# SUGGESTED JUMPMASTER CERTIFICATION COURSE OUTLINE

## CONTENTS

This section contains minimum course content. The Chief Instructor conducting the jumpmaster course must prepare and evaluate all candidates to the minimum standard and for responsibilities and duties specific to the particular DZ where the course is being held. Qualified Jumpmasters visiting from other DZs should be checked out by the CI to the minimum plus his DZ standard.

# 1 LESSON 1: COURSE OPENING

## 1.1 REGISTRATION

See pre-course requirements included in PANAM Form 7.

## 1.2 INTRODUCTION

### 1.2.1 Objectives

### 1.2.2 Course programme

### 1.2.3 Discipline

# 2 LESSON 2: GENERAL - THEORY

## 2.1 WHAT IS A JUMPMASTER?

### 2.1.1 Description of a Jump Master (JM)

The JM, more than any other person, is responsible for the conduct of safe parachute jumping. He creates an environment of safe parachuting by his actions, attitude, expression of leadership and attention to detail. One cannot wish safety into existence; it has to be actively pursued. ***Safety is completely gone the moment it is compromised.*** The effectiveness of a JM is directly proportional to the degree of assumption of responsibility, attention to detail and to adherence to procedure.

### 2.1.2 Duties of a JM

- Be familiar with both the PANAM MOPs and the individual club rules, and to enforce them.
- Assist in the training of students.
- Be familiar with both student and advanced equipment and be able to effectively inspect the equipment before use.
- Be familiar with all training programmes.
- Control students in the aircraft.
- Safe and competent dispatching.
- Give effective post-jump critique.
- Present an image of professionalism, competence and induce confidence in students.

## 2.2 PANAM MANUAL OF PROCEDURES (PANAM MOPs)

The PANAM Manual of Procedures are the rules laid down by the Parachute section of the Namibian Civil Aviation Authority, and are applicable to all sport parachuting in Namibia. These rules are constantly updated and maintained by the National Safety and Training Officer (NSTO) of PANAM. PANAM is responsible for the safe conduct of the sport within the areas of jurisdiction of PANAM.

### 2.2.1 Requirements of JM Qualification

See Section 2 (PANAM MOPs).

### 2.2.2 Regulations of special importance to JMs

All PANAM MOPs to be discussed, but CI to highlight all PANAM MOPs of particular importance to JMs.

### 2.2.3 Other Regulations

• Governing Safety Structure

- Department of Transport
- Namibian Civil Aviation Authority (NCAA)
- Aero Club of Namibia, PANAM, DZO
- NSTO
- DZ Safety Officers/Chief Instructors
- Instructors
- JMs

• Approved DZs

The Air Navigation Regulation, rules of the air, specify the following:

*3.8 (1) The Commissioner for Civil Aviation may specify areas in which parachute descents from aircraft may be made.*

*3.8 (2) In specifying areas in terms of sub-regulation (1) the Commissioner for Civil Aviation may impose conditions to ensure the safety of air traffic or parachutists or of persons or property on the surface and he may impose different conditions in respect of different areas and at any time amend or cancel any condition so imposed or impose any further conditions.*

*3.8 (3) Except in an emergency or with the written permission of the Commissioner, no person shall make a parachute descent from an aircraft and the pilot-in-command of such an aircraft shall also not permit a parachute descent, unless –*
*a) the descent is commenced and completed in the area specified in terms of subregulation (1);*
*b) the descent is made in compliance with the conditions imposed in terms of subregulation (2) in respect of the area concerned;*
*c) the person making the descent is a member of an organisation in respect of which the Commissioner has approved a procedures manual submitted to him by such an organisation; and*
*d) the requirements of the procedures manual mentioned in paragraph c) are complied with.*

• Demonstration jumps

See Sections 2 and 12 of the PANAM MOPs.

Altimeters to be correctly "zeroed" for landing area if aircraft takes off at a different site.

• High Altitude Jumps

See Sections 2 and 13 of the PANAM MOPs.

Hypoxia caused by lack of oxygen slows down the functioning of the human brain without the jumper being aware of the effects.

• Water Jumps

See Sections 2 and 13 of the PANAM MOPs.

• Night Jumps

See Sections 2 and 13 of the PANAM MOPs.

