Date amended :

Revision No :

Date Implemented :

Stay safe



Parachute Training Organisation (PTO) Risk Assessment Form

Please read the guidance (Form 244a) before completing this form

Please remember:

1 The Assessor must identify if additional control measures are needed to reduce the lever of risk. If so, these should be listed in column 5 'Additional Controls'.

2 Copies of this document should be retained and readily available for inspection.

3 The risk assessment must be reviewed if changes occur to the tasks/activity undertaken, equipment, personnel, legislative,British Skydiving or PTO SOP requirements. Otherwise, the risk assessment will remain valid for a period of up to one year after which it must be reviewed and updated as necessary.

PART A: Assessment details						
Name of PTO:		Person carrying out this Risk Assessment:				
Address:		Signature:				
Telephone Number:		Date of Assessment:				
Chief Instructor:		Latest Review Date:				

PART B: Risk level matrix

Likelihood:		Severity:		Ri
1	Improbable	1	No or trivial injury / ill health	
2	Unlikely	2	Minor or slight injury / illness	
3	Even chance	3	Significant injury / ill health	
4	Likely	4	Incapacity	
5	Almost certain	5	Fatal	

isk Level Matrix:

L I k e I

h o o d Key

5	5	10	15	20	25	Intolerable
4	4	8	12	16	20	High
3	3	6	9	12	15	Moderate
2	2	4	6	8	10	Low
1	1	2	3	4	5	Insignificant (ignore)
	1	2	3	4	5	

Severity

Generic

British Skydiving Parachute Training Organisation (PTO) Risk Assessment Form

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Training equipment and associated activities	Students undertaking training	2 x 3	All students under supervision by competent instructor. Training area clean and tidy and inspected prior to commencement of training by duty instructor in charge. PLP, practice landings, and aircraft exits mats are provided to cushion impact on feet and additionally prevent injury should any student fall over. Only demo lightweight equipment is used for aircraft exist and drills to reduce possible manual handling injuries. All students must be of a physical condition to be able to undertake the training. Warm up exercises are complete prior to any physical activity. Students declare themselves fit by completion of medical either self-declaration of via GP.	All students are weighed to assure compliance with weight limits imposed by the PTO	2 x 2

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Failure of AAD (Automatic Activation Device)	Any skydivers (student or experienced)	2 x 5	All AADs are serviced as per the manufactueres' recommendations by nominated suitable and competent persons/companies specialising in this field.	Equipment records at the PTO highlight when each unit requires servicing, therefore no unit will be used when service date expires.	1 x 5
Failure of student radio	Student static line or freefall skydivers	2 x 4	All radios are checked before any skydiving takes place, any battleries replaced accordingly (Section 6, British Skydiving Ops Manual). These are again tested once placed in student helmet to confirm operation and that students can hear them. Any adjustments are completed before emplaning. Any radios that are found to be not working will be taken out of service until tested and repaired as part of the planned preventive maintenance. All students have been training in canopy control for both main and reserve parachutes.		2 x 3
			Radio is back up device and may breakdown or fail.		

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Malfunction of main parachute - static line or freefall	Student skydivers	2 x 5	All student equipment at the PTO is packed by a competent person (approved packer, Section 6 Equipment, British Skydiving Ops Manual). All equipment has a packing log and is checked and signed at 4 stages. Each set of equipment is maintained and inspected at regular intervals (Section 14 Rigging, British Skydiving Ops Manual). All equipment is fitted with a reserve parachute, RSL and AAD. Static line and freefall students have received training with regard to malfunction procedures.	Radio instructions will be given if required Stabilty is reinforced on every brief thorough students' progression. Practical exits, with equipment on, are undertaken.	2 x 5
Malfunction of main parachute Tandem	Tandem skydivers	2 x 5	As above including Tandem equipment, instructor trained to be competent to identify and deal with a malfunctioning parachute.		2 x 5
Mafunction of experienced skydiver's parachute	Experienced skydivers	2 x 5	Experienced skydivers competent in packing their own parachute and have knowledge and training of how to deal with a malfunction.		2 x 5

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Static line hangup	Any static line student	1 x 5	All students trained in stability and exits from aircraft (Section 5 Training, British Skydiving Ops Manual). Static line is checked prior to student exiting aircraft for any entaglements with student or equipment. Instructor is in full control of the static line on the student exiting the aircraft and observes their delpoyment sequence of the main parachute to prevent the possibility of a hang up (Section 10 Safety, British Skydiving Ops Manual). Aircaft and door inspected before static line operations begin. Students have been trained and briefed should a hangup occur. Instructor and pilot aware of procedures should this happen (Section 10 Safety, British Skydiving Ops Manual). Additional procedures in place should student become unconscious.		1 x 5

