



**SKYDIVE TILSTOCK FREEFALL CLUB
TILSTOCK AIRFIELD
WHITCHURCH**

**SHROPSHIRE
01948-841111**

**STANDARD
OPERATING PROCEDURES**

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SECTION I

KEY PERSONNEL AND DUTIES

DROPZONE OPERATOR: KAT BUSBY HICKS

CHIEF INSTRUCTOR: ALEXANDER F.G. (BUZZ) BUSBY HICKS

RATINGS – AI, IE, TI(G), CSI, AP

RESPONSIBILITIES - ALL PARACHUTING OPERATIONS
AIRCRAFT MAINTENANCE
MAINTENANCE OF BS OPS MANUAL
MAINTENANCE OF CLUB SOPS
SAFETY MANAGEMENT SYSTEM

CHIEF PILOT: DARREN (SHEP) SHEPHERD*

RATINGS – CPL, PPL, IMC, BS PILOT 1412,

RESPONSIBILITIES - ALL FLYING OPERATIONS
FLYING SECTION OF THE SMS

RIGGING & EQPT: JACK BRADFORD*

RATINGS – PR287

RESPONSIBILITIES - ALL CLUB EQUIPMENT

AFF CO-ORDINATOR: DAVID TITCOMBE*

RATINGS – AFFI, TI

RESPONSIBILITIES - THE AFF PROGRAM AT STFC

SECTION II

INSTRUCTORS

ALL INSTRUCTORS:

1. Will abide by the rules and regulations as contained within the British Skydiving's Operations Manual. It is each Instructor's responsibility to ensure that they are up-to-date and fully aware of any amendments to the BS Operations Manual.
2. Will conduct themselves in accordance with the British Skydiving (BS) Code of Conduct.
3. Are to familiarise themselves with the Skydive Tilstock Freefall Club Safeguarding Procedure.
4. It is each Instructor's personal responsibility to ensure that their own personal documentation and equipment, including renewal of ratings and reserve parachute packing requirements, are kept up to date.
5. It is the responsibility of each Instructor to set a good example, which includes general behaviour, language, appearance, and dress.
6. Instructors who are cleared by the CI to teach at the centre but are unfamiliar with the lesson structure, should familiarise themselves fully before any teaching takes place, lesson plans are held in the office, and shared with all instructors using OneDrive.
7. Specific emphasis must be placed on progression and student retention must be actively encouraged.
8. AFF ground school will normally have no more than 3 Ab Initio students; however, this may be increased to a maximum of 6.
9. Particular attention must be paid by the instructor to any participant on the Training Course who appears not to be a suitable candidate for parachuting.
10. Any Student who fails to respond satisfactorily to the ground training must be brought to the attention of the CI.
11. A Student Skydiver who trains at the centre will automatically become a provisional member of the club.
12. Any revision training undertaken must be entered into the Refresher Training Book and student's logbook by the instructor involved, both must sign the Refresher Training Book.
13. Any progression briefings given must be entered into the Refresher Training Book and student's logbook by the instructor involved, both must sign the Refresher Training Book.

14. In the absence of the CI, parachuting will only take place when a Category System Instructor or Advanced Instructor, nominated by the CI, is present.
15. All accidents on the airfield must be reported immediately to the CI and the DZO.
16. Details of medical renewal dates are kept on the DZ manifest system (Ground Control), and hard copies are held in the Staff folder in the office, all instructors must provide a hard copy. It is the responsibility of the individual instructor to provide an updated copy as necessary.

TANDEM INSTRUCTORS:

1. It is the responsibility of each Tandem Instructor to ensure that currency requirements and suspended harness drills are up to date. Details of reserve due dates and suspended harness drills are to be logged in the Instructor's logbook and on the board in the kit store.
2. Hard copies of the ROI and tandem harness inspection sheet for each piece of equipment owned by instructors are kept in the staff folder in the office, it is the responsibility of the individual instructor to provide an updated copy as necessary.
3. The following drills must be carried out on all Tandem descents by all Tandem Instructors.