### 2.2.4 DZ Emergency Procedures

Extract from Section 17 - DZ Operating Procedures:

***"Injuries***

*Establish type and extent to injury. If it is of a serious nature or you are not sure what to do, immobilize patient and wait for qualified help.*

***Fatalities***

*Every fatality causes considerable damage to sport parachuting. The long-term effects of fatality however, may be kept to a minimum providing the tragedy is well managed in all respects.*

*Poor management of a fatality can result in adverse publicity, lengthy civil or statutory proceedings, inability to establish the cause of the accident, closure of the DZ, etc.*

*It is essential therefore that responsible members of the sport, are aware of the complications which can arise, in order that appropriate steps can be taken to prevent them from occurring.*

*Procedures to be followed:*

• *Equipment*

- *Keep people away.*
- *Do not remove the body until the equipment has been inspected by the SO/CI.*
- *The equipment must be photographed.*
- *Remove and box the equipment carefully, taking care so as not to disturb any evidence.*
- *Advise the police that PANAM, on behalf of NCAA, will appoint a board of inquiry to investigate the accident, and as such would require the equipment. Do not allow the police to impound the equipment if possible.*
- *The equipment along with the photographs should be forwarded to the NSTO when possible.*

• *Notifications*

*The following persons should be notified immediately:*

- *Ambulance*
- *Police*
- *SO/CI*
- *NSTO*
- *Air Traffic Control (use the telephone and not the aircraft radio).*
- *Next of kin, preferable by way of the police unless if a close family friend is nearby.*

• *The Press*

*All club members should be prepared for the press converging to the scene for what is to them a natural action/drama story. Reporters should be directed to the senior DZ safety officer (SO/CI) who may give a short factual release, free of any speculation. e.g.:*

- *Name of the deceased (if next of kin informed)*
- *age*
- *general address*
- *experience level*
- *time of accident*
- *location*
- *aircraft type*
- *altitude of jump*

*Also mention that an investigation has been launched by PANAM on behalf of NCAA to establish the causes of the accident. No further information should be given to any one, and avoid using the words "parachute did not open".*

• *Administration*

*Sworn statements are to be taken from the pilot of the aircraft, and also from as many responsible eyewitnesses as possible. These statements should accompany the equipment and the photographs, along with any other information (logbooks etc.), to the NSTO."*
(end of extract)

• Shock

Shock is a condition of blood circuitry collapse, caused by fright or loss of blood.

Symptoms:

- Cold clammy skin
- Dizziness
- Pulse fast but weak
- Hyper ventilation
- Paleness
- Anxiousness

Treatment:

- Preserve body temperature (keep constant)
- Place patient in shock position (lie him down lift the feet a few inches)

• Spinal injuries

Never attempt to move a patient with spinal injuries. Immobilise him and wait for qualified help, preferably the paramedic ambulance. Make sure that a "spinal board" is used to move the patient.

• Moving injured people

- Transport in orderly, planned, unhurried way
- Immobilise fractures
- Stabilise patient (shock treatment)
- Position in vehicle, feet towards the front

• Strains and sprains

Use the "RICE" - procedure for the most effective recovery:

- **R** Rest the injured part (immobilise)
- **I** Apply ice-compression
- **C** Apply direct compression (light, firm crepe bandage)
- **E** Elevate the injured part to combat swelling

• Medication and illness

Persons taking medication should be closely monitored and be cleared to jump by their medical practitioner. Jumpers suffering from colds and flu or sinusitis or ear trouble should not be allowed to jump due to the effects of this illness on balance and the dangers involved with quick changes of pressure. Medication taken for the mentioned illnesses may cause drowsiness and affect co-ordination.

### 2.3 DZ SAFETY SYSTEM AND RULES

Each DZ may well have its own specific safety system and rules over and above those defined nationwide by DZO. At this point, these specific details should be covered.

#### 2.3.1 DZ Safety Hierarchy

• DZ Chief Instructor OR DZ Safety Officer

• Instructors

• Jumpmasters

#### 2.3.2 DZ Safety Rules

#### 2.3.3 DZ Safety Administration

• Student Progression Records

• Other

#### 2.3.4 Visiting Jumper Check List

When a visiting jumper arrives at your DZ, the following things should be checked before he is allowed to jump:

• PANAM Membership Card

Only members of PANAM shall be allowed to jump, in terms of the PANAM MOPs. If the jumper is a foreigner, he should be issued a temporary PANAM card. If the jumper is a student in his first year of membership, without an A Licence, he should be registered with PANAM as a temporary member. Check the expiry date on all cards.

