounded by obstacles and eventually landed hitting a picnic table. Passenger was unconscious for a short time due to a head impact, instructor fractured his lower leg.			Winds should be assessed prior to jump and again at higher altitudes to assess any required adjustments to exit point and/or landing pattern. Review procedures for landing patterns and obstacle avoidance. "Take note of where the obstacles are and keep track of other large open alternate landing areas. Keep these things in mind when making a note of wind direction and spotting. Think ahead and plan carefully." (UPT, *Sigma Tandem Manual* , MAN-013 REV 0.5 p87)	Tandem Instructors

Accident	Landing	Tandem Instructor was landing near target when at the flare altitude, the parachute stopped moving forward and dropped to the ground from approximately 1.5 feet in the air. The passenger did not lift their legs as taught and therefore received friction burns to lower leg. The instructor absorbed the shock of the landing to protect the passenger and in the process, jarred his back and twisted a knee.	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. 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.	Tandem Instructors
Accident	Landing	On landing approach, the winds gusted, partial canopy collapse, causing surge. Resulted in a hard landing and a sprained ankle.	Review procedures for landing patterns, including landing in different wind conditions (downwind, crosswind, turbulent). Turn onto final with enough time to ensure canopy can recover to full flight.	Tandem Instructors
Accident	Landing	Tandem passenger lowered legs upon landing. Passenger suffered a lower leg fracture.	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.	Tandem Instructors
Accident	Landing	Main parachute suffered a broken line on opening. the first control check showed sufficient control to land the canopy safely. control became more unstable below 2000 ft. making it too late to cut away. The canopy stalled at 20 ft on the landing approach, Landing surface was hard ground. Tandem instructor suffered 2 broken ankles. The right one requiring surgery, the left required a cast. Passenger broke one ankle requiring surgery and fractured 2 vertebrae. It is uncertain at this time why the degree of control was lost after the initial flight control check showed the canopy was stable enough to land.	Review Deployment Problems and Emergency Procedure recommendations of the manufacturer. 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. 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.	Tandem Instructors; Packers; Riggers; Equipment Owner
Accident	Landing	Winds were strong for landing. Tandem pair landed well, however the passenger rolled onto the instructors leg as the catchers only collapsed half the canopy.	"When the wind is high, have the canopy catcher(s) waiting at the landing area. Hand the toggles to the catcher(s) at touchdown. The catchers must be trained to meet the tandem pair as they land into the wind and fully collapse the canopy." (UPT, Sigma Tandem Manual, MAN-013 REV 0.5 p97).	Tandem Instructors; Catchers
Accident	Landing	On final, after telling passenger to lift legs for landing, passenger was distracted and calling out to videographer that he was watching the wrong tandem pair. On landing, passengers feet impacted the ground, complained of back and leg pain. Transported to hospital.	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. Ensure passenger understands the importance of following instruction upon landing despite possible distractions such as spectators.	Tandem Instructors
Accident	Landing	Tandem passenger lowered legs upon landing. Suffered ankle injury.	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.	Tandem Instructors
Accident	Landing	Upon turning into the wind with a very lightweight passenger, for final at 130ft found myself going backwards under canopy. Flaring the parachute at 12-15ft had no effect on slowing the descent rate. Upon landing I cushioned the initial impact taking the brunt of the force. We made a second impact as winds inflated the canopy causing a lift of 4 ft. Passenger transported to hospital, injuries unknown.	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. Upon entering the landing pattern, if the winds are high and there is no catcher present, it is permissible to disconnect the reserve static line (RSL). With the RSL detached, the main canopy can be released after landing if being dragged. This will prevent the RSL from deploying the reserve parachute.	Tandem Instructors