In aircraft prior to exit

Full systems check before moving to the door, which includes drogue, drogue release, secondary drogue release cut-away pad, reserve handle, RSL, both side connectors, both main top connectors, chest straps (instructor and student).

In addition to this the Tandem Instructor must check both top hooks, drogue & drogue release in the door prior to exit.

The following drills should be carried out on all Tandem descents by all Tandem Instructors.

In freefall after exit

Systems check after the drogue is deployed, which are: check drogue is gone and that it's inflated, then check all handles/pads. Occasionally a Tandem Instructor may encounter an awkward Student in freefall or exit at a lower exit altitude or an aircraft emergency and this may not be possible*

Under canopy

Check cut away pad, reserve handle and connectors.

JUMPMASTERS

1. A jumpmaster (J/M) must be nominated for every aircraft lift.
2. The J/M responsibilities are listed in the BS Operations Manual. In addition to complying with all those requirements:
 - a. The J/M must ensure every jumper has been checked before boarding the aircraft. This must be indicated by the copy manifest slip which has the checker's signature on it.
 - b. The J/M must brief the pilot concerning the height and number of passes and the experience level of the jumpers on those passes. He should discuss with the pilot any performance or structural limitations of the aircraft relevant to the exit planned.
 - c. The J/M should be aware of any specific loading requirements/limitations of the aircraft in use.
 - d. The J/M should familiarise him/herself with the operation of any in-flight door before emplaning, the location of the knife and all aircraft emergency procedures.
 - e. A Student Parachutist must not be left alone in the aircraft if the altitude required is not achieved. The instructor must remain in the aircraft with the student.
 - f. Jumpmasters are responsible for escorting parachutists to the aircraft and must ensure that all parachutists remain aft of the aircraft wing while loading. Where tandem or AFF students are on a lift the instructor is responsible for escorting their student to the aircraft and ensuring they emplane safely.*
3. The JM is responsible for checking it is safe to exit the aircraft, if necessary they can take the aircraft round or abort the lift.*
4. Spotting through cloud is not permitted.
5. Prior to exit, the J/M must ensure that radio clearance has been given to drop or if there is no radio communications, the signal cross indicates "jump". *

X - Conditions suitable for parachuting

T - Only parachutists authorised by the CI may jump

I - Parachuting is TEMPORARILY suspended.

L - Parachuting is suspended. Land with the aircraft.

This Section should be read in conjunction with the BS Operations Manual Section 1, 3 and 10.

SECTION III

GROUND OPERATIONS

START OF OPERATIONS

Before the start of any parachute operation the following must be established:

DZ Control:	DZ control must be established
Landing Arrow:	The landing arrow must be placed in position next to the entrance to the PLA
Signal Cross:	The Signal Cross must available.*
Radio:	Radio communications must be established with the aircraft before any flying takes place.
Manifest:	A clear system of manifesting must be established by the duty manifestor
Packing:	The packing areas must be prepared and all equipment to be used must be checked
AADs:	All Centre AADs must be switched on and signed for by a member of staff
Vehicles:	Communication must be established with agricultural and other vehicles on the airfield
Runway:	The runways must be visually checked prior to operations
Emplaning:	The emplaning point must be established, this will normally be the threshold of Runway 32
Crash Box:	The Crash Box and associated equipment must be in the DZ vehicle
ATSU Notification:	The ATSU must be notified and the appropriate form completed.
Warning Signs:	All Warning Signs must be in place

EQUIPMENT

1. All parachute equipment, including ancillary devices such as cameras, will be checked by an instructor nominated by the CI prior to being used at the Club.
2. All AADs on Club equipment will be switched on at the start of operations and signed for on the daily switch on sheet
3. All student digital altimeters (Alti-2 Atlas) will be checked at the start of the day and signed for on the daily switch on sheet..
4. All student digital altimeters (Alti-2 Atlas) will be placed on charge at the end of the day.
5. Safety notices and Safety Information notices are held in a folder in the packing area.*
6. All maintenance, servicing and repairs to Club equipment will be carried out by a suitably qualified Rigger nominated by the CI. All Tandem equipment faults will be referred to the CI for action.
7. Ground training equipment and facilities will only be used with the permission of an instructor after a briefing on its use.
8. Student equipment is only to be issued from the kit store by an instructor.
9. Student talk down radios must not be used if they display a power level of 2 bars or less, they must be returned to the kit store and placed on charge.