• Licences/Ratings

All licences and ratings have to be renewed on an annual basis. Check their validity. In the case of a foreigner, the equivalent FAI licences are acceptable. However, only PANAM ratings are valid.

• Log Book

Check the currency of the jumper (date and location of last jump, etc.). If a student, check the progression chart and whether your type of aircraft has been jumped before. Check for endorsements and/or violations recorded in the logbook.

• Equipment

Check that all equipment is serviceable, especially the expiry date on the reserve packing card, and who packed it. Unknown foreign gear should be treated with caution. If in doubt, seek advice from qualified personnel.

• Orientation to DZ Procedures

Explain all special DZ rules and procedures (pilot commands, boarding points, opening altitudes, manifest procedures, exit procedures, etc.). Orientate the new jumper on the DZ, highlighting hazardous areas and prevailing weather conditions, etc.

## 3 LESSON 3: STUDENT INSTRUCTION & BRIEFING - THEORY

### 3.1 METHODS OF INSTRUCTION

Refer to Section 3 of the PANAM MOPs.

Learning is an active process of acquiring new knowledge, skills, techniques and appreciations. Learning originates with sensory stimulation. Training aids are essential for the stimulation of the senses. There are six principles of learning that are used to formulate a lesson plan.

#### 3.1.1 Principles of Learning

• Motivation

The student must know the reason for the actions that he is about to learn/perform. He will be mentally and physically prepared if he knows why he must learn something. Intent to learn must be developed in the student (which leads on to the next principle).

• Objective

One of the best ways to motivate the student is to explain exactly what is required of them. Present the student with an objective that is to be attained. Learning is more efficient if the student knows the object of the lesson and how it fits into the more global aspect of the programme.

• Doing

We learn by doing. We learn more by practice than by any other process. Practical training combines all senses and builds confidence in the student, and completes the learning process.

• Realism

The more realistic the learning process, the more efficient it will be. The more realistic the exercise, the easier it is for the student to relate to the exercise and the real thing.

• Background

A student builds knowledge on what he already knows and therefore relates back to previous lessons and experiences. Do not leave gaps and flit around from concept to concept. Progress in an orderly fashion.

• Appreciation

Learning has not taken place until the student has appreciated what he has learnt or why he has learnt it. Understanding of the motivation, objective and the lesson itself is crucial.

#### 3.1.2 Lesson Plan

• Motivation and Objective

Explain to the student what is to be learnt and why.

• Explanation

Demonstrate and explain the action.

• Practice

The student practices his new knowledge.

• Review

Find out what the student has learnt and if he understands it.

### 3.2 STUDENT PROGRESSION/BRIEFING

Refer to Section 3 of the PANAM MOPs.

#### 3.2.1 General pre-jump briefings

• Isolate the student from all other distractions.

• Personalise the instruction/briefing.

• Check that the student has been cleared for that jump, ask when and how the previous jumps were and who his last JM/INST was.

• Follow the structure of the above lesson plan.

• Always stick to the standard methods to avoid confusion.

• Only an instructor may progress a student from one test to another.

• All briefings for freefall progression must be done under the auspices of an instructor.

#### 3.2.2 General post-jump debriefings

• Critique must be constructive.

• Point out good as well as bad points of the jump.

• Never bluff to hide lack of knowledge. If you cannot identify a student's problem, ask for advice.

• An easy way to remember what the student did is to memorise the main points after each jump, e.g.
No. 1 : De-arch with left hand in, turned 180° right.
No. 2 : Good arch, but looked down.
No. 3 : Arch too late, went head down, etc.

**NB!** JMs may recommend progression, but only an INSTRUCTOR may clear freefall students to the next test.

**ONLY** the Chief Instructor may clear a static line student to go on to freefall.

#### 3.2.3 DRCP briefing

**Objective:** To teach the student to pull his own ripcord in preparation for free fall.

**Always teach the standard method:**

| | |
|---|---|
| ***Arch Thousand*** | Good stable arch and look up at aircraft. |
| ***Two Thousand*** | Keep arch, look at aircraft. |
| ***Reach Thousand*** | Symmetrical motion with both arms, left hand to position in front of face where wrist can be seen, right hand on dummy with open palm. Grip dummy firmly. |
| ***Pull Thousand*** | Pull dummy out, back into arch position with both arms symmetrical. |
| ***5000 Thousand Check*** | From here check and reserve procedure same as for normal static line. |

**NB:** In case of a malfunction, throw dummy ripcord away immediately.

The training harness can be useful if a student has problems. Stress that the student must not rush the pull. Same speed as on the ground. The static line will open his canopy while he concentrates on the dummy pull.