Accident	Landing	Tandem passenger lowered legs upon landing. Suffered lower leg injury.	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.	Tandem Instructors
Accident	Landing	On downwind leg of approach, received turbulence from wind gusts. This continued until final approach. During flare, all lift was lost and tandem pair dropped. Instructor pulled the passenger onto their lap and took the force of the landing on left hip. Instructor suffered bruising and some lower back pain. Passenger uninjured.	Review procedures for landing patterns, including landing in different wind conditions (downwind, crosswind, turbulent). Turn onto final with enough time to ensure canopy can recover to full flight.	Tandem Instructors
Accident	Landing	Upon landing, instructors right foot contacted the ground and dislocated. Instructor was transported to the hospital.	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. 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.	Tandem Instructors; DZSO
Accident	Landing	Tandem passenger had a disability that did not allow them to bend knees normally. Upon landing, passenger was unsuccessful and retracting legs. No wind conditions and the landing area sloped uphill. Passenger experienced pain in foot.	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. In the event equipment to assist passenger with lifting legs for landing is being used, ensure equipment is operating properly and instructor is aware of any limitations the passenger may have with the equipment prior to taking on skydive.	Tandem Instructors
Accident		Instructor knelt down to double check tandem harness before boarding plane. Felt a pinch in the back. Routine jump but post-jump the instructors back started spasming.	Bending correctly can help you avoid back strain and injury.	Tandem Instructors
Incident	Exit	On exit, instructor pushed off with right leg and it slipped sideways. Instructor felt a sharp pain in knee. Iced upon landing and no medical attention required.	Ensure proper exit position is being practised on the ground. Routinely check equipment such as shoes, booties, gloves, and so forth for any potential hazards or wear that can impact exit of aircraft.	Tandem Instructors
Malfunction	Deployment	Upon drogue release and opening, broken A lines, and A and B lines detached from the attachment point. Excess lines got tangled in the slider grommet. Immediately initiated Emergency Procedures and landed safely under reserve.	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.	Tandem Instructors; Packers; Riggers; Equipment Owner
Malfunction	Deployment	Tandem Student was stiff and did not have a good body position in freefall. During the deployment, student went into "superman position" resulting in both of us turning as main parachute was opening. Line twists occurred and although attempts to kick out and separate risers, the line twists remained. At hard deck of 3,000 feet initiated emergency procedures with no issues and landing safely.	Ensure proper body position of passenger is reviewed and practised on the ground. Review manufacturers recommendations for drogue fall techniques and corrective actions to assist instructors with issues such as rocking. Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Tandem Instructors; Packers; Riggers; Equipment Owner
Malfunction	Deployment	Line over on end cell, which resulted in a violent turn. Instructor was unsuccessful in cutting away and after trying a second time, deployed the reserve to stop the spin. Main took a position in front of the reserve. Instructor performed a front riser turn with the main canopy and it moved to the side and then cut it away. Landed safely under reserve.	Review Deployment Problems and Emergency Procedure recommendations of the manufacturer. Emergency procedures should be practised regularly on the ground to ensure correct and safe actions are performed. Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Tandem Instructors; Packers; Riggers; Equipment Owner
Malfunction	Deployment	Step through. Initiated Emergency Procedures and landing safely under reserve.	Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Packers; Riggers; Equipment Owner

Malfunction	Deployment	Line twists. Initiated Emergency Procedures and landed safely under reserve.	Tandem Instructors should review Drogue Fall Techniques and practise proper body position to minimize instability during deployment. Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Tandem Instructors; Packers; Riggers; Equipment Owner
Malfunction	Deployment	Line twists. Initiated Emergency Procedures and landed safely under reserve.	Tandem Instructors should review drogue Fall Techniques and practise proper body position to minimize instability during deployment. Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Tandem Instructors; Packers; Riggers; Equipment Owner

Student AIM Reports | Les rapports AID étudiant

Accident / Incident/Malfunction	Trend	Cause	Total Jumps	Months since last jump	Proposed Corrective Action	Action Initiated by:
Accident	Exit	Student suffered a dislocated shoulder upon exit of the aircraft.	2		Student waivers should be reviewed for any pre-existing medical conditions and/or concerns that could inhibit the ability for a safe skydive. Instructors and students should review Exit Types (CSPA PIM2A-2009; Section 4.7 *Exit Types* , p59-60). Ensure practice of exit is completed on the ground at the plane or aircraft door mock up prior to skydive.	SSI; PFFI; JM; Manifest
Accident	Landing	Fourth jump of the day. Jumper flared slow resulting in an awkward but not hard landing. Full flare as contacted the ground and sat on right ankle. Resulted in a fractured ankle.	5	0	Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, 141-143). Students should be taught, then reviewed, and practice the Parachute Landing Fall (PLF). 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 personal currency.	SSI; PFFI; JM; GCI
Accident	Landing	Student was on final approach with both hands up waiting for flare signal. Student drift under canopy with target fixation on the radio cart. Landed straight on the cart. Student was not responsive with radio commands. Fractured ankle.	2		Instructors should address and review the importance of: avoid the obstacle - protect the body - prepare to land (CSPA PIM2A-2009; Section 6.17.4 *Hazards Near The Ground* , p138-141). Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). 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 personal currency. Ensure landing zone is clear of potential hazards.	SSI; PFFI; JM; GCI
Accident	Landing	Upon landing, student caught left foot in a hole in the pea gravel, resulting in a sprain.	8	0	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.	DZSO
Accident	Landing	Student was very slow on all radio commands during canopy flight. When on final approach, student didn't respond in time to flare commands and contacted the ground with no flare. Student suffered a fractured ankle.	1		Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Students should be taught, review, and practice the Parachute Landing Fall (PLF). 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 personal currency.	SSI; PFFI; JM; GCI