PACKING

1. Packing must always be supervised by a qualified person.
2. Student equipment may only be packed by the authorised club packers or by students preparing for their packing test.
3. Reserves may only be packed by a qualified person.
4. BS "A" Licence holders may pack their own main parachutes without a Packing Certificate provided that they have been cleared to do so by their CI. A Logbook endorsement will suffice.
5. Any person authorised to check main parachute assemblies must complete a packing tag and attach it to the large ring on the riser.*
6. Student reserves packed must have all details of the repack entered on to the reserve packing log sheet.
7. Any Student main parachute without a valid packing tag must be grounded and repacked prior to the equipment being jumped.*

8. Any Student main parachute returned to store after a flightline check, but not jumped, must be annotated with FLC on the packing tag.*

FLIGHTLINE CHECKS

1. All jumpers must have a full equipment check every time they jump, before boarding the aircraft.
2. Flightline checks for A License jumper and above will only be conducted by jumpers with JM1, Student Parachutist's will be checked by an Instructor, Tandem Students will be checked by their Instructor and Tandem Instructors will be checked by a suitably qualified person. The individual conducting the flightline check will sign the manifest sheet to confirm that the check has been completed.
3. It is the Jumpmasters' responsibility to ensure that every person due to be on the aircraft has been checked and signed for, against the jumper's name.
4. All checks relating to Student Parachutists must be made by an instructor and endorsed on the manifest copy.
5. All Student Parachutists must be fully briefed by an instructor, using the aerial photograph, with regards to wind direction, opening point, hazards, WDI etc. before boarding the aircraft.
6. All AADs of Students and BS "A" Licence holders must be visually checked to ensure that they are switched on.
7. Tandem Instructors are to have a Flightline Check by a suitably qualified person, this is to include a visual check that the AAD is switched on.

PERSONAL DOCUMENTS

1. It is the responsibility of each Parachutist to ensure that their medicals and other personal documents are up to date. Details will be logged on the DZ computer system, currently Ground Control and/or Microsoft Outlook. In the case of computer system failure, refer to the logbook(s) involved for details.
2. All Parachutists documents will be checked at least annually on the first operational day in April and a new Club Membership Agreement completed.

MANIFESTING

1. The duty Manifester will ensure that the aircraft loads manifested are appropriate to the experience level of the Parachutists on board. In the case of any doubt, refer to the CI or his deputy.

DROP ZONE CONTROLLERS

It is imperative that a system is set up for DZ control during a parachute operation. This is the responsibility of the CI who should nominate personnel, preferably Instructors or at least BS "B" Licence holders, to act as DZ controllers. One of these people should be positioned at the control point throughout any active periods, taking over from each other when necessary. The DZ controller should monitor everything that is going on during the operation.

To assist him/her in this he/she should have radio contact with the aircraft and some form of communication with the manifest, landing and loading areas, either radio or telephone, preferably radio. If "out landings" start occurring the DZ Controller should consider changing the "spot".

All descents must be monitored. Once the pilot has called "running in", the DZ controller or an assistant should monitor the exits, freefall, openings, and landings from the ground. If a malfunction occurs, the cutaway main and freebag should be followed and recovered. Find out what caused the malfunction in case anything can be learned. Once all the canopies are fully deployed the job is not over. Canopy collisions and "wraps" can, and all too frequently do, occur. All the landings should be observed in case of injury and assistance dispatched, as necessary. To this end all staff should be aware of the whereabouts of first aid equipment and how to use it. In the unfortunate event of a fatality, the appropriate incident procedures should be initiated. In addition to telemeters, a pair of binoculars is a useful tool. Some landings are outside the line of sight of the DZC binoculars, and it is easier to move to another position with them.