**3.2.4 First freefall briefing** (only after progression has been cleared by the Chief Instructor - briefing to be done by, or under direct supervision, of an Instructor.)

• Stress that student must not rush the pull. Same speed as he was trained for the dummy pull. Mention the extra altitude to give more self-confidence.

• Deployment sequence only begins once the handle has been pulled; there is therefore a longer delay to opening shock.

• Reserve procedure is the same as for static line. In case of a malfunction throw main ripcord away immediately.

• Pilot chute hesitation should clear in the "check position" - if not, use reserve.

• Student's Freefall Progression Programme log sheet must be signed by an Instructor, after passing each test, with help from the JM.

• The longer the delay, up to terminal, the more the head drops to a horizontal position. Do not swim when this happens.

• Retain discipline throughout count.

• Retain a heading on the horizon to prevent slow turns.

• Maintain a symmetrical body position for stable delays, to prevent spins and unintentional turns.

• When in trouble, arch more.

• If unable to correct a problem, deploy main parachute.

• Explain the importance of altitude awareness and how to develop it.

• Retain altitude awareness, and make only two attempts to solve a problem before deploying main parachute.

• Explain spins and how they are caused.

• Explain how to prevent and correct spins. Arch hard, keep looking in direction of original heading.

**3.3 PRACTICAL SESSION**

## 4 LESSON 4: EQUIPMENT - THEORY

### 4.1 STATIC LINE STUDENT EQUIPMENT

#### 4.1.1 Rigging and Assembly

The JM must examine the design of static line equipment and understand how it is constructed, and why.

### 4.1.2 Rigging Checks

What to look for:

- Check for compatible gear.
- Accessibility of all handles.
- Damaged and unsafe gear.
- Canopy size suits the jumper.
- Correct length of static line for aircraft used - bag ± 10cm in front of tail plane.
- Student is familiar with the equipment to be used.

### 4.1.3 Kitting up and pre-jump check

**The JM is responsible for faulty gear, not the student.**

**COMPULSORY GEAR:** Helmets, soft soled shoes, (no hooks on shoes)

**CHECK PROCEDURE:** Top to bottom, right to left, front to back.

- Front
  - Helmet - fits well, chinstrap tight and not flapping.
  - Spectacles secure - goggles for contact lenses.
  - Jewellery off.
  - 3-ring release system routed correctly & risers straight into container.
  - RSL secure & routed correctly.
  - Chest strap secure, loose ends tucked away. (Radio secure & working, if fitted)
  - Cutaway puff secure & easily accessible. No cable showing.
  - Reserve handle secure, easily accessible and free to move.
  - Leg straps tight, not twisted and excess tucked away.
  - Shoelaces done up and secure.
  - Boots with hooks must be covered with tape.

- Back
  - Check the routing of RSL and ensure that the reserve pin is in correctly.
  - Check that the reserve is in date.
  - Static line correctly routed and first bungie doubled and the pin in correctly.
  - Check the closure loop for fraying.
  - Static line hook functional.
  - Remove and check the packing slip.
  - Check general appearance and all flaps closed properly.

- Freefall Gear
  - Pilot chute must be flat in centre of the container.
  - Free movement of cable.
  - Rip cord stuck to Velcro and easily accessible.

### 4.1.4 Direct Bag Deployment System

## 4.2 AIRCRAFT EQUIPMENT

### 4.2.1 Required equipment

- Knife for pilot
- Hook-knife for JM
- Static line attachment point
- Altimeter and airspeed indicator

### 4.2.2 Aircraft pre-jump check

- Approach aircraft from behind or where pilot can see.
- Inspect the entrance to the aircraft (no hooks or similar problem situations).
- Check exit position and launching platform if applicable.
- Door and inside of cabin must be clear of hook-up points.
- Check the static line attachment point.
- Check that hook-knife is in position and also functional.
- Check airspeed indicator and altimeter of aircraft.
- Check seating positions and exit procedures.