Accident	Landing	Student queued the jump but wrapped onto the strut. Instructors managed to get student back in freefall. Student rolled onto his belly as the main AAD fired. Student suffered a dislocated shoulder which resulted in a hard landing due to being unable to flare. It was reported that student also did a static line jump where they hesitated. However this was not recorded in the logbook.	2	0	Instructors and students should review Exit Types (CSPA PIM2A-2009; Section 4.7 *Exit Types* , p59-60). Ensure practice of exit is completed on the ground at the plane or aircraft door mock up prior to skydive. Additionally, review and practice on the ground of the arch should be completed (CSPA PIM2A-2009; Section 5.2 *The Arch* , p64-65). Anticipatory skills can be improved if you learn and practice skydiving skills in the sequence in which they occur, and mentally and physically rehearse the skydive and your emergency procedures, therefore a focused review for the student on *Section 2 Preparation: Mental and Physical* (CSPA PIM2A-2009; p10-22) will be of great benefit. Students should be taught, review, and practice the Parachute Landing Fall (PLF). Ensure that ground practice of body position and response to signals is sufficient, and student's practice is properly evaluated. While it is unclear whether currency is at issue here, it is entirely possible given 2020's short jumping season. Instructors should review unusual situations, and assess personal currency prior to jumping with students. Course reference manuals are a good resource for unusual situations review. Students and Instructors should ensure detailed information pertaining to individual skydive performance is recorded accurately in students logbook (CSPA PIM2A-2009; Section 2.5 *Logging* , p21-22).	SSI; PFFI; GCI
Accident	Landing	Student lost consciousness under canopy at start of landing pattern. Regained consciousness after landing. Student walked away with minor scratches and bruises and transported to medical aid. No medical conditions were reported.	1		Student waivers should be reviewed for any pre-existing medical conditions and/or concerns that could inhibit the ability for a safe skydive. Instructors should ensure gear fits student appropriately.	SSI; PFFI; JM; GCI; Manifest
Accident	Landing	Jumper was landing, flared, and his left leg touched and absorbed all the body weight. Left leg injured. Transported to medical aid.	11	<1	Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Students should be taught, review, and practice the Parachute Landing Fall (PLF).	SSI; PFFI; JM
Accident	Landing	Jumper did not do a full flare on landing. Injured ankle.	1		Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Students should be taught, review, and practice the Parachute Landing Fall (PLF). 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 personal currency.	SSI; PFFI; JM; GCI
Incident	Exit	Student pilot chute improperly packed in the way that we pack them so the bridle comes out of the TOP and not the bottom. Upon removing the pilot chute to prepare for IAD deployment while on jump run, the bridle was too short for a good comfortable grab on the side of the student harness. Attempts were made to try and pull out and lengthen the bridle length with no success. Grabbing the harness again with a proper grip resulted in popping the pin. The result was a bag drop in the aircraft with the door still being closed. The pilot was notified and was instructed in order to give more time to deal with the issue. None of the other jumpers in the aircraft had a pull up in their possession. I took off my shoe and used my shoe lace in order to close the container properly then a fellow Jump Master on the load repacked the pilot chute. The rest of the student dispatch was completed without incident.	5	12	Instructor(s) should perform and review procedures of full gear checks with students prior to boarding the aircraft (CSPA PIM2A-2009; Section 3.7.1 *Safety Check,* p39-40). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	SSI; PFFI; JM; Packers; Rigger