1. Before parachuting begins a Drop Zone (DZ) Controller will be nominated. The DZ Controller will be an instructor or, at least, a CI nominated BS B Licence Holder or above who must hold the appropriate radio licence. They will be responsible for ensuring that:
 - a) Binoculars are functional and in position.
 - b) Radio equipment is functional and in position.
 - c) Landing arrow has been established.
 - d) Signal cross is available.
 - e) A Ground Control Organisation is established according to the requirements of the BS Operations Manual.
 - f) Up to date spot, landing pattern and spot winds are displayed on the flightline information board.
 - g) All persons entering the PLA are wearing pink Staff clothing or Hi-Viz vests.*
2. The DZ Controller must check that Student talk down has been organised by the AFFI as required.*
3. The DZ Controller must ensure that radio communication is established between the aircraft and the Control Point.

4. The DZ Controller must ensure that all descents are monitored from exit to landing.
5. The DZ Controller is responsible for recording and reporting to the CI or nominated Deputy CI, as soon as possible, any abnormal deployments, dangerous practice, off landing or suspected injury.
6. If the DZ Controller must leave his station for whatever reason, he must ensure that he is replaced by another suitable person who has been briefed on his/her duties (see 1. above).
7. The DZ Controller is responsible for all DZ equipment. During a suspension of parachuting the telemeters should be covered but the radio should continue to be monitored for air traffic.
8. If any aircraft enters DZ airspace and does not respond to radio calls, the Jumpmaster must be informed immediately, and parachuting will be suspended until the aircraft has cleared the area. If possible, the aircraft registration should be noted and reported to the CI or nominated Deputy CI for further action.
9. The discrete radio frequency for air traffic communication is 118.105, call sign "Tilstock Radio".
10. The DZ Controller must ensure that a vehicle equipped with crash rescue equipment, as described in the BS Operations Manual, is available when parachuting is in progress.
11. Necessary assistance must be given to any parachutist requiring it. All emergencies should be dealt with as described in Incident Procedures.
12. A person equipped with a foam fire extinguisher will supervise each aircraft engine start up.
13. All warning signs must be in place. The DZ controller is responsible for monitoring runway incursions.
14. If parachuting is suspended for any significant period, the appropriate ATSU must be notified as required.

AGRICULTURAL VEHICLES

1. Whenever agricultural vehicles are operating on the airfield, the DZ Controller will liaise with the operator by mobile phone, radio and/or visual signals.
2. All movement by agricultural vehicles on the PLA must cease while Student Parachuting is taking place
3. Stationary vehicles must be checked for potential hazards such as raised bailing spikes and the hazard removed before parachuting takes place.

INSTRUCTIONS TO PARACHUTISTS

1. All parachutists must be either a full or temporary member of the Club before being allowed to jump.
2. A Parachute Club Membership Agreement must be completed and signed and held as a record after details are entered on the computer and must be renewed annually.
3. Full memberships are valid for one year, on a rolling basis. *
4. Before jumping all visiting jumpers must have a document and kit check by an instructor, these details must go on file, both on the Skydive Tilstock Freefall Club Membership Agreement form and on the computer.
5. All visiting jumpers must be current members of the BS. This includes foreign nationals except for some European jumpers.
6. All jumpers must be made aware of the drop zone brief and rules. This should include briefing on:

The Parachute Landing Area, overshoot and undershoot areas and the location of hazards and out of bounds areas.

The location of powerlines as plotted on the DZ photo.

Spot, Landing pattern and spot winds as displayed on the flight-line info board.

Deployment heights

Equipment

Aircraft performance, limitations, door operation and C of G considerations

Restraints until 2000ft

Emergency procedures

Non-conflict procedures, landing patterns and awareness of other canopies, manoeuvring aircraft and vehicles etc.

7. All jumpers are responsible for checking it is safe to exit the aircraft before they exit, if necessary they can take the aircraft round or abort the lift.*
8. Instructors should note that particular care should be taken when checking documentation relating to parachutists' currency and past history. Visiting Students must be fully familiarised with equipment to be used, emergency drills etc.; this must be endorsed on their training record card or logbook.