### 4.3 PRACTICAL SESSION

## 5 LESSON 5: THE JUMP - THEORY

### 5.1 JUMP PLANNING

#### 5.1.1 General

- Know the students on the load. Ask them how many jumps they have and what they are meant to do on the next jump.

**NB:** Must have received correct briefing.

- If a student is from another drop zone, make sure that the following has been done:
  - The Club Chief Instructor inspected his logbook and affiliation card and approved him on merit.
  - Make sure that he understands the exit procedure and is familiar with the gear he is about to use.

- Make sure students do not use freefall gear for a static line jump.

- See that the canopy sizes are compatible with the student's weight.

- Make sure you plan the correct altitudes for the planned delays. (See Freefall Training Programme)

- Ground Crew
  - Appoint responsible ground crew where applicable.
  - Have somebody to keep an eye on the wind speed - agree on signals to abort the jump if so required.

- Batons, arrows or other forms of communication used by club. (Discuss)

#### 5.1.2 Weather

Check meteorological conditions to clear and plan the load:

Note the wind direction and the wind speed.

Maximum Wind speeds:

- Student 15 knots (27 Km/hr)
- Non-student CI/SO discretion

Note the effect of top winds from previous jumps or wind drift indicator.

Note and be aware of approaching thunderstorms and fronts. They cause sudden gusts and wind directional changes as well as wind speed changes.

Plan the exit point for the student in correlation with his jump, canopy control and experience.

(Study the section on Spotting Techniques with particular reference to the situation of "cone of possible landings".)

### 5.1.4 Unfamiliar DZ

- Check DZ for obstacles - open water, power lines, busy roads, etc.
- Large enough outlanding area.
- Familiarise the student with the new DZ.
- Check for top winds using wind drift indicators or GPS data.

## 5.2 PILOT BRIEFING

Use the logical and sequential method:

- Number of run-ins required.
- The altitude of each run-in.
- The direction of each run-in to be (from .. to .. method).
- Ask for a 1000ft AGL check.
- Ask pilot to indicate when he turns for final run-in.

Summary:

| | |
|---|---|
| Number of run-ins | **N** |
| Altitudes | **A** |
| Directions Seq = | **D** |
| Alti-check – 1000ft | **A** |
| Pilot comms | **P** |

## 5.3 AIRCRAFT DRILLS AND DESPATCHING

According to club policies.

- Equipment Check

Talk to students and make sure they know what they are to do on the jump. Hand all student gear packing cards to the pilot or manifest. (see club regulations). All equipment must be checked by JMs before boarding.

- Aircraft Check

Inspect the aircraft before each load, hook-up point, knife, etc.

See "Aircraft Inspection".

- Brief the Pilot

See "Pilot Briefing".

- Boarding

Place students in correct position for exit order.

- Take-off Procedures

Check your own altimeter with aircraft altimeter and correlate. Move students weight forward for takeoff. Do not move back until pilot gives the OK.

**ALL** static line students are to be hooked up either on the ground or by 1000ft AGL. Unhooking of any static line before all students have exited is not recommended.

• In-flight Procedures

Re-check all parachutists' equipment (including your own) at 1000ft AGL. Show the pilot and the student that they are hooked up before they exit. (Check each student's equipment before he jumps.) Clear run-in with pilot.

• Check the following

- Airspeed - 70 to 80 knots / 120 to 140km/hr / 75 to 90mph
- Altitude - as requested
- Wind Sock - for direction
- Ground batons/arrow

• Do the Spot

Very important part of safety. Give instructions to the pilot clear and loud, or positive signs, or taps on the shoulders as cleared with the pilot PRIOR to take-off. Finally, check airspeed and altitude on run-in.

• Give Exit Commands

**"Stand by!"**
(This command is directed to the pilot)

**"Climb out!" (Procedure depends on aircraft type)**
(Point with your finger firstly at the student then to the step outside)

**"Right Foot.. Right Hand..**
**Left Foot.. Left Hand.. "**
(Assist the student while getting out - e.g. push gently or hold on to harness to ease climb-out procedure.)

**NOTE:** Each drop zone has its own particular method of climbout depending on aircraft type and configuration. Change the above commands to suit your drop zone.