Malfunction	Deployment	Okay exit, but during freefall, student destabilized and instructors not able to recover and eventually were flipped off. Instructors unable to redock. AAD fired.	2		Review and practice of Emergency Procedures should be conducted regularly, including response if neither instructor is present. (CSPA PIM2A-2009; Section 3.3 *Activation of Reserve (Emergency Procedures)* , p24-31). Review and practice on the ground of the arch should be completed (CSPA PIM2A-2009; Section 5.2 *The Arch* , p64-65). Instructors should ensure that ground practice of body position and response to signals is sufficient, and student's practice is properly evaluated. Anticipatory skills can be improved if you learn and practice skydiving skills in the sequence in which they occur, and mentally and physically rehearse the skydive and your emergency procedures, therefore a focused review for the student on *Section 2 Preparation: Mental and Physical* (CSPA PIM2A-2009; p10-22) will be of great benefit. While it is unclear whether currency is at issue here, it is entirely possible given 2020's short jumping season. Instructors should review unusual situations, and assess personal currency prior to jumping with students. Progressive Freefall Instructor (PFFI) Course reference manuals are a good resource for unusual situations review.	SSI; PFFI
Malfunction	Canopy	Student was on his 4th attempt at 3 second delay, working on getting past instability issues. Climb out was uneventful. Initial arch was good, right leg kicked forward causing turn, rolls and flips. Student had trouble regaining stability and finding pilot chute. Attempted twice before initiating emergency procedures. Cutaway was not located and D-ring was activated. Landing was uneventful.	11	0	Review and practice of Emergency Procedures should be conducted regularly (CSPA PIM2A-2009; Section 3.3 *Activation of Reserve (Emergency Procedures)* , p24-31). Instructors and students should review Exit Types (CSPA PIM2A-2009; Section 4.7 *Exit Types* , p59-60). Ensure practice of exit is completed on the ground at the plane or aircraft door mock up prior to skydive. Additionally, review and practice on the ground of the arch should be completed (CSPA PIM2A-2009; Section 5.2 *The Arch,* p64-65). Anticipatory skills can be improved if you learn and practice skydiving skills in the sequence in which they occur, and mentally and physically rehearse the skydive and your emergency procedures, therefore a focused review for the student on *Section 2 Preparation: Mental and Physical* (CSPA PIM2A-2009; p10-22) will be of great benefit.	SSI; PFFI; JM

Experienced AIM Reports | Les rapports AID des parachutistes experience

Accident / Incident/Malfunction	Trend	Cause	Total Jumps	Months since last jump	Proposed Corrective Action	Action Initiated by:
Accident	Exit	On the student first jump, he gets in the door but does not seem to be fully aware of what's happening and does not exit as briefed. The instructor on the reserve side pulls on the harness at the hip while exiting. It is not clear if the student was still holding on to the door frame. A light tumble followed the exit and the instructor on the reserve side could not grab the student's harm. After stabilised, the student went through the jump using his left arm. Once on the ground, the student told the instructor that he did not want to jump again because he felt a sharp pain in his left shoulder since that exit.			Instructors and students should review Exit Types (CSPA PIM2A-2009; Section 4.7 *Exit Types*). Ensure practice of exit is completed on the ground at the plane or aircraft door mockup prior to skydive. Anticipatory skills can be improved if you learn and practice skydiving skills in the sequence in which they occur, and mentally and physically rehearse the skydive and your emergency procedures, therefore a focused review for the student on *Section 2 Preparation: Mental and Physical* (CSPA PIM2A-2009) will be of great benefit. Course reference manuals are a good resource for unusual situations for Instructors to review.	
Accident	Deployment	Canopy opening was violent and without delay, then the canopy turned violently to one side before finished its deployment with several "line twists". immediate consequences: sudden tilting of the head downwards giving a shock to the neck, shortness of breath (stuck lungs), black vision then star sight for a few seconds, rush of blood in the right leg causing tingling in the limb for several hours after the incident.	1140	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation* , p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists* , p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Accident	Deployment	Hard opening. Jumper heard crunching in their back. Slider was down and canopy instantly inflated. Result was multiple compression fractures to the thoracic vertebrae.	937	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Accident	Landing	Jumper (recurrency jump) didn't flare upon landing after also doing an incorrect landing pattern.			Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Pattern* (CSPA PIM2A-2009; Section 6.9, p114-117). Coaches should evaluate level of assistance required for recurrency jumps specific to Novice jumpers and utilize resources, such as Ground Control Instructors (GCI), accordingly. Jumpers should review and practice the dive planning process (CSPA PIM2A-2009; Section 2.2.4 *Dive Planning,* p13). Jumpers should review the CSPA *Sport Canopy Endorsements* document (https://www.cspa.ca/en/Sport-Canopy-Intro) and practice appropriate canopy skill(s) related to areas of performance opportunity. Jumpers should understand impacts of external factors that can alter flight cycle and/or flare performance. Jumpers should review and practice the Parachute Landing Fall (PLF).	Jumper; C2; C1; GCI
Accident	Landing	Jumper landed off the dropzone, in a downwind pattern, and the canopy collapsed during the flare. Jumper suffered an ankle injury.			Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113), *Landing Pattern* (CSPA PIM2A-2009; Section 6.9, p114-117), and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Jumpers should review and practice the Parachute Landing Fall (PLF). "Land into the wind IF POSSIBLE... If you are landing downwind still flare with your proper technique and prepare for a PLF." (CSPA *Sport Canopy Endorsements* ; https://www.cspa.ca/en/Sport-Canopy-Intro; p17).	Jumper; C2; C1
Accident	Landing	Final approach was a little crosswind. Twisted ankle on landing. Jumper flare was performed well.	14	0	Jumpers should review the CSPA *Sport Canopy Endorsements* document pertaining to crosswind landings (p10). Jumpers should understand impacts of external factors that can alter flight cycle and/or flare performance. Jumpers should review and practice the Parachute Landing Fall (PLF).	Jumper; C2; C1