SECTION IV

AIRCRAFT OPERATIONS

AIRCRAFT OPERATIONS

1. Refer to Flying Order Book and BS Operations Manual.
2. Prior to flying, all the pilots' details, authorisations etc., must be lodged with the Chief Pilot
3. It is the responsibility of the pilot to pre-flight check the aircraft and have it in serviceable flying order for the start of operations.
4. It is the responsibility of the pilot to hangar the aircraft at the end of operations.
5. All pilots must have all documentation in order and be approved BS jump pilots.
6. All pilots are members of the Club, and their details must be kept on file.
7. New pilots wishing to fly must conform to all BS regulations and must satisfy the CI, CP, and aircraft owner as to their suitability.
8. As per British Skydiving Operations Manual, Section 9, Flying, Paragraph 5, Flying Operations, Sub-para 5.6, Carriage of Passengers, no one is to be carried as a passenger unless they are a suitably qualified Task Specialist.

AIRCRAFT STARTS & LOADING

1. Only those personnel briefed and cleared may carry out aircraft starts and loading.
2. During and after the start procedure no one is to move forward of the GPU.
3. During the start procedure only the nominated starter is to be at the aircraft.
4. Ear defence is to be worn at all times when starting and loading the aircraft.
5. If there is a lift at the emplaning point they are to remain there until the starter/loader signals them that it is safe to approach the aircraft.

AIRCRAFT REFUELLING

1. At the start of the day the white refuelling bowser will be opened by a nominated member of staff. It is their responsibility to ensure that the refuelling bowser and fuel contained within, is serviceable. A sample must be taken from the sump, labelled, stored and the bowser check sheet completed and signed accordingly.
2. The yellow bulk bowser will be opened, when necessary, by a nominated member of staff. It is their responsibility to ensure that the refuelling bowser and fuel contained within, is serviceable. Samples must be taken from both sumps, the filter and the nozzle, they must be labelled, stored and the bowser check sheet completed and signed accordingly.
3. A sample must be taken from the delivery tanker and recorded on the bowser check sheet.
4. Care must always be taken to ensure that no fuel contamination can occur.
5. The re-fueller must ensure that the no smoking signs are observed and obeyed.
6. No dirt diving may take place from the aircraft whilst it is being refuelled.
7. The re-fueller must make sure that the aircraft is adequately earthed after all aircraft electrical systems are switched off.
8. Hot Refuelling shall only take place under the following conditions:
 - a By personnel trained and cleared to carry out hot refuels
 - b By two personnel, one to fuel the aircraft and the second to operate the bowser and ensure no one approaches the aircraft.
 - c No one will move in front of the aircraft whilst the engine is running, the filler caps in each wing will be approached from the rear.
 - d The pilot will remain at the controls and maintain vigilance, should anyone move towards the prop they will perform an emergency shutdown.
9. A list of authorised refuellers is at annex xi.

This section should be read in conjunction with BS Operations Manual Section 1.4.3 and SECTION 9.5.13

SECTION IV

INCIDENTS

INCIDENT PROCEDURES

1. Any incident or accident must be brought to the attention of the CI or nominated Deputy CI as soon as possible.
2. Details relating to incident procedures are maintained in the office.
3. Depending on the severity of the incident, it may be necessary to delegate one person to deal with all incoming and outgoing calls from the Club.

DAMAGE TO PROPERTY

1. A full note of the damage caused must be made and witnessed by at least two people from the Club. All details relating to the Third Party must be gained. No liability must be admitted.
2. All persons involved (J/M, witness, pilot, DZ control etc.) must file a statement relating to the incident, (forms at the back of the incident book.) a BS Incident Form must also be filled out and sent to their office. The Third Party should be informed of BS Third Party Liability insurance.