**NB:** Be very careful with the static line at this stage. Beware of putting too much tension on static line and check the routing thereof. The static line must run straight from the backpack up to the far upper front section of the door frame, in order to prevent it from looping/snagging around student's arm or equipment. Quick-check spot and see student's affirmation.

**"GO!"**
(Give this command loud and clear)

**Observe** student carefully and make a mental note of details for critique.

Retrieve static line and bag and stow it under the pilot seat.

If all students are not hooked up simultaneously (on the ground or at 1000ft) then hook up the next static line and show pilot.

Move next jumper to the door.

Always use the standard method of despatching. Students get very confused when they get an order that they have not been briefed on, or when they expect a certain order and they do not get it.

• Command for climbing back in:

If student is still in the door, it is easy to pull him back to his seat. However, if he is ready to jump, it can be difficult to communicate with him. Do not shout or touch him, as he may confuse this with the command to jump. Try to attract his attention and indicate that he must climb back into the plan. Assist him back into the plane by placing your arms around the back of his pack.

Always ensure that all static lines are unhooked before following out. Ensure the pilot knows that you are following out.

## 5.4 AIRCRAFT EMERGENCIES

**Chain of Command:**

The **PILOT** is always in command of the aircraft and all passengers.

The **JM** is in command of all the jumpers.

In an emergency the JM and the pilot must communicate and decide what to do. The general rule is to let the students jump if above 1000ft AGL and if below 1000ft AGL all land with the aircraft.

There are other factors that can influence this decision:

### 5.4.1 Engine Failure

The rate of descent can be as high as 800ft per minute with a full load. This leaves very little time to jump, even from 2500ft. The pilot may decide to head to a safe landing area rather than spend time gliding over a safe jumping area.

Unhook all static lines and tell students to brace themselves for a hard landing in case of a forced landing.

### 5.4.2 Fire on Board

In this case the pilot may stop the engine and get down as fast as he can. If the fire is bad, he may decide to bail out. In this case, get the students out as fast as possible, under their reserves if necessary. (Collect the handles in the doorway.) Fire can also cause structural failure.

### 5.4.3 Structural Failure

Emergency of the worst kind. The aircraft will most likely be out of control. Get as many students out as possible and save yourself before it is too late.

### 5.4.4 Area where emergency occurs

High ground, densely built-up areas and open bodies of water can also influence the decision to jump. Always keep cool in an emergency, communicate with the pilot, keep the students under control, make the necessary decisions and act fast.

### 5.4.5 Student in Tow

There are mainly two student hang-up possibilities:

• Student hang-up on static line

**Causes:**
- Improper handling of static line by the JM
- Unstable exit of student.

In both cases the static line can wrap around the backpack, arm or leg of the student.

In this case the static line will be attached to the inside of the plane where the JM can reach it. Students are trained to place their hands on their heads to indicate awareness of the situation - the JM shows them the knife and cuts them free.

When the student is unconscious or unaware of what has happened, the situation becomes infinitely more dangerous.

First of all tell the pilot what is happening so that he can try to maintain or gain altitude and circle over the DZ with full power. If the student does not recover consciousness it will be necessary to slide down the static line, cut him free and deploy his reserve. If possible, leave a knife with the pilot.

• Student-in-tow with his canopy hooked up

**Causes:**
- Premature opening of container
- Too much power applied by pilot
- Airspeed too high
- Aircraft in side-slip on exit
- JM applied too much tension on static line during climbout procedure

In this case the student is out of reach and help from the JM. They are trained to cut themselves away and deploy their reserves in the correct sequence.

Firstly let the pilot know what is happening. If they do not react to the situation, the JM can try to communicate with the student, or give the pilot instructions to try to shake him off. A canopy wrapped over the tailplane may cause structural damage or pull the tailplane down so far that the aircraft will be out of control.

**NB:** Never give the pilot turning corrections just before exit of static line students.

• Make sure that the throttle is right back and airspeed is within limits.
• Never "short line" a static line student.
• Be extremely careful with the static line when student climbs out.
• Always carry a hook-knife in the aircraft.

### 5.4.6 Accidental Premature Deployment of Reserve

• Always watch the reserve handles of the students when they are moving inside the aircraft.
• If you can, trap the fabric before it catches air, do so with great haste.
• If not, push the student out after the inflating fabric as fast as possible.
• Structural failure may result from such an incident.

## 6 LESSON 6: PRACTICAL TESTS

Include a Remarks column in each section for each student JM to assist in final assessment.

