

2014 CSPA Safety Management System | Système de gestion de la sécurité 2014

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 | Proposed Corrective Action | Action Initiated by: |
|---------------------------------|------------|---|---|--|
| Incident | Aircraft | While moving to the aircraft door with his passenger, the Tandem Master caught his drogue on the pilot seat bracket causing the drogue to be pulled from the pocket. Equipment was secured and the door closed. | Inspect aircraft for possible snag points. Tandem Master to carry out drogue and handle checks prior to moving to the door. | Tandem Masters, DZ Safety Officer, and Pilot |
| Malfunction | Deployment | During tandem freefall, the drogue bridle wrapped through the 3 ring release. No response from either the primary or secondary drogue release. | Packers to ensure the placement of the drogue bridle is in accordance with manufacturer's instructions. | Tandem Masters, Riggers, and Packers |
| Malfunction | Deployment | During solo tandem recertification jump, upon activation of the main canopy, Tandem Master had a bag lock. He initiated emergency procedures and deployed the reserve. | With lighter Tandem Masters conducting solo jumps, it is recommended that line stows on the main canopy only be single stowed to lessen the force required to deploy. | Tandem Masters and Packers |
| Malfunction | Canopy | Tandem Master experienced several line twists upon activation. Carried out drills to clear the line twists but the canopy failed to respond to his efforts. Emergency procedures were initiated and the reserve was deployed. | Packers to ensure the correct stowing of the lines and that manufacturers packing instructions are correctly followed. | Tandem Masters, Riggers, and Packers |
| Malfunction | Canopy | Tandem Master was not able to release the right toggle. Emergency procedures were initiated and the reserve was deployed. | Review packing procedures. | Tandem Masters, Riggers, and Packers |
| Accident | Landing | During the landing, the tandem passenger dropped his leg and fractured his ankle. | Tandem Masters to ensure passengers are briefed on the importance of landing procedures. | Tandem Masters |
| Accident | Landing | Tandem Master, while executing a sit landing with a passenger, caught his food on the ground and fractured his lower leg. | Tandem area should be clear of all ruts or objects which may cause this to happen. | DZ Safety Officer |
| Accident | Landing | Tandem passenger dropped her legs on landing and fractured her ankle. | Tandem Masters to review the importance of passengers maintaining their legs up during landings. | Tandem Masters |
| Accident | Landing | Tandem passenger dropped his legs on landing and twisted his ankle. | Tandem Masters to review the importance of passengers maintaining their legs up during landings. | Tandem Masters |
| Accident | Landing | Tandem passenger dropped legs on landing and caught an ankle. | Tandem Masters to review the importance of passengers maintaining their legs up during landings. | Tandem Masters |

Student AIM Reports | Les rapports AID étudiant

| Accident / Incident/Malfunction | Trend | Cause | Proposed Corrective Action | Action Initiated by: |
|---------------------------------|------------|--|--|--|
| Malfunction | Aircraft | Student leaned against the dash of a Cessna and popped the pin of his reserve. | Regular inspection of the reserve pin during the jump to ensure it is properly inserted and seated prior to gearing up. More awareness while in the aircraft. | Jump Masters, Pilots |
| Accident | Exit | Improper climb out procedure during Instructor Assisted Deployment. Student left their foot on the wheel. Returned the next day complaining of shoulder pain. | Ensure all students review exit procedures before boarding. Jump Masters are to ensure students are in full hang before giving student the go-ahead. | Jump Masters |
| Incident | Exit | Student struck step on release. | Ensure all students review exit procedures before boarding. Jump Masters are to ensure students are in full hang before giving student the go-ahead. | Jump Masters |
| Malfunction | Deployment | Jumper failed to locate the pilot chute and activated the reserve. | Student jumpers should have extensive training on locating the pilot chute prior to their first jump. | Jump Masters, Skydive School Instructors, Progressive Freefall Instructors |
| Malfunction | Canopy | Upon deployment, student said he was in a spin and could not release the left toggle. Emergency procedures were initiated and the reserve was deployed. | Possible tension knot or student released only one steering line. Have packers ensure they remove twists from steering lines. Have Coach 2s, Jump Masters, or Skydive School Instructors review toggle release procedures with students. | Packers, Coach 2s, Jump Masters, Skydive School Instructors |
| Accident | Landing | Student approached the target at approximately 100 feet in part brakes. Ground Control Instructor instructed jumper to raise his arms. Possible late call by GCI or slow response from student resulted in hard landing and jumper twisting his ankle. | Ensure landing procedures are reviewed with all students prior to jumping. GCIs should observe practice flares for response time of jumpers. | Jump Masters, Skydive School Instructors, Coach 2s, Ground Control Instructors |
| Accident | Landing | Student rolled ankle on landing. | Jump Masters and Progressive Freefall Instructors should ensure students are wearing proper footwear. | Jump Masters, Progressive Freefall Instructors |
| Accident | Landing | Jumper failed to flare on landing. Landed hard on his butt. | Review landing and flaring procedures with all students prior to each jump. | Jump Masters, Ground Control Instructors |
| Accident | Landing | Student flared too early. Jumper was given the command 'relax' and began to flare. Then told to bring hands back up and then flare. No response from the student on the flare and he hit the ground. | Commands should be kept simple. "Prepare to land", then at the right time, "flare". Too many short word commands can be confusing for students learning. Review of landing procedures for both Ground Control Instructors and students. | Jump Masters, Skydive School Instructors, Ground Control Instructors |