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Contacting moving aircraft or propellor	Student and experienced skydivers	1 x 5	<u>Experienced</u> skydivers are aware of precautions to take when emplaning the aircraft due to their experience and therefore present a lower potential risk. Designated jumpmaster of each lift will co- ordinate the safe emplaning procedure (Section 3 Jumpmasters, British Skydiving Ops Manual). Aircraft will be stationary before emplaning begins (Section 10 Safety, British Skydiving Ops Manual).	Skydivers must remain at the designated emplaning point with nominated JM or instructor and will not approach aircraft until it is stationary.	1 x 5
		1 x 5	Student skydivers will be under the supervision of a qualifed instructor. Aircraft will be stationary before enplaning begins. (Section 10 Safety, British Skydiving Ops Manual). All students have receieved training in how to approach the aircaft in a safe manner (Section 5, British Skydiving Ops Manual). No skydiver, student or experienced, must approach any aircraft from forward of the wings (Section 10, British Skydiving Ops Manual).	Restrict aircraft movements on ground or do not allow to start up until parachutist dropping is complete.	1 x 5

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HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Premature opening of main or reserve parachute whilst in aircraft	Student (S/L + F/F) Tandem and experienced skydivers	2 x 5	All skydivers have been trained should the event occur (Section 5 Training& Section 10 Safety, British Skydiving Ops Manual). Each aircraft lift will have a designated jumpmaster who will take charge if such an event occurs. (Section 3 Jumpmasters, British Skydiving Ops Manual). All equipment is checked before emplaning and prior to any student exiting the aircraft. All equipment is maintained as per manufactures' recommendations (Section 6 Equipment, British Skydiving Ops Manual).	Aircraft has inflight door to prevent prematurely deployed parachute escaping into slipstream. Skydiver will be moved to as far away from the door as possible and the aircraft will land with all remaining skydivers on board (Section 10 Safety, British Skydiving Ops Manual).	1 x 5

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Aircraft engine or structural failure	All skydivers and pilot	2 x 5	Aircraft must be suitable for skydiving and maintained are per manufactures' recommendations (Section 9 Flying, British Skydiving Ops Manual). Aircraft has rigorous maintenance regime carried out by suitable approved and qualified aircraft engineers. Only suitably competent pilots authorised to fly. Aircraft checked before beginning of every day by duty pilot. Should aircraft emergency occur, pilot has knowledge of areas considered safe to land if away from DZ. Jumpmaster trained and competent in dealing with such situations (Section 3 Jumpmasters, British Skydiving Ops Manual). All skydivers have been trained in event of such emergency (Section 5 Training, British Skydiving Ops Manual) . Fuel is checked daily on aircraft and refueliing system and recorded accordingly. Emergency vehicle available on airfield with access to most areas.	CAA CAP 748 Fuel management	1 x 5

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HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Body entanglement with main parachute on deployment	Any student freefall or static line skydiver	2 x 5	All students are trained in stability and exits and all freefall students are briefed/trained on consequences of instability on deployment of main parachute (Section 5 Training, British Skydiving Ops Manual). Instructor will ensure students leave aircraft as square into relative slipstream as possible to prevent possible entanglement and control static line (Section 10 Safety, British Skydiving Ops Manual). All students have received training on how to react to this situation. Any student progression will include re-inforcement of stability on delpoyment (Section 5 training British Skydiving Ops Manual). Students practice exits from aircraft wearing dummy equipment to assist and famiarlise them with the exit positions and weight of equipment (Section 5 Training, British Skjydiving Ops Manual)		2 x 5

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Injury to skydiver on landing	All skydivers	3 x 5	Student (S/L + F/F) skydivers. All students are trained in parachute landing techniques for both main and reserve parachutes (Section 5 Training, British Skydiving Ops Manual). In addition all students are under radio instruction and supervision. Skydiving will only take place if conditions are suitable (Section 8, British Skydiving Ops Manual). All student skydivers are fully briefed on their descent they are to undertake on the flight line before emplaning. <u>Tandem</u> students are trained and briefed to keep legs and feet up for landing and to remain with instructor until all skydivers have descended <u>Experienced Skydivers</u> present a lesser risk of injury on landings due to their experience although equipment is checked for correct weight to canopy size ratio against their experience.	Aircraft has a minimum fuel reserve. If injury occurs to skydiver who has landed on runway and cannot be removed immediatley, other sutibale runway may be used to land. Qualified first-aiders on site. All skydivers to land into wind identified by two windsocks on the airfield.	3 x 3
			All experienced skydivers are aware of low turns towards the ground and the risks of such actions.	British Skydiving campaign and safety notices posted around DZ.	