Accident	Landing	On Flight 201 course, drill was to perform a braked landing. On final, jumper initiated the flare to low. Lack of shutdown, jumper tried to slide but foot didn't and jumper rolled their ankle. Possible sprain.	446	0	Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Jumpers should review the *CSPA Sport Canopy Endorsements* document pertaining to the braked approach (p25). Jumpers should review and practice the Parachute Landing Fall (PLF).	Jumper; C2
Accident	Landing	On final approach, jumper encountered turbulence which led to an inefficient flare. Jumper slid the landing and heard their knee pop. Sent to hospital for evaluation.	190	0	Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Jumpers should review the CSPA *Sport Canopy Endorsements* document pertaining to turbulence (p18-19). Jumpers should review and practice the Parachute Landing Fall (PLF).	Jumper; C2; C1
Accident	Landing	Spot was long, didn't make it back to the landing area. Aggressive 90 degree turn to land. Used rear risers to plane out onto toggles to finish flare. Landed hard on tarmac. No injuries.	8000		**Intentional and unintentional low turns can result in serious injury or death.** Jumper should review correct spotting procedures (CSPA PIM2B; Section 4.5 *Spotting,* p84-87). Jumper should review the *Post Opening Priorities* (CSPA Sport Canopy Endorsements; p12). A review and practice of canopy skills and performance, specific to landing (CSPA Sport Canopy Endorsements*; Canopy Control Skills/Drills Explained,* p6-10).	Jumper; C2
Accident	Landing	On deployment, jumper had line twists. Initiated Emergency Procedures. The skyhook deployed the reserve canopy and the RSL got snagged with the reserve risers. Two canopies remained tangled until impact. Jumper sustained some injuries.	1100	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation* , p66). Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review* , p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. **Inspection of equipment should be conducted by Rigger.**	Jumper; C2; C1; Packers; Rigger
Accident	Landing	Long spot, jumper initiated a 180 degree turn about 75 feet above the ground, resulting in a hook turn. Jumper only sustained a broken nose.	224	0	**Intentional and unintentional low turns can result in serious injury or death.** Jumper should review correct spotting procedures (CSPA PIM2B; Section 4.5 Spotting, p84-87). Jumper should review the *Post Opening Priorities* (CSPA Sport Canopy Endorsements; p12). Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113), *Landing Pattern* (CSPA PIM2A-2009; Section 6.9, p114-117), and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Jumpers should review and practice the Parachute Landing Fall (PLF). Additionally, a review and practice of canopy skills and performance, specific to landing (CSPA Sport Canopy Endorsements; *Canopy Control Skills/Drills Explained* , p6-10).	Jumper; C2; C1
Accident	Landing	Line twists, initiated Emergency Procedures. Hard landing due to inexperience under reserve canopy. Some bruises to lower legs.	228	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation* , p66). Jumper should review *Basic Correctable Situations* (CSPA PIM2A-2009; Section 3.3.1 Line Twists, p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review* , p156-161). Jumpers should review and practice the Parachute Landing Fall (PLF). Jumper should familiarize themselves with the reserve canopy in the equipment they are using, including but not limited to canopy size and type, and also ensure the reserve canopy is appropriate to skill level. Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger

Accident	Landing	Jumper misjudged their landing pattern and hit a tree about 10 feet in the air before hitting the ground. No injuries reported.	57		Review the importance of: avoid the obstacle - protect the body - prepare to land (CSPA PIM2A-2009; Section 6.17.4 *Hazards Near The Ground* , p138-141). Review educational material on *Set-up Assessment* (CSPA PIM2A-2009; Section 6.8, p114), *Landing Pattern* (CSPA PIM2A-2009; Section 6.9, p114-117), and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Additional material on landings pattern in the CSPA *Sport Canopy Endorsement* document (https://www.cspa.ca/en/Sport-Canopy-Intro; p.13-18) should be reviewed.	Jumper; C2; C1
Accident	Landing	Jumper followed a downwind pattern that resulted in jumper landing into a slight embankment. Jumper sustained minor injuries.	200	0	Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113), *Landing Pattern* (CSPA PIM2A-2009; Section 6.9, p114-117), and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Jumpers should review and practice the Parachute Landing Fall (PLF).	Jumper; C2; C1
Accident	Landing	Landed in turbulent area and landed hard on left foot. Resulted in a fracture.			Review educational material on *Landing Techniques* (CSPA PIM2A-2009; Section 6.7, p112-113) and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Jumpers should review the CSPA *Sport Canopy Endorsements* document pertaining to turbulence (p18-19). Jumpers should review and practice the Parachute Landing Fall (PLF).	Jumper; C2; C1
Accident	Landing	Jumper tried to readjust landing pattern, but in an attempt to avoid landing in trees, landed in a pit. Transported to medical aid.	70		Review the importance of: avoid the obstacle - protect the body - prepare to land (CSPA PIM2A-2009; Section 6.17.4 *Hazards Near The Ground,* p138-141). Review educational material on *Set-up Assessment* (CSPA PIM2A-2009; Section 6.8, p114), *Landing Pattern* (CSPA PIM2A-2009; Section 6.9, p114-117), and *Landing Problems and Solutions* (CSPA PIM2A-2009; Section 6.17.5, p141-143). Additional material on landings pattern in the CSPA *Sport Canopy Endorsement* document (https://www.cspa.ca/en/Sport-Canopy-Intro; p.13-18) should be reviewed.	Jumper; C2; C1
Fatality	Landing	Jumper had a canopy deployed at 3500 feet. Witnesses observed spirals along with normal flat flight under canopy. Jumper performed a high performance landing but was too low to the ground. Jumper impacted the ground with a high rate of speed and succumbed to his injuries immediately.	1093	0	**Intentional and unintentional low turns can result in serious injury or death.** It is important to recognize your limitations, including but not limited to, currency, skill level, external inputs, and personal inputs. Review of CSPA PIM2B; Section 6.3.1 *Factors Affecting Human Performance* (p162-163) will assist in recognizing possible performance inhibiting factors. Additionally, jumpers should regularly review the CSPA *Sport Canopy Endorsement (* https://www.cspa.ca/en/Sport-Canopy-Intro*)* document to ensure a safe transition during training and to assist in their overall skills development and awareness. Exercising caution, common sense, self-discipline, control, alertness and better judgment is highly recommended to help ensure continued safety under canopy. Never attempt anything beyond your skill level, or without first consulting a certified coach experienced in that discipline.	Jumper; C3-CP; C2
Fatality	Landing	No report submitted. High performance canopy manoeuvre.	2800		**Intentional and unintentional low turns can result in serious injury or death.** It is important to recognize your limitations, including but not limited to, currency, skill level, external inputs, and personal inputs. Review of CSPA PIM2B; Section 6.3.1 *Factors Affecting Human Performance* (p162-163) will assist in recognizing possible performance inhibiting factors. Additionally, jumpers should regularly review the CSPA *Sport Canopy Endorsement* (https://www.cspa.ca/en/Sport-Canopy-Intro) document to ensure a safe transition during training and to assist in their overall skills development and awareness. Exercising caution, common sense, self-discipline, control, alertness and better judgment is highly recommended to help ensure continued safety under canopy. Never attempt anything beyond your skill level, or without first consulting a certified coach experienced in that discipline.	Jumper; C3-CP; C2