### 6.1 STUDENT EQUIPMENT CHECK AND BRIEFING

**Mark Schedule:**

| | |
|---|---|
| Bearing and Attitude of JM | 3 |
| Check System and Awareness | 3 |
| Student Communication | 3 |
| Equipment Knowledge and Time | 3 |
| Include a remarks section on mark sheet | **12** |

### 6.2 DRCP, FIRST FREEFALL AND FREEFALL TRAINING BRIEFING

**Mark Schedule:**

| | |
|---|---|
| Bearing and Attitude of JM | 3 |
| Student Communication | 3 |
| Teaching Method | 3 |
| Subject Knowledge | 3 |
| Include a remarks section on mark sheet | **12** |

### 6.3 PILOT BRIEFING AND AIRCRAFT CHECKS

**Mark Schedule:**

| | |
|---|---|
| Bearing and Attitude | 2 |
| Exit Point and Static Line Accessories | 2 |
| Aircraft Instruments | 2 |
| Pilot Communication | 2 |
| Run-in and Drop Details | 2 |
| Include a remarks section on mark sheet | **10** |

### 6.4 AIRCRAFT DRILLS AND DESPATCHING

**Mark Schedule:**

| | |
|---|---|
| Bearing and Attitude | 4 |
| Aircraft Emergencies | 4 |
| 1000ft Check | 4 |
| Student Equipment Check | 4 |
| Pilot Communication | 4 |
| Aircraft Awareness & Instruments | 4 |
| Spotting, batons and arrow | 4 |
| Student Communication | 4 |
| The Exit: Student & Static Line Handling: | |
| – Post Jump Observation | 7 |
| – Static Line Retrieval | 2 |
| Include a remarks section on mark sheet | **41** |

## 7 STUDENT PROGRESSION

• See Section 3 of the PANAM MOPs.
• The major cause of student problems is too rapid a progression rate combined with an inadequate training programme.
• In progression, a small point overlooked in the early stages can create serious, if not dangerous, problems in later jumps.
• Dropping back one level of progression (i.e. 10 second to 5 second) to correct a fault is often the fastest method of advancement.
• Students must always strive for perfection in their performance. A conscientious JM will demand perfection from his students prior to recommending advancement.
• Prior to advancement, a student must perform all phases of a level to a minimum standard of 80% or higher.
• Emphasis must never be placed on quantity, but quality is essential.
• The maximum number of jumps that the average student can perform in one day and still advance at 100% of his ability is three.
• Students must be trained on an individual basis according to ability, and must never be allowed to progress beyond their capabilities. To do so is definitely hazardous.
• The progression chart we follow, is the maximum rate recommended by the NSTO. It is accomplishment to the NATURAL, rewarding to the AVERAGE and demanding of the SLOW LEARNER.
• Individual progression charts should be kept on each student and used in conjunction with the individual's logbook.
• An accurate and detailed briefing, observation and debriefing must be made on every student if they are expected to learn at their maximum rate.
• Any student whose performance creates a hazard to his safety on a continued basis, without any sign of improvement, MUST be told to quit Sport Parachuting immediately. This is a difficult decision to make, especially with an enthusiastic student, but necessary to maintain the safety standards of the sport. Such decisions should be left to the CI of the Drop Zone.

**Levels of Knowledge**

| | | |
|---|---|---|
| **1** | **Student** | **Eager to learn and improve skills.** |
| **2** | **"B" Licence Holder** | **Often over-confident.** |
| **3** | **"C" Licence Holder** | **Knows everything in the world about parachuting.** |
| **4** | **"D" Licence Holder** | **Begins to realise how much more there is to learn about the sport, usually self confident and competent** |

The JMs must be capable of:

• Teaching students to pack their main parachutes properly.
• Assisting a student in kitting up correctly.
• Controlling their student load on the ground, e.g. having them ready when it’s their turn to fill the next load.
• Discussing with and briefing students on their relevant tasks.
• Checking out students prior to jump.
• Checking out the aircraft prior to take-off.
• Controlling their student load in the air e.g. discipline during emergencies.
• Spotting safely!
• Despatching safely!
• Critical observation - both from the plane and when following out.
• Critiquing sensibly and helpfully.
• Generally assisting instructors and DZ management to improve the quantity and quality of parachuting/skydiving, particularly where students are concerned.