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Canopy collisons	Student skydivers	2 x 5	All students receive training in canopy control and collision avoidance (Section 5, British Skydiving Ops Manual). All students are under radio supervision. Students on static line and or freefall will exit two per pass, with a substantial gap between each student. This is part of the jumpmaster's responsibility. No students will be despatched if the intended landing area for exit point is not visible (Section 8, British Skydiving Ops Manual). All students are under radio supervision.	Pilots are trained and briefed on student circuit / patterns and number of passess required. Lengths of circuits are timed to avoid descending student skydivers from catching up with previously exited students.	1 x 5
	Experienced skydivers	2 x 5	Experienced skydivers track away to clear airspace and wave their intentions to deploy. All have knowledge in collision avoidance.	Landing patterns in force throughout the parachuting programme.	2 x 4

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HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Freefall collison and collision on deployment	Experienced Skydivers	2 x 5 2 x 5	Experienced skydivers are aware of the necessity to avoid freefall collisons and the potential risk should this occur. They are equipped with two serviceable parachutes and wear protective head gear. Skydivers aware of space requirements on deployment to avoid a collision when parachtues deploy near to each other. All skydivers notify their intention of deployment by waving off. Minimum opening and breakoff heights are used (Section 8, British Skydiving Ops Manual). All experienced skydivers have been trained in cutaway procedures. Each group exiting the aircraft will allow sufficent space/separation between each group as an additional precaution to eliminate freefall collisions, This is monitored by the jumpmaster. Students are under constant supervision and will only attempt manoeuvre when instructed to do so. All are trained in stability and air signals. Both student and instructor wear AADs as a backup to manual deployment of the reserve parachute.	Experienced skydivers wear suitable protective head gear, and may use additional equipment such as AAD. Jumpmaster may wish to nominate additional competent persons to assist control / separation of exiting skydivers should the jumpmaster exit before aircraft is empty.	2 x 5

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HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Refuelling aircraft (fire and associated risks)	Refuelers and pilots	2 x 5	Refuelling station is some distance from any public area. No smoking or naked flames allowed within vicinty. No electrical radio equipment or mobile phones in vicinty of refuelling pocess. Fire fighting provision in place with appropriate vehicle and portable fire extingushiers. Only nominated refuellers competent in procedures to refuel aircraft.	Avgas and kerosene are appropriately marked to prevent filling aircraft with incorrect type. Safe sytem of work in place for refueling, to incorporate emergency procedures and control	1 x 5
Contaminated fuel	Pilot and skydivers	1 x 5	Any aircraft fuel and oil used must have a certificate of conformity. Aircraft fuel is stored in an approraite facility, bunded to prevent leaks and suitably sealed to prevent water ingress. Fuel is checked and recorded at the beginning of every flight day and a fuel sample kept for a minimum seven days, labelled appropriately.	CAP 748 Aircraft fueling and fuel installation management and CAP 393 Articles for licensed airfields and Articles for unlicensed airfields	1 x 5
Hazardous substances (aviation fuels and oils)	Refuelers and pilots	3 x 3	Hazard data sheet should be held by DZ. Control measures in place for: short duration work, job rotation, segregation and isolation of ignition sources, appropriate and suitable personal protective equipment, provision for first-aid, washing facilities, etc.		2 x 2

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Aircraft infringments of DZ airspace by other aircraft	Pilot and skydivers	2 x 5	All relevant stautory bodies informed of start and potential finish times. All logged on ATSU form. If any infringments occur, all parachuting will be suspended until the area is safe to continue (Section 1, British Skydiving Ops Manual). Any infringement is logged on ATSU form and relative authorities notifed. Visual observation is in place whilst parachuting is undertaken and no parachutists will be released from aircraft until clear drop authoristion is received from ground.	Other contacts listed in SOPS also notified. Additional radio contact with relevant air traffic centres may be required depending upon location of DZ to relative airways their proximity and local flying clubs.	2 x 5

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Serviceability of parachute equipment	Student skydivers	2 x 5	All equipment is maintained in a serviceable condition (Section 6, British Skydiving Ops Manual). Only qualified packers allowed to sign off the four stages checks. Each set of equipment is checked after each jump, and is packed and inspected before being returned to stores. Each set of equipment is inspected and repacked and signed off for servicability by a competent person in a period not exceeding 6 months. Maintenance logs for each set of equipment are kept and updated accordingly. Any equipment found with a fault is withdrawn from service until repaired this forms part of the Planned Preventative Maintenance for each set of equipment. All students are trained in use of equipment and this is documented were appropriate.	Any auxillary equipment e.g. AADs are maintained to manufacturers' specification	1 x 5
	Experienced skydivers	2 x 5	Responsible for their own equipment but visiting skydivers' equipment will be checked for reserve currency and that the equipment is serviceable.	Soft housings grounded	1 x 5

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING
Descending skydivers; movement of aircraft; associated plant and machinery	Visitors and spectators at the PTO	2 x 4	Spectators and visitors' area is fenced off away from parachute landing areas, aircraft and associated plant / machinery. Fence approx. 1.5m height. Notice posted of restricted access airside. Access to airside restricted to authorised staff and emplaning skydivers only. Viewing area monitored from raised control point by Chief Instructor and other competent persons (staff).	Controlled access and egress to PTO by motor vehicles by means of enforced speed limits. Access restricted to airfield (airside) and runways. Runway threshold is signed with warning notices.	1 x 4

Specific

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING

Specific

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING

Specific

HAZARD / TASK OR ACTIVITY	WHO MIGHT BE HARMED ?	PRE-CONTROL RISK RATING	EXISTING CONTROLS	ADDITIONAL CONTROLS	POST CONTROL RISK RATING