Incident	Deployment	An individual trains and qualifies for their Solo certificate at Dropzone A under one type of deployment system, then goes to Dropzone B the following season, and undergoes refresher training on a different deployment system. At pull time, the individual fails to release the pilot chute upon extraction, and then initiates emergency procedures at too low of an altitude, resulting in an AAD fire. Jumper landed safely under reserve.	12	12	When using a method of main deployment other than BoC, instructors should indicate this in the jumper's logbook when they receive their Solo Certificate. Furthermore, during the Solo Certificate exam, the jumper should be advised that other dropzones may have a different system and indicate in the logbook when a jumper receives BoC conversion training. When completing recurrency training, or dropzone orientation, all dropzones should ensure that refresher training includes full education on any rental equipment being used, including practice pulls with a training pilot chute whenever possible. While not applicable to this incident, it is also appropriate to note that the reserve deployment system should be noted for students, and training confirmed during recurrency/orientation.	JM, SSI, PFFI, DZO, DZSO, C2
Incident	Canopy	Collision and entanglement during a CF jump. Performed Emergency Procedures and landed safely under reserve.	860	0	Jumper should review CSPA PIM2C: *Canopy Relative Work* (p55-72) with additional attention to *Unusual Situation* (p59-61). Additionally, review of CSPA Pim2A-2009; Section 6.17.3 *Canopy Collisions* (p135-138).	Jumper; C2; C3-CRW
Incident	Freefall	Solo wingsuit backfly. On second attempt, jumper ended up in a flat spin. Jumper regained control at 2000 feet and deployed low. Landed safely.	286	0	Review and practice of Emergency Procedures should be conducted regularly (CSPA PIM2A-2009; Section 3.3 *Activation of Reserve (Emergency Procedures)* , p24-31). Jumper should utilize skydive discipline appropriate equipment to aid in altitude awareness, such as, but not limited to Audible Altimeters (CSPA PIM2A; Section 3.6.2 *Audible Altimeters,* p37-38). Wingsuiters should receive one-on-one instruction from an experienced wingsuit jumper. Wingsuit manufactures and/or CSPA C3-WS should be consulted as their definition of "experienced" may vary based on the wingsuit model in use. This instruction should include training in gear selection; rigging and proper wearing of the suit, pilot briefing, and aircraft exit, heading awareness, basic flight techniques, deployment and emergency procedures. Refer to CSPA PIM1: Section 3.24 *Wingsuit Jumps* (p17-18).	Jumper; C3-WS; Manufacturer
Incident		Upon deployment on a wingsuit jump, jumper realized that their left leg was not in the leg strap. Landed safely with minimal inputs.	282	0	Jumper should perform and review procedures of full gear checks prior to boarding the aircraft (CSPA PIM2A-2009; Section 3.7.1 *Safety Check* , p39-40). Reinforce the importance of discipline specific training with qualified coaching/instructing.	Jumper; C3-WS; C2; Manufacturer
Malfunction	Deployment	Line twists and possible deployment bag flip during packing. Jumper successfully got out of line twist but observed lines were still crossed with each other (canopy was in stable flight). No flight control check was performed. Emergency Procedures performed as jumper reached their altitude hard	139	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Jumper should review *Basic Correctable Situations* (CSPA PIM2A-2009; Section 3.3.1 *Line Twists* , p29) and *Flight Control Check* procedures (CSPA PIM2A-2009; Section 6.3, p104). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Hard opening, Removable slider was released from left suspension lines and was hung up on the right. Initiated Emergency Procedures and landed safely under reserve.	1090	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation* , p66). Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review* , p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; Packers; Rigger
Malfunction	Deployment	Line over, spinning canopy. Initiated Emergency Procedures and landed safely under reserve.	3840	0	Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 Canopy Malfunctions Review, p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. *"A hook knife is a useful item (considered as backup equipment) and could be very important in an emergency (e.g., a line over on a reserve)." (CSPA PIM2B; Section 3: Hook Knife, p39).	Jumper; C2; C1; Packers; Rigger

Malfunction	Deployment	Step through. After opening, jumper was flying above a highway. Jumper flew to a safer cutaway location which resulted in initiated emergency procedures at an altitude lower than hard deck. Jumper landed safely under reserve.	63	0	Review and practice of Emergency Procedures should be conducted regularly (CSPA PIM2A-2009; Section 3.3 *Activation of Reserve (Emergency Procedures)* , p24-31). Jumper should review the Post Opening Priorities (CSPA *Sport Canopy Endorsements* ; p12). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	High performance canopy. Line twists. Performed Emergency Procedures and landed safely under reserve.	970	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation* , p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists* , p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1
Malfunction	Deployment	High performance canopy. Tension knots. Performed Emergency Procedures and landed safely under reserve.	1800	0	Check for and remove excessive line twists in the steering lines to avoid tension knots. Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; Packers; Rigger
Malfunction	Deployment	Line over. Performed Emergency Procedures and landed safely under reserve.	63	0	Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. *"A hook knife is a useful item (considered as backup equipment) and could be very important in an emergency (e.g., a line over on a reserve)." (CSPA PIM2B; Section 3: *Hook Knife,* p39).	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	After deployment, jumper looked up and the canopy was not fully inflated or rectangular. The lines looked fine. Jumper collapsed the slider and grabbed the toggles and unstowed them. Jumper flared and then performed a toggle turn and	49	0	Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; *Section 6.1.1 Canopy Malfunctions Review,* p156-161). **Inspection of equipment should be conducted by Rigger.**	Jumper; C2; C1; Rigger
Malfunction	Deployment	Line over. Performed Emergency Procedures and landed safely under reserve.	416	9	Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. "A hook knife is a useful item (considered as backup equipment) and could be very important in an emergency (e.g., a line over on a reserve)." (CSPA PIM2B; Section 3: *Hook Knife,* p39).	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Line twists. Performed Emergency Procedures and landed safely under reserve.	171	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists,* p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Wingsuit flight. Line twists. Performed Emergency Procedures and landed safely under reserve.	883	0	Wingsuiters should receive one-on-one instruction from an experienced wingsuit jumper. Wingsuit manufactures and/or CSPA C3-WS should be consulted as their definition of "experienced" may vary based on the wingsuit model in use. This instruction should include training in gear selection; rigging and proper wearing of the suit, pilot briefing, and aircraft exit, heading awareness, basic flight techniques, deployment and emergency procedures. Refer to CSPA PIM1: Section 3.24 *Wingsuit Jumps (* p17-18).	Jumper; C3-WS; Manufacturer
Malfunction	Deployment	Step through. Performed Emergency Procedures and landed safely under reserve.	3840	0	Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger

Malfunction	Deployment	Line twists. Performed Emergency Procedures and landed safely under reserve.	381	1	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists,* p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Wingsuit flight. Line twists. Performed Emergency Procedures and landed safely under reserve.	385	0	Wingsuiters should receive one-on-one instruction from an experienced wingsuit jumper. Wingsuit manufactures and/or CSPA C3-WS should be consulted as their definition of "experienced" may vary based on the wingsuit model in use. This instruction should include training in gear selection; rigging and proper wearing of the suit, pilot briefing, and aircraft exit, heading awareness, basic flight techniques, deployment and emergency procedures. Refer to CSPA PIM1: Section 3.24 *Wingsuit Jumps* (p17-18).	Jumper; C3-WS; Manufacturer
Malfunction	Deployment	Line twists. Performed Emergency Procedures and landed safely under reserve.	1137	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists,* p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Line twists. Performed Emergency Procedures and landed safely under reserve.	32	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists* , p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Premature reserve deployment on exit. Jumper pulled off strut. Landed safely under reserve.	23	3	Jumper should perform and review procedures of full gear checks prior to boarding the aircraft (CSPA PIM2A-2009; Section 3.7.1 *Safety Check* , p39-40), as well as, review *In-flight Gear Checks: Handles and Pins* (PIM2A-2009; Section 4.6, p57-58). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). **Inspection of equipment should be conducted by Rigger.**	Jumper; C2; C1; Rigger
Malfunction	Deployment	Line twists. Performed Emergency Procedures and landed safely under reserve.	736	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists,* p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review* , p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Wingsuit flight. Line twists. Performed Emergency Procedures and landed safely under reserve.	244	0	Wingsuiters should receive one-on-one instruction from an experienced wingsuit jumper. Wingsuit manufactures and/or CSPA C3-WS should be consulted as their definition of "experienced" may vary based on the wingsuit model in use. This instruction should include training in gear selection; rigging and proper wearing of the suit, pilot briefing, and aircraft exit, heading awareness, basic flight techniques, deployment and emergency procedures. Refer to CSPA PIM1: Section 3.24 *Wingsuit Jumps* (p17-18).	Jumper; C3-WS; Manufacturer

Malfunction	Deployment	Line twists. Performed Emergency Procedures and landed safely under reserve.	7500	0	Jumper should review proper body position during deployment, (CSPA PIM2A-2009; Section 5.4 *Activation,* p66). Jumper should review Basic Correctable Situations (CSPA PIM2A-2009; Section 3.3.1 *Line Twists,* p29). Additionally, reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary.	Jumper; C2; C1; Packers; Rigger
Malfunction	Deployment	Line over. Performed Emergency Procedures and landed safely under reserve.	61		Reviewing malfunctions often will help jumpers deal with most situations that can occur at opening (PIM2B; Section 6.1.1 *Canopy Malfunctions Review,* p156-161). Review of equipment specific packing procedures should be completed and consult with a Rigger if necessary. *"A hook knife is a useful item (considered as backup equipment) and could be very important in an emergency (e.g., a line over on a reserve)." (CSPA PIM2B; Section 3: *Hook Knife,* p39).	Jumper; C2; C1; Packers; Rigger