Experienced AIM Reports | Les rapports AID des parachutistes d'expérience

| Accident / Incident/Malfunction | Trend | Cause | Proposed Corrective Action | Action Initiated by: |
|---------------------------------|------------|--|---|------------------------------------|
| Incident | Aircraft | Jumper's main pin was dislodged in the aircraft. The door was closed and the jumper was returned to the ground. | Gear checks should be done prior to boarding and exiting the aircraft and movement should be limited in the aircraft. | All jumpers |
| Incident | Deployment | 2way freefly with experienced jumpers. Low main activation resulting in reserve deployment. | Ensure proper breakoff procedures. Ensure altitude awareness and ensure audible altimeters are used and are correctly set. | DZ Safety Officers |
| Malfunction | Deployment | Jumper had the pilot chute wrapped around his arm. The reserve was activated by the time the wrap was cleared. | Review deployment procedures and two-out procedures with jumper. | Coach 2s |
| Fatality | Deployment | Wingsuit jumper impacted with the ground. No visible signs of canopy activation or inflation by witnesses. | Wingsuit-specific deployment procedures and emergency procedures should be well rehearsed prior to every jump. AADs are strongly recommended. | DZ Safety Officers, Coach 2s |
| Incident | Deployment | Unstable, hard opening. | Review deployment procedures with emphasis on stability. | Coach 2s |
| Incident | Deployment | Hard opening, HMA steering lines broke at the stow loop. | Jumpers should be aware of how to look for damage to HMA lines and inspect them during each pack job. | Riggers, Equipment owners, Packers |
| Malfunction | Deployment | Jumper had a bag lock. Emergency procedures were initiated and the reserve was deployed. | Routine inspection of equipment and packing procedures should solve bag lock related issues. | Riggers, Equipment owners, Packers |
| Malfunction | Deployment | Pilot chute in tow. Bridle was routed incorrectly. | Review of packing procedures with access to manufacturer's instructions. | Riggers, Equipment owners, Packers |
| Incident | Deployment | Low pull, AAD fired after main activation. Only reserve inflated. | Review deployment procedures and emphasis on altitude awareness and the use of audible altimeters. | Coach 2s |
| Malfunction | Deployment | Jumper went to deploy but could not locate his pilot chute. Made 3 attempts and then deployed the reserve. Jumper was wearing a baggy jacket. | Jumpers should wear suits or clothing suitable for skydiving. After two attempts, emergency procedures should be initiated. | Coach 2s, |
| Malfunction | Deployment | On activation, a pilot chute in tow occurred. The reserve was deployed. The main canopy began to inflate and was cutaway. | Review pilot chute in tow procedures. | Coach 2s |
| Malfunction | Canopy | Slider grommet became lodged over steering toggle. Jumper could not unstow the brakes. Emergency procedures were initiated and the reserve was deployed. | Install proper slider bumper stops. | Equipment owner with Riggers |
| Fatality | Canopy | Spinning deployment of the main canopy, low activation of emergency procedures. The cause of the spinning malfunction is unknown. Possible slider hang up caught in lines and unable to move down. Low reserve deployment. | Review emergency procedures with emphasis on altitude awareness. Recommend the use of audible altimeters. | DZ Safety Officers. |
| Malfunction | Canopy | Unstable deployment resulting in line twists upon opening. Emergency procedures were initiated and the reserve was deployed. | Jumpers to review deployment procedures. Additional emphasis on stability at deployment time. | Coach 2s |