LANDING INJURY

1. All details relating to the injured party must be obtained before they leave the airfield. These details must be filed together with any witness statements and any pertinent information in the office in an injury file.
2. A BS injury report must be completed and sent to their office.
3. The injured party should not be moved unless safety requires it.
4. Medical assistance should be called for if required. Emergency Services should be contacted if required.
5. No liability should be admitted.

ABNORMAL LANDINGS

SOLAR FARM

1. An instructor plus one other responsible person should be despatched to the scene as quickly as possible once communications with DZ control have been established.
2. If possible, radio contact should be established between DZ Control and the incident site.
3. If possible and safe, the person involved should be recovered. Under no circumstances should the person be moved if it could jeopardise their safety. The Fire Service should be called if needed.
4. A BS incident report form must be completed and sent to their office with witness statements from all concerned.
5. Any damage should be reported, and the owner informed.

TREES

1. An instructor plus one other responsible person should be despatched to the scene as quickly as possible once communications with DZ control have been established.
2. If possible, radio contact should be established between DZ Control and the incident site.
3. If possible and safe, the person involved should be recovered. Under no circumstances should the person be moved if it could jeopardise their safety. The Fire Service should be called if needed.
4. A BS incident report form must be completed and sent to their office with witness statements from all concerned.
5. Any damage should be reported, and the owner informed.

POWER LINES

1. An instructor plus one other responsible person should be despatched to the scene as quickly as possible once communications with DZ control have been established.
2. Contact must immediately be made to Scottish power to establish that power is cut off. Phone 105 or via the Fire Service. *
3. If the person and/or canopy is entangled with the lines, no attempt should be made to recover either until authorised to do so by Scottish Power site engineers or the Fire Service.
4. If possible, radio contact should be established between the incident site and DZ control.
5. A BS incident report form must be completed and sent to their office with any witness statements.

WATER

1. An instructor plus one other responsible person should be despatched to the scene as quickly as possible once communications with DZ control have been established.
2. If possible, radio contact should be established between the incident site and DZ control.
3. Immediate recovery of the person involved should be attempted using lifebuoys, ropes, boats etc. Care should be taken if attempting to recover the person in case of panic. Emergency Services should be contacted if required.
4. A BS incident report form must be completed and sent to their office with any witness statements.

OFF LANDING/LOST EQUIPMENT

1. Following an off landing/lost equipment a suitable number of vehicles must be despatched for collection of the parachutist(s) as soon as communications with DZ control have been established.
2. Suspend parachuting until the parachutist(s) are found.
3. All jumpers must check in on their return.
4. If possible, radio or phone contact should be established between the search party and DZ control.
5. A BS incident report form must be completed and sent to their office with any witness statements.

COMPLAINTS

1. All complaints must be recorded in the complaints book, listing date, time, name of complainant, and nature of complaint. If possible, record the complaint verbatim.
2. All complaints should be dealt with politely, but no discussion must ensue.
3. All complaints should be brought to the attention of the CI and DZO.
4. Pilots are requested to observe all noise abatement procedures as listed in the Flying Order Book.
5. If the complaint is threatening the Police should be informed.

AIRCRAFT EMERGENCY

In the event of a potential, or actual aircraft incident occurring, the following procedure should be put into immediate effect.

1. Once communications with DZ control have been established, a vehicle equipped with crash rescue equipment should be despatched to the scene with a minimum of three responsible people, with ground radio/phone if available. The CI must be informed immediately.
2. Emergency services should be contacted if actual incident occurs or is imminent stating:

Location of incident
Nature of incident
Number of persons involved (if known)
Telephone number.
3. An additional follow-on vehicle should be despatched to assist crash rescue. Consideration should be given as to whether any additional equipment may be required.
4. Responsible persons should be posted to help direct Emergency Vehicles to the incident site.
5. Ensure clear access for Emergency vehicles to incident site.
6. Interim statements should be taken from witnesses while the incident is still fresh in mind, recording:
Time of incident
Any radio calls or transmissions
7. Notify BS Safety & Technical Officers and Accident Investigation Branch of the CAA if necessary. (See BS Ops Manual for extra information.)

This should be read in conjunction with the BS Incident Procedures Section 10.6