| Accident / Incident/Malfunction | Trend | Cause | Proposed Corrective Action | Action Initiated by: |
|---------------------------------|---------|--|---|--|
| Malfunction | Canopy | After dispatching students, Jump Master exited the aircraft and deployed his parachute. The right side of the canopy did not inflate. Risers were pumped in an attempt to get the canopy to inflate. The canopy did not inflate. Emergency procedures were initiated and the reserve was deployed. | Review of packing procedures and inspection of canopy for signs of wear, damage, and line trim. | Riggers, Equipment owners, Packers |
| Malfunction | Canopy | Canopy was pulling to the left during flight. Canopy flaring failed to correct the issue. Emergency procedures were initiated and reserve was deployed. | Rigger to check the line trim of the canopy in situations where this occurs. | Riggers |
| Malfunction | Canopy | Unstable deployment resulting in poor deployment of the main. Emergency procedures were initiated and the reserve was deployed. | Review deployment procedures and emphasis on stability. | Coach 2s |
| Incident | Landing | Jumper struck power line. | Ensure all jumpers are aware of DZ obstacles and alternate landing areas. | DZ Safety Officers, Coach 2s |
| Fatality | Landing | Jumper struck aircraft on exit. Remainder of the freefall was uneventful. Initiated a 720 degree turn for high performance landing. No corrective input on final. Jumper struck the ground. | Eliminate high speed approaches or high wingloading during these maneuvers. DZ should set a policy that in the event of physical contact with aircraft, high performance landings should not be attempted. | DZ Safety Officers, DZOs |
| Accident | Landing | While attempting a landing into an alternate landing area, jumper caught his foot on the embankment and fractured his foot. | Ensure jumpers are aware of all ground obstacles on both main and alternate landing areas. | DZ Safety Officers, Coach 2s, Ground Control Instructors, Skydive School Instructors |
| Accident | Landing | Jumper performed a front riser turn in preparation for a high performance landing. Jumper failed to release the risers and struck the ground. Jumper suffered multiple broken bones and concussion. | DZ should have established training plan for jumpers who want to learn high performance landings. Each step should be trained under proper supervision until they are ready to advance. | DZOs, Canopy course instructors, experienced canopy pilots |
| Accident | Landing | Jumper twisted foot on landing. Required to wear an air cast for 6 weeks. | Review proper flaring procedures. | Coach 2s |
| Accident | Landing | Jumper blacked out under canopy and struck house. Family of jumper disclosed after the fact that the jumper suffered from Vertigo. | Ensure a detailed review of waiver forms and question jumpers on possible medical conditions that might be affected by skydiving. | DZ Safety Officer, Manifest |
| Accident | Landing | Jumper performed a low turn under a 119 square foot canopy. Parachute did not recover from the turn and the jumper hit the ground, bruised and sore. | More education on downsizing and more coaching on high performance landings. Perhaps return the jumper to a larger canopy. | DZ Safety Officer, Coach 2s |
| Accident | Landing | Jumper performed a high performance landing at a low altitude. Broke femur. | More education and supervision on high performance landings. | DZOs, Canopy course instructors, experienced canopy pilots |
| Incident | Landing | Jumper returned from two year absence. Completed all recurrencies as required. Flew into flag post on landing despite radio instructions to turn. | Ensure all jumpers are aware of DZ obstacles and alternate landing areas. | DZ Safety Officers, Coach 2s, Ground Control Instructors, Skydive School Instructors |
| Accident | Landing | Jumper experienced turbulence over a taxiway on landing and hit feet, knees, and shoulder. | Jumpers should receive instruction on the proper method of doing a PLF and given the opportunity to practice them during ground training. Jumpers should also receive canopy control lectures on how canopies react on different surfaces. Ie. Pavement | Coach 2s |

| Accident / Incident/Malfunction | Trend | Cause | Proposed Corrective Action | Action Initiated by: |
|---------------------------------|---------|---|---|----------------------|
| Accident | Landing | Jumper performed a front rise landing but could not make it back to the landing area. He landed on the road to avoid power lines. | Coaches should emphasize the importance of penetration checks under canopy and proper set ups for landing patterns. | Coach 2s |
| Incident | Landing | Jumper initiated a low pattern and landed on the hanger roof. | Coaches should emphasize the importance of air awareness and obstacle avoidance drills and proper altitudes for landing patterns. | Coach 2s |
| Accident | Landing | On approach for landing, jumper suffered a shoulder separation from a pre-existing injury. | Waivers should be reviewed to ensure jumpers do not have pre-existing injuries. | Manifest |

Aircraft AIM Reports | Les rapports AID d'avion

| Accident / Incident/Malfunction | Trend | Cause | Proposed Corrective Action | Action Initiated by: |
|---------------------------------|----------|--|---|-------------------------|
| Incident | Aircraft | Second aircraft in the proximity of the dropzone during parachuting activities | Better control from NavCan and review of aircraft procedures. | Chief Pilots and pilots |